

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: P623849

Luminaire Tested: **IFLD-S-SA3E-727-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623849
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3E-727-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (48) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	23419.3 lumens	Max Intensity:	13006.9 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	100.9 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	10133.3 lumens	Field Lumens:	16592.9 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

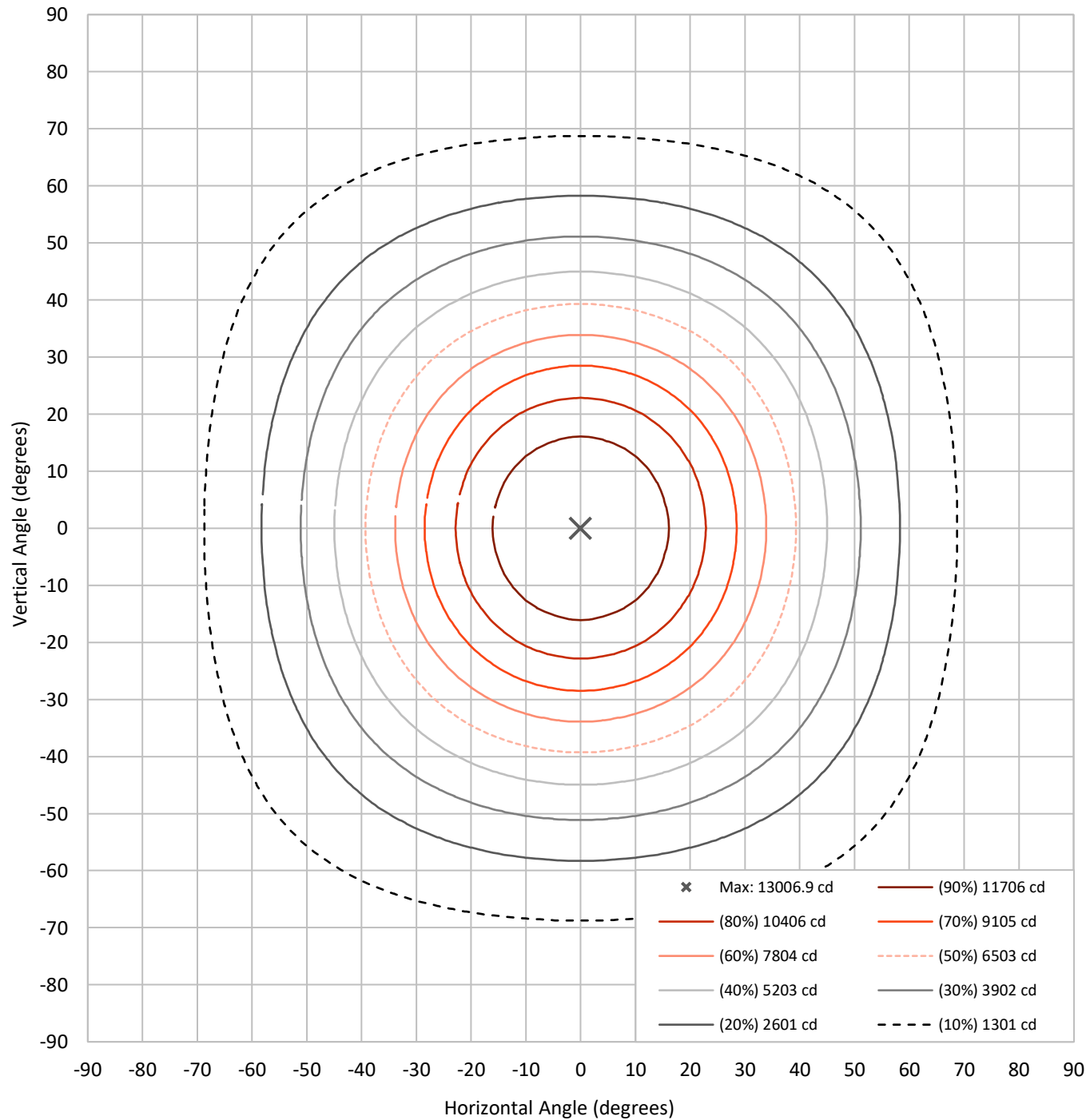
Input Watts (W): 232.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT





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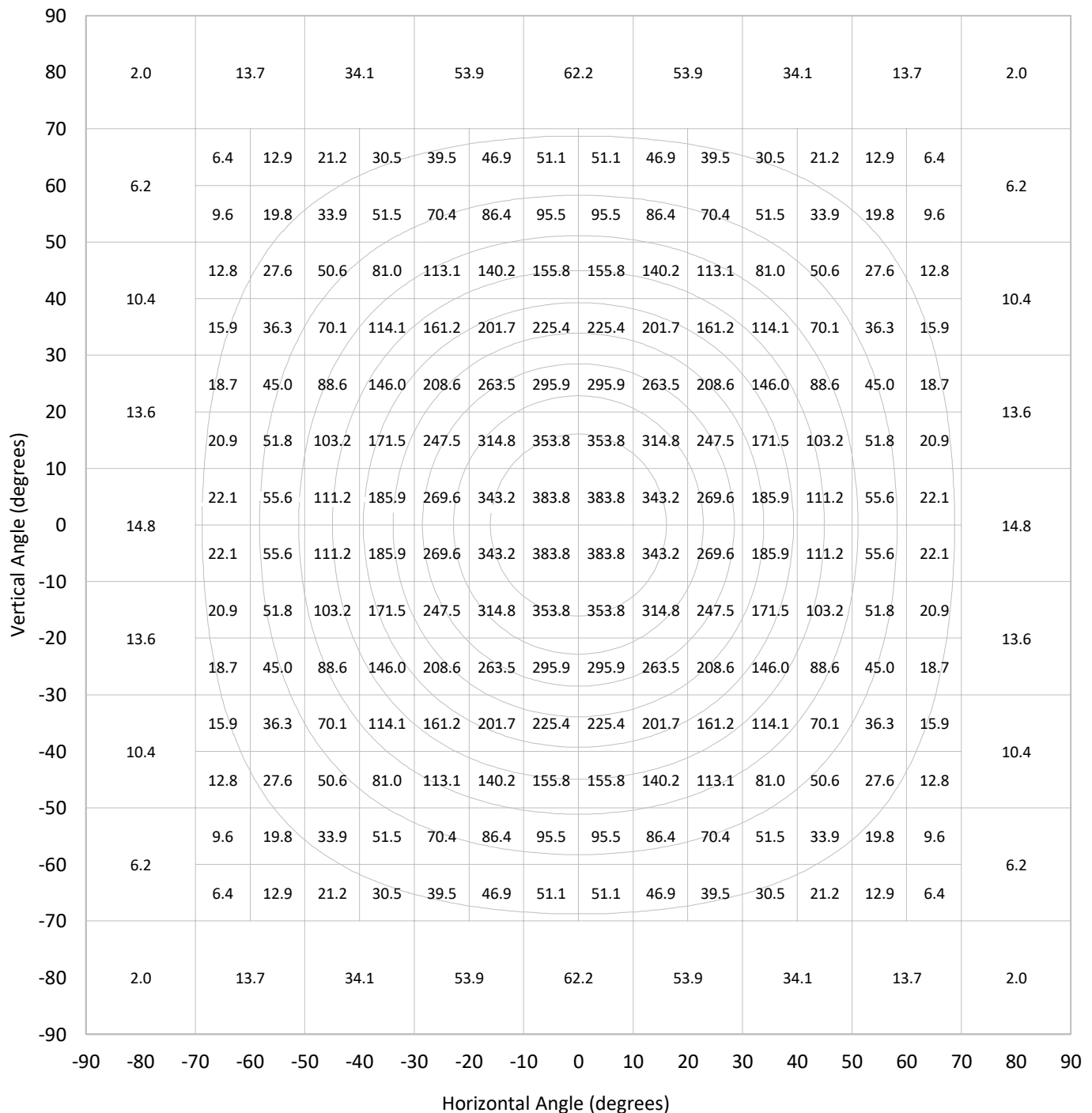
Iso-Candela Plot



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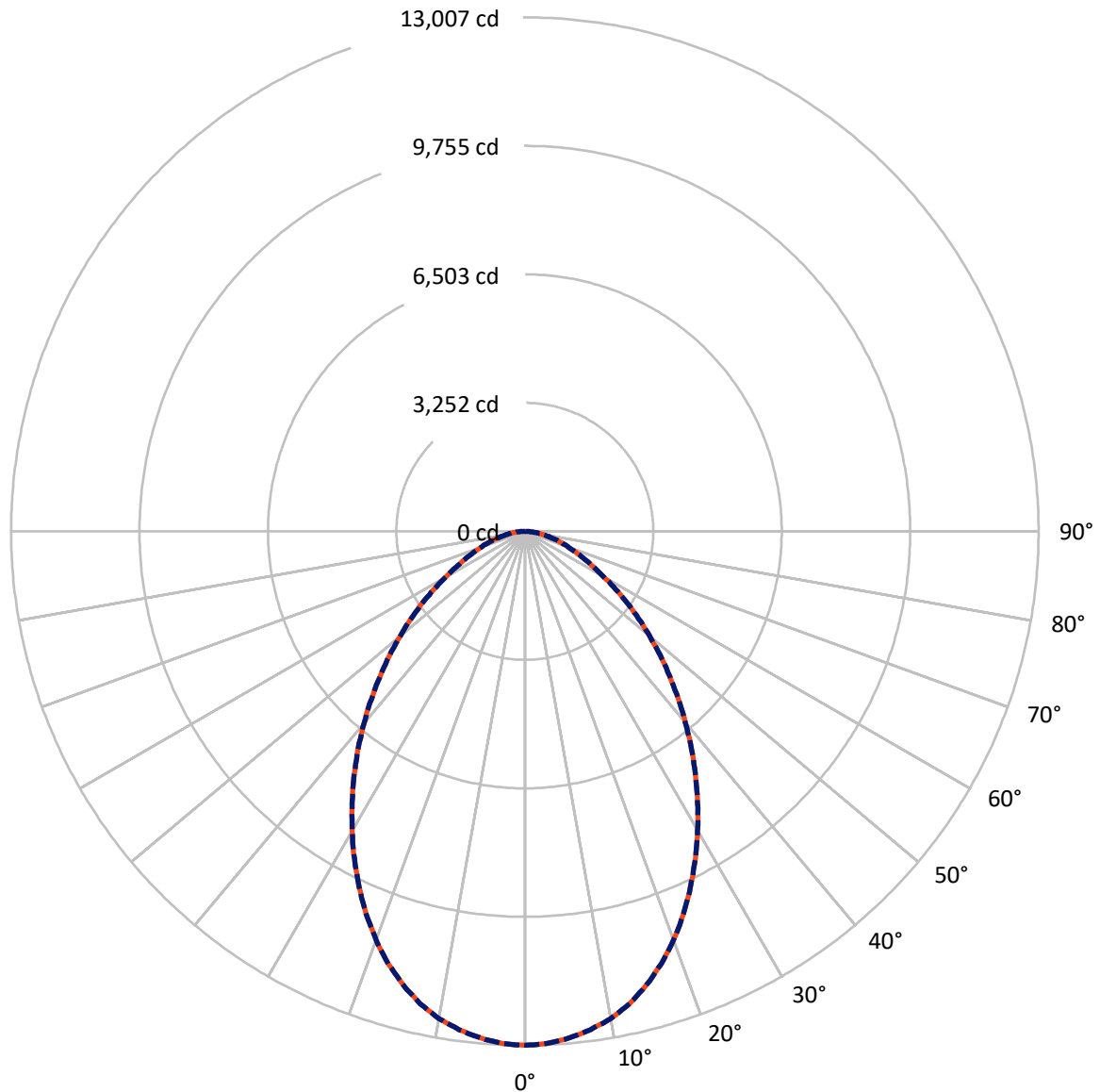
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Lumen Table



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Luminous Intensity Polar Plot

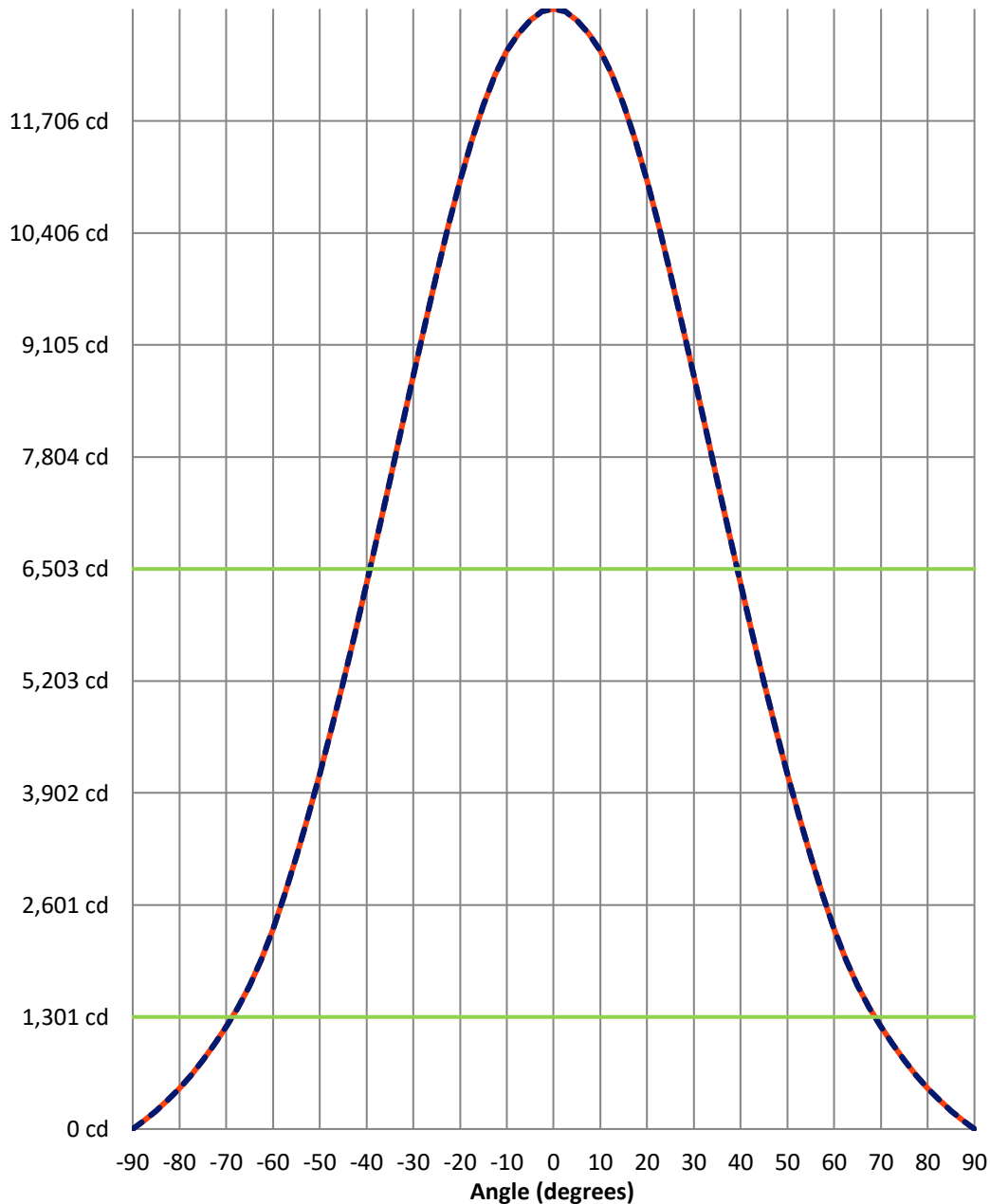


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 10133.3
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 16592.9
Efficiency: 70.9%

Spill:

Lumens: 6826.4
Efficiency: 29.1%

— Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-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°	100.1	100.1	100.1	100.1	100.1	100.1	100.1	95.2	95.2	92.8	90.3
