

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: P623805

Luminaire Tested: **IFLD-L-SA7D-830-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623805
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-830-U-55
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 5 distribution lens
Light Source: (112) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	40414 lumens	Max Intensity:	49387.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	95.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

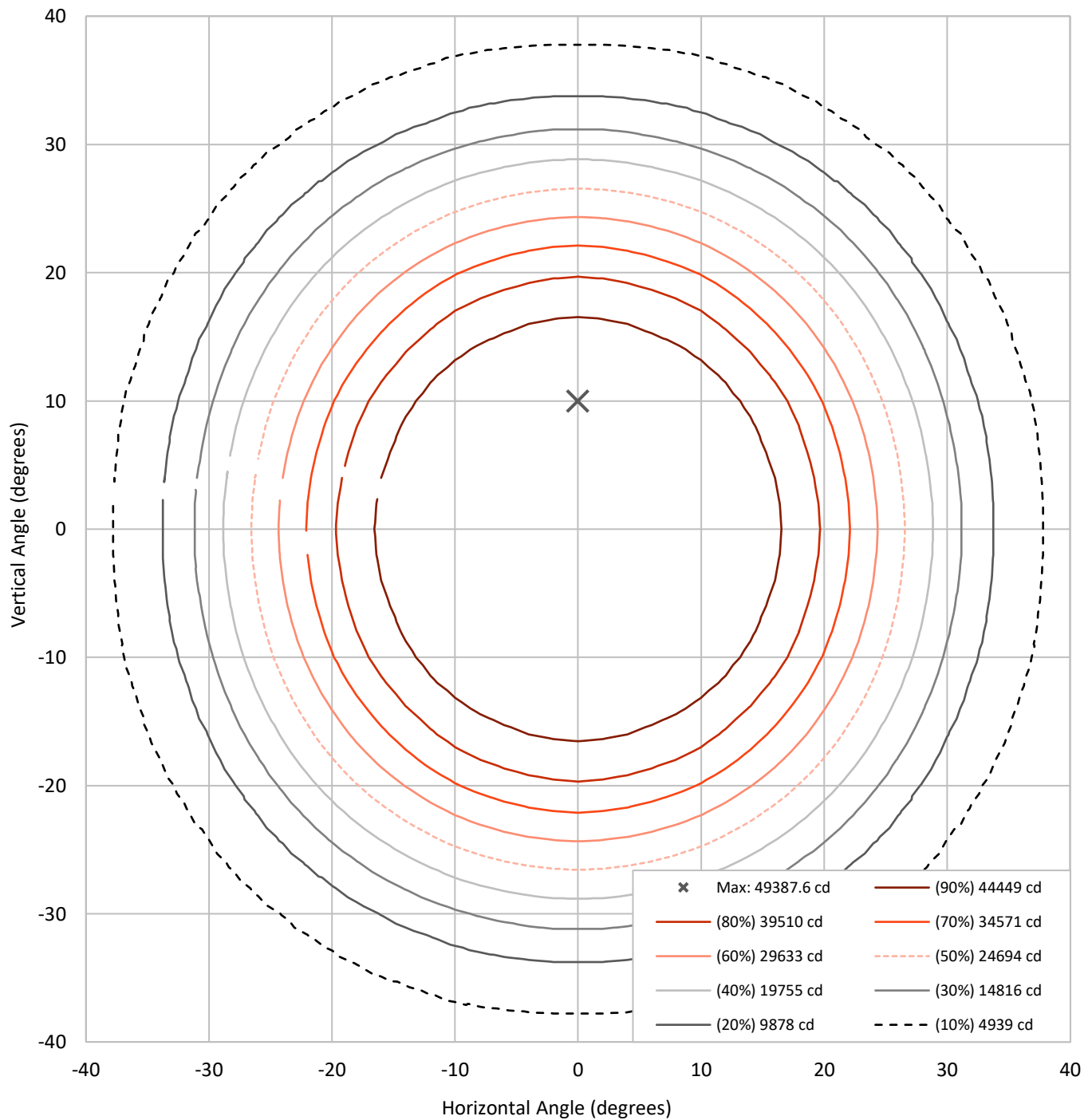
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	20086.8 lumens	Field Lumens:	26123.4 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

