

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: P628386

Luminaire Tested: **IFLD-S-SA2E-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628386
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	14801.3 lumens	Max Intensity:	4824.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	94.8 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		

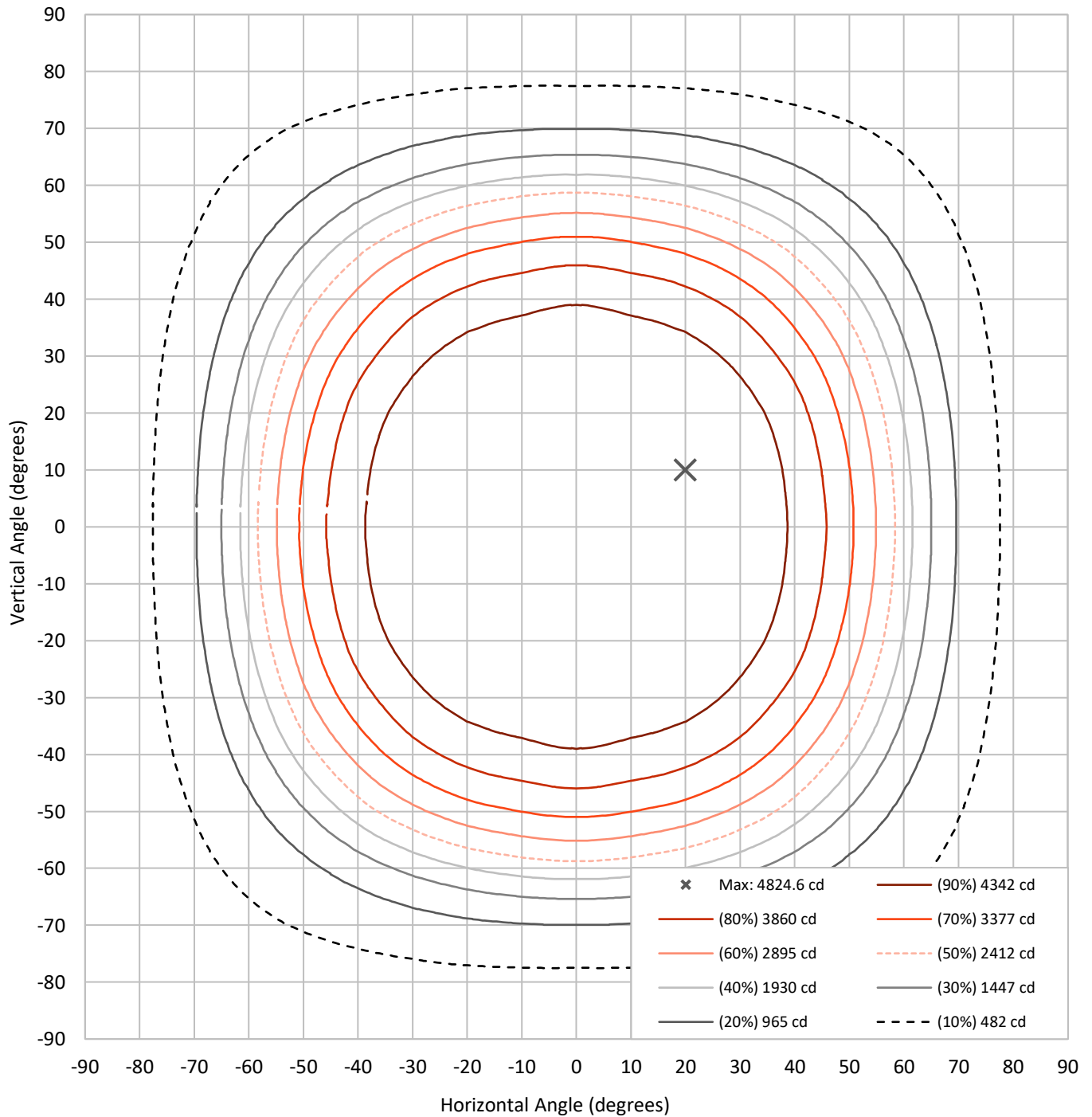
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	9082.4 lumens	Field Lumens:	10888.2 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 156.2
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



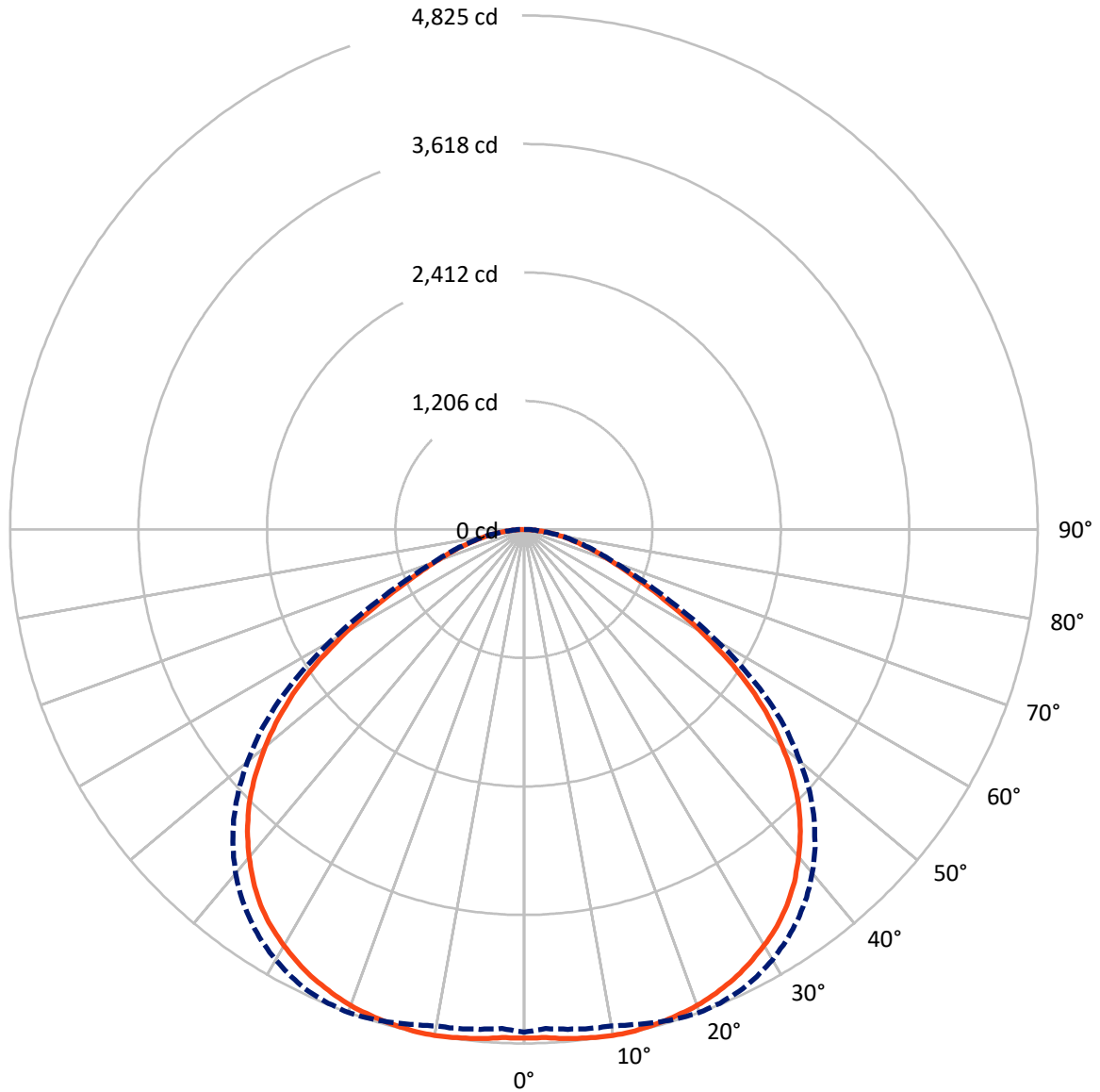
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Iso-Candela Plot



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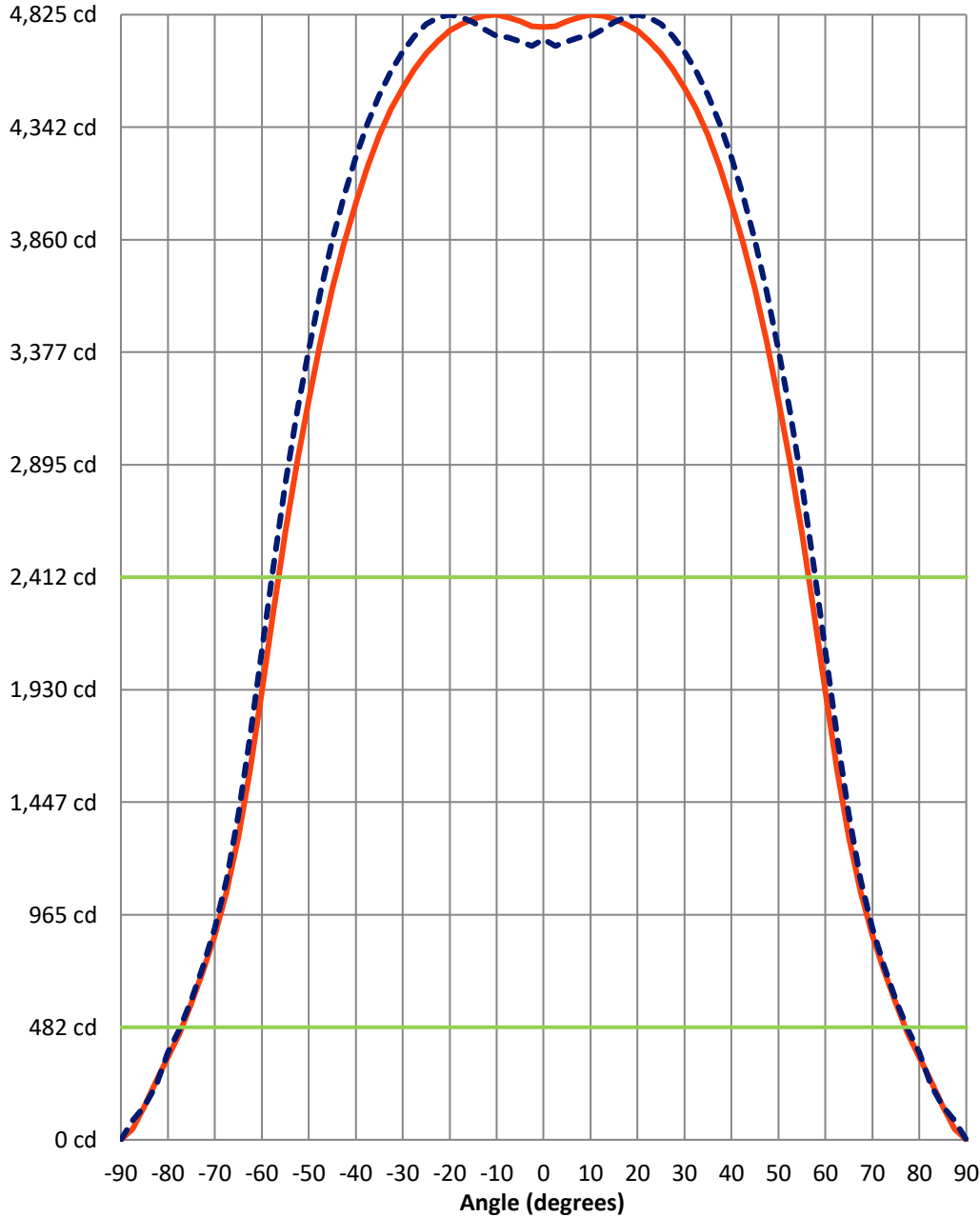
Luminous Intensity Polar Plot



— 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: 9082.4
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 10888.2
 Efficiency: 73.6%

Spill:
 Lumens: 3913.1
 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°	38.9	42.0	43.6	45.2	46.7	48.3	49.8	48.3	46.7	46.7	45.2
85°	104.3	107.5	109.0	119.9	130.8	137.0	144.8	143.3	143.3	141.7	140.2
82.5°	208.7	218.0	225.8	236.7	242.9	252.3	258.5	253.8	250.7	244.5	239.8
80°	370.6	373.8	375.3	376.9	369.1	367.5	364.4	359.7	353.5	345.7	337.9
77.5°	471.9	475.0	478.1	475.0	473.4	471.9	467.2	462.5	456.3	450.1	440.7
75°	624.5	624.5	624.5	619.8	616.7	612.0	604.2	596.5	585.6	573.1	559.1
