

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: P624599

Luminaire Tested: **IFLD-M-SA4C-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624599
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4C-940-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

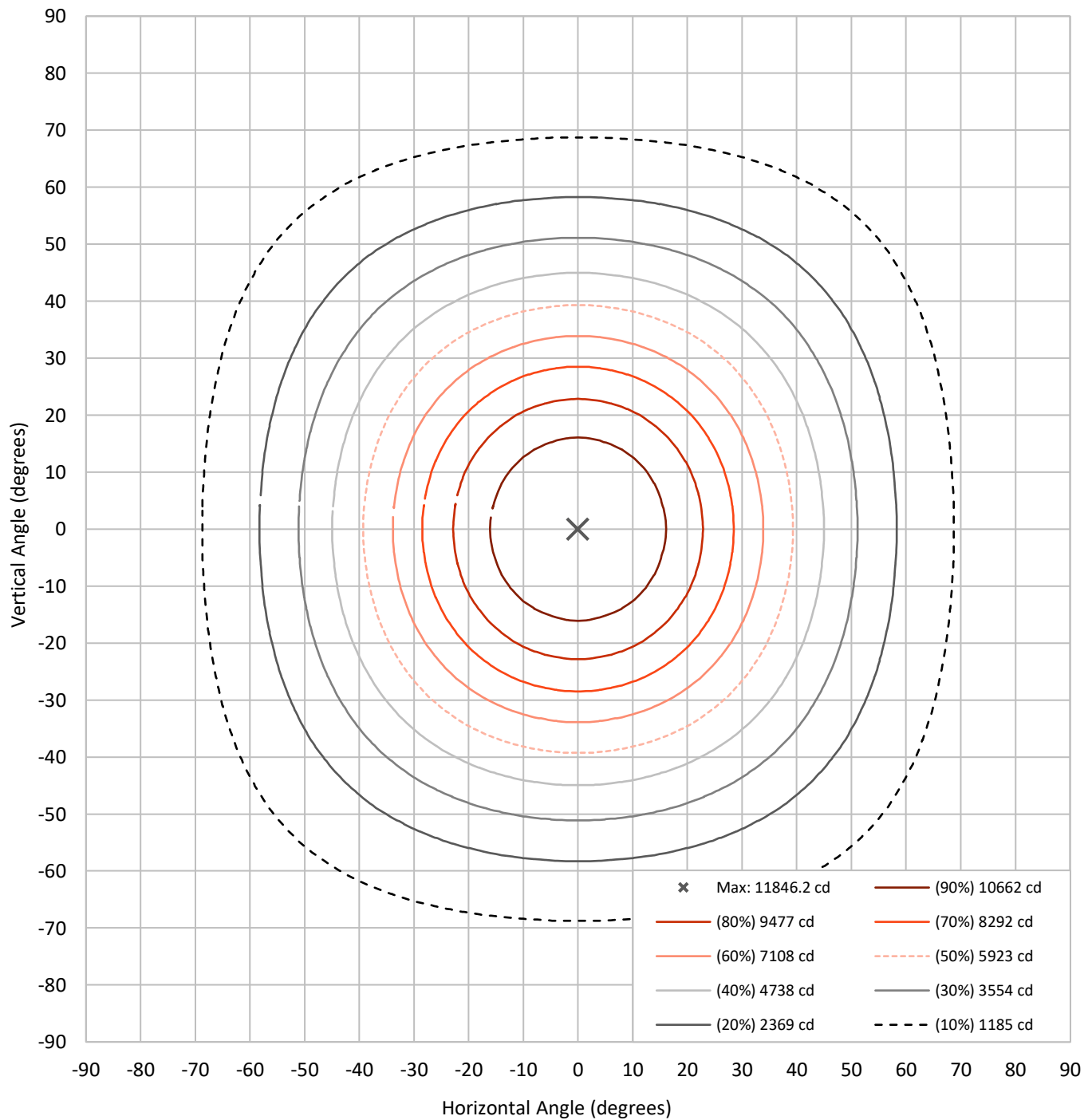
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	21329.3 lumens	Max Intensity:	11846.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	97.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	9229 lumens	Field Lumens:	15112.2 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	218.1		
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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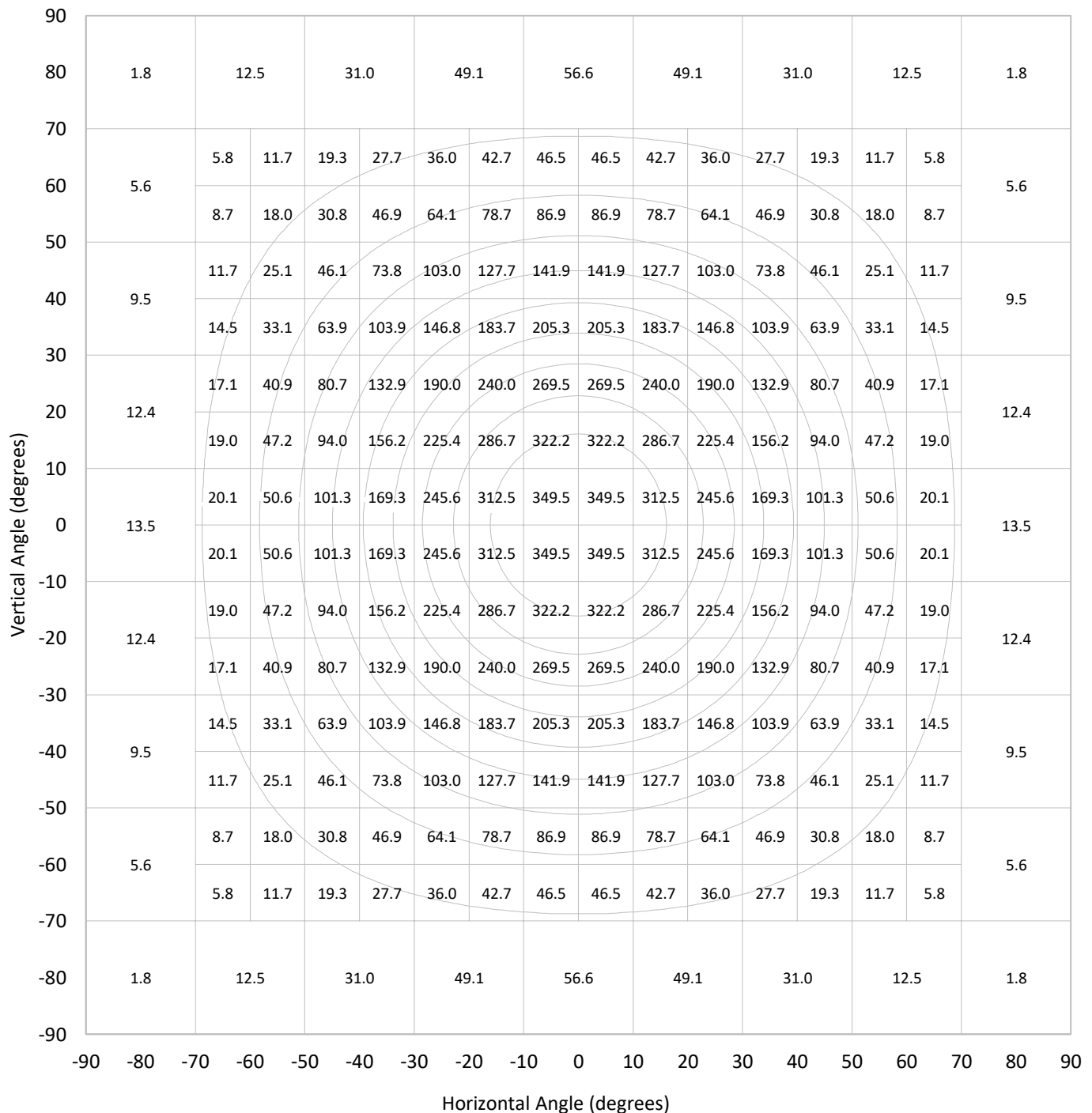
CATALOG NUMBER: IFLD-M-SA4C-940-U-77

Iso-Candela Plot



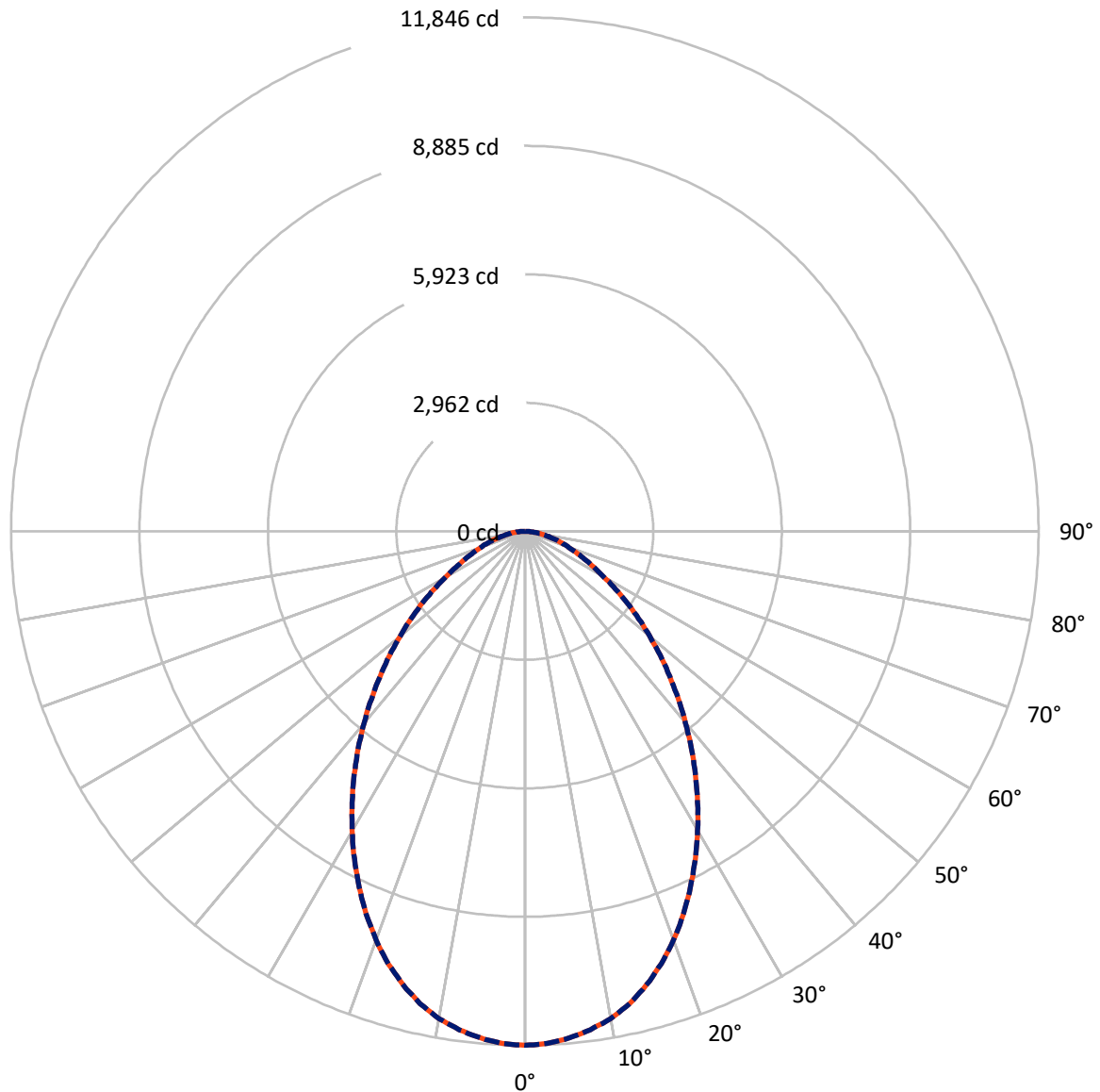
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Lumen Table



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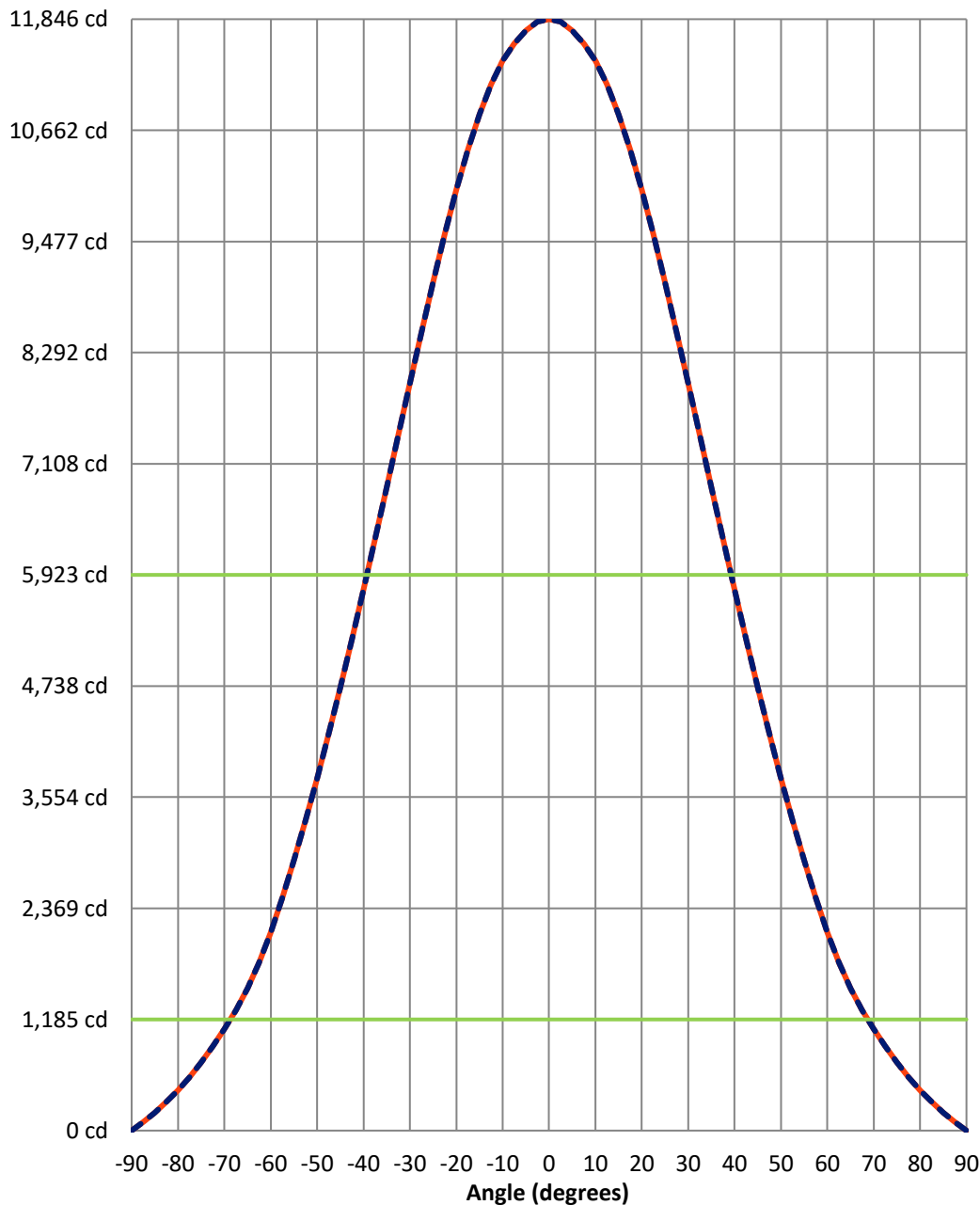
Luminous Intensity Polar Plot



— 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: 9229
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 15112.2
Efficiency: 70.9%

Spill:
Lumens: 6217.2
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°	91.2	91.2	91.2	91.2	91.2	91.2	91.2	86.7	86.7	84.5	82.3
