

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: P628429

Luminaire Tested: **IFLD-M-SA4D-927-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628429
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-927-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

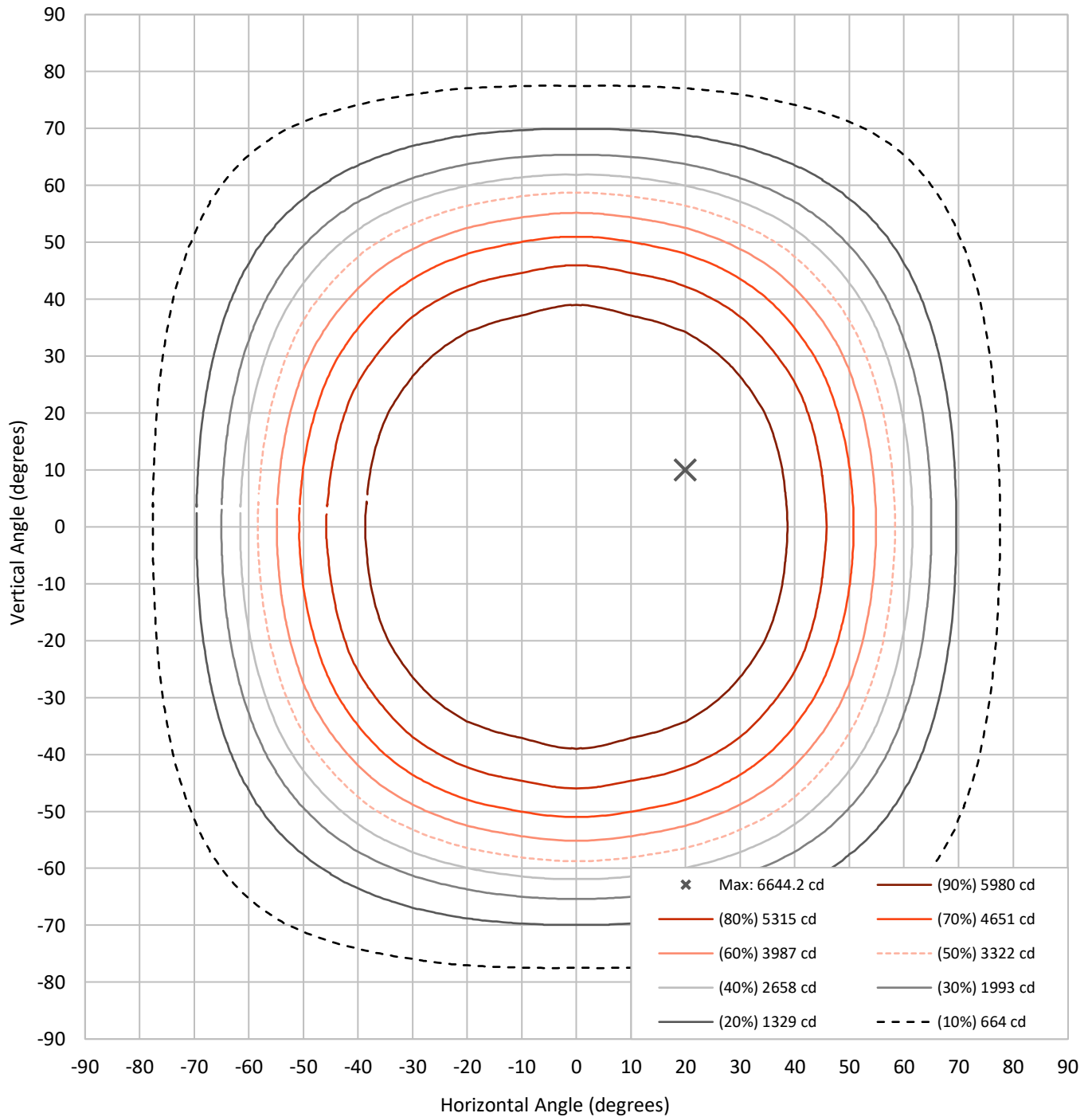
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	20383.6 lumens	Max Intensity:	6644.2 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	81.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	12507.8 lumens	Field Lumens:	14994.7 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 249.7
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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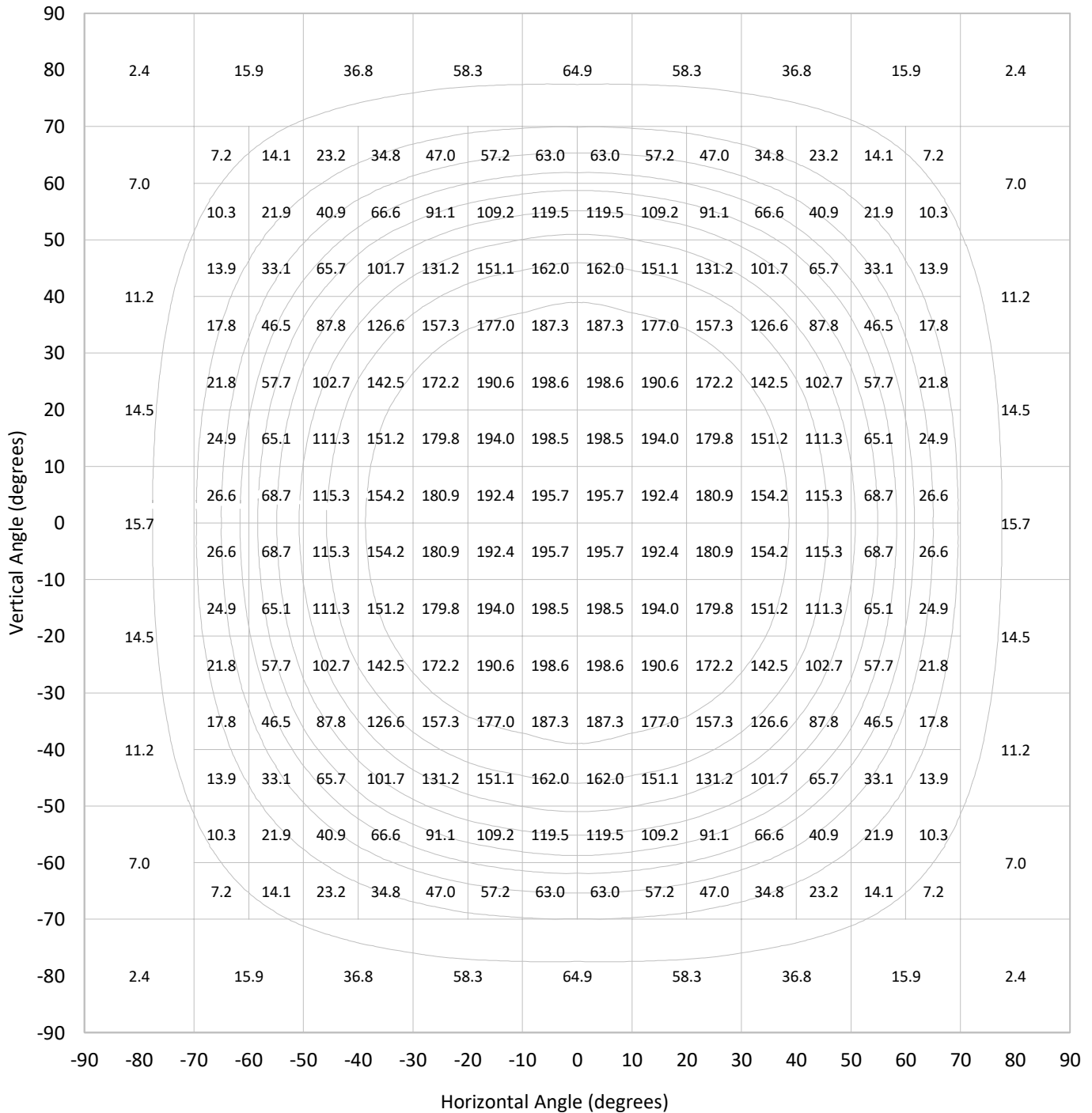
Iso-Candela Plot





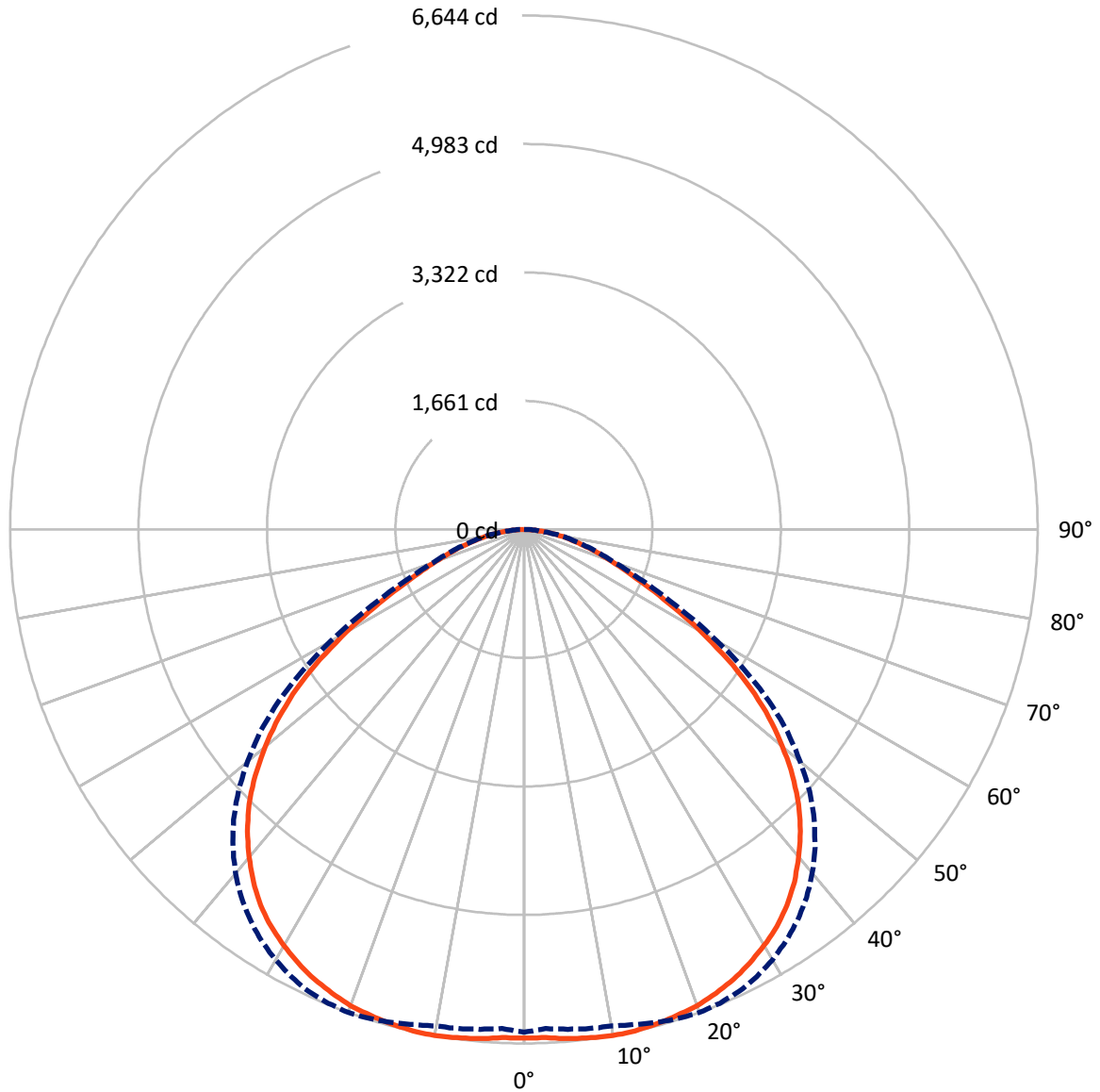
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Lumen Table



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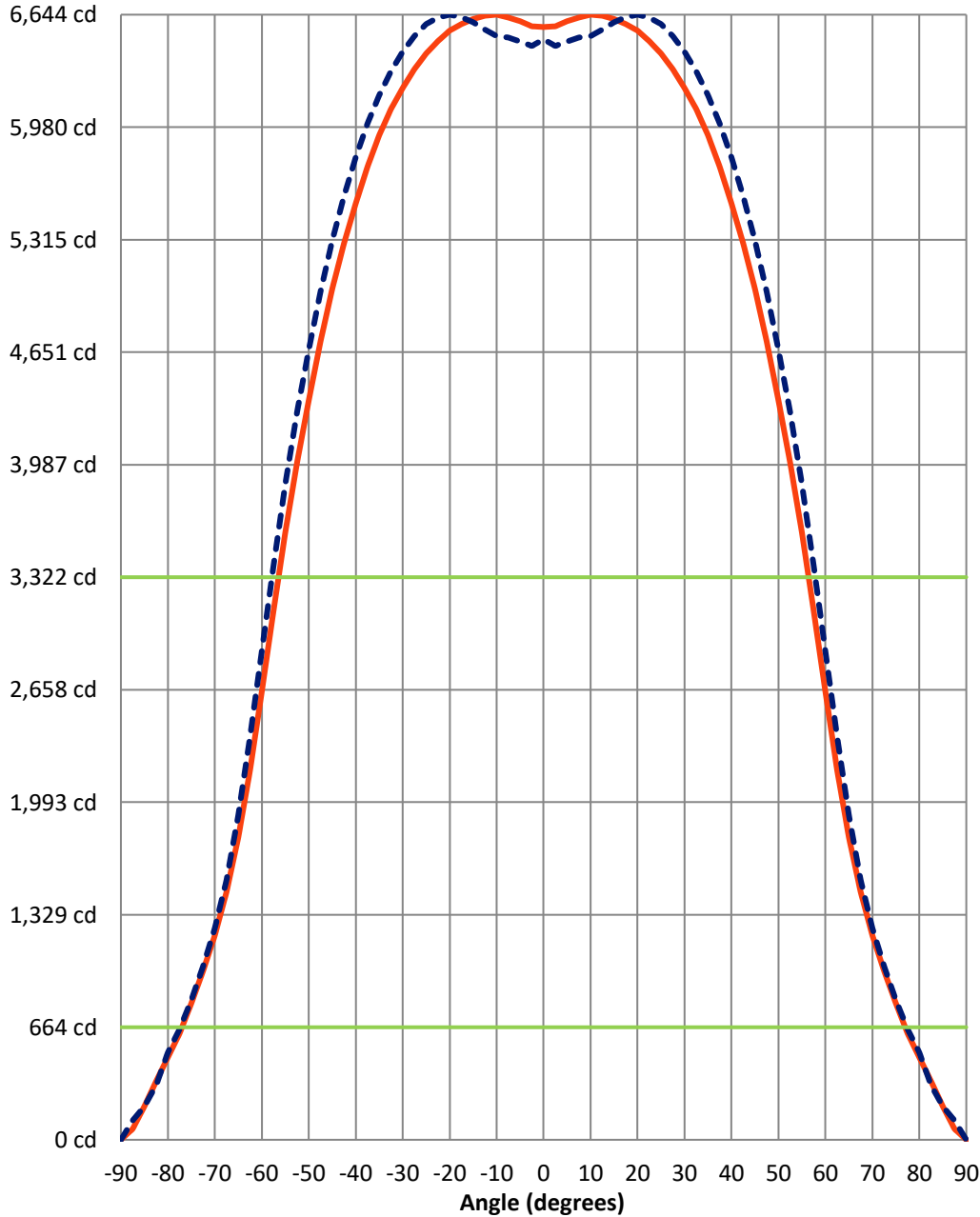
Luminous Intensity Polar Plot



— 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: 12507.8
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 14994.7
 Efficiency: 73.6%

Spill:
 Lumens: 5388.9
 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°	53.6	57.9	60.1	62.2	64.3	66.5	68.6	66.5	64.3	64.3	62.2
85°	143.7	148.0	150.1	165.1	180.2	188.7	199.5	197.3	197.3	195.2	193.0
