

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: P628285

Luminaire Tested: **IFLD-M-SA4E-740-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628285
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-740-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	37260.7 lumens	Max Intensity:	12145.5 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	118.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

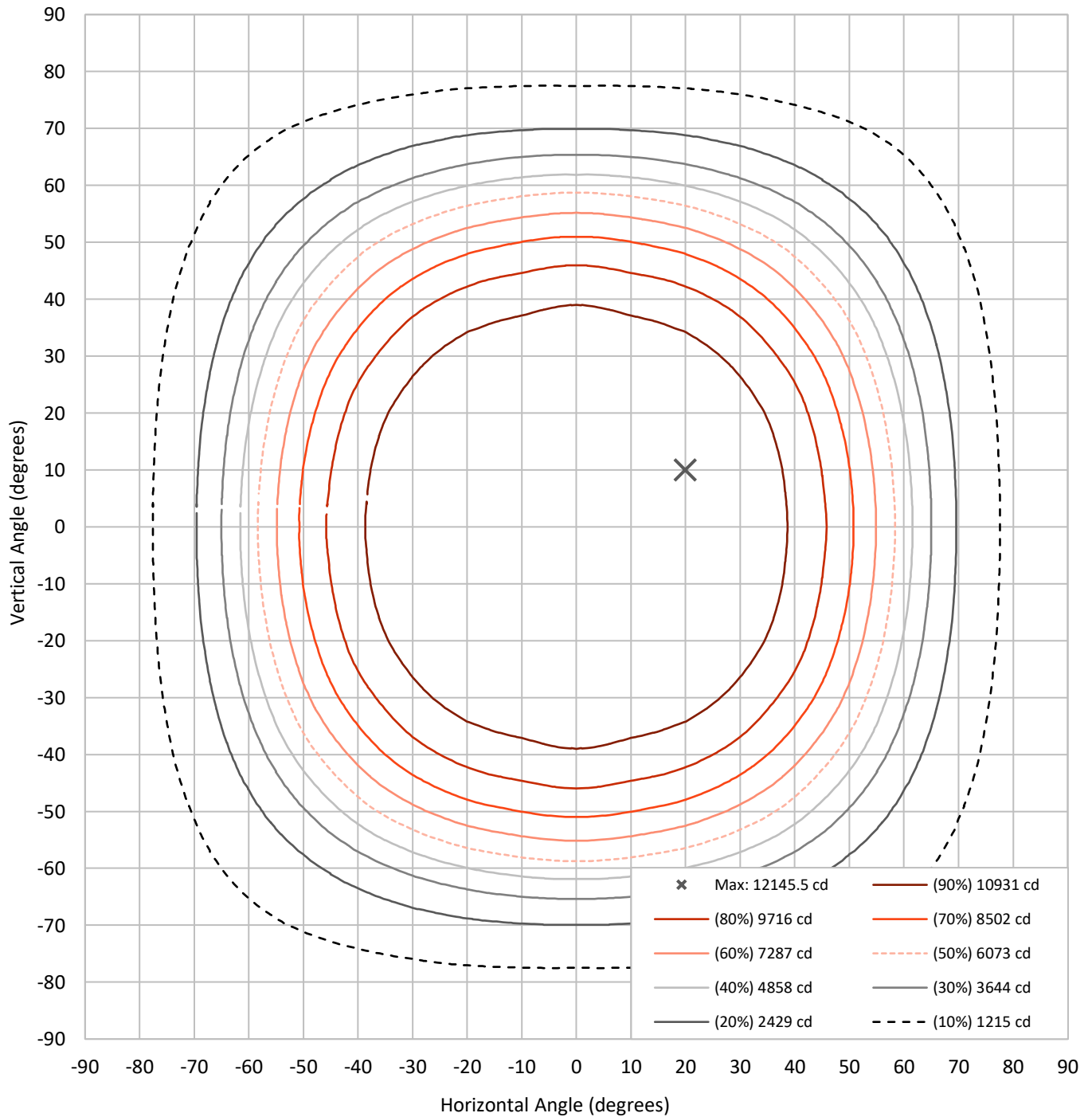
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	22863.9 lumens	Field Lumens:	27410 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 314.8
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



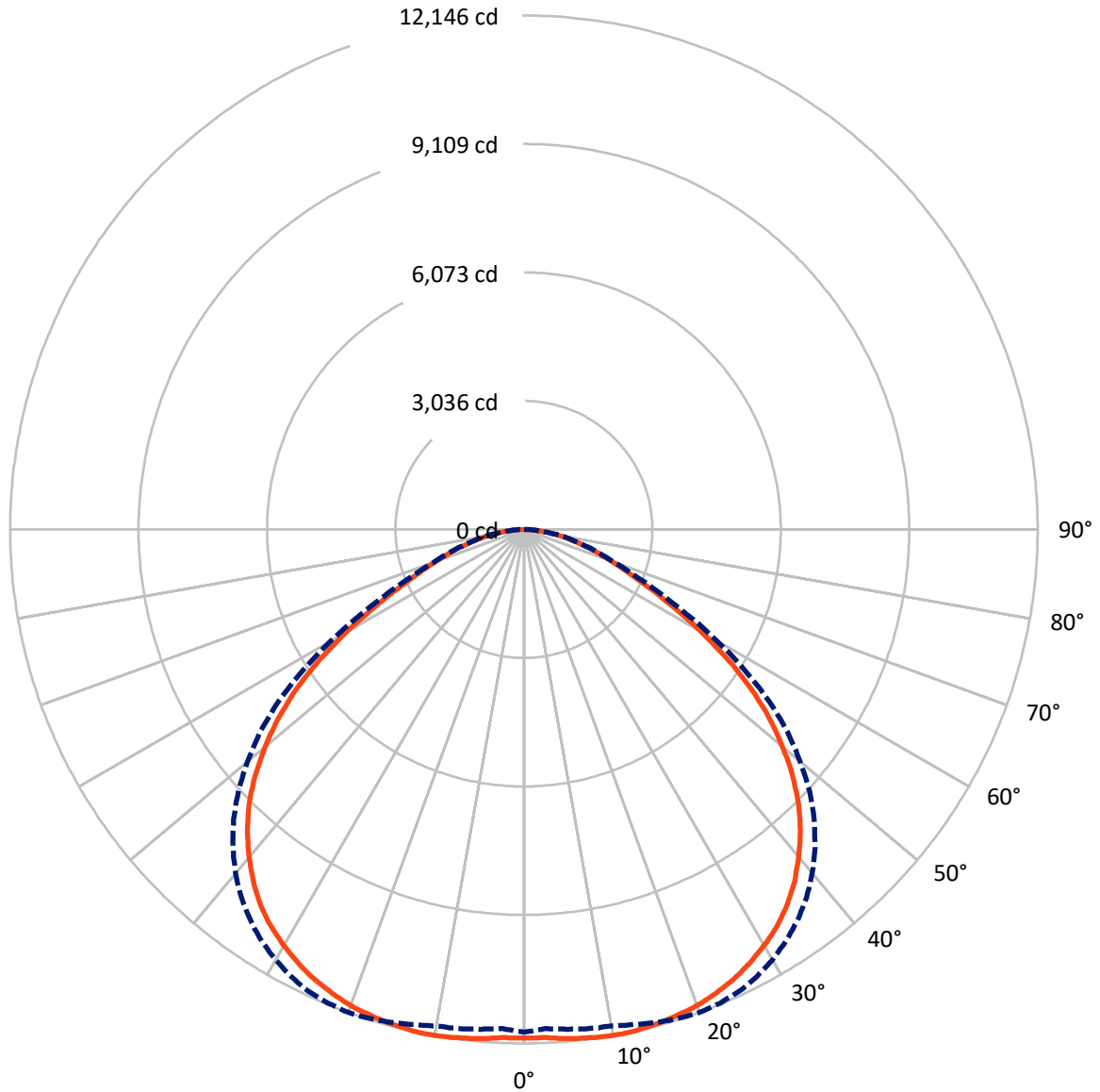
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Iso-Candela Plot



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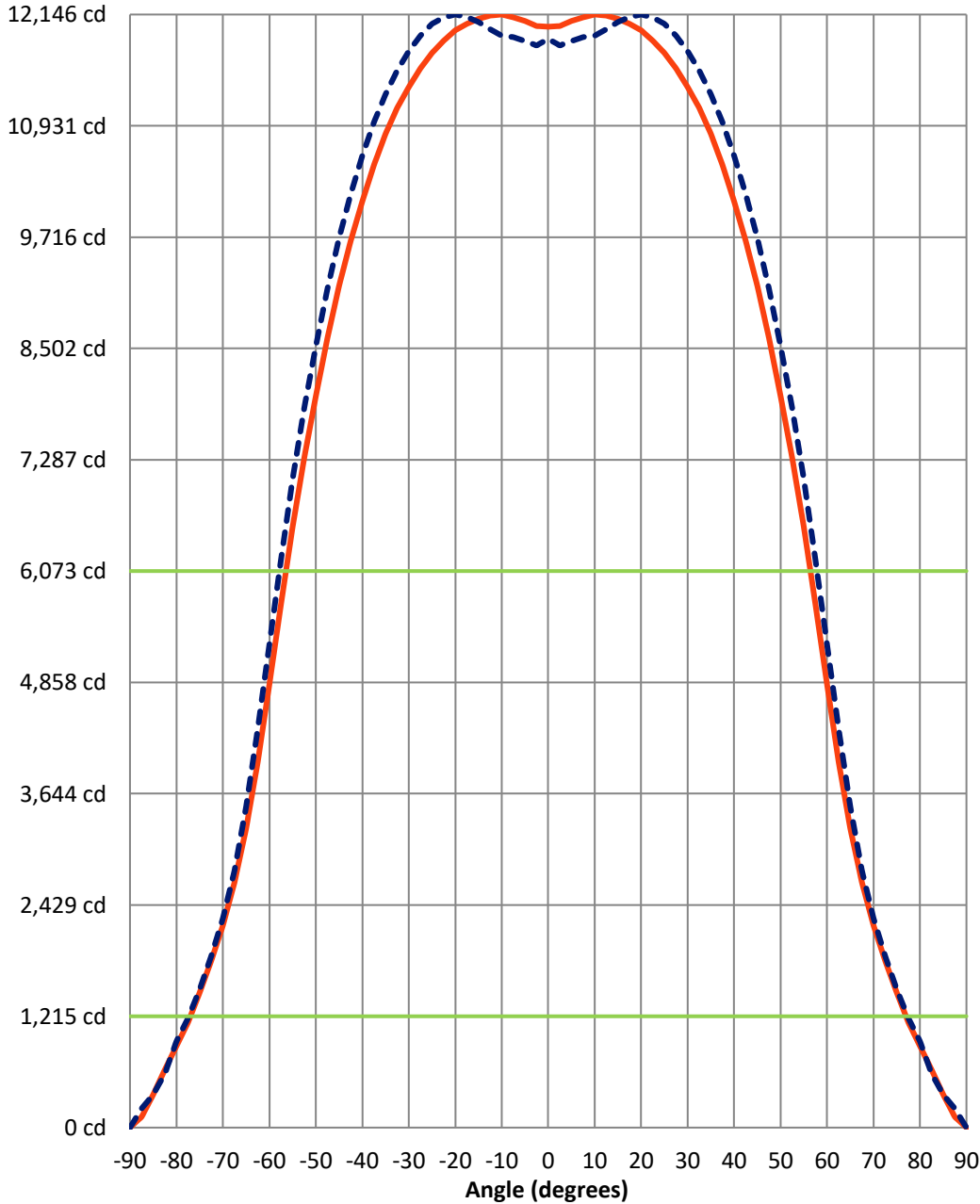
Luminous Intensity Polar Plot



— 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: 22863.9
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 27410
 Efficiency: 73.6%

Spill:
 Lumens: 9850.7
 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°	98.0	105.9	109.8	113.7	117.6	121.5	125.5	121.5	117.6	117.6	113.7
85°	262.7	270.5	274.4	301.9	329.3	345.0	364.6	360.7	360.7	356.8	352.8
82.5°	525.3	548.9	568.5	595.9	611.6	635.1	650.8	639.0	631.2	615.5	603.7
80°	933.1	940.9	944.8	948.7	929.1	925.2	917.4	905.6	889.9	870.3	850.7
77.5°	1187.9	1195.7	1203.6	1195.7	1191.8	1187.9	1176.1	1164.4	1148.7	1133.0	1109.5
75°	1572.1	1572.1	1572.1	1560.3	1552.5	1540.7	1521.1	1501.5	1474.1	1442.7	1407.4