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



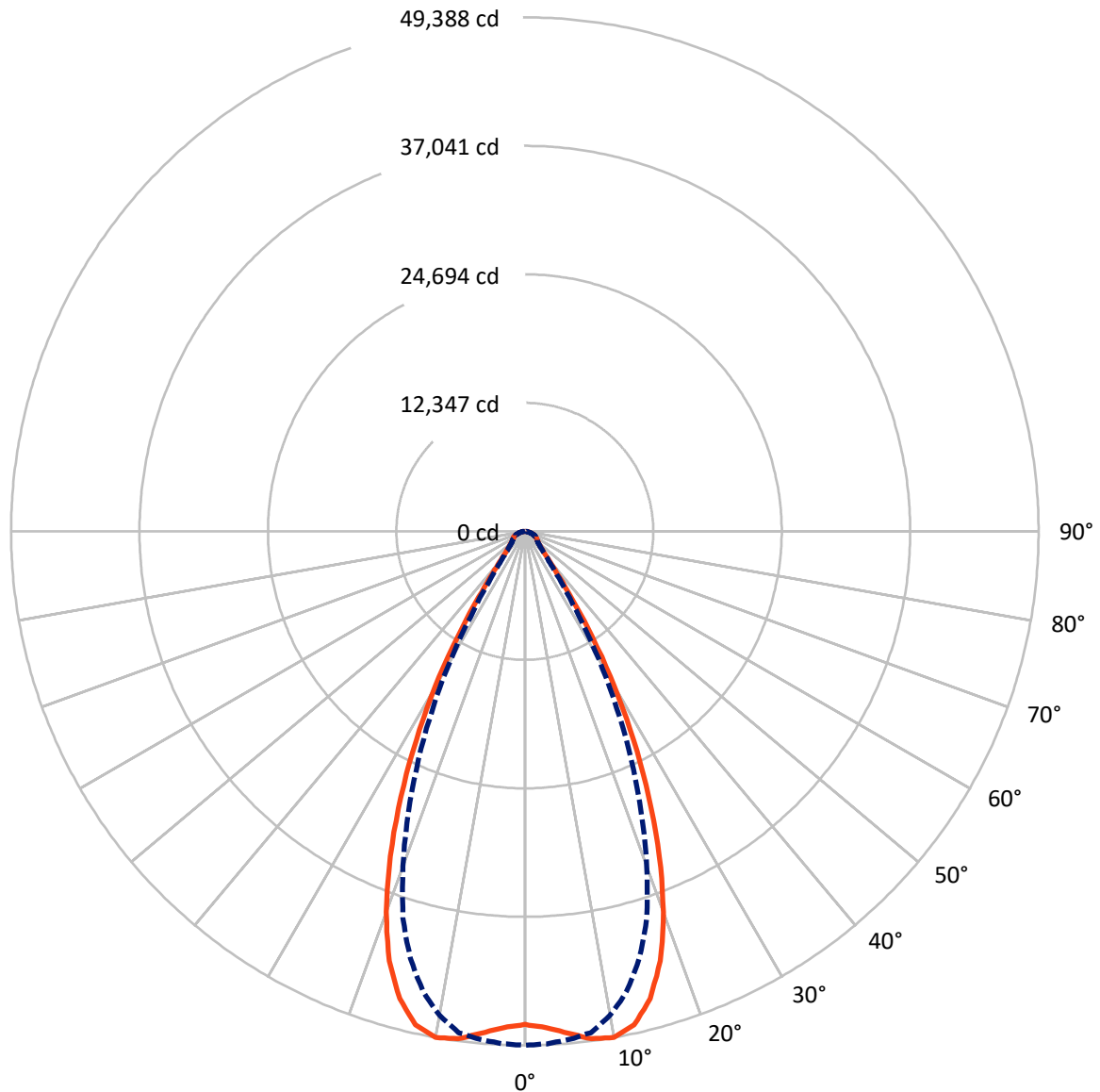
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Lumen Table