72.5°	786.5	784.9	783.3	774.0	766.2	756.9	746.0	736.6	724.2	710.1	691.5
70°	956.2	959.3	960.9	948.4	939.1	926.6	912.6	895.5	876.8	856.5	830.1
67.5°	1189.8	1186.7	1183.6	1166.4	1154.0	1136.9	1116.6	1091.7	1063.7	1032.5	995.1
65°	1479.5	1484.1	1474.8	1457.7	1434.3	1406.3	1375.1	1339.3	1297.3	1250.5	1197.6
62.5°	1829.9	1837.7	1826.8	1805.0	1775.4	1738.0	1694.4	1643.0	1585.4	1520.0	1454.6
60°	2228.5	2227.0	2206.7	2177.2	2138.2	2091.5	2043.2	1987.2	1921.8	1845.4	1766.0
57.5°	2594.5	2591.4	2566.5	2536.9	2498.0	2448.1	2396.7	2337.6	2269.0	2188.1	2096.2
55°	2923.1	2920.0	2895.1	2863.9	2823.4	2773.6	2726.9	2670.8	2603.9	2518.2	2420.1
52.5°	3214.3	3215.9	3194.1	3159.8	3116.2	3067.9	3022.8	2966.7	2902.9	2817.2	2722.2
50°	3482.2	3480.6	3457.3	3426.1	3385.6	3338.9	3293.8	3237.7	3170.7	3088.2	2996.3
47.5°	3731.4	3728.3	3701.8	3667.5	3625.5	3585.0	3542.9	3493.1	3423.0	3340.5	3248.6
45°	3940.1	3933.8	3907.4	3874.6	3834.2	3798.3	3761.0	3723.6	3648.8	3572.5	3485.3
42.5°	4119.2	4117.6	4091.1	4058.4	4017.9	3986.8	3952.5	3905.8	3843.5	3773.4	3687.8
40°	4290.5	4278.0	4251.5	4220.4	4183.0	4156.5	4122.3	4075.5	4014.8	3946.3	3863.7
37.5°	4418.2	4419.7	4391.7	4357.4	4324.7	4299.8	4268.7	4225.0	4172.1	4105.1	4022.6
35°	4539.6	4531.8	4508.5	4478.9	4449.3	4421.3	4388.6	4351.2	4307.6	4245.3	4167.4
32.5°	4619.1	4630.0	4601.9	4570.8	4553.6	4531.8	4497.6	4458.6	4419.7	4357.4	4287.3
30°	4706.3	4696.9	4675.1	4648.6	4636.2	4622.2	4592.6	4555.2	4510.0	4454.0	4388.6
27.5°	4767.0	4762.3	4735.9	4710.9	4704.7	4692.3	4668.9	4636.2	4591.0	4536.5	4475.8
