

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: P628405

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

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628405
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (112) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

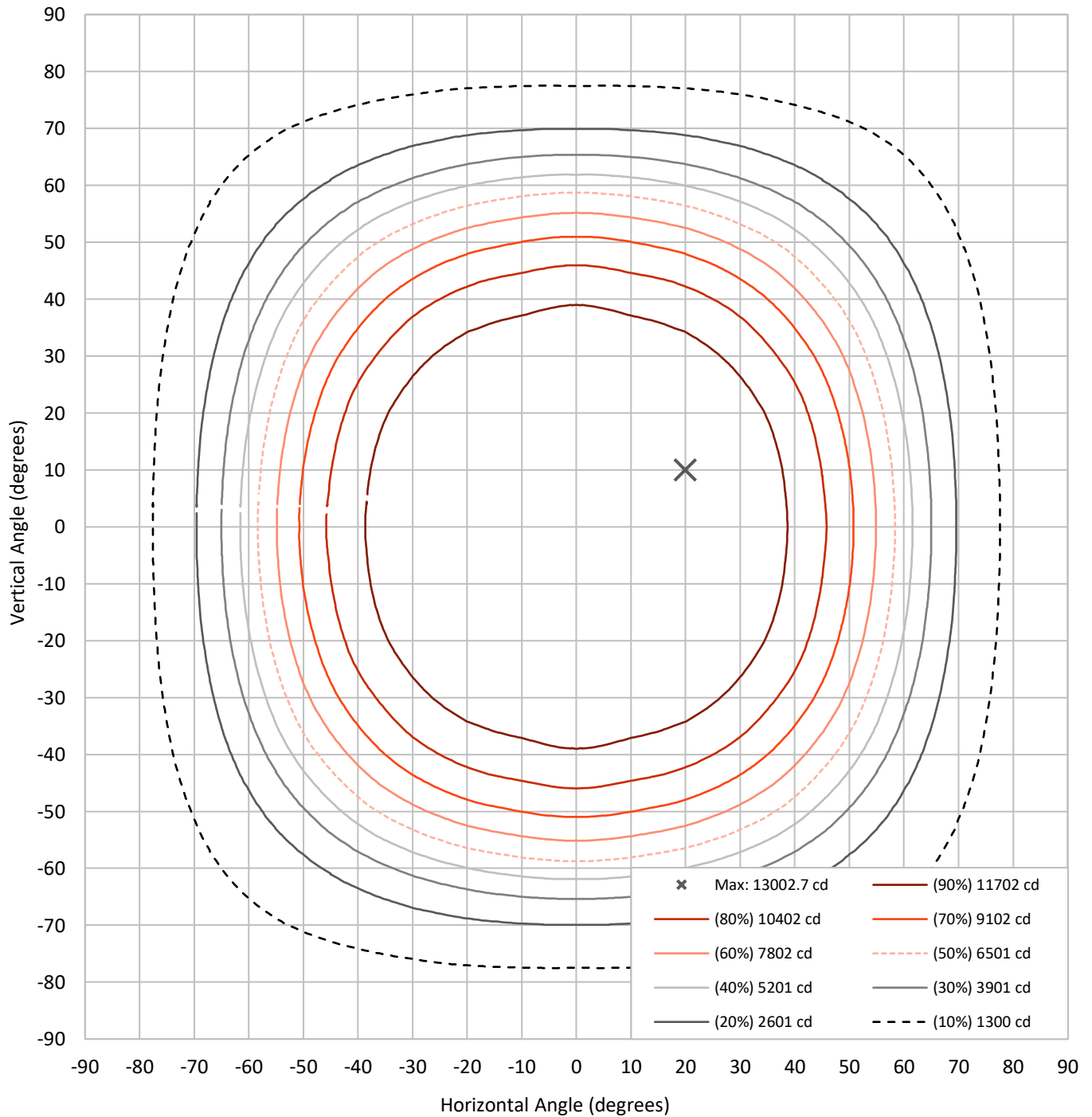
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	39890.5 lumens	Max Intensity:	13002.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	94.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	24477.6 lumens	Field Lumens:	29344.5 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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



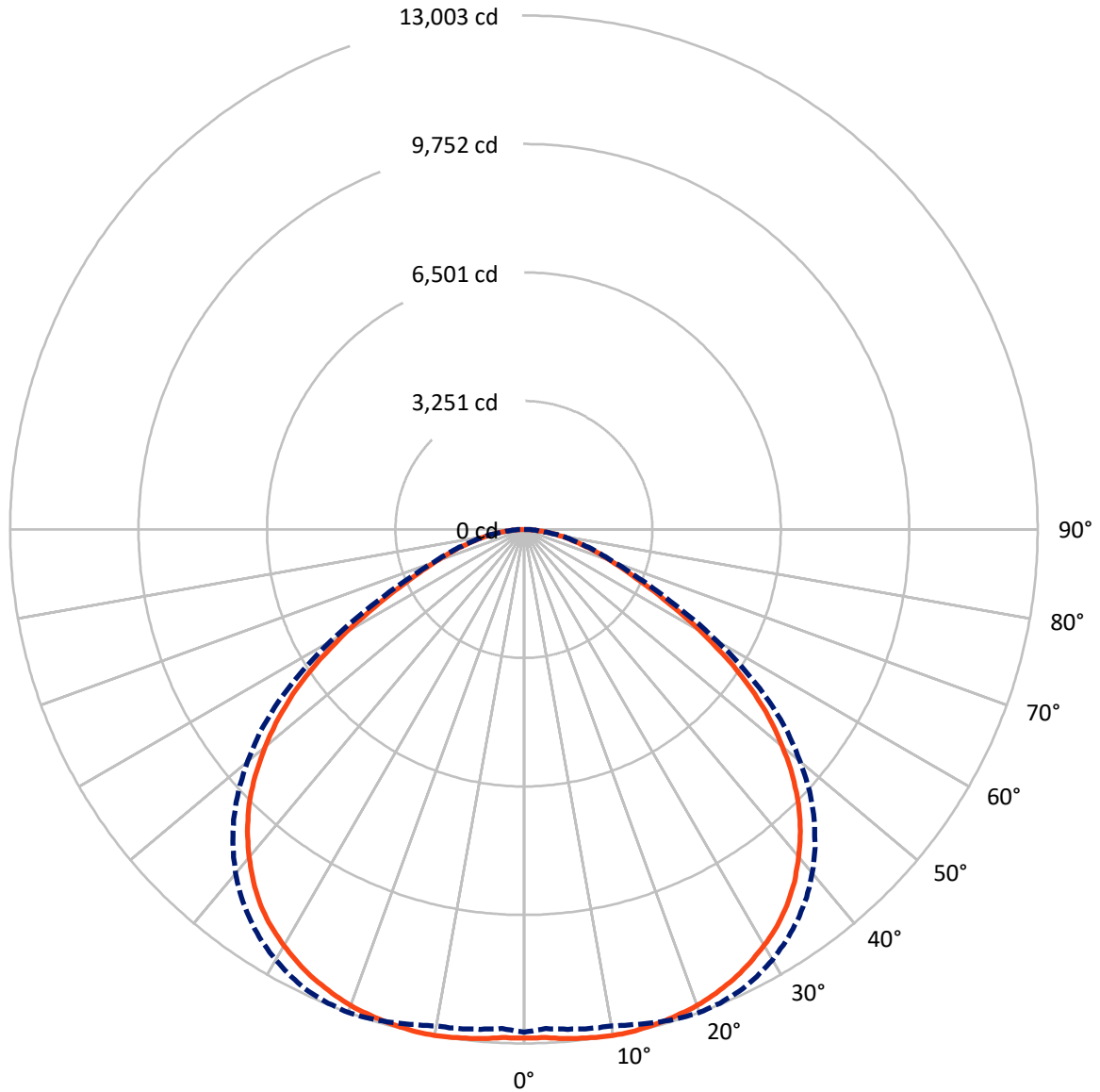
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Iso-Candela Plot



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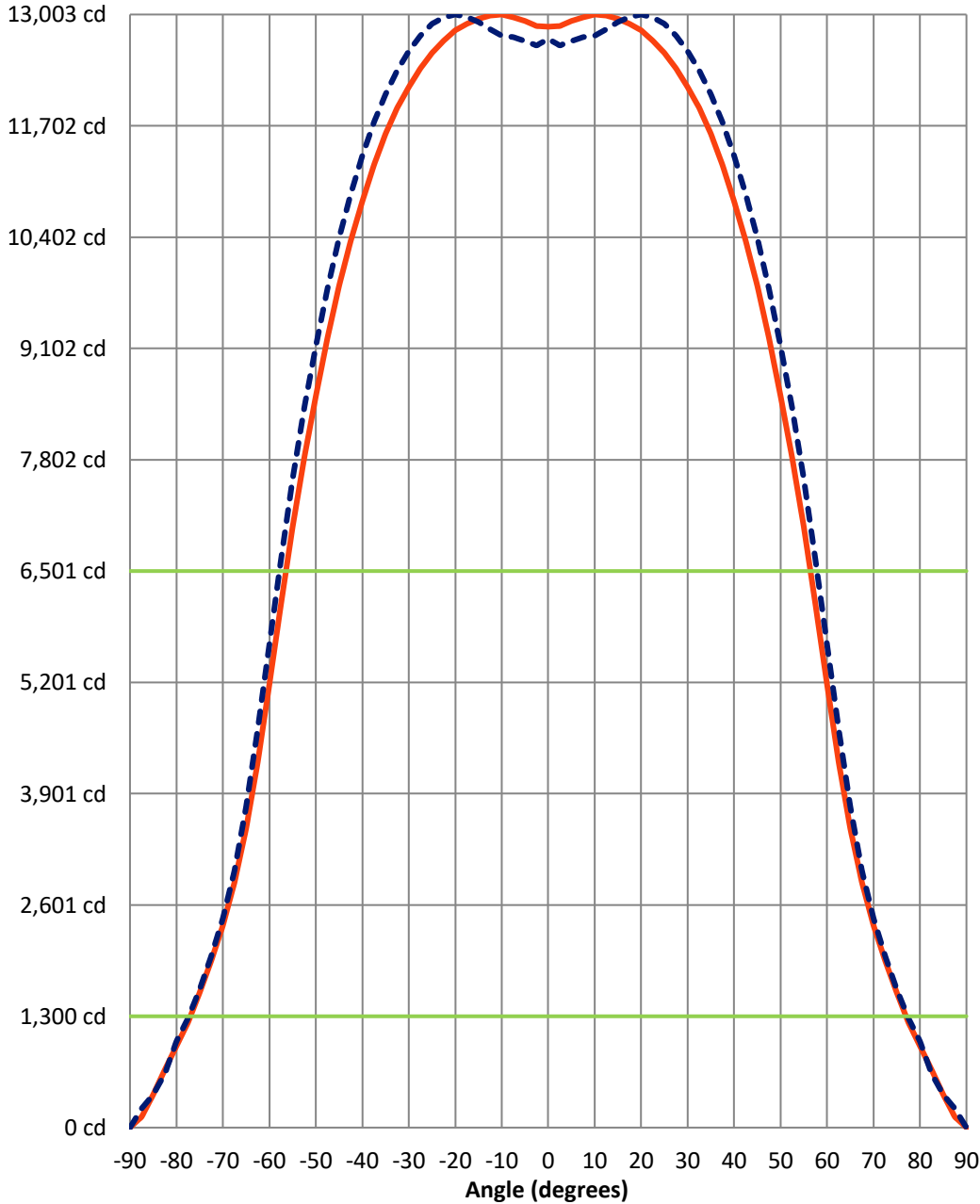
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 24477.6
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 29344.5
 Efficiency: 73.6%

Spill:
 Lumens: 10546
 Efficiency: 26.4%

- Vertical Distribution through 20-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°	104.9	113.3	117.5	121.7	125.9	130.1	134.3	130.1	125.9	125.9	121.7
85°	281.2	289.6	293.8	323.2	352.6	369.3	390.3	386.1	386.1	381.9	377.7
82.5°	562.4	587.6	608.6	638.0	654.8	679.9	696.7	684.1	675.7	658.9	646.4
80°	998.9	1007.3	1011.5	1015.7	994.7	990.5	982.1	969.5	952.7	931.8	910.8
77.5°	1271.7	1280.1	1288.5	1280.1	1275.9	1271.7	1259.1	1246.5	1229.8	1213.0	1187.8
75°	1683.0	1683.0	1683.0	1670.5	1662.1	1649.5	1628.5	1607.5	1578.1	1544.5	1506.8
