

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: P623931

Luminaire Tested: **IFLD-S-SA2E-740-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623931
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-740-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

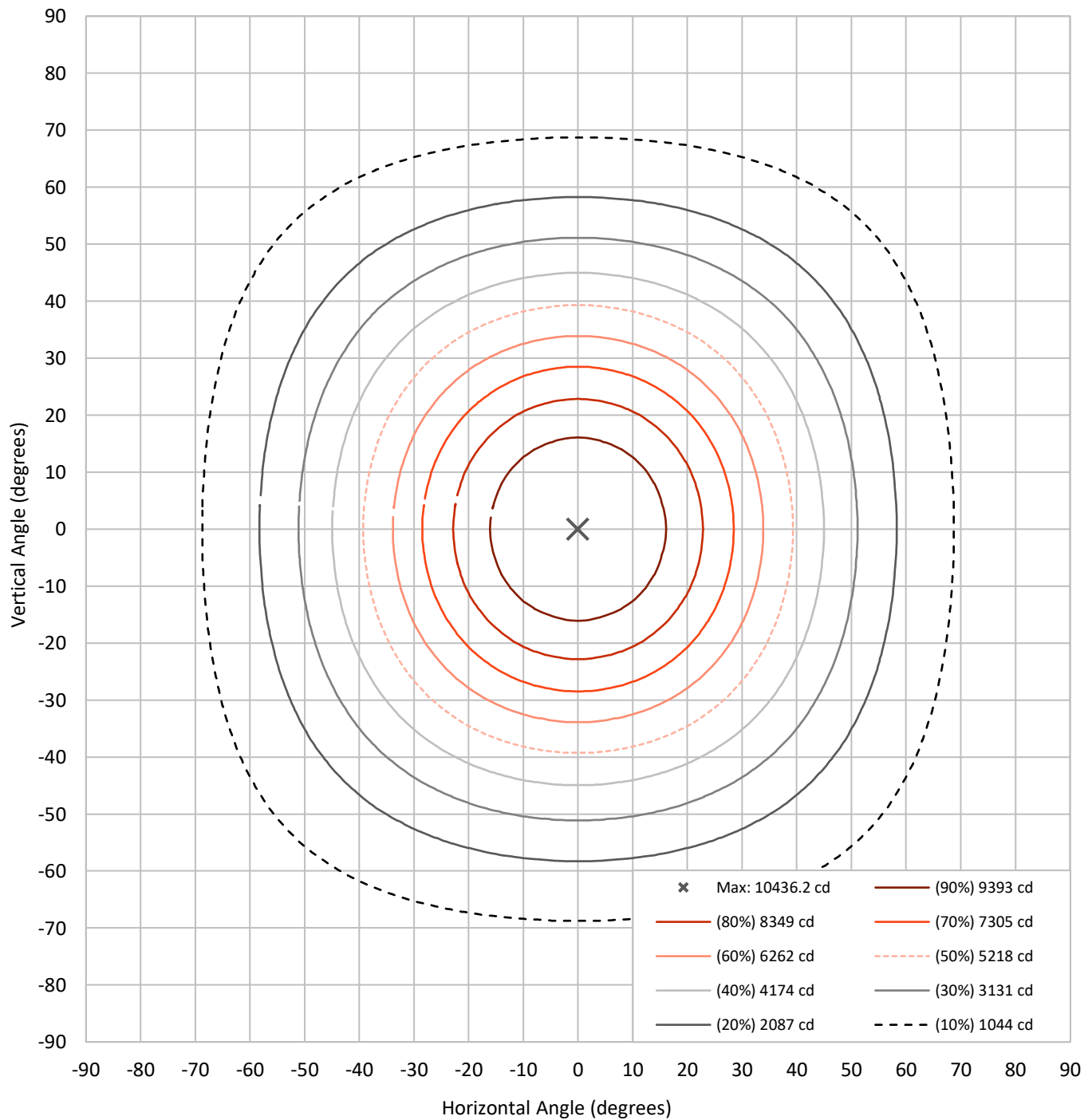
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	18790.6 lumens	Max Intensity:	10436.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	120.3 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	8130.5 lumens	Field Lumens:	13313.4 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