25°	4793.5	4796.6	4771.7	4757.7	4757.7	4749.9	4731.2	4703.2	4658.0	4608.2	4549.0
22.5°	4805.9	4802.8	4785.7	4782.6	4790.4	4784.1	4776.3	4751.4	4710.9	4670.4	4620.6
20°	4813.7	4791.9	4776.3	4788.8	4798.1	4796.6	4790.4	4774.8	4756.1	4721.8	4678.2
17.5°	4796.6	4782.6	4763.9	4782.6	4802.8	4804.4	4798.1	4788.8	4784.1	4762.3	4723.4
15°	4754.5	4743.6	4746.8	4765.4	4788.8	4796.6	4801.3	4812.2	4805.9	4788.8	4754.5
12.5°	4726.5	4712.5	4726.5	4745.2	4757.7	4762.3	4799.7	4820.0	4820.0	4804.4	4782.6
10°	4718.7	4690.7	4709.4	4726.5	4732.7	4760.8	4791.9	4813.7	4824.6	4812.2	4784.1
7.5°	4703.2	4684.5	4692.3	4700.0	4735.9	4756.1	4773.2	4796.6	4812.2	4810.6	4785.7
5°	4695.4	4672.0	4675.1	4707.8	4732.7	4746.8	4753.0	4773.2	4796.6	4801.3	4782.6
2.5°	4675.1	4664.2	4687.6	4690.7	4709.4	4720.3	4726.5	4745.2	4774.8	4785.7	4777.9
0°	4664.2	4648.6	4633.1	4645.5	4676.7	4700.0	4709.4	4737.4	4771.7	4782.6	4765.4



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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°	43.6	42.0	40.5	38.9	40.5	40.5	40.5	38.9	40.5	38.9	38.9
85°	135.5	129.3	124.6	118.4	112.1	107.5	101.2	95.0	93.4	91.9	88.8
82.5°	233.6	225.8	218.0	208.7	199.3	188.4	177.5	165.1	162.0	158.8	154.2
80°	328.6	317.7	306.8	295.9	286.5	275.6	263.2	249.2	239.8	232.0	222.7
77.5°	428.3	412.7	397.1	378.4	367.5	356.6	344.2	330.2	316.1	303.7	289.7
75°	542.0	524.8	509.2	490.6	470.3	450.1	429.8	411.1	390.9	372.2	353.5
72.5°	668.1	643.2	618.3	594.9	570.0	545.1	518.6	493.7	468.8	443.8	417.4