85°	210.0	210.0	210.0	210.0	210.0	205.1	202.7	200.2	197.8	192.9	190.5
82.5°	337.0	337.0	337.0	337.0	332.1	327.2	324.7	319.9	315.0	307.7	300.3
80°	471.2	471.2	471.2	471.2	463.9	459.0	451.7	446.8	439.5	429.7	420.0
77.5°	625.1	625.1	625.1	617.8	612.9	605.5	598.2	588.5	578.7	566.5	551.8
75°	798.4	798.4	798.4	788.7	781.3	774.0	761.8	749.6	735.0	717.9	698.3
72.5°	986.4	986.4	986.4	974.2	966.9	954.7	940.1	923.0	905.9	883.9	859.5
70°	1189.1	1189.1	1189.1	1174.5	1162.2	1150.0	1130.5	1111.0	1086.6	1062.1	1032.8
67.5°	1408.9	1408.9	1408.9	1391.8	1377.1	1360.0	1338.1	1313.6	1284.3	1250.2	1216.0
65°	1665.2	1665.2	1655.5	1640.8	1623.7	1599.3	1572.5	1538.3	1501.6	1457.7	1411.3
62.5°	1968.0	1968.0	1953.4	1936.3	1914.3	1882.6	1845.9	1802.0	1750.7	1694.5	1638.4
60°	2319.6	2319.6	2302.5	2280.5	2248.8	2209.7	2160.9	2104.7	2041.3	1970.5	1902.1
57.5°	2724.9	2724.9	2703.0	2673.7	2634.6	2585.8	2524.7	2453.9	2373.3	2285.4	2200.0
55°	3164.4	3164.4	3137.6	3103.4	3057.0	2998.4	2925.2	2842.1	2744.5	2644.4	2534.5
52.5°	3630.8	3630.8	3599.1	3560.0	3506.3	3437.9	3354.9	3257.2	3144.9	3027.7	2898.3
50°	4121.6	4121.6	4085.0	4041.0	3980.0	3899.4	3804.2	3691.9	3567.3	3430.6	3281.6
47.5°	4646.6	4646.6	4605.0	4553.8	4480.5	4387.7	4275.4	4146.0	4004.4	3850.6	3682.1
45°	5186.2	5186.2	5139.8	5081.2	5000.6	4895.6	4771.1	4646.6	4465.9	4287.6	4092.3