72.5°	1979.8	1975.9	1972.0	1948.5	1928.9	1905.3	1877.9	1854.4	1823.0	1787.7	1740.7
70°	2407.1	2415.0	2418.9	2387.5	2364.0	2332.7	2297.4	2254.2	2207.2	2156.2	2089.6
67.5°	2995.2	2987.4	2979.5	2936.4	2905.0	2861.9	2810.9	2748.2	2677.7	2599.2	2505.2
65°	3724.4	3736.2	3712.6	3669.5	3610.7	3540.1	3461.7	3371.6	3265.7	3148.1	3014.8
62.5°	4606.5	4626.1	4598.7	4543.8	4469.3	4375.2	4265.4	4136.1	3991.0	3826.3	3661.7
60°	5610.1	5606.2	5555.2	5480.8	5382.8	5265.1	5143.6	5002.5	4837.8	4645.7	4445.8
57.5°	6531.4	6523.6	6460.9	6386.4	6288.4	6162.9	6033.5	5884.6	5712.1	5508.2	5276.9
55°	7358.6	7350.8	7288.1	7209.7	7107.7	6982.3	6864.7	6723.5	6555.0	6339.3	6092.3
52.5°	8091.8	8095.7	8040.8	7954.6	7844.8	7723.2	7609.6	7468.4	7307.7	7092.1	6852.9
50°	8766.1	8762.2	8703.4	8624.9	8523.0	8405.4	8291.7	8150.6	7982.0	7774.2	7542.9
47.5°	9393.4	9385.5	9318.9	9232.6	9126.8	9024.8	8919.0	8793.5	8617.1	8409.3	8178.0
45°	9918.7	9903.0	9836.4	9754.0	9652.1	9561.9	9467.8	9373.7	9185.6	8993.5	8773.9
42.5°	10369.5	10365.6	10299.0	10216.6	10114.7	10036.3	9950.1	9832.4	9675.6	9499.2	9283.6
40°	10800.8	10769.4	10702.8	10624.4	10530.3	10463.6	10377.4	10259.8	10106.9	9934.4	9726.6
37.5°	11122.3	11126.2	11055.6	10969.4	10887.0	10824.3	10745.9	10636.1	10502.8	10334.3	10126.5
35°	11428.1	11408.5	11349.6	11275.2	11200.7	11130.1	11047.8	10953.7	10843.9	10687.1	10491.1
32.5°	11628.0	11655.4	11584.9	11506.5	11463.3	11408.5	11322.2	11224.2	11126.2	10969.4	10792.9
30°	11847.5	11824.0	11769.1	11702.5	11671.1	11635.8	11561.3	11467.3	11353.6	11212.4	11047.8
27.5°	12000.4	11988.7	11922.0	11859.3	11843.6	11812.3	11753.4	11671.1	11557.4	11420.2	11267.3