70°	800.5	769.3	738.2	707.0	674.3	641.6	610.5	579.3	548.2	515.5	485.9
67.5°	956.2	920.4	879.9	836.3	788.0	746.0	705.5	668.1	630.7	593.3	556.0
65°	1150.9	1101.0	1046.5	987.4	931.3	875.2	816.0	760.0	716.4	672.8	630.7
62.5°	1390.7	1320.6	1244.3	1168.0	1099.5	1026.3	957.8	884.6	816.0	753.8	702.4
60°	1677.2	1582.3	1488.8	1390.7	1295.7	1196.0	1108.8	1018.5	932.8	856.5	781.8
57.5°	1993.4	1882.8	1770.7	1650.8	1521.5	1404.7	1286.4	1168.0	1066.8	965.5	881.5
55°	2314.2	2197.4	2071.3	1935.8	1794.0	1644.5	1484.1	1351.8	1213.2	1094.8	985.8
52.5°	2619.4	2498.0	2367.1	2242.6	2072.8	1901.5	1725.5	1551.1	1389.1	1238.1	1105.7
50°	2892.0	2773.6	2647.5	2502.6	2345.3	2163.1	1966.9	1770.7	1579.1	1401.6	1236.5
47.5°	3141.1	3025.9	2899.8	2754.9	2611.7	2409.2	2211.4	1994.9	1781.6	1577.6	1384.5
45°	3374.7	3257.9	3127.1	2988.5	2823.4	2642.8	2438.8	2220.8	1991.8	1762.9	1540.2
42.5°	3586.5	3469.7	3337.4	3194.1	3030.6	2851.5	2653.7	2434.1	2203.6	1954.5	1710.0
40°	3771.9	3658.2	3530.5	3381.0	3228.4	3039.9	2845.3	2636.6	2398.3	2147.6	1878.1
37.5°	3933.8	3827.9	3701.8	3553.8	3391.9	3223.7	3022.8	2814.1	2599.2	2326.7	2051.0
35°	4077.1	3979.0	3849.7	3709.6	3550.7	3373.2	3184.7	2980.7	2748.7	2493.3	2225.4
32.5°	4201.7	4102.0	3983.7	3843.5	3689.3	3522.7	3329.6	3124.0	2904.4	2644.4	2353.1
30°	4307.6	4211.0	4098.9	3966.5	3818.6	3653.5	3465.1	3257.9	3033.7	2775.2	2487.1
27.5°	4399.5	4307.6	4198.6	4075.5	3933.8	3775.0	3585.0	3376.3	3147.4	2898.2	2610.1
25°	4478.9	4390.1	4288.9	4172.1	4031.9	3876.2	3697.1	3479.1	3250.2	2999.4	2714.4