72.5°	2119.5	2115.4	2111.2	2086.0	2065.0	2039.8	2010.4	1985.2	1951.7	1913.9	1863.5
70°	2577.0	2585.4	2589.6	2556.1	2530.9	2497.3	2459.5	2413.3	2363.0	2308.4	2237.1
67.5°	3206.6	3198.2	3189.8	3143.6	3110.1	3063.9	3009.3	2942.2	2866.6	2782.7	2682.0
65°	3987.3	3999.9	3974.7	3928.5	3865.6	3790.0	3706.1	3609.5	3496.2	3370.3	3227.6
62.5°	4931.6	4952.6	4923.2	4864.5	4784.7	4684.0	4566.5	4428.0	4272.7	4096.4	3920.1
60°	6006.1	6001.9	5947.3	5867.6	5762.7	5636.7	5506.6	5355.5	5179.3	4973.6	4759.5
57.5°	6992.4	6984.0	6916.9	6837.1	6732.2	6597.9	6459.4	6299.9	6115.2	5897.0	5649.3
55°	7878.0	7869.6	7802.5	7718.5	7609.4	7475.1	7349.2	7198.1	7017.6	6786.8	6522.3
52.5°	8662.9	8667.1	8608.3	8516.0	8398.5	8268.3	8146.6	7995.5	7823.4	7592.6	7336.6
50°	9384.8	9380.6	9317.6	9233.7	9124.6	8998.6	8876.9	8725.8	8545.4	8322.9	8075.3
47.5°	10056.3	10047.9	9976.6	9884.2	9770.9	9661.8	9548.5	9414.2	9225.3	9002.8	8755.2
45°	10618.7	10601.9	10530.6	10442.5	10333.3	10236.8	10136.1	10035.3	9833.9	9628.2	9393.2
42.5°	11101.4	11097.2	11025.9	10937.7	10828.6	10744.6	10652.3	10526.4	10358.5	10169.6	9938.8
40°	11563.1	11529.5	11458.2	11374.2	11273.5	11202.1	11109.8	10983.9	10820.2	10635.5	10413.1
37.5°	11907.3	11911.4	11835.9	11743.6	11655.4	11588.3	11504.3	11386.8	11244.1	11063.6	10841.2
35°	12234.6	12213.6	12150.7	12070.9	11991.2	11915.6	11827.5	11726.8	11609.3	11441.4	11231.5
32.5°	12448.7	12478.1	12402.5	12318.6	12272.4	12213.6	12121.3	12016.4	11911.4	11743.6	11554.7
30°	12683.7	12658.5	12599.8	12528.4	12494.8	12457.1	12377.3	12276.6	12154.9	12003.8	11827.5
27.5°	12847.4	12834.8	12763.5	12696.3	12679.5	12645.9	12583.0	12494.8	12373.1	12226.2	12062.5