82.5°	287.4	300.3	311.0	326.0	334.6	347.4	356.0	349.6	345.3	336.7	330.3
80°	510.4	514.7	516.9	519.0	508.3	506.1	501.9	495.4	486.8	476.1	465.4
77.5°	649.8	654.1	658.4	654.1	652.0	649.8	643.4	637.0	628.4	619.8	606.9
75°	860.0	860.0	860.0	853.6	849.3	842.9	832.1	821.4	806.4	789.2	769.9
72.5°	1083.1	1080.9	1078.8	1065.9	1055.2	1042.3	1027.3	1014.4	997.3	978.0	952.2
70°	1316.8	1321.1	1323.3	1306.1	1293.2	1276.1	1256.8	1233.2	1207.5	1179.6	1143.1
67.5°	1638.5	1634.3	1630.0	1606.4	1589.2	1565.6	1537.7	1503.4	1464.8	1421.9	1370.5
65°	2037.5	2043.9	2031.0	2007.4	1975.3	1936.7	1893.8	1844.4	1786.5	1722.2	1649.3
62.5°	2520.0	2530.7	2515.7	2485.7	2444.9	2393.5	2333.4	2262.6	2183.3	2093.2	2003.1
60°	3069.0	3066.9	3039.0	2998.3	2944.7	2880.3	2813.8	2736.6	2646.5	2541.5	2432.1
57.5°	3573.0	3568.8	3534.4	3493.7	3440.1	3371.4	3300.7	3219.2	3124.8	3013.3	2886.7
55°	4025.6	4021.3	3987.0	3944.1	3888.3	3819.7	3755.3	3678.1	3585.9	3468.0	3332.8
52.5°	4426.6	4428.8	4398.8	4351.6	4291.5	4225.0	4162.8	4085.6	3997.7	3879.7	3748.9
50°	4795.5	4793.4	4761.2	4718.3	4662.5	4598.2	4536.0	4458.8	4366.6	4252.9	4126.4
47.5°	5138.7	5134.4	5097.9	5050.7	4992.8	4937.1	4879.2	4810.5	4714.0	4600.4	4473.8
45°	5426.1	5417.5	5381.0	5336.0	5280.2	5230.9	5179.4	5127.9	5025.0	4919.9	4799.8
42.5°	5672.7	5670.5	5634.1	5589.1	5533.3	5490.4	5443.2	5378.9	5293.1	5196.6	5078.6