85°	191.2	191.2	191.2	191.2	191.2	186.8	184.6	182.4	180.1	175.7	173.5
82.5°	306.9	306.9	306.9	306.9	302.4	298.0	295.8	291.3	286.9	280.2	273.5
80°	429.2	429.2	429.2	429.2	422.5	418.1	411.4	407.0	400.3	391.4	382.5
77.5°	569.3	569.3	569.3	562.6	558.2	551.5	544.8	535.9	527.0	515.9	502.6
75°	727.2	727.2	727.2	718.3	711.6	704.9	693.8	682.7	669.4	653.8	636.0
72.5°	898.4	898.4	898.4	887.3	880.6	869.5	856.2	840.6	825.0	805.0	782.8
70°	1083.0	1083.0	1083.0	1069.6	1058.5	1047.4	1029.6	1011.8	989.6	967.4	940.7
67.5°	1283.1	1283.1	1283.1	1267.6	1254.2	1238.7	1218.6	1196.4	1169.7	1138.6	1107.5
65°	1516.6	1516.6	1507.7	1494.4	1478.8	1456.6	1432.1	1401.0	1367.6	1327.6	1285.4
62.5°	1792.4	1792.4	1779.0	1763.5	1743.5	1714.6	1681.2	1641.2	1594.5	1543.3	1492.2
60°	2112.6	2112.6	2097.0	2077.0	2048.1	2012.5	1968.1	1916.9	1859.1	1794.6	1732.3
57.5°	2481.8	2481.8	2461.7	2435.1	2399.5	2355.0	2299.4	2234.9	2161.5	2081.5	2003.6
55°	2882.0	2882.0	2857.6	2826.5	2784.2	2730.8	2664.1	2588.5	2499.6	2408.4	2308.3
52.5°	3306.8	3306.8	3277.9	3242.3	3193.4	3131.1	3055.5	2966.6	2864.3	2757.5	2639.7
50°	3753.8	3753.8	3720.4	3680.4	3624.8	3551.4	3464.7	3362.4	3249.0	3124.4	2988.8
47.5°	4231.9	4231.9	4194.1	4147.4	4080.7	3996.2	3893.9	3776.0	3647.0	3506.9	3353.5
45°	4723.4	4723.4	4681.1	4627.7	4554.3	4458.7	4345.3	4231.9	4067.3	3905.0	3727.1
42.5°	5234.8	5234.8	5185.9	5125.9	5041.4	4936.8	4807.9	4661.1	4498.8	4316.4	4122.9
