

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: P623810

Luminaire Tested: **IFLD-L-SA8D-830-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623810
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA8D-830-U-55
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 5 distribution lens
Light Source: (128) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	46187.5 lumens	Max Intensity:	56443.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	94.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

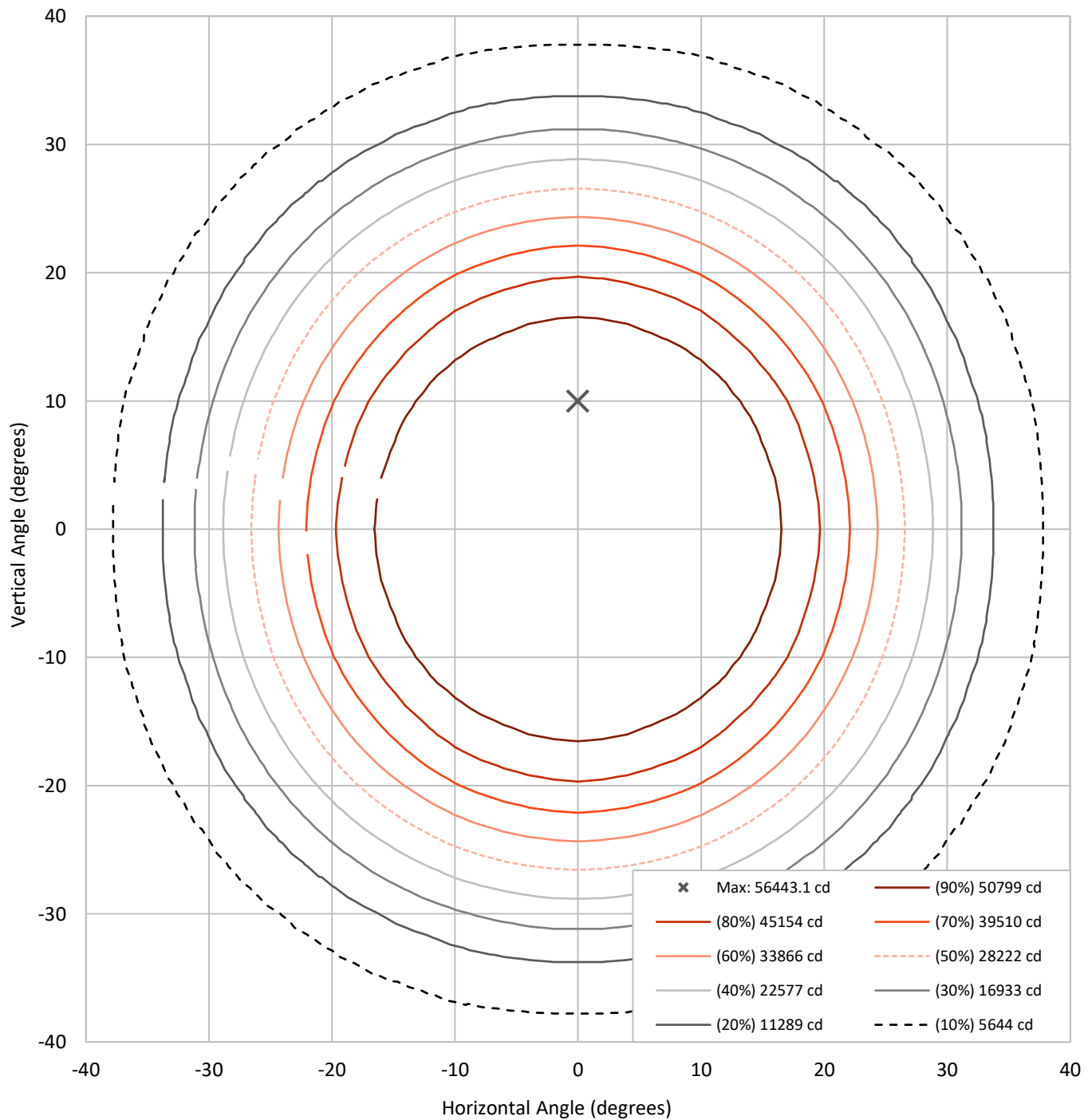
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	22956.4 lumens	Field Lumens:	29855.4 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