42.5°	5747.8	5747.8	5694.0	5628.1	5535.3	5420.6	5279.0	5117.8	4939.6	4739.3	4526.9
40°	6331.3	6331.3	6270.3	6194.6	6092.0	5960.2	5801.5	5620.8	5420.6	5198.4	4964.0
37.5°	6927.1	6927.1	6858.7	6775.7	6661.0	6514.5	6336.2	6136.0	5911.4	5664.7	5405.9
35°	7527.8	7527.8	7452.1	7361.7	7234.8	7073.6	6880.7	6658.5	6409.5	6140.9	5850.3
32.5°	8140.6	8140.6	8057.6	7955.1	7811.0	7632.8	7420.3	7178.6	6927.1	6614.6	6297.1
30°	8746.2	8746.2	8655.8	8543.5	8389.7	8194.4	7962.4	7696.2	7400.8	7080.9	6739.1
27.5°	9342.0	9317.5	9241.8	9122.2	8953.7	8746.2	8494.7	8206.6	7886.7	7535.1	7168.8
25°	9928.0	9901.1	9818.1	9686.2	9505.5	9278.5	9007.4	8699.8	8355.5	7984.4	7583.9
22.5°	10489.6	10460.2	10372.3	10230.7	10037.8	9791.2	9500.7	9171.0	8804.8	8406.8	7984.4
20°	11009.6	10977.9	10887.5	10738.6	10538.4	10277.1	9969.5	9615.4	9224.7	8804.8	8355.5
17.5°	11478.4	11446.7	11351.5	11197.6	11009.6	10719.1	10401.6	10028.1	9615.4	9171.0	8699.8
15°	11891.1	11856.9	11759.2	11605.4	11390.5	11117.1	10782.6	10401.6	9969.5	9500.7	9007.4
12.5°	12242.7	12208.5	12108.4	11954.6	11732.4	11458.9	11117.1	10719.1	10277.1	9791.2	9278.5
10°	12521.0	12486.9	12391.6	12245.1	12015.6	11732.4	11390.5	11009.6	10538.4	10037.8	9505.5
7.5°	12721.3	12689.5	12601.6	12455.1	12245.1	11954.6	11605.4	11197.6	10738.6	10230.7	9686.2
5°	12872.7	12836.0	12748.1	12601.6	12391.6	12108.4	11759.2	11351.5	10887.5	10372.3	9818.1