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



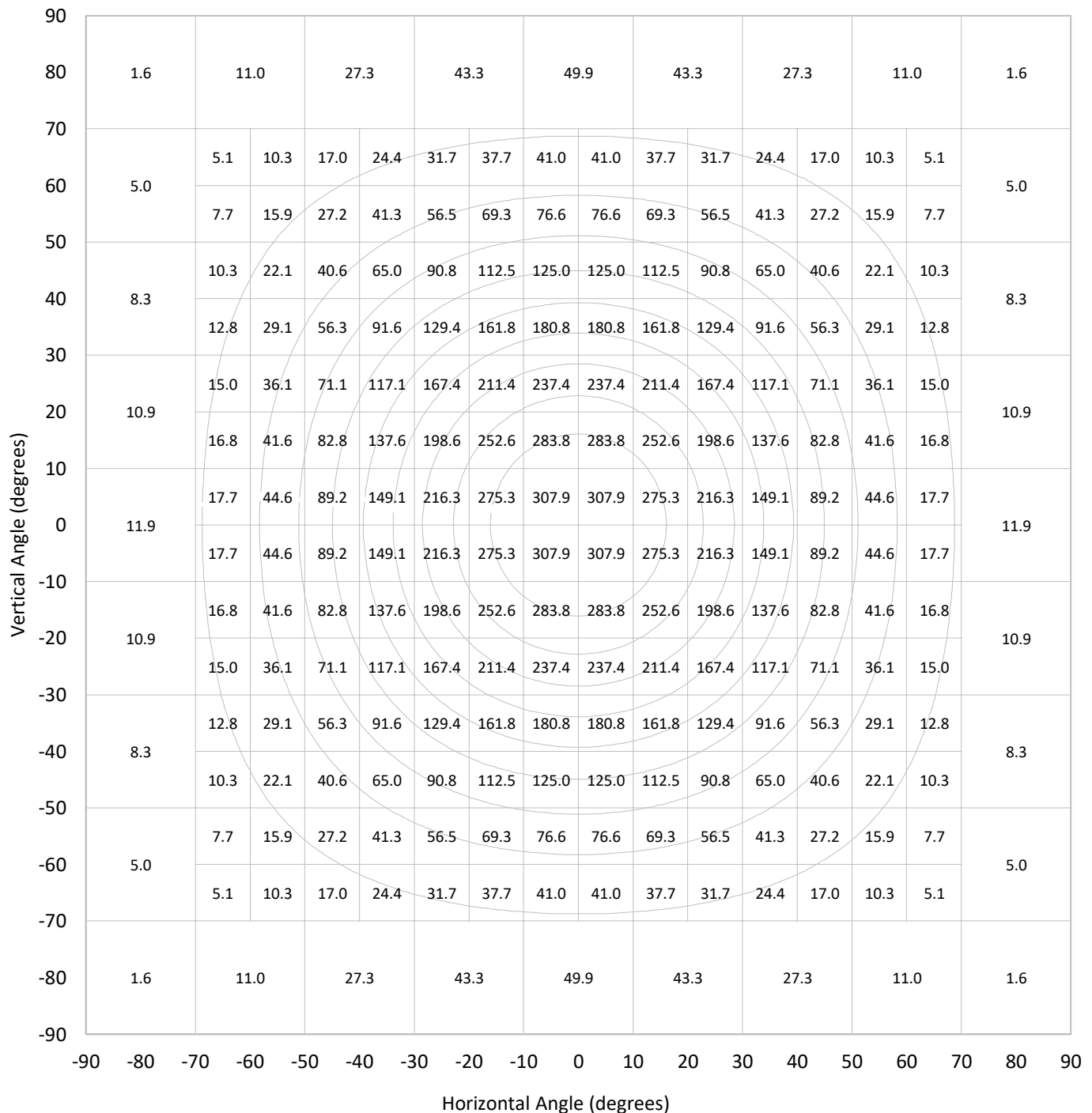
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Iso-Candela Plot