Input Watts (W): 488.3
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



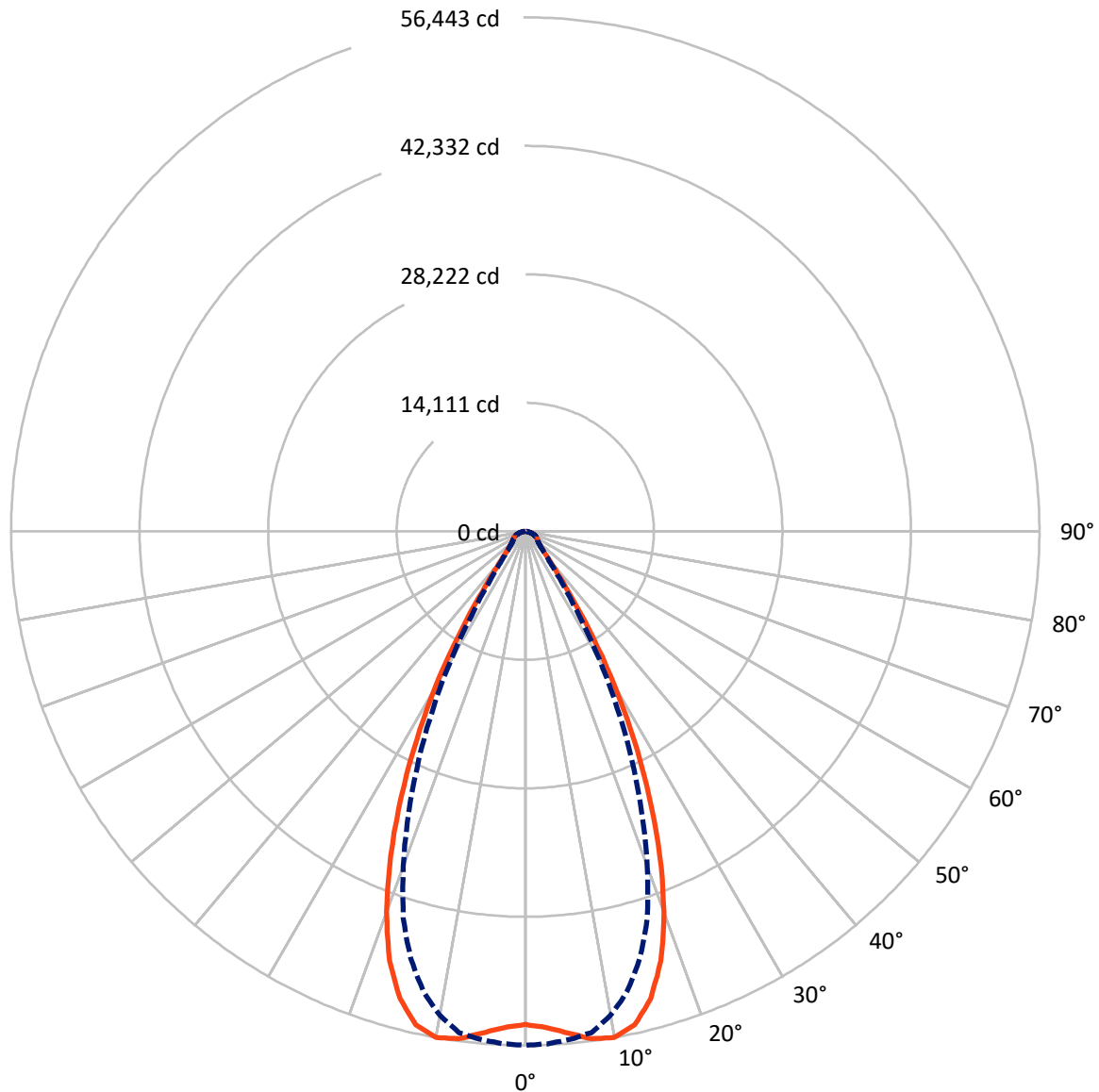
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Lumen Table