90	1.2		8.9		23.1		37.3		43.2		37.3		23.1		8.9		1.2
80	1.2		8.9		23.1		37.3		43.2		37.3		23.1		8.9		1.2
70	4.1	4.4	9.1	15.1	21.2	26.5	30.3	32.4	32.4	30.3	26.5	21.2	15.1	9.1	4.4	4.1	4.1
60		6.8	14.0	22.2	29.8	36.2	41.1	43.8	43.8	41.1	36.2	29.8	22.2	14.0	6.8		
50	7.2	9.1	18.0	27.3	36.6	47.3	60.0	69.6	69.6	60.0	47.3	36.6	27.3	18.0	9.1	7.2	7.2
40		11.1	20.9	31.6	47.9	85.4	166.8	251.6	251.6	166.8	85.4	47.9	31.6	20.9	11.1		
30	9.6	12.5	23.0	37.1	77.5	246.9	572.2	812.1	812.1	572.2	246.9	77.5	37.1	23.0	12.5	9.6	9.6
20		13.4	24.5	44.2	143.0	538.9	1054.5	1344.2	1344.2	1054.5	538.9	143.0	44.2	24.5	13.4		
10	10.4	13.9	25.4	49.9	209.9	742.4	1304.5	1479.3	1479.3	1304.5	742.4	209.9	49.9	25.4	13.9	10.4	10.4
0		13.9	25.4	49.9	209.9	742.4	1304.5	1479.3	1479.3	1304.5	742.4	209.9	49.9	25.4	13.9		
-10	9.6	13.4	24.5	44.2	143.0	538.9	1054.5	1344.2	1344.2	1054.5	538.9	143.0	44.2	24.5	13.4	9.6	9.6
-20		12.5	23.0	37.1	77.5	246.9	572.2	812.1	812.1	572.2	246.9	77.5	37.1	23.0	12.5		
-30	7.2	11.1	20.9	31.6	47.9	85.4	166.8	251.6	251.6	166.8	85.4	47.9	31.6	20.9	11.1	7.2	7.2
-40		9.1	18.0	27.3	36.6	47.3	60.0	69.6	69.6	60.0	47.3	36.6	27.3	18.0	9.1		
-50	4.1	6.8	14.0	22.2	29.8	36.2	41.1	43.8	43.8	41.1	36.2	29.8	22.2	14.0	6.8	4.1	4.1
-60		4.4	9.1	15.1	21.2	26.5	30.3	32.4	32.4	30.3	26.5	21.2	15.1	9.1	4.4		
-70	1.2	1.2	8.9	23.1	37.3	43.2	37.3	23.1	8.9	1.2	8.9	23.1	37.3	43.2	37.3	23.1	8.9
-80		1.2	8.9	23.1	37.3	43.2	37.3	23.1	8.9	1.2	8.9	23.1	37.3	43.2	37.3	23.1	8.9
-90	1.2		8.9		23.1		37.3		43.2		37.3		23.1		8.9		1.2

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Luminous Intensity Polar Plot