40°	5766.3	5766.3	5710.7	5641.8	5548.4	5428.3	5283.8	5119.2	4936.8	4734.5	4521.0
37.5°	6308.9	6308.9	6246.7	6171.1	6066.5	5933.1	5770.8	5588.4	5383.8	5159.2	4923.5
35°	6856.0	6856.0	6787.0	6704.8	6589.1	6442.4	6266.7	6064.3	5837.5	5592.9	5328.2
32.5°	7414.2	7414.2	7338.5	7245.1	7113.9	6951.6	6758.1	6538.0	6308.9	6024.3	5735.2
30°	7965.7	7965.7	7883.4	7781.1	7641.0	7463.1	7251.8	7009.4	6740.3	6449.0	6137.7
27.5°	8508.3	8486.0	8417.1	8308.1	8154.7	7965.7	7736.6	7474.2	7182.9	6862.7	6529.1
25°	9042.0	9017.5	8941.9	8821.8	8657.3	8450.4	8203.6	7923.4	7609.9	7271.8	6907.1
22.5°	9553.5	9526.8	9446.7	9317.7	9142.1	8917.4	8652.8	8352.6	8019.0	7656.6	7271.8
20°	10027.1	9998.2	9915.9	9780.3	9597.9	9360.0	9079.8	8757.3	8401.5	8019.0	7609.9
17.5°	10454.1	10425.2	10338.5	10198.4	10027.1	9762.5	9473.4	9133.2	8757.3	8352.6	7923.4
15°	10829.9	10798.8	10709.8	10569.7	10374.0	10125.0	9820.3	9473.4	9079.8	8652.8	8203.6
12.5°	11150.1	11119.0	11027.8	10887.7	10685.4	10436.3	10125.0	9762.5	9360.0	8917.4	8450.4
10°	11403.7	11372.5	11285.8	11152.4	10943.3	10685.4	10374.0	10027.1	9597.9	9142.1	8657.3
7.5°	11586.0	11557.1	11477.0	11343.6	11152.4	10887.7	10569.7	10198.4	9780.3	9317.7	8821.8
5°	11723.9	11690.5	11610.5	11477.0	11285.8	11027.8	10709.8	10338.5	9915.9	9446.7	8941.9
2.5°	11819.5	11779.5	11690.5	11557.1	11372.5	11119.0	10798.8	10425.2	9998.2	9526.8	9017.5