40°	5908.6	5891.5	5855.0	5812.1	5760.6	5724.2	5677.0	5612.6	5529.0	5434.6	5321.0
37.5°	6084.5	6086.6	6048.0	6000.8	5955.8	5921.5	5878.6	5818.5	5745.6	5653.4	5539.7
35°	6251.8	6241.0	6208.9	6168.1	6127.4	6088.8	6043.7	5992.3	5932.2	5846.4	5739.2
32.5°	6361.1	6376.2	6337.5	6294.7	6271.1	6241.0	6193.9	6140.2	6086.6	6000.8	5904.3
30°	6481.2	6468.4	6438.3	6401.9	6384.7	6365.4	6324.7	6273.2	6211.0	6133.8	6043.7
27.5°	6564.9	6558.4	6522.0	6487.7	6479.1	6461.9	6429.8	6384.7	6322.5	6247.5	6163.8
25°	6601.3	6605.6	6571.3	6552.0	6552.0	6541.3	6515.6	6477.0	6414.8	6346.1	6264.6
22.5°	6618.5	6614.2	6590.6	6586.3	6597.1	6588.5	6577.8	6543.4	6487.7	6431.9	6363.3
20°	6629.2	6599.2	6577.8	6594.9	6607.8	6605.6	6597.1	6575.6	6549.9	6502.7	6442.6
17.5°	6605.6	6586.3	6560.6	6586.3	6614.2	6616.4	6607.8	6594.9	6588.5	6558.4	6504.8
15°	6547.7	6532.7	6537.0	6562.7	6594.9	6605.6	6612.1	6627.1	6618.5	6594.9	6547.7
12.5°	6509.1	6489.8	6509.1	6534.9	6552.0	6558.4	6609.9	6637.8	6637.8	6616.4	6586.3
10°	6498.4	6459.8	6485.5	6509.1	6517.7	6556.3	6599.2	6629.2	6644.2	6627.1	6588.5
7.5°	6477.0	6451.2	6461.9	6472.7	6522.0	6549.9	6573.5	6605.6	6627.1	6624.9	6590.6
5°	6466.2	6434.1	6438.3	6483.4	6517.7	6537.0	6545.6	6573.5	6605.6	6612.1	6586.3
2.5°	6438.3	6423.3	6455.5	6459.8	6485.5	6500.5	6509.1	6534.9	6575.6	6590.6	6579.9