90																			
80	1.3	10.1		26.4		42.6		49.4		42.6		26.4		10.1		1.3			
70																			
60	4.6	5.0	10.4	17.2	24.2	30.3	34.7	37.0	37.0	34.7	30.3	24.2	17.2	10.4	5.0	4.6			
50		7.8	16.0	25.3	34.0	41.4	47.0	50.1	50.1	47.0	41.4	34.0	25.3	16.0	7.8				
40	8.2	10.4	20.6	31.2	41.8	54.1	68.5	79.6	79.6	68.5	54.1	41.8	31.2	20.6	10.4	8.2			
30		12.7	23.9	36.1	54.8	97.6	190.7	287.6	287.6	190.7	97.6	54.8	36.1	23.9	12.7				
20	10.9	14.3	26.3	42.4	88.6	282.2	653.9	928.1	928.1	653.9	282.2	88.6	42.4	26.3	14.3	10.9			
10		15.3	28.0	50.5	163.5	615.9	1205.1	1536.3	1536.3	1205.1	615.9	163.5	50.5	28.0	15.3				
0	11.9	15.9	29.0	57.0	239.9	848.5	1490.8	1690.7	1690.7	1490.8	848.5	239.9	57.0	29.0	15.9	11.9			
-10		15.9	29.0	57.0	239.9	848.5	1490.8	1690.7	1690.7	1490.8	848.5	239.9	57.0	29.0	15.9				
-20	10.9	15.3	28.0	50.5	163.5	615.9	1205.1	1536.3	1536.3	1205.1	615.9	163.5	50.5	28.0	15.3	10.9			
-30		14.3	26.3	42.4	88.6	282.2	653.9	928.1	928.1	653.9	282.2	88.6	42.4	26.3	14.3				
-40	8.2	12.7	23.9	36.1	54.8	97.6	190.7	287.6	287.6	190.7	97.6	54.8	36.1	23.9	12.7	8.2			
-50		10.4	20.6	31.2	41.8	54.1	68.5	79.6	79.6	68.5	54.1	41.8	31.2	20.6	10.4				
-60	4.6	7.8	16.0	25.3	34.0	41.4	47.0	50.1	50.1	47.0	41.4	34.0	25.3	16.0	7.8	4.6			
-70		5.0	10.4	17.2	24.2	30.3	34.7	37.0	37.0	34.7	30.3	24.2	17.2	10.4	5.0				
-80	1.3	10.1		26.4		42.6		49.4		42.6		26.4		10.1		1.3			
-90																			
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