0°	11846.2	11819.5	11723.9	11586.0	11403.7	11150.1	10829.9	10454.1	10027.1	9553.5	9042.0

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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°	80.1	80.1	77.8	75.6	73.4	68.9	66.7	64.5	62.3	57.8	55.6
85°	169.0	164.6	160.1	155.7	149.0	144.5	137.9	133.4	126.8	120.1	113.4
82.5°	266.9	260.2	251.3	244.6	235.7	224.6	215.7	204.6	193.5	184.6	173.5
80°	373.6	362.5	351.4	340.2	326.9	313.6	300.2	286.9	271.3	255.7	240.2
77.5°	489.2	473.7	458.1	440.3	424.7	407.0	389.2	371.4	351.4	331.3	311.3
75°	618.2	598.2	576.0	553.7	533.7	509.3	484.8	460.3	433.6	409.2	382.5
72.5°	758.3	733.9	707.2	680.5	651.6	620.4	589.3	556.0	524.8	493.7	460.3
70°	909.5	880.6	847.3	813.9	778.3	740.5	702.7	662.7	622.7	582.6	542.6
67.5°	1071.9	1036.3	996.3	956.2	911.8	867.3	822.8	776.1	727.2	678.3	631.6
65°	1245.3	1200.9	1154.2	1103.0	1051.9	1000.7	947.3	891.7	836.1	778.3	727.2
62.5°	1438.8	1383.2	1323.2	1260.9	1203.1	1140.8	1083.0	1014.1	947.3	882.8	818.4
60°	1663.4	1590.0	1516.6	1438.8	1365.4	1285.4	1214.2	1138.6	1063.0	989.6	914.0
57.5°	1914.7	1821.3	1732.3	1638.9	1541.1	1452.1	1361.0	1269.8	1185.3	1098.6	1016.3
55°	2199.3	2085.9	1974.7	1859.1	1745.7	1634.5	1518.9	1416.6	1312.0	1214.2	1118.6
52.5°	2510.7	2381.7	2243.8	2112.6	1968.1	1830.2	1701.2	1572.2	1449.9	1332.1	1223.1