22.5°	4550.5	4464.9	4363.7	4250.0	4122.3	3966.5	3785.9	3569.4	3337.4	3089.8	2809.4
20°	4614.4	4535.0	4435.3	4318.5	4190.8	4033.5	3854.4	3648.8	3415.2	3172.3	2895.1
17.5°	4665.8	4595.7	4496.0	4373.0	4245.3	4092.7	3918.3	3729.8	3482.2	3242.4	2966.7
15°	4701.6	4633.1	4542.7	4418.2	4293.6	4142.5	3968.1	3773.4	3542.9	3298.4	3025.9
12.5°	4726.5	4653.3	4569.2	4454.0	4329.4	4179.9	4010.1	3818.6	3594.3	3348.3	3077.3
10°	4732.7	4665.8	4581.7	4478.9	4357.4	4212.6	4046.0	3856.0	3636.4	3387.2	3119.3
7.5°	4735.9	4672.0	4595.7	4497.6	4377.7	4237.5	4072.4	3885.6	3667.5	3419.9	3150.5
5°	4734.3	4673.6	4605.0	4510.0	4390.1	4251.5	4089.6	3905.8	3689.3	3441.7	3173.8
2.5°	4729.6	4675.1	4611.3	4519.4	4404.1	4267.1	4106.7	3929.2	3712.7	3460.4	3192.5
0°	4742.1	4695.4	4614.4	4516.3	4407.3	4267.1	4105.1	3932.3	3715.8	3458.8	3191.0



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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°	38.9	37.4	37.4	35.8	34.3	32.7	29.6	28.0	24.9	20.2	15.6
85°	84.1	79.4	74.8	71.6	68.5	65.4	60.7	56.1	49.8	40.5	31.1
82.5°	147.9	138.6	129.3	118.4	109.0	99.7	91.9	84.1	74.8	60.7	46.7
80°	211.8	197.8	183.8	168.2	154.2	138.6	124.6	112.1	99.7	81.0	62.3
77.5°	275.6	257.0	236.7	218.0	197.8	177.5	157.3	140.2	121.5	99.7	77.9
75°	334.8	313.0	294.3	267.9	242.9	216.5	190.0	166.6	143.3	116.8	93.4
72.5°	394.0	366.0	339.5	314.6	286.5	253.8	224.3	194.7	165.1	133.9	105.9
70°	453.2	418.9	386.2	356.6	325.5	292.8	257.0	222.7	186.9	149.5	116.8
67.5°	513.9	475.0	437.6	400.2	364.4	327.0	289.7	250.7	208.7	165.1	129.3