25°	12067.1	12074.9	12012.2	11976.9	11976.9	11957.3	11910.3	11839.7	11726.0	11600.6	11451.6
22.5°	12098.4	12090.6	12047.5	12039.6	12059.2	12043.6	12024.0	11961.2	11859.3	11757.4	11631.9
20°	12118.0	12063.2	12024.0	12055.3	12078.8	12074.9	12059.2	12020.0	11973.0	11886.7	11777.0
17.5°	12074.9	12039.6	11992.6	12039.6	12090.6	12094.5	12078.8	12055.3	12043.6	11988.7	11890.7
15°	11969.1	11941.6	11949.5	11996.5	12055.3	12074.9	12086.7	12114.1	12098.4	12055.3	11969.1
12.5°	11898.5	11863.2	11898.5	11945.6	11976.9	11988.7	12082.8	12133.7	12133.7	12094.5	12039.6
10°	11878.9	11808.3	11855.4	11898.5	11914.2	11984.8	12063.2	12118.0	12145.5	12114.1	12043.6
7.5°	11839.7	11792.7	11812.3	11831.9	11922.0	11973.0	12016.1	12074.9	12114.1	12110.2	12047.5
5°	11820.1	11761.3	11769.1	11851.5	11914.2	11949.5	11965.2	12016.1	12074.9	12086.7	12039.6
2.5°	11769.1	11741.7	11800.5	11808.3	11855.4	11882.8	11898.5	11945.6	12020.0	12047.5	12027.9
0°	11741.7	11702.5	11663.3	11694.6	11773.1	11831.9	11855.4	11925.9	12012.2	12039.6	11996.5



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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°	109.8	105.9	101.9	98.0	101.9	101.9	101.9	98.0	101.9	98.0	98.0
85°	341.1	325.4	313.6	298.0	282.3	270.5	254.8	239.1	235.2	231.3	223.5
82.5°	588.1	568.5	548.9	525.3	501.8	474.4	446.9	415.6	407.7	399.9	388.1
80°	827.2	799.8	772.3	744.9	721.4	693.9	662.6	627.3	603.7	584.1	560.6
77.5°	1078.1	1038.9	999.7	952.7	925.2	897.8	866.4	831.1	795.8	764.5	729.2
75°	1364.3	1321.2	1282.0	1234.9	1184.0	1133.0	1082.0	1035.0	984.0	937.0	889.9
72.5°	1681.9	1619.1	1556.4	1497.6	1434.9	1372.2	1305.5	1242.8	1180.0	1117.3	1050.7