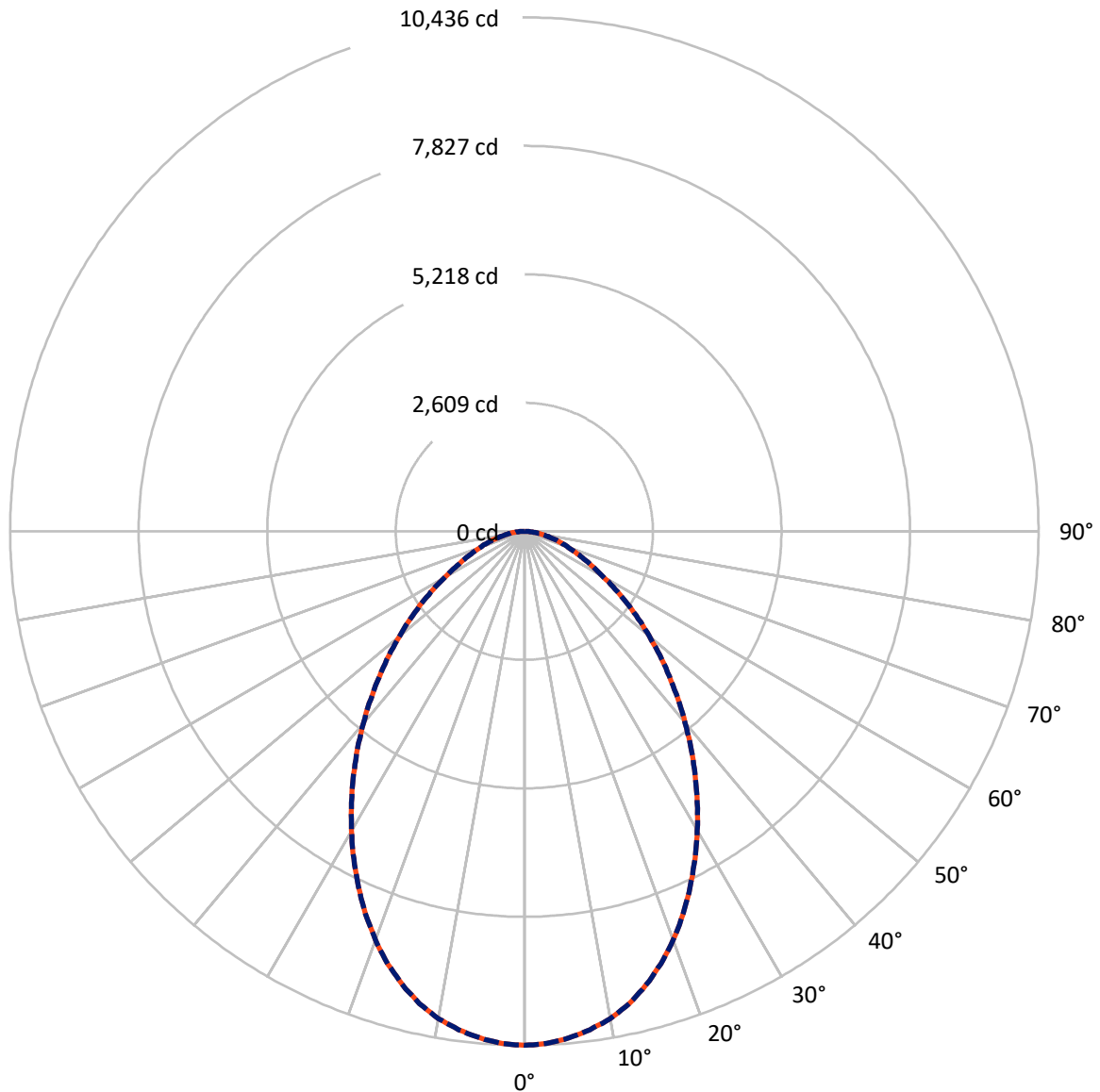
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Lumen Table