2.5°	12977.6	12933.7	12836.0	12689.5	12486.9	12208.5	11856.9	11446.7	10977.9	10460.2	9901.1
0°	13006.9	12977.6	12872.7	12721.3	12521.0	12242.7	11891.1	11478.4	11009.6	10489.6	9928.0

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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°	87.9	87.9	85.5	83.0	80.6	75.7	73.3	70.8	68.4	63.5	61.0
85°	185.6	180.7	175.8	170.9	163.6	158.7	151.4	146.5	139.2	131.9	124.5
82.5°	293.0	285.7	275.9	268.6	258.8	246.6	236.8	224.6	212.4	202.7	190.5
80°	410.2	398.0	385.8	373.6	358.9	344.3	329.6	315.0	297.9	280.8	263.7
77.5°	537.2	520.1	503.0	483.5	466.4	446.8	427.3	407.8	385.8	363.8	341.8
75°	678.8	656.8	632.4	608.0	586.0	559.1	532.3	505.4	476.1	449.3	420.0
72.5°	832.6	805.8	776.5	747.2	715.4	681.2	647.1	610.4	576.2	542.1	505.4
70°	998.7	966.9	930.3	893.7	854.6	813.1	771.6	727.6	683.7	639.7	595.8
67.5°	1176.9	1137.8	1093.9	1049.9	1001.1	952.3	903.4	852.2	798.4	744.7	693.4
65°	1367.4	1318.5	1267.2	1211.1	1154.9	1098.8	1040.2	979.1	918.1	854.6	798.4
62.5°	1579.8	1518.7	1452.8	1384.4	1321.0	1252.6	1189.1	1113.4	1040.2	969.4	898.5
60°	1826.4	1745.8	1665.2	1579.8	1499.2	1411.3	1333.2	1250.2	1167.1	1086.6	1003.5
57.5°	2102.3	1999.8	1902.1	1799.5	1692.1	1594.4	1494.3	1394.2	1301.4	1206.2	1115.9
55°	2414.8	2290.3	2168.2	2041.3	1916.7	1794.7	1667.7	1555.4	1440.6	1333.2	1228.2