70°	2015.1	1936.7	1858.3	1779.9	1697.5	1615.2	1536.8	1458.4	1380.0	1297.7	1223.2
67.5°	2407.1	2317.0	2215.0	2105.3	1983.7	1877.9	1776.0	1681.9	1587.8	1493.7	1399.6
65°	2897.2	2771.7	2634.5	2485.6	2344.4	2203.3	2054.3	1913.2	1803.4	1693.6	1587.8
62.5°	3500.9	3324.5	3132.4	2940.3	2767.8	2583.6	2411.1	2226.8	2054.3	1897.5	1768.1
60°	4222.3	3983.2	3747.9	3500.9	3261.8	3010.9	2791.3	2564.0	2348.3	2156.2	1968.1
57.5°	5018.2	4739.8	4457.5	4155.7	3830.3	3536.2	3238.3	2940.3	2685.5	2430.7	2219.0
55°	5825.8	5531.7	5214.2	4873.1	4516.3	4140.0	3736.2	3402.9	3054.0	2756.1	2481.6
52.5°	6594.2	6288.4	5959.1	5645.4	5218.1	4786.8	4343.8	3904.7	3497.0	3116.7	2783.5
50°	7280.2	6982.3	6664.7	6300.1	5904.2	5445.5	4951.5	4457.5	3975.3	3528.4	3112.8
47.5°	7907.5	7617.4	7299.8	6935.2	6574.6	6064.9	5567.0	5022.1	4485.0	3971.4	3485.3
45°	8495.6	8201.5	7872.2	7523.3	7107.7	6653.0	6139.4	5590.5	5014.2	4437.9	3877.3
42.5°	9028.8	8734.7	8401.5	8040.8	7629.2	7178.3	6680.4	6127.6	5547.4	4920.1	4304.6
40°	9495.3	9209.1	8887.6	8511.3	8127.1	7652.7	7162.6	6637.3	6037.5	5406.3	4728.0
37.5°	9903.0	9636.4	9318.9	8946.4	8538.7	8115.3	7609.6	7084.2	6543.2	5857.1	5163.2
35°	10263.7	10016.7	9691.3	9338.5	8938.6	8491.7	8017.3	7503.7	6919.6	6276.6	5602.3
32.5°	10577.3	10326.4	10028.5	9675.6	9287.5	8868.0	8381.9	7864.4	7311.6	6656.9	5923.8
30°	10843.9	10600.8	10318.6	9985.3	9612.9	9197.3	8723.0	8201.5	7637.0	6986.2	6260.9
27.5°	11075.2	10843.9	10569.5	10259.8	9903.0	9503.1	9024.8	8499.5	7923.2	7295.9	6570.6
25°	11275.2	11051.7	10796.9	10502.8	10150.0	9758.0	9307.1	8758.2	8181.9	7550.7	6833.3