0°	6423.3	6401.9	6380.4	6397.6	6440.5	6472.7	6485.5	6524.1	6571.3	6586.3	6562.7



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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°	60.1	57.9	55.8	53.6	55.8	55.8	55.8	53.6	55.8	53.6	53.6
85°	186.6	178.0	171.6	163.0	154.4	148.0	139.4	130.8	128.7	126.5	122.2
82.5°	321.7	311.0	300.3	287.4	274.5	259.5	244.5	227.3	223.0	218.8	212.3
80°	452.5	437.5	422.5	407.5	394.6	379.6	362.5	343.1	330.3	319.6	306.7
77.5°	589.8	568.3	546.9	521.2	506.1	491.1	474.0	454.7	435.4	418.2	398.9
75°	746.4	722.8	701.3	675.6	647.7	619.8	591.9	566.2	538.3	512.6	486.8
72.5°	920.1	885.8	851.4	819.3	785.0	750.6	714.2	679.9	645.6	611.2	574.8
70°	1102.4	1059.5	1016.6	973.7	928.6	883.6	840.7	797.8	754.9	709.9	669.1
67.5°	1316.8	1267.5	1211.7	1151.7	1085.2	1027.3	971.5	920.1	868.6	817.1	765.7
65°	1584.9	1516.3	1441.2	1359.7	1282.5	1205.3	1123.8	1046.6	986.6	926.5	868.6
62.5°	1915.2	1818.7	1713.6	1608.5	1514.1	1413.3	1319.0	1218.2	1123.8	1038.0	967.3
60°	2309.8	2179.0	2050.3	1915.2	1784.4	1647.1	1527.0	1402.6	1284.7	1179.6	1076.6
57.5°	2745.2	2592.9	2438.5	2273.4	2095.4	1934.5	1771.5	1608.5	1469.1	1329.7	1213.9
55°	3187.0	3026.2	2852.4	2665.8	2470.7	2264.8	2043.9	1861.6	1670.7	1507.7	1357.6
52.5°	3607.4	3440.1	3259.9	3088.3	2854.6	2618.7	2376.3	2136.1	1913.1	1705.0	1522.7
50°	3982.7	3819.7	3646.0	3446.5	3229.9	2979.0	2708.7	2438.5	2174.7	1930.2	1702.9