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Luminous Intensity Polar Plot

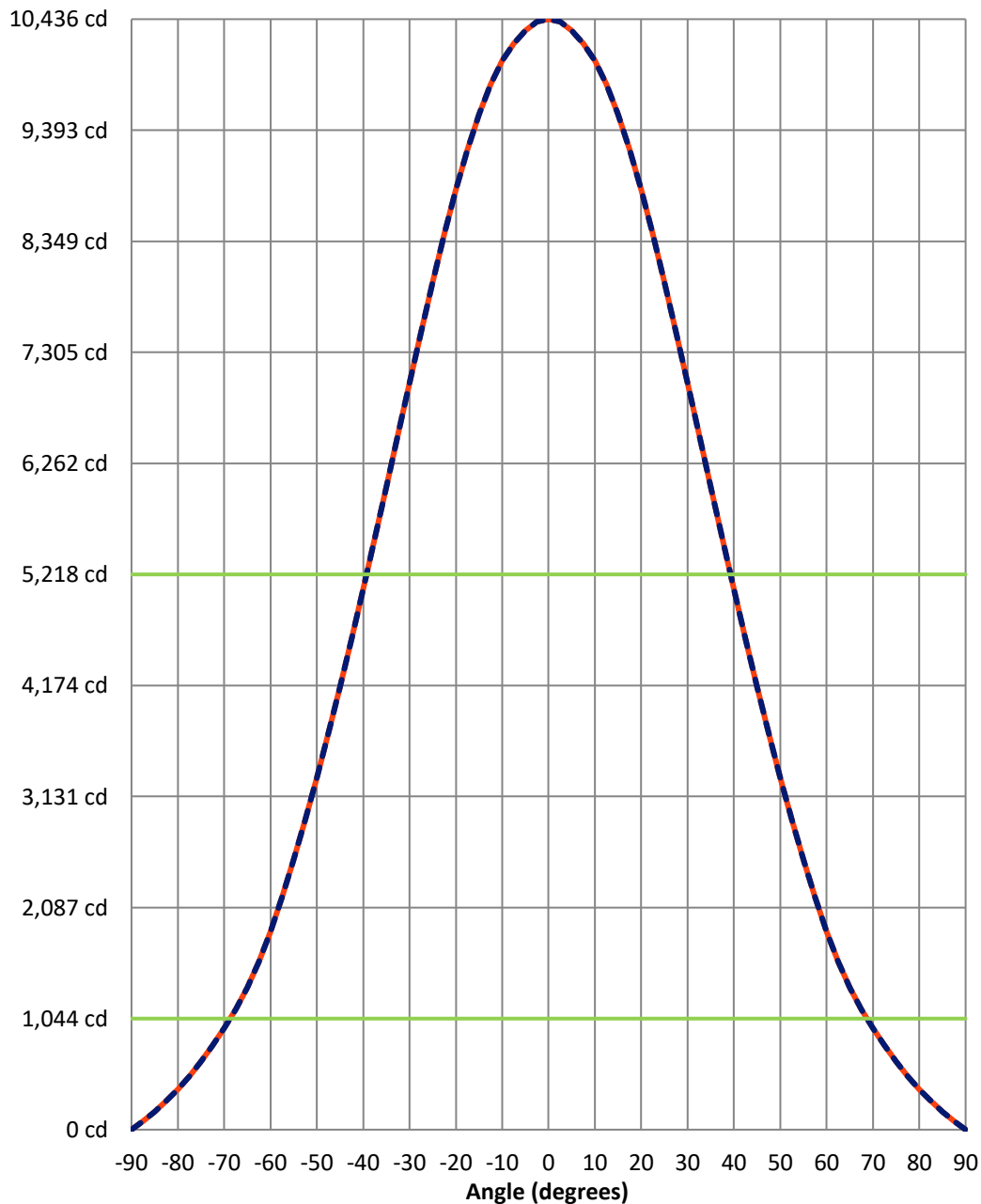


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 8130.5
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 13313.4
Efficiency: 70.9%