22.5°	11455.5	11239.9	10985.0	10698.9	10377.4	9985.3	9530.6	8985.6	8401.5	7778.1	7072.5
20°	11616.2	11416.3	11165.4	10871.4	10549.9	10153.9	9703.1	9185.6	8597.5	7985.9	7288.1
17.5°	11745.6	11569.2	11318.3	11008.6	10687.1	10302.9	9863.8	9389.4	8766.1	8162.3	7468.4
15°	11835.8	11663.3	11435.9	11122.3	10808.6	10428.3	9989.3	9499.2	8919.0	8303.5	7617.4
12.5°	11898.5	11714.2	11502.5	11212.4	10898.8	10522.4	10095.1	9612.9	9048.4	8428.9	7746.8
10°	11914.2	11745.6	11533.9	11275.2	10969.4	10604.8	10185.3	9707.0	9154.2	8526.9	7852.6
7.5°	11922.0	11761.3	11569.2	11322.2	11020.3	10667.5	10251.9	9781.5	9232.6	8609.3	7931.0
5°	11918.1	11765.2	11592.7	11353.6	11051.7	10702.8	10295.0	9832.4	9287.5	8664.2	7989.8
2.5°	11906.3	11769.1	11608.4	11377.1	11087.0	10742.0	10338.2	9891.2	9346.3	8711.2	8036.9
0°	11937.7	11820.1	11616.2	11369.2	11094.8	10742.0	10334.3	9899.1	9354.1	8707.3	8033.0



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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°	98.0	94.1	94.1	90.2	86.2	82.3	74.5	70.6	62.7	51.0	39.2
85°	211.7	199.9	188.2	180.3	172.5	164.7	152.9	141.1	125.5	101.9	78.4
82.5°	372.4	348.9	325.4	298.0	274.4	250.9	231.3	211.7	188.2	152.9	117.6
80°	533.2	497.9	462.6	423.4	388.1	348.9	313.6	282.3	250.9	203.9	156.8
77.5°	693.9	646.9	595.9	548.9	497.9	446.9	396.0	352.8	305.8	250.9	196.0
75°	842.9	788.0	741.0	674.3	611.6	544.9	478.3	419.5	360.7	294.0	235.2
72.5°	991.9	921.3	854.7	791.9	721.4	639.0	564.5	490.1	415.6	337.2	266.6
70°	1140.8	1054.6	972.3	897.8	819.4	737.0	646.9	560.6	470.5	376.4	294.0
67.5°	1293.7	1195.7	1101.6	1007.6	917.4	823.3	729.2	631.2	525.3	415.6	325.4