52.5°	2756.7	2615.1	2463.7	2319.6	2160.9	2009.5	1867.9	1726.3	1592.0	1462.6	1342.9
50°	3122.9	2956.9	2783.5	2607.7	2427.1	2248.8	2077.9	1911.9	1755.6	1604.2	1462.6
47.5°	3503.8	3315.8	3118.1	2917.8	2724.9	2507.6	2302.5	2114.5	1926.5	1755.6	1592.0
45°	3894.5	3682.1	3464.8	3237.7	3010.6	2776.2	2549.1	2319.6	2114.5	1911.9	1726.3
42.5°	4297.4	4058.1	3816.4	3564.9	3313.4	3057.0	2800.6	2549.1	2302.5	2077.9	1867.9
40°	4712.5	4448.8	4172.9	3899.4	3630.8	3337.8	3057.0	2776.2	2507.6	2248.8	2009.5
37.5°	5127.6	4839.5	4541.6	4233.9	3926.3	3630.8	3313.4	3010.6	2724.9	2427.1	2160.9
35°	5545.1	5227.7	4905.4	4570.9	4233.9	3899.4	3564.9	3237.7	2917.8	2607.7	2319.6
32.5°	5965.1	5618.4	5261.9	4905.4	4541.6	4172.9	3816.4	3464.8	3118.1	2783.5	2463.7
30°	6377.7	6001.7	5618.4	5227.7	4839.5	4448.8	4058.1	3682.1	3315.8	2956.9	2615.1
27.5°	6780.6	6377.7	5965.1	5545.1	5127.6	4712.5	4297.4	3894.5	3503.8	3122.9	2756.7
25°	7168.8	6739.1	6297.1	5850.3	5405.9	4964.0	4526.9	4092.3	3682.1	3281.6	2898.3
22.5°	7535.1	7080.9	6614.6	6140.9	5664.7	5198.4	4739.3	4287.6	3850.6	3430.6	3027.7
20°	7886.7	7400.8	6927.1	6409.5	5911.4	5420.6	4939.6	4465.9	4004.4	3567.3	3144.9
17.5°	8206.6	7696.2	7178.6	6658.5	6136.0	5620.8	5117.8	4646.6	4146.0	3691.9	3257.2
15°	8494.7	7962.4	7420.3	6880.7	6336.2	5801.5	5279.0	4771.1	4275.4	3804.2	3354.9
12.5°	8746.2	8194.4	7632.8	7073.6	6514.5	5960.2	5420.6	4895.6	4387.7	3899.4	3437.9