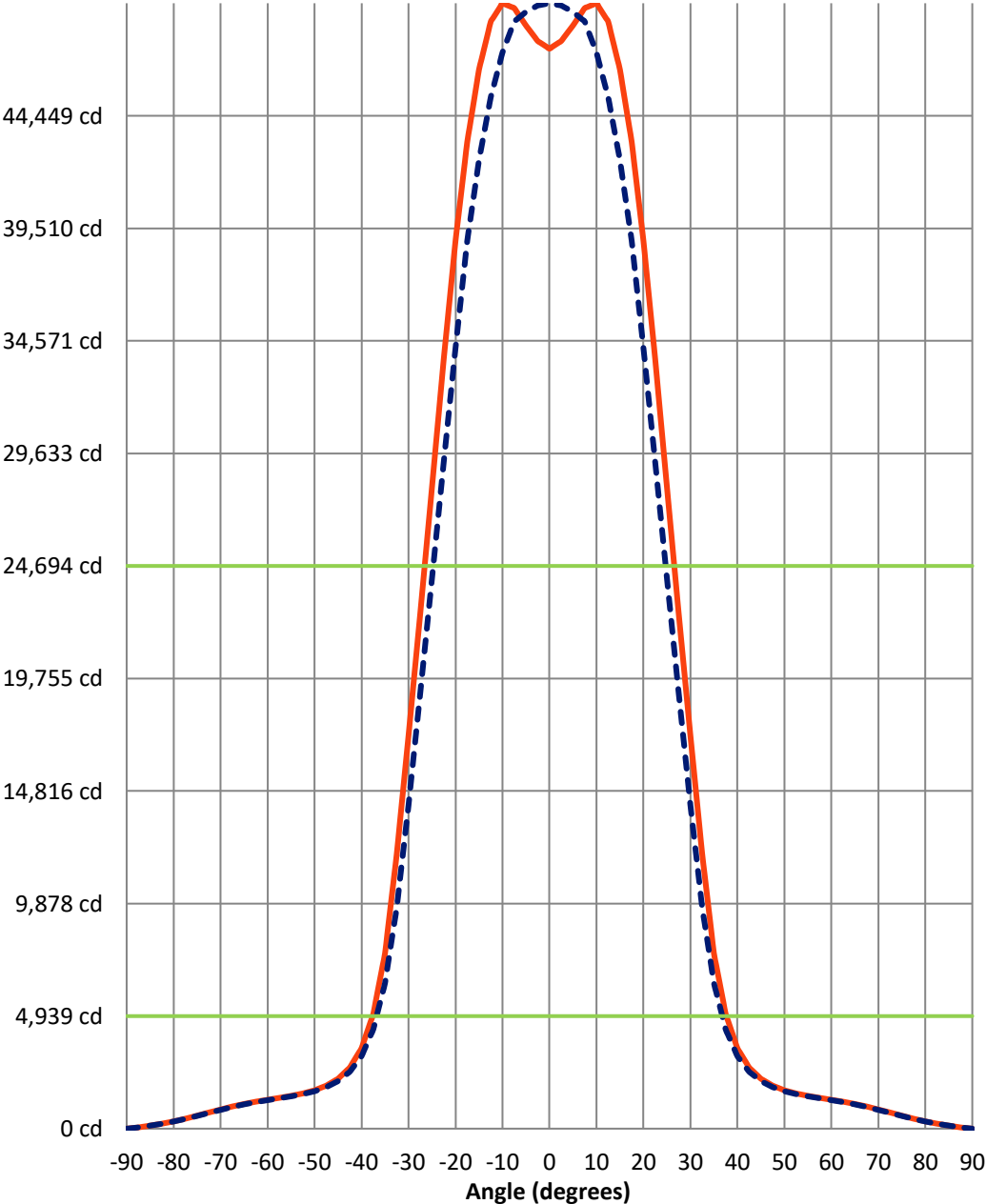


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 10-Deg



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Luminous Intensity Plot



Beam:
H Angle: 49.5°
V Angle: 53.1°
Lumens: 20086.8
Efficiency: 49.7%

Field:
H Angle: 73.6°
V Angle: 75.3°
Lumens: 26123.4
Efficiency: 64.6%

Spill:
Lumens: 14290.6
Efficiency: 35.4%

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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°	54.6	54.6	54.6	54.6	54.6	54.6	54.6	50.4	50.4	50.4	50.4
85°	134.3	134.3	134.3	134.3	134.3	130.1	130.1	125.9	125.9	121.7	117.5
82.5°	218.3	218.3	218.3	218.3	214.1	214.1	209.9	205.7	201.5	197.3	193.1
80°	319.1	319.1	319.1	319.1	314.9	310.7	306.5	302.3	293.9	289.7	281.3
77.5°	436.6	436.6	436.6	432.4	428.2	424.0	415.6	407.2	398.8	390.4	382.0
75°	571.0	571.0	571.0	562.6	558.4	550.0	541.6	533.2	520.6	508.0	495.4
72.5°	709.5	709.5	709.5	701.1	692.7	684.3	675.9	663.3	650.7	633.9	617.1
70°	839.6	839.6	839.6	831.2	822.8	814.4	801.9	789.3	772.5	755.7	738.9
67.5°	974.0	974.0	974.0	961.4	953.0	944.6	932.0	915.2	898.4	877.4	856.4
65°	1083.1	1083.1	1078.9	1074.7	1066.3	1053.7	1045.4	1028.6	1011.8	995.0	974.0
62.5°	1183.9	1183.9	1179.7	1175.5	1167.1	1154.5	1141.9	1129.3	1112.5	1091.5	1070.5
60°	1267.9	1267.9	1263.7	1259.5	1251.1	1242.7	1230.1	1217.5	1200.7	1183.9	1162.9
57.5°	1351.8	1351.8	1347.6	1343.4	1335.0	1322.4	1309.8	1297.2	1280.4	1259.5	1238.5
55°	1440.0	1440.0	1435.8	1427.4	1419.0	1406.4	1393.8	1377.0	1356.0	1335.0	1314.0
52.5°	1544.9	1544.9	1536.5	1528.1	1515.5	1503.0	1482.0	1461.0	1435.8	1410.6	1385.4
50°	1683.5	1683.5	1675.1	1662.5	1641.5	1620.5	1595.3	1561.7	1532.3	1498.8	1465.2
47.5°	1889.2	1889.2	1872.4	1851.4	1822.0	1788.4	1742.3	1691.9	1649.9	1607.9	1557.5