25°	12918.8	12927.2	12860.0	12822.2	12822.2	12801.2	12750.9	12675.3	12553.6	12419.3	12259.8
22.5°	12952.3	12943.9	12897.8	12889.4	12910.4	12893.6	12872.6	12805.4	12696.3	12587.2	12452.9
20°	12973.3	12914.6	12872.6	12906.2	12931.4	12927.2	12910.4	12868.4	12818.0	12725.7	12608.2
17.5°	12927.2	12889.4	12839.0	12889.4	12943.9	12948.1	12931.4	12906.2	12893.6	12834.8	12729.9
15°	12813.8	12784.5	12792.8	12843.2	12906.2	12927.2	12939.7	12969.1	12952.3	12906.2	12813.8
12.5°	12738.3	12700.5	12738.3	12788.6	12822.2	12834.8	12935.5	12990.1	12990.1	12948.1	12889.4
10°	12717.3	12641.7	12692.1	12738.3	12755.1	12830.6	12914.6	12973.3	13002.7	12969.1	12893.6
7.5°	12675.3	12625.0	12645.9	12666.9	12763.5	12818.0	12864.2	12927.2	12969.1	12964.9	12897.8
5°	12654.3	12591.4	12599.8	12687.9	12755.1	12792.8	12809.6	12864.2	12927.2	12939.7	12889.4
2.5°	12599.8	12570.4	12633.4	12641.7	12692.1	12721.5	12738.3	12788.6	12868.4	12897.8	12876.8
0°	12570.4	12528.4	12486.5	12520.0	12604.0	12666.9	12692.1	12767.7	12860.0	12889.4	12843.2



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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°	117.5	113.3	109.1	104.9	109.1	109.1	109.1	104.9	109.1	104.9	104.9
85°	365.2	348.4	335.8	319.0	302.2	289.6	272.8	256.0	251.8	247.6	239.2
82.5°	629.6	608.6	587.6	562.4	537.2	507.9	478.5	444.9	436.5	428.1	415.5
80°	885.6	856.2	826.8	797.5	772.3	742.9	709.3	671.5	646.4	625.4	600.2
77.5°	1154.2	1112.2	1070.3	1019.9	990.5	961.1	927.6	889.8	852.0	818.4	780.7
75°	1460.6	1414.4	1372.5	1322.1	1267.5	1213.0	1158.4	1108.0	1053.5	1003.1	952.7
72.5°	1800.6	1733.4	1666.3	1603.3	1536.1	1469.0	1397.6	1330.5	1263.3	1196.2	1124.8