10°	8953.7	8389.7	7811.0	7234.8	6661.0	6092.0	5535.3	5000.6	4480.5	3980.0	3506.3
7.5°	9122.2	8543.5	7955.1	7361.7	6775.7	6194.6	5628.1	5081.2	4553.8	4041.0	3560.0
5°	9241.8	8655.8	8057.6	7452.1	6858.7	6270.3	5694.0	5139.8	4605.0	4085.0	3599.1
2.5°	9317.5	8746.2	8140.6	7527.8	6927.1	6331.3	5747.8	5186.2	4646.6	4121.6	3630.8
0°	9342.0	8746.2	8140.6	7527.8	6927.1	6331.3	5747.8	5186.2	4646.6	4121.6	3630.8

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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°	58.6	53.7	48.8	46.4	41.5	39.1	34.2	29.3	26.9	22.0	17.1
85°	117.2	107.4	100.1	92.8	85.5	75.7	68.4	61.0	51.3	44.0	34.2
82.5°	178.2	166.0	153.8	141.6	129.4	117.2	102.6	90.3	78.1	65.9	51.3
80°	246.6	227.1	210.0	192.9	175.8	158.7	139.2	122.1	102.6	85.5	68.4
77.5°	317.4	295.4	271.0	246.6	222.2	200.2	175.8	153.8	131.9	107.4	85.5
75°	393.1	363.8	337.0	305.2	275.9	244.2	214.9	185.6	158.7	131.9	102.6
72.5°	471.2	434.6	398.0	363.8	327.2	290.6	256.4	219.8	185.6	153.8	122.1
70°	551.8	507.9	463.9	422.4	380.9	337.0	297.9	256.4	214.9	175.8	139.2
67.5°	637.3	586.0	534.7	481.0	434.6	385.8	337.0	290.6	244.2	200.2	158.7
65°	730.1	669.0	605.5	549.4	488.3	434.6	380.9	327.2	275.9	222.2	175.8
62.5°	825.3	754.5	683.7	612.9	549.4	481.0	422.4	363.8	305.2	246.6	192.9
60°	923.0	842.4	761.8	683.7	605.5	534.7	463.9	398.0	337.0	271.0	210.0
57.5°	1023.1	932.7	842.4	754.5	669.0	586.0	507.9	434.6	363.8	295.4	227.1