50°	2844.2	2693.0	2535.1	2375.0	2210.5	2048.1	1892.5	1741.2	1598.9	1461.0	1332.1
47.5°	3191.2	3019.9	2839.8	2657.4	2481.8	2283.8	2097.0	1925.8	1754.6	1598.9	1449.9
45°	3547.0	3353.5	3155.6	2948.8	2741.9	2528.5	2321.6	2112.6	1925.8	1741.2	1572.2
42.5°	3913.9	3696.0	3475.8	3246.8	3017.7	2784.2	2550.7	2321.6	2097.0	1892.5	1701.2
40°	4291.9	4051.8	3800.5	3551.4	3306.8	3039.9	2784.2	2528.5	2283.8	2048.1	1830.2
37.5°	4670.0	4407.6	4136.3	3856.1	3575.9	3306.8	3017.7	2741.9	2481.8	2210.5	1968.1
35°	5050.3	4761.2	4467.6	4163.0	3856.1	3551.4	3246.8	2948.8	2657.4	2375.0	2112.6
32.5°	5432.7	5117.0	4792.3	4467.6	4136.3	3800.5	3475.8	3155.6	2839.8	2535.1	2243.8
30°	5808.6	5466.1	5117.0	4761.2	4407.6	4051.8	3696.0	3353.5	3019.9	2693.0	2381.7
27.5°	6175.5	5808.6	5432.7	5050.3	4670.0	4291.9	3913.9	3547.0	3191.2	2844.2	2510.7
25°	6529.1	6137.7	5735.2	5328.2	4923.5	4521.0	4122.9	3727.1	3353.5	2988.8	2639.7
22.5°	6862.7	6449.0	6024.3	5592.9	5159.2	4734.5	4316.4	3905.0	3506.9	3124.4	2757.5
20°	7182.9	6740.3	6308.9	5837.5	5383.8	4936.8	4498.8	4067.3	3647.0	3249.0	2864.3
17.5°	7474.2	7009.4	6538.0	6064.3	5588.4	5119.2	4661.1	4231.9	3776.0	3362.4	2966.6
15°	7736.6	7251.8	6758.1	6266.7	5770.8	5283.8	4807.9	4345.3	3893.9	3464.7	3055.5
12.5°	7965.7	7463.1	6951.6	6442.4	5933.1	5428.3	4936.8	4458.7	3996.2	3551.4	3131.1
10°	8154.7	7641.0	7113.9	6589.1	6066.5	5548.4	5041.4	4554.3	4080.7	3624.8	3193.4