70°	2157.3	2073.4	1989.4	1905.5	1817.4	1729.2	1645.3	1561.3	1477.4	1389.2	1309.5
67.5°	2577.0	2480.5	2371.4	2253.9	2123.7	2010.4	1901.3	1800.6	1699.8	1599.1	1498.4
65°	3101.7	2967.4	2820.5	2661.0	2509.9	2358.8	2199.3	2048.2	1930.7	1813.2	1699.8
62.5°	3748.0	3559.2	3353.5	3147.8	2963.2	2765.9	2581.2	2384.0	2199.3	2031.4	1892.9
60°	4520.3	4264.3	4012.5	3748.0	3492.0	3223.4	2988.4	2744.9	2514.1	2308.4	2107.0
57.5°	5372.3	5074.3	4772.1	4449.0	4100.6	3785.8	3466.8	3147.8	2875.0	2602.2	2375.6
55°	6236.9	5922.1	5582.2	5217.0	4835.1	4432.2	3999.9	3643.1	3269.6	2950.6	2656.8
52.5°	7059.6	6732.2	6379.6	6043.9	5586.4	5124.7	4650.4	4180.3	3743.8	3336.7	2980.0
50°	7794.1	7475.1	7135.1	6744.8	6320.9	5829.8	5301.0	4772.1	4255.9	3777.4	3332.5
47.5°	8465.6	8155.0	7815.1	7424.7	7038.6	6493.0	5959.9	5376.5	4801.5	4251.7	3731.2
45°	9095.2	8780.4	8427.8	8054.3	7609.4	7122.5	6572.7	5985.1	5368.1	4751.1	4151.0
42.5°	9666.0	9351.2	8994.4	8608.3	8167.6	7684.9	7151.9	6560.1	5938.9	5267.4	4608.4
40°	10165.4	9859.1	9514.9	9112.0	8700.6	8192.8	7668.2	7105.7	6463.6	5787.8	5061.7
37.5°	10601.9	10316.5	9976.6	9577.8	9141.3	8688.1	8146.6	7584.2	7005.0	6270.5	5527.6
35°	10988.1	10723.7	10375.3	9997.6	9569.5	9091.0	8583.1	8033.3	7407.9	6719.6	5997.7
32.5°	11323.9	11055.2	10736.3	10358.5	9943.0	9493.9	8973.5	8419.4	7827.6	7126.7	6341.9
30°	11609.3	11349.0	11046.8	10690.1	10291.4	9846.5	9338.6	8780.4	8176.0	7479.3	6702.8
27.5°	11856.9	11609.3	11315.5	10983.9	10601.9	10173.8	9661.8	9099.4	8482.4	7810.9	7034.4
25°	12070.9	11831.7	11558.9	11244.1	10866.4	10446.7	9964.0	9376.4	8759.4	8083.7	7315.6