47.5°	4325.8	4167.1	3993.4	3793.9	3596.6	3317.8	3045.5	2747.3	2453.5	2172.6	1906.6
45°	4647.5	4486.7	4306.5	4115.7	3888.3	3639.5	3358.6	3058.3	2743.1	2427.8	2121.1
42.5°	4939.2	4778.4	4596.1	4398.8	4173.6	3926.9	3654.5	3352.1	3034.7	2691.6	2354.9
40°	5194.4	5037.9	4862.0	4656.1	4445.9	4186.4	3918.3	3631.0	3302.8	2957.5	2586.5
37.5°	5417.5	5271.6	5097.9	4894.2	4671.1	4439.5	4162.8	3875.4	3579.5	3204.2	2824.6
35°	5614.8	5479.7	5301.7	5108.6	4889.9	4645.4	4385.9	4104.9	3785.4	3433.6	3064.8
32.5°	5786.4	5649.1	5486.1	5293.1	5080.8	4851.3	4585.3	4302.2	3999.8	3641.7	3240.6
30°	5932.2	5799.2	5644.8	5462.5	5258.8	5031.4	4771.9	4486.7	4177.8	3821.8	3425.1
27.5°	6058.7	5932.2	5782.1	5612.6	5417.5	5198.7	4937.1	4649.7	4334.4	3991.3	3594.5
25°	6168.1	6045.9	5906.5	5745.6	5552.6	5338.1	5091.5	4791.2	4476.0	4130.7	3738.2
22.5°	6266.8	6148.8	6009.4	5852.8	5677.0	5462.5	5213.7	4915.6	4596.1	4255.1	3869.0
20°	6354.7	6245.3	6108.1	5947.2	5771.3	5554.7	5308.1	5025.0	4703.3	4368.7	3987.0
17.5°	6425.5	6329.0	6191.7	6022.3	5846.4	5636.2	5396.0	5136.5	4795.5	4465.2	4085.6
15°	6474.8	6380.4	6256.0	6084.5	5912.9	5704.9	5464.7	5196.6	4879.2	4542.4	4167.1
12.5°	6509.1	6408.3	6292.5	6133.8	5962.2	5756.3	5522.6	5258.8	4949.9	4611.1	4237.9
10°	6517.7	6425.5	6309.7	6168.1	6000.8	5801.4	5571.9	5310.2	5007.8	4664.7	4295.8