65°	1462.3	1340.8	1227.1	1121.2	1015.4	913.5	807.6	701.8	584.1	458.7	352.8
62.5°	1630.9	1497.6	1364.3	1231.0	1113.4	999.7	886.0	768.4	639.0	505.7	380.3
60°	1811.2	1658.3	1505.4	1356.5	1211.4	1086.0	960.5	835.1	697.8	548.9	407.7
57.5°	2011.2	1826.9	1654.4	1485.8	1321.2	1172.2	1035.0	901.7	748.8	592.0	439.1
55°	2238.6	2011.2	1807.3	1619.1	1438.8	1258.5	1109.5	972.3	807.6	635.1	474.4
52.5°	2477.7	2215.0	1968.1	1756.4	1564.3	1360.4	1180.0	1027.2	866.4	678.2	505.7
50°	2756.1	2422.8	2148.4	1889.6	1674.0	1462.3	1254.5	1089.9	925.2	729.2	537.1
47.5°	3042.3	2673.7	2328.7	2046.5	1791.6	1560.3	1340.8	1144.8	980.1	776.2	568.5
45°	3375.5	2912.9	2532.6	2199.4	1905.3	1662.3	1427.0	1203.6	1027.2	823.3	599.8
42.5°	3697.0	3195.2	2744.3	2367.9	2034.7	1760.3	1505.4	1266.3	1074.2	870.3	627.3
40°	4077.2	3477.4	2948.2	2528.7	2164.1	1854.4	1583.9	1332.9	1117.3	913.5	654.7
37.5°	4441.8	3763.6	3195.2	2705.1	2289.5	1948.5	1662.3	1395.7	1156.5	956.6	690.0
35°	4802.5	4081.2	3430.4	2869.8	2418.9	2054.3	1740.7	1454.5	1195.7	991.9	721.4
32.5°	5147.5	4379.1	3669.5	3054.0	2560.0	2152.3	1811.2	1509.4	1234.9	1023.2	752.7
30°	5469.0	4661.4	3904.7	3242.2	2689.4	2242.5	1877.9	1564.3	1282.0	1050.7	784.1
27.5°	5763.0	4935.8	4140.0	3418.6	2810.9	2324.8	1948.5	1615.2	1321.2	1078.1	811.5
25°	6029.6	5182.8	4355.6	3579.4	2920.7	2415.0	2015.1	1666.2	1356.5	1101.6	835.1
22.5°	6280.5	5410.2	4551.6	3740.1	3054.0	2505.2	2077.8	1713.2	1391.8	1125.2	858.6
20°	6500.1	5618.0	4739.8	3900.8	3171.6	2587.5	2132.7	1756.4	1423.1	1140.8	882.1
17.5°	6676.5	5802.2	4908.4	4042.0	3273.6	2658.1	2179.8	1795.6	1450.6	1160.4	897.8