Spill:

Lumens: 5477.2
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°	80.3	80.3	80.3	80.3	80.3	80.3	80.3	76.4	76.4	74.4	72.5
85°	168.5	168.5	168.5	168.5	168.5	164.6	162.6	160.6	158.7	154.8	152.8
82.5°	270.4	270.4	270.4	270.4	266.4	262.5	260.6	256.6	252.7	246.8	241.0
80°	378.1	378.1	378.1	378.1	372.2	368.3	362.4	358.5	352.6	344.8	337.0
77.5°	501.5	501.5	501.5	495.7	491.7	485.9	480.0	472.1	464.3	454.5	442.8
75°	640.6	640.6	640.6	632.8	626.9	621.0	611.2	601.4	589.7	576.0	560.3
72.5°	791.5	791.5	791.5	781.7	775.8	766.0	754.3	740.5	726.8	709.2	689.6
70°	954.1	954.1	954.1	942.3	932.5	922.7	907.1	891.4	871.8	852.2	828.7
67.5°	1130.4	1130.4	1130.4	1116.7	1104.9	1091.2	1073.6	1054.0	1030.5	1003.1	975.6
65°	1336.1	1336.1	1328.3	1316.5	1302.8	1283.2	1261.7	1234.2	1204.9	1169.6	1132.4
62.5°	1579.0	1579.0	1567.3	1553.6	1535.9	1510.5	1481.1	1445.8	1404.7	1359.6	1314.6
60°	1861.2	1861.2	1847.4	1829.8	1804.3	1773.0	1733.8	1688.8	1637.8	1581.0	1526.1
57.5°	2186.4	2186.4	2168.7	2145.2	2113.9	2074.7	2025.7	1968.9	1904.3	1833.7	1765.2
55°	2539.0	2539.0	2517.5	2490.0	2452.8	2405.8	2347.0	2280.4	2202.0	2121.7	2033.6
52.5°	2913.2	2913.2	2887.7	2856.4	2813.3	2758.4	2691.8	2613.5	2523.3	2429.3	2325.5
50°	3307.0	3307.0	3277.6	3242.3	3193.4	3128.7	3052.3	2962.2	2862.3	2752.6	2633.0
47.5°	3728.2	3728.2	3694.9	3653.7	3595.0	3520.5	3430.4	3326.6	3212.9	3089.5	2954.3
45°	4161.2	4161.2	4123.9	4076.9	4012.3	3928.0	3828.1	3728.2	3583.2	3440.2	3283.5
42.5°	4611.7	4611.7	4568.6	4515.8	4441.3	4349.2	4235.6	4106.3	3963.3	3802.6	3632.2
40°	5080.0	5080.0	5031.0	4970.3	4888.0	4782.2	4654.8	4509.9	4349.2	4170.9	3982.9
37.5°	5558.0	5558.0	5503.1	5436.5	5344.5	5226.9	5083.9	4923.2	4743.0	4545.1	4337.5
35°	6039.9	6039.9	5979.2	5906.7	5804.8	5675.5	5520.8	5342.5	5142.7	4927.2	4694.0
32.5°	6531.7	6531.7	6465.1	6382.8	6267.2	6124.2	5953.7	5759.8	5558.0	5307.2	5052.5
30°	7017.5	7017.5	6945.0	6854.9	6731.5	6574.8	6388.7	6175.1	5938.1	5681.4	5407.1
27.5°	7495.6	7476.0	7415.2	7319.2	7184.1	7017.5	6815.7	6584.6	6327.9	6045.8	5751.9
25°	7965.7	7944.2	7877.6	7771.8	7626.8	7444.6	7227.2	6980.3	6704.1	6406.3	6085.0
22.5°	8416.3	8392.8	8322.3	8208.7	8053.9	7856.0	7622.9	7358.4	7064.6	6745.2	6406.3
20°	8833.6	8808.2	8735.7	8616.2	8455.5	8245.9	7999.1	7715.0	7401.5	7064.6	6704.1
17.5°	9209.8	9184.3	9107.9	8984.5	8833.6	8600.5	8345.8	8046.1	7715.0	7358.4	6980.3
15°	9540.9	9513.4	9435.1	9311.7	9139.3	8919.8	8651.4	8345.8	7999.1	7622.9	7227.2
12.5°	9823.0	9795.6	9715.2	9591.8	9413.5	9194.1	8919.8	8600.5	8245.9	7856.0	7444.6
10°	10046.3	10018.9	9942.5	9824.9	9640.8	9413.5	9139.3	8833.6	8455.5	8053.9	7626.8
7.5°	10207.0	10181.5	10111.0	9993.4	9824.9	9591.8	9311.7	8984.5	8616.2	8208.7	7771.8
5°	10328.4	10299.0	10228.5	10111.0	9942.5	9715.2	9435.1	9107.9	8735.7	8322.3	7877.6
2.5°	10412.7	10377.4	10299.0	10181.5	10018.9	9795.6	9513.4	9184.3	8808.2	8392.8	7944.2
0°	10436.2	10412.7	10328.4	10207.0	10046.3	9823.0	9540.9	9209.8	8833.6	8416.3	7965.7