45°	2191.5	2191.5	2166.3	2132.7	2086.5	2027.7	1960.6	1889.2	1817.8	1746.4	1675.1
42.5°	2682.6	2682.6	2636.5	2577.7	2497.9	2397.2	2271.2	2153.7	2052.9	1939.6	1843.0
40°	3530.7	3530.7	3442.5	3333.4	3182.2	2989.1	2758.2	2573.5	2397.2	2199.9	2065.5
37.5°	5037.8	5037.8	4865.7	4655.8	4361.9	3992.5	3547.5	3249.4	2921.9	2611.3	2384.6
35°	7699.5	7699.5	7367.8	6960.6	6393.9	5680.2	4920.3	4357.7	3732.2	3253.6	2829.6
32.5°	12065.6	12065.6	11469.5	10734.8	9723.0	8442.6	7225.1	6154.6	5037.8	4244.4	3480.3
30°	17254.6	17254.6	16473.7	15512.3	14194.1	12531.6	10797.8	8896.0	7132.7	5717.9	4563.4
27.5°	22619.9	22397.4	21725.7	20629.9	19127.0	17254.6	15092.5	12636.6	10252.0	7758.3	6108.4
25°	28169.9	27909.6	27141.3	25881.9	24160.6	22040.5	19605.6	16859.9	13917.0	10944.7	8089.9
22.5°	33778.7	33484.8	32611.6	31188.4	29257.2	26881.0	24122.8	21070.7	17783.6	14349.4	10944.7
20°	38963.4	38652.8	37737.6	36255.6	34257.3	31650.2	28585.5	25201.8	21566.1	17783.6	13917.0
17.5°	43304.4	43006.3	42124.7	40709.9	38963.4	36079.3	32892.9	29173.3	25201.8	21070.7	16859.9
15°	46474.0	46217.9	45466.4	44278.4	42498.3	39945.8	36700.6	32892.9	28585.5	24122.8	19605.6
12.5°	48577.3	48371.6	47779.7	46856.0	45260.7	43119.7	39945.8	36079.3	31650.2	26881.0	22040.5
10°	49387.6	49286.8	49009.7	48585.7	47225.5	45260.7	42498.3	38963.4	34257.3	29257.2	24160.6
7.5°	49173.5	49207.0	49303.6	49194.4	48585.7	46856.0	44278.4	40709.9	36255.6	31188.4	25881.9
5°	48409.4	48589.9	49039.1	49303.6	49009.7	47779.7	45466.4	42124.7	37737.6	32611.6	27141.3
2.5°	47729.3	48010.6	48589.9	49207.0	49286.8	48371.6	46217.9	43006.3	38652.8	33484.8	27909.6
0°	47393.4	47729.3	48409.4	49173.5	49387.6	48577.3	46474.0	43304.4	38963.4	33778.7	28169.9