7.5°	6522.0	6434.1	6329.0	6193.9	6028.7	5835.7	5608.4	5351.0	5050.7	4709.7	4338.7
5°	6519.8	6436.2	6341.8	6211.0	6045.9	5855.0	5631.9	5378.9	5080.8	4739.8	4370.9
2.5°	6513.4	6438.3	6350.4	6223.9	6065.2	5876.4	5655.5	5411.0	5112.9	4765.5	4396.6
0°	6530.6	6466.2	6354.7	6219.6	6069.5	5876.4	5653.4	5415.3	5117.2	4763.3	4394.5



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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°	53.6	51.5	51.5	49.3	47.2	45.0	40.7	38.6	34.3	27.9	21.4
85°	115.8	109.4	102.9	98.7	94.4	90.1	83.6	77.2	68.6	55.8	42.9
82.5°	203.7	190.9	178.0	163.0	150.1	137.3	126.5	115.8	102.9	83.6	64.3
80°	291.7	272.4	253.1	231.6	212.3	190.9	171.6	154.4	137.3	111.5	85.8
77.5°	379.6	353.9	326.0	300.3	272.4	244.5	216.6	193.0	167.3	137.3	107.2
75°	461.1	431.1	405.3	368.9	334.6	298.1	261.7	229.5	197.3	160.9	128.7
72.5°	542.6	504.0	467.5	433.2	394.6	349.6	308.8	268.1	227.3	184.4	145.8
70°	624.1	576.9	531.9	491.1	448.2	403.2	353.9	306.7	257.4	205.9	160.9
67.5°	707.7	654.1	602.7	551.2	501.9	450.4	398.9	345.3	287.4	227.3	178.0
65°	800.0	733.5	671.3	613.4	555.5	499.7	441.8	383.9	319.6	250.9	193.0
62.5°	892.2	819.3	746.4	673.4	609.1	546.9	484.7	420.4	349.6	276.7	208.0
60°	990.8	907.2	823.6	742.1	662.7	594.1	525.4	456.8	381.8	300.3	223.0
57.5°	1100.2	999.4	905.1	812.8	722.8	641.3	566.2	493.3	409.6	323.8	240.2
55°	1224.6	1100.2	988.7	885.8	787.1	688.4	606.9	531.9	441.8	347.4	259.5