65°	580.9	532.6	487.4	445.4	403.3	362.9	320.8	278.8	232.0	182.2	140.2
62.5°	647.9	594.9	542.0	489.0	442.3	397.1	352.0	305.2	253.8	200.9	151.1
60°	719.5	658.8	598.0	538.8	481.2	431.4	381.5	331.7	277.2	218.0	162.0
57.5°	798.9	725.7	657.2	590.2	524.8	465.6	411.1	358.2	297.5	235.2	174.4
55°	889.2	798.9	717.9	643.2	571.5	499.9	440.7	386.2	320.8	252.3	188.4
52.5°	984.2	879.9	781.8	697.7	621.4	540.4	468.8	408.0	344.2	269.4	200.9
50°	1094.8	962.4	853.4	750.6	665.0	580.9	498.3	432.9	367.5	289.7	213.4
47.5°	1208.5	1062.1	925.1	812.9	711.7	619.8	532.6	454.7	389.3	308.4	225.8
45°	1340.9	1157.1	1006.0	873.7	756.9	660.3	566.9	478.1	408.0	327.0	238.3
42.5°	1468.6	1269.2	1090.1	940.6	808.3	699.2	598.0	503.0	426.7	345.7	249.2
40°	1619.6	1381.4	1171.1	1004.5	859.6	736.6	629.2	529.5	443.8	362.9	260.1
37.5°	1764.5	1495.0	1269.2	1074.6	909.5	774.0	660.3	554.4	459.4	380.0	274.1
35°	1907.7	1621.2	1362.7	1140.0	960.9	816.0	691.5	577.8	475.0	394.0	286.5
32.5°	2044.8	1739.5	1457.7	1213.2	1016.9	855.0	719.5	599.6	490.6	406.5	299.0
30°	2172.5	1851.7	1551.1	1287.9	1068.3	890.8	746.0	621.4	509.2	417.4	311.5
27.5°	2289.3	1960.7	1644.5	1358.0	1116.6	923.5	774.0	641.6	524.8	428.3	322.4
25°	2395.2	2058.8	1730.2	1421.8	1160.2	959.3	800.5	661.9	538.8	437.6	331.7
22.5°	2494.9	2149.1	1808.1	1485.7	1213.2	995.1	825.4	680.6	552.9	447.0	341.1
20°	2582.1	2231.7	1882.8	1549.5	1259.9	1027.8	847.2	697.7	565.3	453.2	350.4
17.5°	2652.1	2304.9	1949.8	1605.6	1300.4	1055.9	865.9	713.3	576.2	461.0	356.6