22.5°	12264.0	12033.2	11760.4	11454.0	11109.8	10690.1	10203.2	9619.8	8994.4	8327.1	7571.6
20°	12436.1	12222.0	11953.4	11638.6	11294.5	10870.6	10387.9	9833.9	9204.3	8549.5	7802.5
17.5°	12574.6	12385.7	12117.1	11785.5	11441.4	11030.1	10560.0	10052.1	9384.8	8738.4	7995.5
15°	12671.1	12486.5	12243.0	11907.3	11571.5	11164.4	10694.3	10169.6	9548.5	8889.5	8155.0
12.5°	12738.3	12541.0	12314.4	12003.8	11668.0	11265.1	10807.6	10291.4	9687.0	9023.8	8293.5
10°	12755.1	12574.6	12347.9	12070.9	11743.6	11353.2	10904.1	10392.1	9800.3	9128.8	8406.8
7.5°	12763.5	12591.4	12385.7	12121.3	11798.1	11420.4	10975.5	10471.8	9884.2	9216.9	8490.8
5°	12759.3	12595.6	12410.9	12154.9	11831.7	11458.2	11021.7	10526.4	9943.0	9275.7	8553.7
2.5°	12746.7	12599.8	12427.7	12180.1	11869.5	11500.1	11067.8	10589.4	10006.0	9326.0	8604.1
0°	12780.3	12654.3	12436.1	12171.7	11877.9	11500.1	11063.6	10597.7	10014.3	9321.8	8599.9



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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°	104.9	100.7	100.7	96.5	92.3	88.1	79.7	75.5	67.2	54.6	42.0
85°	226.6	214.1	201.5	193.1	184.7	176.3	163.7	151.1	134.3	109.1	83.9
82.5°	398.7	373.5	348.4	319.0	293.8	268.6	247.6	226.6	201.5	163.7	125.9
80°	570.8	533.0	495.3	453.3	415.5	373.5	335.8	302.2	268.6	218.3	167.9
77.5°	742.9	692.5	638.0	587.6	533.0	478.5	423.9	377.7	327.4	268.6	209.9
75°	902.4	843.6	793.3	721.9	654.8	583.4	512.0	449.1	386.1	314.8	251.8
72.5°	1061.9	986.3	915.0	847.8	772.3	684.1	604.4	524.6	444.9	361.0	285.4
70°	1221.4	1129.0	1040.9	961.1	877.2	789.1	692.5	600.2	503.7	402.9	314.8
67.5°	1385.1	1280.1	1179.4	1078.7	982.1	881.4	780.7	675.7	562.4	444.9	348.4