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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°	70.5	70.5	68.6	66.6	64.7	60.7	58.8	56.8	54.9	50.9	49.0
85°	148.9	145.0	141.1	137.1	131.3	127.3	121.5	117.5	111.7	105.8	99.9
82.5°	235.1	229.2	221.4	215.5	207.7	197.9	190.0	180.2	170.4	162.6	152.8
80°	329.1	319.3	309.5	299.7	288.0	276.2	264.5	252.7	239.0	225.3	211.6
77.5°	431.0	417.3	403.6	387.9	374.2	358.5	342.8	327.2	309.5	291.9	274.3
75°	544.6	527.0	507.4	487.8	470.2	448.6	427.1	405.5	382.0	360.5	337.0
72.5°	668.1	646.5	623.0	599.5	574.0	546.6	519.2	489.8	462.4	434.9	405.5
70°	801.3	775.8	746.4	717.0	685.7	652.4	619.1	583.8	548.6	513.3	478.0
67.5°	944.3	912.9	877.7	842.4	803.2	764.1	724.9	683.7	640.6	597.5	556.4
65°	1097.1	1057.9	1016.8	971.7	926.7	881.6	834.6	785.6	736.6	685.7	640.6
62.5°	1267.5	1218.6	1165.7	1110.8	1059.9	1005.0	954.1	893.4	834.6	777.8	721.0
60°	1465.4	1400.8	1336.1	1267.5	1202.9	1132.4	1069.7	1003.1	936.5	871.8	805.2
57.5°	1686.8	1604.5	1526.1	1443.9	1357.7	1279.3	1199.0	1118.7	1044.2	967.8	895.3
55°	1937.6	1837.6	1739.7	1637.8	1537.9	1439.9	1338.1	1248.0	1155.9	1069.7	985.4
52.5°	2211.8	2098.2	1976.7	1861.2	1733.8	1612.3	1498.7	1385.1	1277.3	1173.5	1077.5
50°	2505.7	2372.5	2233.4	2092.3	1947.4	1804.3	1667.2	1534.0	1408.6	1287.1	1173.5
47.5°	2811.3	2660.5	2501.8	2341.1	2186.4	2012.0	1847.4	1696.6	1545.7	1408.6	1277.3
45°	3124.8	2954.3	2780.0	2597.8	2415.6	2227.5	2045.3	1861.2	1696.6	1534.0	1385.1
42.5°	3448.0	3256.0	3062.1	2860.3	2658.5	2452.8	2247.1	2045.3	1847.4	1667.2	1498.7
40°	3781.1	3569.5	3348.1	3128.7	2913.2	2678.1	2452.8	2227.5	2012.0	1804.3	1612.3
37.5°	4114.1	3883.0	3643.9	3397.1	3150.3	2913.2	2658.5	2415.6	2186.4	1947.4	1733.8
35°	4449.1	4194.5	3935.9	3667.5	3397.1	3128.7	2860.3	2597.8	2341.1	2092.3	1861.2
32.5°	4786.1	4507.9	4221.9	3935.9	3643.9	3348.1	3062.1	2780.0	2501.8	2233.4	1976.7
30°	5117.2	4815.5	4507.9	4194.5	3883.0	3569.5	3256.0	2954.3	2660.5	2372.5	2098.2
27.5°	5440.5	5117.2	4786.1	4449.1	4114.1	3781.1	3448.0	3124.8	2811.3	2505.7	2211.8
25°	5751.9	5407.1	5052.5	4694.0	4337.5	3982.9	3632.2	3283.5	2954.3	2633.0	2325.5
22.5°	6045.8	5681.4	5307.2	4927.2	4545.1	4170.9	3802.6	3440.2	3089.5	2752.6	2429.3
20°	6327.9	5938.1	5558.0	5142.7	4743.0	4349.2	3963.3	3583.2	3212.9	2862.3	2523.3
17.5°	6584.6	6175.1	5759.8	5342.5	4923.2	4509.9	4106.3	3728.2	3326.6	2962.2	2613.5
15°	6815.7	6388.7	5953.7	5520.8	5083.9	4654.8	4235.6	3828.1	3430.4	3052.3	2691.8
12.5°	7017.5	6574.8	6124.2	5675.5	5226.9	4782.2	4349.2	3928.0	3520.5	3128.7	2758.4
10°	7184.1	6731.5	6267.2	5804.8	5344.5	4888.0	4441.3	4012.3	3595.0	3193.4	2813.3
7.5°	7319.2	6854.9	6382.8	5906.7	5436.5	4970.3	4515.8	4076.9	3653.7	3242.3	2856.4
5°	7415.2	6945.0	6465.1	5979.2	5503.1	5031.0	4568.6	4123.9	3694.9	3277.6	2887.7
2.5°	7476.0	7017.5	6531.7	6039.9	5558.0	5080.0	4611.7	4161.2	3728.2	3307.0	2913.2
0°	7495.6	7017.5	6531.7	6039.9	5558.0	5080.0	4611.7	4161.2	3728.2	3307.0	2913.2