55°	1125.6	1023.1	923.0	825.3	730.1	637.3	551.8	471.2	393.1	317.4	246.6
52.5°	1228.2	1115.9	1003.5	898.5	798.4	693.4	595.8	505.4	420.0	341.8	263.7
50°	1333.2	1206.2	1086.6	969.4	854.6	744.7	639.7	542.1	449.3	363.8	280.8
47.5°	1440.6	1301.4	1167.1	1040.2	918.1	798.4	683.7	576.2	476.1	385.8	297.9
45°	1555.4	1394.2	1250.2	1113.4	979.1	852.2	727.6	610.4	505.4	407.8	315.0
42.5°	1667.7	1494.3	1333.2	1189.1	1040.2	903.4	771.6	647.1	532.3	427.3	329.6
40°	1794.7	1594.4	1411.3	1252.6	1098.8	952.3	813.1	681.2	559.1	446.8	344.3
37.5°	1916.7	1692.1	1499.2	1321.0	1154.9	1001.1	854.6	715.4	586.0	466.4	358.9
35°	2041.3	1799.5	1579.8	1384.4	1211.1	1049.9	893.7	747.2	608.0	483.5	373.6
32.5°	2168.2	1902.1	1665.2	1452.8	1267.2	1093.9	930.3	776.5	632.4	503.0	385.8
30°	2290.3	1999.8	1745.8	1518.7	1318.5	1137.8	966.9	805.8	656.8	520.1	398.0
27.5°	2414.8	2102.3	1826.4	1579.8	1367.4	1176.9	998.7	832.6	678.8	537.2	410.2
25°	2534.5	2200.0	1902.1	1638.4	1411.3	1216.0	1032.8	859.5	698.3	551.8	420.0
22.5°	2644.4	2285.4	1970.5	1694.5	1457.7	1250.2	1062.1	883.9	717.9	566.5	429.7
20°	2744.5	2373.3	2041.3	1750.7	1501.6	1284.3	1086.6	905.9	735.0	578.7	439.5
17.5°	2842.1	2453.9	2104.7	1802.0	1538.3	1313.6	1111.0	923.0	749.6	588.5	446.8
15°	2925.2	2524.7	2160.9	1845.9	1572.5	1338.1	1130.5	940.1	761.8	598.2	451.7
12.5°	2998.4	2585.8	2209.7	1882.6	1599.3	1360.0	1150.0	954.7	774.0	605.5	459.0