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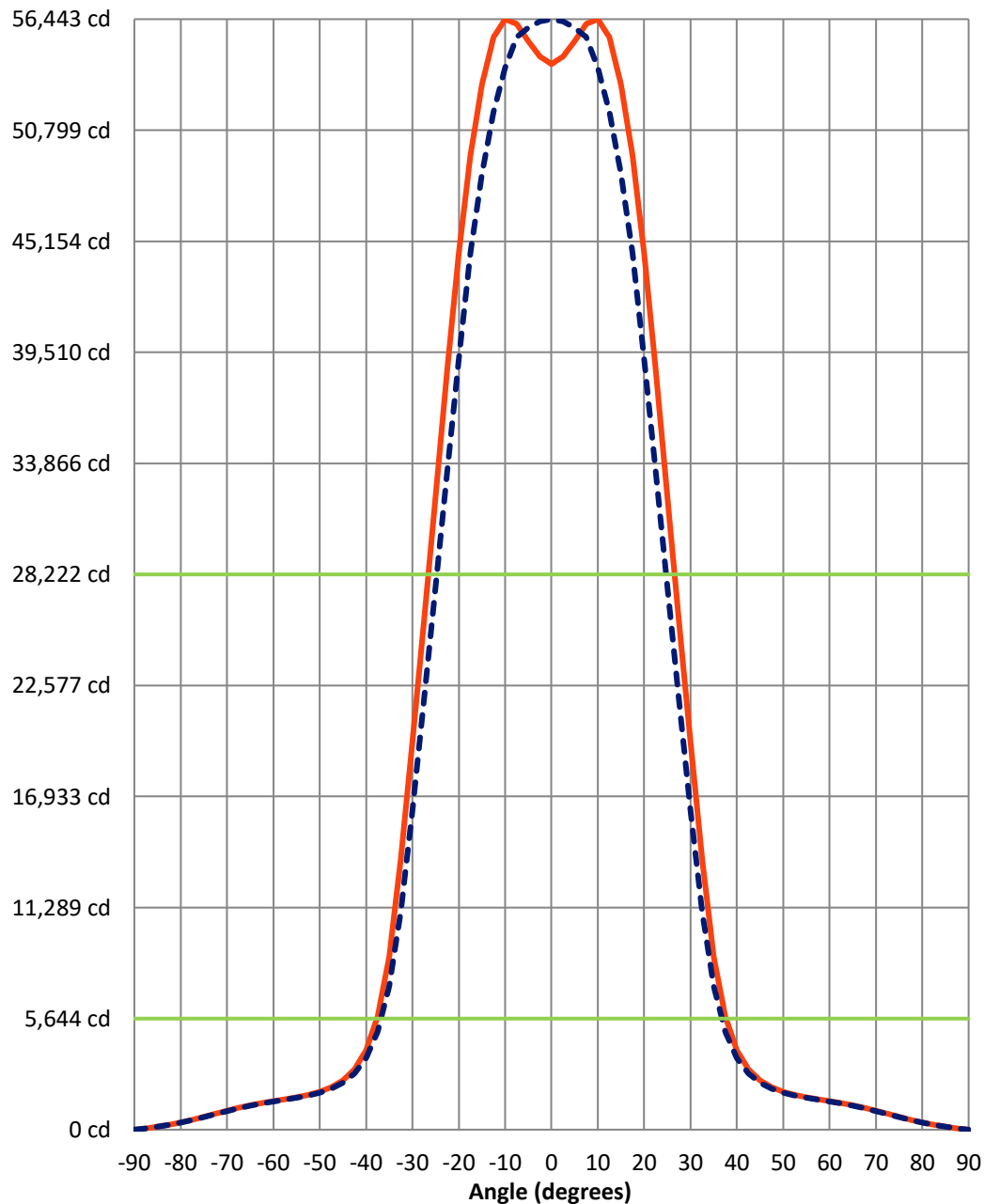
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:

H Angle: 49.5°
V Angle: 53.1°
Lumens: 22956.4
Efficiency: 49.7%

Field:

H Angle: 73.6°
V Angle: 75.3°
Lumens: 29855.4
Efficiency: 64.6%

Spill:

Lumens: 16332.1
Efficiency: 35.4%

— Vertical Distribution through 0-Deg
- - Horizontal Distribution through 10-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°	62.4	62.4	62.4	62.4	62.4	62.4	62.4	57.6	57.6	57.6	57.6
85°	153.5	153.5	153.5	153.5	153.5	148.7	148.7	143.9	143.9	139.1	134.3
82.5°	249.5	249.5	249.5	249.5	244.7	244.7	239.9	235.1	230.3	225.5	220.7
80°	364.6	364.6	364.6	364.6	359.8	355.0	350.3	345.5	335.9	331.1	321.5
77.5°	499.0	499.0	499.0	494.2	489.4	484.6	475.0	465.4	455.8	446.2	436.6
75°	652.5	652.5	652.5	642.9	638.1	628.5	618.9	609.3	594.9	580.6	566.2
72.5°	810.9	810.9	810.9	801.3	791.7	782.1	772.5	758.1	743.7	724.5	705.3
70°	959.6	959.6	959.6	950.0	940.4	930.8	916.4	902.0	882.8	863.6	844.4
67.5°	1113.1	1113.1	1113.1	1098.7	1089.1	1079.5	1065.1	1046.0	1026.8	1002.8	978.8
65°	1237.9	1237.9	1233.1	1228.3	1218.7	1204.3	1194.7	1175.5	1156.3	1137.1	1113.1
62.5°	1353.0	1353.0	1348.2	1343.4	1333.8	1319.4	1305.0	1290.6	1271.5	1247.5	1223.5
60°	1449.0	1449.0	1444.2	1439.4	1429.8	1420.2	1405.8	1391.4	1372.2	1353.0	1329.0
57.5°	1544.9	1544.9	1540.1	1535.3	1525.7	1511.4	1497.0	1482.6	1463.4	1439.4	1415.4
55°	1645.7	1645.7	1640.9	1631.3	1621.7	1607.3	1592.9	1573.7	1549.7	1525.7	1501.8
52.5°	1765.6	1765.6	1756.0	1746.5	1732.1	1717.7	1693.7	1669.7	1640.9	1612.1	1583.3
50°	1924.0	1924.0	1914.4	1900.0	1876.0	1852.0	1823.2	1784.8	1751.3	1712.9	1674.5
47.5°	2159.1	2159.1	2139.9	2115.9	2082.3	2043.9	1991.1	1933.6	1885.6	1837.6	1780.0
45°	2504.5	2504.5	2475.7	2437.4	2384.6	2317.4	2240.6	2159.1	2077.5	1995.9	1914.4
42.5°	3065.9	3065.9	3013.1	2945.9	2854.8	2739.6	2595.7	2461.3	2346.2	2216.7	2106.3
40°	4035.1	4035.1	3934.3	3809.6	3636.8	3416.1	3152.3	2941.1	2739.6	2514.1	2360.6
37.5°	5757.5	5757.5	5560.8	5320.9	4985.1	4562.8	4054.3	3713.6	3339.4	2984.3	2725.2
35°	8799.4	8799.4	8420.4	7955.0	7307.3	6491.6	5623.2	4980.3	4265.4	3718.4	3233.8
32.5°	13789.3	13789.3	13108.0	12268.4	11112.0	9648.7	8257.3	7033.8	5757.5	4850.7	3977.5
30°	19719.6	19719.6	18827.2	17728.4	16221.9	14321.9	12340.3	10166.9	8151.7	6534.8	5215.4
27.5°	25851.3	25597.1	24829.4	23577.1	21859.5	19719.6	17248.6	14441.8	11716.6	8866.6	6981.0
25°	32194.2	31896.8	31018.7	29579.4	27612.2	25189.2	22406.4	19268.6	15905.2	12508.3	9245.6
22.5°	38604.3	38268.4	37270.5	35644.0	33436.9	30721.3	27569.0	24080.9	20324.1	16399.4	12508.3
20°	44529.8	44174.7	43128.8	41435.1	39151.3	36171.7	32669.2	28802.1	24647.1	20324.1	15905.2
17.5°	49490.8	49150.2	48142.6	46525.7	44529.8	41233.6	37591.9	33340.9	28802.1	24080.9	19268.6
15°	53113.3	52820.6	51961.8	50604.0	48569.6	45652.5	41943.7	37591.9	32669.2	27569.0	22406.4
12.5°	55517.1	55282.0	54605.5	53549.9	51726.7	49279.7	45652.5	41233.6	36171.7	30721.3	25189.2
10°	56443.1	56327.9	56011.3	55526.7	53972.1	51726.7	48569.6	44529.8	39151.3	33436.9	27612.2
7.5°	56198.4	56236.8	56347.1	56222.4	55526.7	53549.9	50604.0	46525.7	41435.1	35644.0	29579.4
5°	55325.1	55531.5	56044.8	56347.1	56011.3	54605.5	51961.8	48142.6	43128.8	37270.5	31018.7
2.5°	54547.9	54869.3	55531.5	56236.8	56327.9	55282.0	52820.6	49150.2	44174.7	38268.4	31896.8
0°	54164.0	54547.9	55325.1	56198.4	56443.1	55517.1	53113.3	49490.8	44529.8	38604.3	32194.2