52.5°	1355.4	1211.7	1076.6	960.8	855.7	744.2	645.6	561.9	474.0	371.0	276.7
50°	1507.7	1325.4	1175.3	1033.7	915.8	800.0	686.3	596.2	506.1	398.9	293.8
47.5°	1664.3	1462.7	1273.9	1119.5	980.1	853.6	733.5	626.2	536.2	424.6	311.0
45°	1846.6	1593.5	1385.5	1203.2	1042.3	909.3	780.7	658.4	561.9	450.4	328.1
42.5°	2022.4	1747.9	1501.3	1295.4	1113.1	963.0	823.6	692.7	587.6	476.1	343.1
40°	2230.5	1902.3	1612.8	1383.3	1183.9	1014.4	866.5	729.2	611.2	499.7	358.2
37.5°	2429.9	2058.9	1747.9	1479.8	1252.5	1065.9	909.3	763.5	632.7	523.3	377.5
35°	2627.2	2232.6	1876.6	1569.9	1323.3	1123.8	952.2	795.7	654.1	542.6	394.6
32.5°	2816.0	2395.6	2007.4	1670.7	1400.5	1177.4	990.8	825.7	675.6	559.8	411.8
30°	2991.8	2550.0	2136.1	1773.7	1471.3	1226.8	1027.3	855.7	701.3	574.8	428.9
27.5°	3152.7	2700.2	2264.8	1870.2	1537.7	1271.8	1065.9	883.6	722.8	589.8	443.9
25°	3298.5	2835.3	2382.7	1958.1	1597.8	1321.1	1102.4	911.5	742.1	602.7	456.8
22.5°	3435.8	2959.7	2490.0	2046.0	1670.7	1370.5	1136.7	937.2	761.4	615.5	469.7
20°	3555.9	3073.3	2592.9	2134.0	1735.1	1415.5	1166.7	960.8	778.5	624.1	482.6
17.5°	3652.4	3174.1	2685.1	2211.2	1790.8	1454.1	1192.4	982.3	793.5	634.8	491.1
15°	3738.2	3259.9	2762.4	2277.7	1840.1	1486.3	1216.0	999.4	806.4	641.3	501.9
12.5°	3811.1	3332.8	2828.8	2335.6	1883.0	1514.1	1235.3	1012.3	817.1	647.7	508.3