65°	1565.5	1435.4	1313.7	1200.4	1087.1	977.9	864.6	751.3	625.4	491.1	377.7
62.5°	1746.0	1603.3	1460.6	1317.9	1192.0	1070.3	948.6	822.6	684.1	541.4	407.1
60°	1939.1	1775.4	1611.7	1452.2	1296.9	1162.6	1028.3	894.0	747.1	587.6	436.5
57.5°	2153.1	1955.9	1771.2	1590.7	1414.4	1254.9	1108.0	965.3	801.7	633.8	470.1
55°	2396.6	2153.1	1934.9	1733.4	1540.3	1347.3	1187.8	1040.9	864.6	679.9	507.9
52.5°	2652.6	2371.4	2107.0	1880.3	1674.7	1456.4	1263.3	1099.6	927.6	726.1	541.4
50°	2950.6	2593.8	2300.0	2023.0	1792.2	1565.5	1343.1	1166.8	990.5	780.7	575.0
47.5°	3257.0	2862.4	2493.1	2190.9	1918.1	1670.5	1435.4	1225.6	1049.3	831.0	608.6
45°	3613.7	3118.5	2711.3	2354.6	2039.8	1779.6	1527.8	1288.5	1099.6	881.4	642.2
42.5°	3957.9	3420.7	2938.0	2535.1	2178.3	1884.5	1611.7	1355.7	1150.0	931.8	671.5
40°	4365.0	3722.9	3156.2	2707.1	2316.8	1985.2	1695.6	1427.0	1196.2	977.9	700.9
37.5°	4755.3	4029.2	3420.7	2896.0	2451.1	2086.0	1779.6	1494.2	1238.2	1024.1	738.7
35°	5141.5	4369.2	3672.5	3072.3	2589.6	2199.3	1863.5	1557.1	1280.1	1061.9	772.3
32.5°	5510.8	4688.2	3928.5	3269.6	2740.7	2304.2	1939.1	1615.9	1322.1	1095.5	805.8
30°	5855.0	4990.4	4180.3	3471.0	2879.2	2400.8	2010.4	1674.7	1372.5	1124.8	839.4
27.5°	6169.8	5284.2	4432.2	3659.9	3009.3	2488.9	2086.0	1729.2	1414.4	1154.2	868.8
25°	6455.2	5548.6	4663.0	3832.0	3126.9	2585.4	2157.3	1783.8	1452.2	1179.4	894.0
22.5°	6723.8	5792.0	4872.9	4004.1	3269.6	2682.0	2224.5	1834.1	1490.0	1204.6	919.2
20°	6958.8	6014.5	5074.3	4176.1	3395.5	2770.1	2283.2	1880.3	1523.6	1221.4	944.4
17.5°	7147.7	6211.7	5254.8	4327.2	3504.6	2845.7	2333.6	1922.3	1552.9	1242.3	961.1