10°	3057.0	2634.6	2248.8	1914.3	1623.7	1377.1	1162.2	966.9	781.3	612.9	463.9
7.5°	3103.4	2673.7	2280.5	1936.3	1640.8	1391.8	1174.5	974.2	788.7	617.8	471.2
5°	3137.6	2703.0	2302.5	1953.4	1655.5	1408.9	1189.1	986.4	798.4	625.1	471.2
2.5°	3164.4	2724.9	2319.6	1968.0	1665.2	1408.9	1189.1	986.4	798.4	625.1	471.2
0°	3164.4	2724.9	2319.6	1968.0	1665.2	1408.9	1189.1	986.4	798.4	625.1	471.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.2	9.8	4.9	0.0
85°	26.9	17.1	9.8	0.0
82.5°	39.1	26.9	12.2	0.0
80°	51.3	34.2	17.1	0.0
77.5°	65.9	44.0	22.0	0.0
75°	78.1	51.3	26.9	0.0
72.5°	90.3	61.0	29.3	0.0
70°	102.6	68.4	34.2	0.0
67.5°	117.2	75.7	39.1	0.0
65°	129.4	85.5	41.5	0.0
62.5°	141.6	92.8	46.4	0.0
60°	153.8	100.1	48.8	0.0
57.5°	166.0	107.4	53.7	0.0
55°	178.2	117.2	58.6	0.0
52.5°	190.5	124.5	61.0	0.0
50°	202.7	131.9	63.5	0.0
47.5°	212.4	139.2	68.4	0.0
45°	224.6	146.5	70.8	0.0
42.5°	236.8	151.4	73.3	0.0
40°	246.6	158.7	75.7	0.0
37.5°	258.8	163.6	80.6	0.0
35°	268.6	170.9	83.0	0.0
32.5°	275.9	175.8	85.5	0.0
30°	285.7	180.7	87.9	0.0
27.5°	293.0	185.6	87.9	0.0
25°	300.3	190.5	90.3	0.0
22.5°	307.7	192.9	92.8	0.0
20°	315.0	197.8	95.2	0.0
17.5°	319.9	200.2	95.2	0.0
15°	324.7	202.7	100.1	0.0
12.5°	327.2	205.1	100.1	0.0
10°	332.1	210.0	100.1	0.0
7.5°	337.0	210.0	100.1	0.0
5°	337.0	210.0	100.1	0.0
2.5°	337.0	210.0	100.1	0.0
0°	337.0	210.0	100.1	0.0

(END OF REPORT)