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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°	57.6	52.8	52.8	52.8	48.0	48.0	48.0	43.2	43.2	38.4	38.4
85°	134.3	129.5	124.7	119.9	115.2	110.4	105.6	100.8	96.0	86.4	81.6
82.5°	215.9	211.1	206.3	196.7	191.9	182.3	172.7	163.1	153.5	148.7	139.1
80°	311.9	302.3	292.7	283.1	268.7	254.3	244.7	230.3	220.7	206.3	196.7
77.5°	422.2	407.8	393.4	374.2	359.8	345.5	326.3	311.9	292.7	273.5	254.3
75°	547.0	527.8	503.8	484.6	465.4	441.4	417.4	393.4	369.4	345.5	321.5
72.5°	681.3	657.3	633.3	609.3	580.6	547.0	518.2	484.6	455.8	427.0	393.4
70°	820.4	791.7	762.9	734.1	700.5	662.1	628.5	590.1	551.8	513.4	475.0
67.5°	950.0	921.2	887.6	858.8	820.4	782.1	738.9	695.7	652.5	604.5	556.6
65°	1084.3	1050.8	1012.4	974.0	935.6	892.4	849.2	806.1	753.3	700.5	652.5
62.5°	1194.7	1165.9	1132.3	1093.9	1050.8	1002.8	959.6	902.0	849.2	796.5	734.1
60°	1300.2	1266.7	1237.9	1194.7	1156.3	1113.1	1060.3	1002.8	945.2	882.8	825.2
57.5°	1391.4	1362.6	1329.0	1290.6	1247.5	1204.3	1156.3	1103.5	1036.4	974.0	906.8
55°	1473.0	1439.4	1405.8	1372.2	1333.8	1285.9	1237.9	1185.1	1127.5	1060.3	988.4
52.5°	1554.5	1520.9	1482.6	1449.0	1405.8	1362.6	1314.6	1261.9	1204.3	1141.9	1065.1
50°	1636.1	1597.7	1559.3	1516.2	1473.0	1429.8	1381.8	1333.8	1271.5	1209.1	1141.9
47.5°	1732.1	1684.1	1636.1	1588.1	1544.9	1492.2	1444.2	1391.4	1338.6	1271.5	1204.3
45°	1852.0	1780.0	1722.5	1664.9	1612.1	1559.3	1501.8	1449.0	1391.4	1333.8	1261.9
42.5°	2000.7	1904.8	1828.0	1751.3	1684.1	1621.7	1564.1	1501.8	1444.2	1381.8	1314.6
40°	2202.3	2072.7	1948.0	1852.0	1765.6	1688.9	1621.7	1559.3	1492.2	1429.8	1362.6
37.5°	2466.1	2283.8	2111.1	1972.0	1861.6	1765.6	1684.1	1612.1	1544.9	1473.0	1405.8
35°	2864.4	2547.7	2327.0	2125.5	1972.0	1852.0	1751.3	1664.9	1588.1	1516.2	1449.0
32.5°	3425.7	2936.3	2581.3	2327.0	2111.1	1948.0	1828.0	1722.5	1636.1	1559.3	1482.6
30°	4164.6	3488.1	2936.3	2547.7	2283.8	2072.7	1904.8	1780.0	1684.1	1597.7	1520.9
27.5°	5335.3	4164.6	3425.7	2864.4	2466.1	2202.3	2000.7	1852.0	1732.1	1636.1	1554.5
25°	6981.0	5215.4	3977.5	3233.8	2725.2	2360.6	2106.3	1914.4	1780.0	1674.5	1583.3
22.5°	8866.6	6534.8	4850.7	3718.4	2984.3	2514.1	2216.7	1995.9	1837.6	1712.9	1612.1
20°	11716.6	8151.7	5757.5	4265.4	3339.4	2739.6	2346.2	2077.5	1885.6	1751.3	1640.9
17.5°	14441.8	10166.9	7033.8	4980.3	3713.6	2941.1	2461.3	2159.1	1933.6	1784.8	1669.7
15°	17248.6	12340.3	8257.3	5623.2	4054.3	3152.3	2595.7	2240.6	1991.1	1823.2	1693.7
12.5°	19719.6	14321.9	9648.7	6491.6	4562.8	3416.1	2739.6	2317.4	2043.9	1852.0	1717.7
10°	21859.5	16221.9	11112.0	7307.3	4985.1	3636.8	2854.8	2384.6	2082.3	1876.0	1732.1
7.5°	23577.1	17728.4	12268.4	7955.0	5320.9	3809.6	2945.9	2437.4	2115.9	1900.0	1746.5
5°	24829.4	18827.2	13108.0	8420.4	5560.8	3934.3	3013.1	2475.7	2139.9	1914.4	1756.0
2.5°	25597.1	19719.6	13789.3	8799.4	5757.5	4035.1	3065.9	2504.5	2159.1	1924.0	1765.6
0°	25851.3	19719.6	13789.3	8799.4	5757.5	4035.1	3065.9	2504.5	2159.1	1924.0	1765.6