15°	6833.3	5959.1	5049.5	4163.5	3363.7	2716.9	2222.9	1826.9	1474.1	1172.2	917.4
12.5°	6966.6	6092.3	5171.0	4269.3	3442.1	2767.8	2258.2	1850.4	1493.7	1184.0	929.1
10°	7076.4	6198.2	5273.0	4351.7	3504.9	2807.0	2285.6	1874.0	1509.4	1195.7	940.9
7.5°	7158.7	6276.6	5347.5	4422.2	3555.8	2834.5	2309.1	1889.6	1525.0	1203.6	960.5
5°	7221.4	6343.3	5406.3	4469.3	3595.0	2873.7	2336.6	1909.2	1540.7	1211.4	960.5
2.5°	7268.5	6398.1	5453.3	4508.5	3626.4	2865.8	2336.6	1905.3	1540.7	1211.4	956.6
0°	7260.6	6402.1	5449.4	4508.5	3626.4	2858.0	2336.6	1901.4	1540.7	1211.4	956.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	27.4	19.6	7.8	0.0
85°	58.8	39.2	19.6	0.0
82.5°	86.2	54.9	27.4	0.0
80°	113.7	74.5	35.3	0.0
77.5°	145.1	94.1	47.0	0.0
75°	172.5	109.8	54.9	0.0
72.5°	199.9	129.4	62.7	0.0
70°	223.5	145.1	70.6	0.0
67.5°	247.0	164.7	82.3	0.0
65°	266.6	180.3	90.2	0.0
62.5°	282.3	199.9	98.0	0.0
60°	301.9	215.6	105.9	0.0
57.5°	317.6	227.4	113.7	0.0
55°	333.2	235.2	121.5	0.0
52.5°	348.9	247.0	129.4	0.0
50°	364.6	258.7	137.2	0.0
47.5°	380.3	266.6	141.1	0.0
45°	403.8	278.4	149.0	0.0
42.5°	423.4	286.2	156.8	0.0
40°	443.0	294.0	160.7	0.0
37.5°	462.6	301.9	168.6	0.0
35°	482.2	309.7	172.5	0.0
32.5°	497.9	317.6	176.4	0.0
30°	513.6	325.4	180.3	0.0
27.5°	529.3	329.3	184.3	0.0
25°	541.0	337.2	188.2	0.0
22.5°	552.8	341.1	192.1	0.0
20°	560.6	345.0	196.0	0.0
17.5°	572.4	348.9	199.9	0.0
15°	576.3	352.8	207.8	0.0
12.5°	584.1	356.8	207.8	0.0
10°	588.1	360.7	207.8	0.0
7.5°	595.9	360.7	207.8	0.0
5°	592.0	360.7	207.8	0.0
2.5°	592.0	360.7	207.8	0.0
0°	588.1	360.7	207.8	0.0

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