7.5°	8308.1	7781.1	7245.1	6704.8	6171.1	5641.8	5125.9	4627.7	4147.4	3680.4	3242.3
5°	8417.1	7883.4	7338.5	6787.0	6246.7	5710.7	5185.9	4681.1	4194.1	3720.4	3277.9
2.5°	8486.0	7965.7	7414.2	6856.0	6308.9	5766.3	5234.8	4723.4	4231.9	3753.8	3306.8
0°	8508.3	7965.7	7414.2	6856.0	6308.9	5766.3	5234.8	4723.4	4231.9	3753.8	3306.8

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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°	53.4	48.9	44.5	42.3	37.8	35.6	31.1	26.7	24.5	20.0	15.6
85°	106.7	97.8	91.2	84.5	77.8	68.9	62.3	55.6	46.7	40.0	31.1
82.5°	162.3	151.2	140.1	129.0	117.9	106.7	93.4	82.3	71.2	60.0	46.7
80°	224.6	206.8	191.2	175.7	160.1	144.5	126.8	111.2	93.4	77.8	62.3
77.5°	289.1	269.1	246.8	224.6	202.4	182.4	160.1	140.1	120.1	97.8	77.8
75°	358.0	331.3	306.9	278.0	251.3	222.4	195.7	169.0	144.5	120.1	93.4
72.5°	429.2	395.8	362.5	331.3	298.0	264.6	233.5	200.1	169.0	140.1	111.2
70°	502.6	462.6	422.5	384.7	346.9	306.9	271.3	233.5	195.7	160.1	126.8
67.5°	580.4	533.7	487.0	438.1	395.8	351.4	306.9	264.6	222.4	182.4	144.5
65°	664.9	609.3	551.5	500.4	444.8	395.8	346.9	298.0	251.3	202.4	160.1
62.5°	751.6	687.2	622.7	558.2	500.4	438.1	384.7	331.3	278.0	224.6	175.7
60°	840.6	767.2	693.8	622.7	551.5	487.0	422.5	362.5	306.9	246.8	191.2
57.5°	931.8	849.5	767.2	687.2	609.3	533.7	462.6	395.8	331.3	269.1	206.8