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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°	50.4	46.2	46.2	46.2	42.0	42.0	42.0	37.8	37.8	33.6	33.6
85°	117.5	113.4	109.2	105.0	100.8	96.6	92.4	88.2	84.0	75.6	71.4
82.5°	188.9	184.7	180.5	172.1	167.9	159.5	151.1	142.7	134.3	130.1	121.7
80°	272.9	264.5	256.1	247.7	235.1	222.5	214.1	201.5	193.1	180.5	172.1
77.5°	369.4	356.8	344.3	327.5	314.9	302.3	285.5	272.9	256.1	239.3	222.5
75°	478.6	461.8	440.8	424.0	407.2	386.2	365.2	344.3	323.3	302.3	281.3
72.5°	596.1	575.2	554.2	533.2	508.0	478.6	453.4	424.0	398.8	373.6	344.3
70°	717.9	692.7	667.5	642.3	612.9	579.4	550.0	516.4	482.8	449.2	415.6
67.5°	831.2	806.1	776.7	751.5	717.9	684.3	646.5	608.7	571.0	529.0	487.0
65°	948.8	919.4	885.8	852.2	818.6	780.9	743.1	705.3	659.1	612.9	571.0
62.5°	1045.4	1020.2	990.8	957.2	919.4	877.4	839.6	789.3	743.1	696.9	642.3
60°	1137.7	1108.3	1083.1	1045.4	1011.8	974.0	927.8	877.4	827.0	772.5	722.1
57.5°	1217.5	1192.3	1162.9	1129.3	1091.5	1053.7	1011.8	965.6	906.8	852.2	793.5
55°	1288.8	1259.5	1230.1	1200.7	1167.1	1125.1	1083.1	1037.0	986.6	927.8	864.8
52.5°	1360.2	1330.8	1297.2	1267.9	1230.1	1192.3	1150.3	1104.1	1053.7	999.2	932.0
50°	1431.6	1398.0	1364.4	1326.6	1288.8	1251.1	1209.1	1167.1	1112.5	1057.9	999.2
47.5°	1515.5	1473.6	1431.6	1389.6	1351.8	1305.6	1263.7	1217.5	1171.3	1112.5	1053.7
45°	1620.5	1557.5	1507.2	1456.8	1410.6	1364.4	1314.0	1267.9	1217.5	1167.1	1104.1
42.5°	1750.6	1666.7	1599.5	1532.3	1473.6	1419.0	1368.6	1314.0	1263.7	1209.1	1150.3
40°	1927.0	1813.6	1704.5	1620.5	1544.9	1477.8	1419.0	1364.4	1305.6	1251.1	1192.3
37.5°	2157.9	1998.3	1847.2	1725.5	1628.9	1544.9	1473.6	1410.6	1351.8	1288.8	1230.1
35°	2506.3	2229.2	2036.1	1859.8	1725.5	1620.5	1532.3	1456.8	1389.6	1326.6	1267.9
32.5°	2997.5	2569.3	2258.6	2036.1	1847.2	1704.5	1599.5	1507.2	1431.6	1364.4	1297.2
30°	3644.0	3052.1	2569.3	2229.2	1998.3	1813.6	1666.7	1557.5	1473.6	1398.0	1330.8
27.5°	4668.4	3644.0	2997.5	2506.3	2157.9	1927.0	1750.6	1620.5	1515.5	1431.6	1360.2
25°	6108.4	4563.4	3480.3	2829.6	2384.6	2065.5	1843.0	1675.1	1557.5	1465.2	1385.4
22.5°	7758.3	5717.9	4244.4	3253.6	2611.3	2199.9	1939.6	1746.4	1607.9	1498.8	1410.6
20°	10252.0	7132.7	5037.8	3732.2	2921.9	2397.2	2052.9	1817.8	1649.9	1532.3	1435.8
17.5°	12636.6	8896.0	6154.6	4357.7	3249.4	2573.5	2153.7	1889.2	1691.9	1561.7	1461.0
15°	15092.5	10797.8	7225.1	4920.3	3547.5	2758.2	2271.2	1960.6	1742.3	1595.3	1482.0
12.5°	17254.6	12531.6	8442.6	5680.2	3992.5	2989.1	2397.2	2027.7	1788.4	1620.5	1503.0
10°	19127.0	14194.1	9723.0	6393.9	4361.9	3182.2	2497.9	2086.5	1822.0	1641.5	1515.5
7.5°	20629.9	15512.3	10734.8	6960.6	4655.8	3333.4	2577.7	2132.7	1851.4	1662.5	1528.1
5°	21725.7	16473.7	11469.5	7367.8	4865.7	3442.5	2636.5	2166.3	1872.4	1675.1	1536.5
2.5°	22397.4	17254.6	12065.6	7699.5	5037.8	3530.7	2682.6	2191.5	1889.2	1683.5	1544.9
0°	22619.9	17254.6	12065.6	7699.5	5037.8	3530.7	2682.6	2191.5	1889.2	1683.5	1544.9