15°	2714.4	2367.1	2005.8	1653.9	1336.2	1079.2	883.0	725.7	585.6	465.6	364.4
12.5°	2767.4	2420.1	2054.1	1695.9	1367.3	1099.5	897.0	735.1	593.3	470.3	369.1
10°	2811.0	2462.1	2094.6	1728.6	1392.3	1115.1	907.9	744.4	599.6	475.0	373.8
7.5°	2843.7	2493.3	2124.2	1756.7	1412.5	1126.0	917.3	750.6	605.8	478.1	381.5
5°	2868.6	2519.8	2147.6	1775.4	1428.1	1141.5	928.2	758.4	612.0	481.2	381.5
2.5°	2887.3	2541.6	2166.3	1790.9	1440.5	1138.4	928.2	756.9	612.0	481.2	380.0
0°	2884.2	2543.1	2164.7	1790.9	1440.5	1135.3	928.2	755.3	612.0	481.2	380.0



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	10.9	7.8	3.1	0.0
85°	23.4	15.6	7.8	0.0
82.5°	34.3	21.8	10.9	0.0
80°	45.2	29.6	14.0	0.0
77.5°	57.6	37.4	18.7	0.0
75°	68.5	43.6	21.8	0.0
72.5°	79.4	51.4	24.9	0.0
70°	88.8	57.6	28.0	0.0
67.5°	98.1	65.4	32.7	0.0
65°	105.9	71.6	35.8	0.0
62.5°	112.1	79.4	38.9	0.0
60°	119.9	85.7	42.0	0.0
57.5°	126.1	90.3	45.2	0.0
55°	132.4	93.4	48.3	0.0
52.5°	138.6	98.1	51.4	0.0
50°	144.8	102.8	54.5	0.0
47.5°	151.1	105.9	56.1	0.0
45°	160.4	110.6	59.2	0.0
42.5°	168.2	113.7	62.3	0.0
40°	176.0	116.8	63.9	0.0
37.5°	183.8	119.9	67.0	0.0
35°	191.6	123.0	68.5	0.0
32.5°	197.8	126.1	70.1	0.0
30°	204.0	129.3	71.6	0.0
27.5°	210.2	130.8	73.2	0.0
25°	214.9	133.9	74.8	0.0
22.5°	219.6	135.5	76.3	0.0
20°	222.7	137.0	77.9	0.0
17.5°	227.4	138.6	79.4	0.0
15°	228.9	140.2	82.5	0.0
12.5°	232.0	141.7	82.5	0.0
10°	233.6	143.3	82.5	0.0
7.5°	236.7	143.3	82.5	0.0
5°	235.2	143.3	82.5	0.0
2.5°	235.2	143.3	82.5	0.0
0°	233.6	143.3	82.5	0.0

(END OF REPORT)