55°	1025.2	931.8	840.6	751.6	664.9	580.4	502.6	429.2	358.0	289.1	224.6
52.5°	1118.6	1016.3	914.0	818.4	727.2	631.6	542.6	460.3	382.5	311.3	240.2
50°	1214.2	1098.6	989.6	882.8	778.3	678.3	582.6	493.7	409.2	331.3	255.7
47.5°	1312.0	1185.3	1063.0	947.3	836.1	727.2	622.7	524.8	433.6	351.4	271.3
45°	1416.6	1269.8	1138.6	1014.1	891.7	776.1	662.7	556.0	460.3	371.4	286.9
42.5°	1518.9	1361.0	1214.2	1083.0	947.3	822.8	702.7	589.3	484.8	389.2	300.2
40°	1634.5	1452.1	1285.4	1140.8	1000.7	867.3	740.5	620.4	509.3	407.0	313.6
37.5°	1745.7	1541.1	1365.4	1203.1	1051.9	911.8	778.3	651.6	533.7	424.7	326.9
35°	1859.1	1638.9	1438.8	1260.9	1103.0	956.2	813.9	680.5	553.7	440.3	340.2
32.5°	1974.7	1732.3	1516.6	1323.2	1154.2	996.3	847.3	707.2	576.0	458.1	351.4
30°	2085.9	1821.3	1590.0	1383.2	1200.9	1036.3	880.6	733.9	598.2	473.7	362.5
27.5°	2199.3	1914.7	1663.4	1438.8	1245.3	1071.9	909.5	758.3	618.2	489.2	373.6
25°	2308.3	2003.6	1732.3	1492.2	1285.4	1107.5	940.7	782.8	636.0	502.6	382.5
22.5°	2408.4	2081.5	1794.6	1543.3	1327.6	1138.6	967.4	805.0	653.8	515.9	391.4
20°	2499.6	2161.5	1859.1	1594.5	1367.6	1169.7	989.6	825.0	669.4	527.0	400.3
17.5°	2588.5	2234.9	1916.9	1641.2	1401.0	1196.4	1011.8	840.6	682.7	535.9	407.0
15°	2664.1	2299.4	1968.1	1681.2	1432.1	1218.6	1029.6	856.2	693.8	544.8	411.4
12.5°	2730.8	2355.0	2012.5	1714.6	1456.6	1238.7	1047.4	869.5	704.9	551.5	418.1