15°	7315.6	6379.6	5405.9	4457.3	3601.1	2908.6	2379.8	1955.9	1578.1	1254.9	982.1
12.5°	7458.3	6522.3	5536.0	4570.7	3685.1	2963.2	2417.5	1981.0	1599.1	1267.5	994.7
10°	7575.8	6635.7	5645.1	4658.8	3752.2	3005.1	2446.9	2006.2	1615.9	1280.1	1007.3
7.5°	7664.0	6719.6	5724.9	4734.4	3806.8	3034.5	2472.1	2023.0	1632.7	1288.5	1028.3
5°	7731.1	6791.0	5787.8	4784.7	3848.8	3076.5	2501.5	2044.0	1649.5	1296.9	1028.3
2.5°	7781.5	6849.7	5838.2	4826.7	3882.3	3068.1	2501.5	2039.8	1649.5	1296.9	1024.1
0°	7773.1	6853.9	5834.0	4826.7	3882.3	3059.7	2501.5	2035.6	1649.5	1296.9	1024.1



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	29.4	21.0	8.4	0.0
85°	63.0	42.0	21.0	0.0
82.5°	92.3	58.8	29.4	0.0
80°	121.7	79.7	37.8	0.0
77.5°	155.3	100.7	50.4	0.0
75°	184.7	117.5	58.8	0.0
72.5°	214.1	138.5	67.2	0.0
70°	239.2	155.3	75.5	0.0
67.5°	264.4	176.3	88.1	0.0
65°	285.4	193.1	96.5	0.0
62.5°	302.2	214.1	104.9	0.0
60°	323.2	230.8	113.3	0.0
57.5°	340.0	243.4	121.7	0.0
55°	356.8	251.8	130.1	0.0
52.5°	373.5	264.4	138.5	0.0
50°	390.3	277.0	146.9	0.0
47.5°	407.1	285.4	151.1	0.0
45°	432.3	298.0	159.5	0.0
42.5°	453.3	306.4	167.9	0.0
40°	474.3	314.8	172.1	0.0
37.5°	495.3	323.2	180.5	0.0
35°	516.2	331.6	184.7	0.0
32.5°	533.0	340.0	188.9	0.0
30°	549.8	348.4	193.1	0.0
27.5°	566.6	352.6	197.3	0.0
25°	579.2	361.0	201.5	0.0
22.5°	591.8	365.2	205.7	0.0
20°	600.2	369.3	209.9	0.0
17.5°	612.8	373.5	214.1	0.0
15°	617.0	377.7	222.4	0.0
12.5°	625.4	381.9	222.4	0.0
10°	629.6	386.1	222.4	0.0
7.5°	638.0	386.1	222.4	0.0
5°	633.8	386.1	222.4	0.0
2.5°	633.8	386.1	222.4	0.0
0°	629.6	386.1	222.4	0.0

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