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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°	33.6	33.6	28.8	28.8	24.0	24.0	19.2	19.2	14.4	14.4	9.6
85°	76.8	67.2	62.4	57.6	52.8	48.0	43.2	38.4	33.6	28.8	24.0
82.5°	129.5	119.9	105.6	96.0	86.4	76.8	62.4	57.6	48.0	38.4	33.6
80°	182.3	167.9	153.5	139.1	124.7	110.4	96.0	81.6	67.2	52.8	43.2
77.5°	235.1	215.9	201.5	182.3	163.1	143.9	124.7	105.6	86.4	67.2	52.8
75°	297.5	273.5	249.5	225.5	201.5	177.5	158.3	134.3	110.4	86.4	67.2
72.5°	364.6	331.1	302.3	273.5	239.9	215.9	187.1	163.1	134.3	105.6	81.6
70°	436.6	398.2	359.8	321.5	287.9	249.5	220.7	187.1	158.3	124.7	96.0
67.5°	508.6	465.4	422.2	374.2	331.1	292.7	249.5	215.9	177.5	143.9	110.4
65°	594.9	537.4	484.6	431.8	379.0	331.1	287.9	239.9	201.5	163.1	124.7
62.5°	676.5	614.1	551.8	489.4	431.8	374.2	321.5	273.5	225.5	182.3	139.1
60°	758.1	690.9	618.9	551.8	484.6	422.2	359.8	302.3	249.5	201.5	153.5
57.5°	839.6	762.9	690.9	614.1	537.4	465.4	398.2	331.1	273.5	215.9	167.9
55°	911.6	839.6	758.1	676.5	594.9	508.6	436.6	364.6	297.5	235.1	182.3
52.5°	988.4	906.8	825.2	734.1	652.5	556.6	475.0	393.4	321.5	254.3	196.7
50°	1060.3	974.0	882.8	796.5	700.5	604.5	513.4	427.0	345.5	273.5	206.3
47.5°	1127.5	1036.4	945.2	849.2	753.3	652.5	551.8	455.8	369.4	292.7	220.7
45°	1185.1	1103.5	1002.8	902.0	806.1	695.7	590.1	484.6	393.4	311.9	230.3
42.5°	1237.9	1156.3	1060.3	959.6	849.2	738.9	628.5	518.2	417.4	326.3	244.7
40°	1285.9	1204.3	1113.1	1002.8	892.4	782.1	662.1	547.0	441.4	345.5	254.3
37.5°	1333.8	1247.5	1156.3	1050.8	935.6	820.4	700.5	580.6	465.4	359.8	268.7
35°	1372.2	1290.6	1194.7	1093.9	974.0	858.8	734.1	609.3	484.6	374.2	283.1
32.5°	1405.8	1329.0	1237.9	1132.3	1012.4	887.6	762.9	633.3	503.8	393.4	292.7
30°	1439.4	1362.6	1266.7	1165.9	1050.8	921.2	791.7	657.3	527.8	407.8	302.3
27.5°	1473.0	1391.4	1300.2	1194.7	1084.3	950.0	820.4	681.3	547.0	422.2	311.9
25°	1501.8	1415.4	1329.0	1223.5	1113.1	978.8	844.4	705.3	566.2	436.6	321.5
22.5°	1525.7	1439.4	1353.0	1247.5	1137.1	1002.8	863.6	724.5	580.6	446.2	331.1
20°	1549.7	1463.4	1372.2	1271.5	1156.3	1026.8	882.8	743.7	594.9	455.8	335.9
17.5°	1573.7	1482.6	1391.4	1290.6	1175.5	1046.0	902.0	758.1	609.3	465.4	345.5
15°	1592.9	1497.0	1405.8	1305.0	1194.7	1065.1	916.4	772.5	618.9	475.0	350.3
12.5°	1607.3	1511.4	1420.2	1319.4	1204.3	1079.5	930.8	782.1	628.5	484.6	355.0
10°	1621.7	1525.7	1429.8	1333.8	1218.7	1089.1	940.4	791.7	638.1	489.4	359.8
7.5°	1631.3	1535.3	1439.4	1343.4	1228.3	1098.7	950.0	801.3	642.9	494.2	364.6
5°	1640.9	1540.1	1444.2	1348.2	1233.1	1113.1	959.6	810.9	652.5	499.0	364.6
2.5°	1645.7	1544.9	1449.0	1353.0	1237.9	1113.1	959.6	810.9	652.5	499.0	364.6
0°	1645.7	1544.9	1449.0	1353.0	1237.9	1113.1	959.6	810.9	652.5	499.0	364.6