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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°	29.4	29.4	25.2	25.2	21.0	21.0	16.8	16.8	12.6	12.6	8.4
85°	67.2	58.8	54.6	50.4	46.2	42.0	37.8	33.6	29.4	25.2	21.0
82.5°	113.4	105.0	92.4	84.0	75.6	67.2	54.6	50.4	42.0	33.6	29.4
80°	159.5	146.9	134.3	121.7	109.2	96.6	84.0	71.4	58.8	46.2	37.8
77.5°	205.7	188.9	176.3	159.5	142.7	125.9	109.2	92.4	75.6	58.8	46.2
75°	260.3	239.3	218.3	197.3	176.3	155.3	138.5	117.5	96.6	75.6	58.8
72.5°	319.1	289.7	264.5	239.3	209.9	188.9	163.7	142.7	117.5	92.4	71.4
70°	382.0	348.5	314.9	281.3	251.9	218.3	193.1	163.7	138.5	109.2	84.0
67.5°	445.0	407.2	369.4	327.5	289.7	256.1	218.3	188.9	155.3	125.9	96.6
65°	520.6	470.2	424.0	377.8	331.7	289.7	251.9	209.9	176.3	142.7	109.2
62.5°	591.9	537.4	482.8	428.2	377.8	327.5	281.3	239.3	197.3	159.5	121.7
60°	663.3	604.5	541.6	482.8	424.0	369.4	314.9	264.5	218.3	176.3	134.3
57.5°	734.7	667.5	604.5	537.4	470.2	407.2	348.5	289.7	239.3	188.9	146.9
55°	797.7	734.7	663.3	591.9	520.6	445.0	382.0	319.1	260.3	205.7	159.5
52.5°	864.8	793.5	722.1	642.3	571.0	487.0	415.6	344.3	281.3	222.5	172.1
50°	927.8	852.2	772.5	696.9	612.9	529.0	449.2	373.6	302.3	239.3	180.5
47.5°	986.6	906.8	827.0	743.1	659.1	571.0	482.8	398.8	323.3	256.1	193.1
45°	1037.0	965.6	877.4	789.3	705.3	608.7	516.4	424.0	344.3	272.9	201.5
42.5°	1083.1	1011.8	927.8	839.6	743.1	646.5	550.0	453.4	365.2	285.5	214.1
40°	1125.1	1053.7	974.0	877.4	780.9	684.3	579.4	478.6	386.2	302.3	222.5
37.5°	1167.1	1091.5	1011.8	919.4	818.6	717.9	612.9	508.0	407.2	314.9	235.1
35°	1200.7	1129.3	1045.4	957.2	852.2	751.5	642.3	533.2	424.0	327.5	247.7
32.5°	1230.1	1162.9	1083.1	990.8	885.8	776.7	667.5	554.2	440.8	344.3	256.1
30°	1259.5	1192.3	1108.3	1020.2	919.4	806.1	692.7	575.2	461.8	356.8	264.5
27.5°	1288.8	1217.5	1137.7	1045.4	948.8	831.2	717.9	596.1	478.6	369.4	272.9