10°	2784.2	2399.5	2048.1	1743.5	1478.8	1254.2	1058.5	880.6	711.6	558.2	422.5
7.5°	2826.5	2435.1	2077.0	1763.5	1494.4	1267.6	1069.6	887.3	718.3	562.6	429.2
5°	2857.6	2461.7	2097.0	1779.0	1507.7	1283.1	1083.0	898.4	727.2	569.3	429.2
2.5°	2882.0	2481.8	2112.6	1792.4	1516.6	1283.1	1083.0	898.4	727.2	569.3	429.2
0°	2882.0	2481.8	2112.6	1792.4	1516.6	1283.1	1083.0	898.4	727.2	569.3	429.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	11.1	8.9	4.4	0.0
85°	24.5	15.6	8.9	0.0
82.5°	35.6	24.5	11.1	0.0
80°	46.7	31.1	15.6	0.0
77.5°	60.0	40.0	20.0	0.0
75°	71.2	46.7	24.5	0.0
72.5°	82.3	55.6	26.7	0.0
70°	93.4	62.3	31.1	0.0
67.5°	106.7	68.9	35.6	0.0
65°	117.9	77.8	37.8	0.0
62.5°	129.0	84.5	42.3	0.0
60°	140.1	91.2	44.5	0.0
57.5°	151.2	97.8	48.9	0.0
55°	162.3	106.7	53.4	0.0
52.5°	173.5	113.4	55.6	0.0
50°	184.6	120.1	57.8	0.0
47.5°	193.5	126.8	62.3	0.0
45°	204.6	133.4	64.5	0.0
42.5°	215.7	137.9	66.7	0.0
40°	224.6	144.5	68.9	0.0
37.5°	235.7	149.0	73.4	0.0
35°	244.6	155.7	75.6	0.0
32.5°	251.3	160.1	77.8	0.0
30°	260.2	164.6	80.1	0.0
27.5°	266.9	169.0	80.1	0.0
25°	273.5	173.5	82.3	0.0
22.5°	280.2	175.7	84.5	0.0
20°	286.9	180.1	86.7	0.0
17.5°	291.3	182.4	86.7	0.0
15°	295.8	184.6	91.2	0.0
12.5°	298.0	186.8	91.2	0.0
10°	302.4	191.2	91.2	0.0
7.5°	306.9	191.2	91.2	0.0
5°	306.9	191.2	91.2	0.0
2.5°	306.9	191.2	91.2	0.0
0°	306.9	191.2	91.2	0.0

(END OF REPORT)