10°	3871.2	3390.7	2884.6	2380.6	1917.3	1535.6	1250.4	1025.2	825.7	654.1	514.7
7.5°	3916.2	3433.6	2925.4	2419.2	1945.2	1550.6	1263.2	1033.7	834.3	658.4	525.4
5°	3950.5	3470.1	2957.5	2444.9	1966.7	1572.1	1278.2	1044.5	842.9	662.7	525.4
2.5°	3976.2	3500.1	2983.3	2466.4	1983.8	1567.8	1278.2	1042.3	842.9	662.7	523.3
0°	3972.0	3502.3	2981.1	2466.4	1983.8	1563.5	1278.2	1040.2	842.9	662.7	523.3



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	15.0	10.7	4.3	0.0
85°	32.2	21.4	10.7	0.0
82.5°	47.2	30.0	15.0	0.0
80°	62.2	40.7	19.3	0.0
77.5°	79.4	51.5	25.7	0.0
75°	94.4	60.1	30.0	0.0
72.5°	109.4	70.8	34.3	0.0
70°	122.2	79.4	38.6	0.0
67.5°	135.1	90.1	45.0	0.0
65°	145.8	98.7	49.3	0.0
62.5°	154.4	109.4	53.6	0.0
60°	165.1	118.0	57.9	0.0
57.5°	173.7	124.4	62.2	0.0
55°	182.3	128.7	66.5	0.0
52.5°	190.9	135.1	70.8	0.0
50°	199.5	141.5	75.1	0.0
47.5°	208.0	145.8	77.2	0.0
45°	220.9	152.3	81.5	0.0
42.5°	231.6	156.6	85.8	0.0
40°	242.3	160.9	87.9	0.0
37.5°	253.1	165.1	92.2	0.0
35°	263.8	169.4	94.4	0.0
32.5°	272.4	173.7	96.5	0.0
30°	281.0	178.0	98.7	0.0
27.5°	289.5	180.2	100.8	0.0
25°	296.0	184.4	102.9	0.0
22.5°	302.4	186.6	105.1	0.0
20°	306.7	188.7	107.2	0.0
17.5°	313.1	190.9	109.4	0.0
15°	315.3	193.0	113.7	0.0
12.5°	319.6	195.2	113.7	0.0
10°	321.7	197.3	113.7	0.0
7.5°	326.0	197.3	113.7	0.0
5°	323.8	197.3	113.7	0.0
2.5°	323.8	197.3	113.7	0.0
0°	321.7	197.3	113.7	0.0

(END OF REPORT)