25°	1314.0	1238.5	1162.9	1070.5	974.0	856.4	738.9	617.1	495.4	382.0	281.3
22.5°	1335.0	1259.5	1183.9	1091.5	995.0	877.4	755.7	633.9	508.0	390.4	289.7
20°	1356.0	1280.4	1200.7	1112.5	1011.8	898.4	772.5	650.7	520.6	398.8	293.9
17.5°	1377.0	1297.2	1217.5	1129.3	1028.6	915.2	789.3	663.3	533.2	407.2	302.3
15°	1393.8	1309.8	1230.1	1141.9	1045.4	932.0	801.9	675.9	541.6	415.6	306.5
12.5°	1406.4	1322.4	1242.7	1154.5	1053.7	944.6	814.4	684.3	550.0	424.0	310.7
10°	1419.0	1335.0	1251.1	1167.1	1066.3	953.0	822.8	692.7	558.4	428.2	314.9
7.5°	1427.4	1343.4	1259.5	1175.5	1074.7	961.4	831.2	701.1	562.6	432.4	319.1
5°	1435.8	1347.6	1263.7	1179.7	1078.9	974.0	839.6	709.5	571.0	436.6	319.1
2.5°	1440.0	1351.8	1267.9	1183.9	1083.1	974.0	839.6	709.5	571.0	436.6	319.1
0°	1440.0	1351.8	1267.9	1183.9	1083.1	974.0	839.6	709.5	571.0	436.6	319.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	8.4	4.2	4.2	0.0
85°	12.6	8.4	4.2	0.0
82.5°	21.0	12.6	8.4	0.0
80°	29.4	21.0	8.4	0.0
77.5°	33.6	25.2	12.6	0.0
75°	42.0	29.4	12.6	0.0
72.5°	50.4	33.6	16.8	0.0
70°	54.6	37.8	16.8	0.0
67.5°	67.2	42.0	21.0	0.0
65°	75.6	46.2	21.0	0.0
62.5°	84.0	50.4	25.2	0.0
60°	92.4	54.6	25.2	0.0
57.5°	105.0	58.8	29.4	0.0
55°	113.4	67.2	29.4	0.0
52.5°	121.7	71.4	33.6	0.0
50°	130.1	75.6	33.6	0.0
47.5°	134.3	84.0	37.8	0.0
45°	142.7	88.2	37.8	0.0
42.5°	151.1	92.4	42.0	0.0
40°	159.5	96.6	42.0	0.0
37.5°	167.9	100.8	42.0	0.0
35°	172.1	105.0	46.2	0.0
32.5°	180.5	109.2	46.2	0.0
30°	184.7	113.4	46.2	0.0
27.5°	188.9	117.5	50.4	0.0
25°	193.1	117.5	50.4	0.0
22.5°	197.3	121.7	50.4	0.0
20°	201.5	125.9	50.4	0.0
17.5°	205.7	125.9	50.4	0.0
15°	209.9	130.1	54.6	0.0
12.5°	214.1	130.1	54.6	0.0
10°	214.1	134.3	54.6	0.0
7.5°	218.3	134.3	54.6	0.0
5°	218.3	134.3	54.6	0.0
2.5°	218.3	134.3	54.6	0.0
0°	218.3	134.3	54.6	0.0

(END OF REPORT)