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.6	4.8	4.8	0.0
85°	14.4	9.6	4.8	0.0
82.5°	24.0	14.4	9.6	0.0
80°	33.6	24.0	9.6	0.0
77.5°	38.4	28.8	14.4	0.0
75°	48.0	33.6	14.4	0.0
72.5°	57.6	38.4	19.2	0.0
70°	62.4	43.2	19.2	0.0
67.5°	76.8	48.0	24.0	0.0
65°	86.4	52.8	24.0	0.0
62.5°	96.0	57.6	28.8	0.0
60°	105.6	62.4	28.8	0.0
57.5°	119.9	67.2	33.6	0.0
55°	129.5	76.8	33.6	0.0
52.5°	139.1	81.6	38.4	0.0
50°	148.7	86.4	38.4	0.0
47.5°	153.5	96.0	43.2	0.0
45°	163.1	100.8	43.2	0.0
42.5°	172.7	105.6	48.0	0.0
40°	182.3	110.4	48.0	0.0
37.5°	191.9	115.2	48.0	0.0
35°	196.7	119.9	52.8	0.0
32.5°	206.3	124.7	52.8	0.0
30°	211.1	129.5	52.8	0.0
27.5°	215.9	134.3	57.6	0.0
25°	220.7	134.3	57.6	0.0
22.5°	225.5	139.1	57.6	0.0
20°	230.3	143.9	57.6	0.0
17.5°	235.1	143.9	57.6	0.0
15°	239.9	148.7	62.4	0.0
12.5°	244.7	148.7	62.4	0.0
10°	244.7	153.5	62.4	0.0
7.5°	249.5	153.5	62.4	0.0
5°	249.5	153.5	62.4	0.0
2.5°	249.5	153.5	62.4	0.0
0°	249.5	153.5	62.4	0.0

(END OF REPORT)