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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°	47.0	43.1	39.2	37.2	33.3	31.3	27.4	23.5	21.6	17.6	13.7
85°	94.0	86.2	80.3	74.4	68.6	60.7	54.9	49.0	41.1	35.3	27.4
82.5°	143.0	133.2	123.4	113.6	103.8	94.0	82.3	72.5	62.7	52.9	41.1
80°	197.9	182.2	168.5	154.8	141.1	127.3	111.7	98.0	82.3	68.6	54.9
77.5°	254.7	237.1	217.5	197.9	178.3	160.6	141.1	123.4	105.8	86.2	68.6
75°	315.4	291.9	270.4	244.9	221.4	195.9	172.4	148.9	127.3	105.8	82.3
72.5°	378.1	348.7	319.3	291.9	262.5	233.1	205.7	176.3	148.9	123.4	98.0
70°	442.8	407.5	372.2	338.9	305.6	270.4	239.0	205.7	172.4	141.1	111.7
67.5°	511.3	470.2	429.0	385.9	348.7	309.5	270.4	233.1	195.9	160.6	127.3
65°	585.8	536.8	485.9	440.8	391.8	348.7	305.6	262.5	221.4	178.3	141.1
62.5°	662.2	605.4	548.6	491.7	440.8	385.9	338.9	291.9	244.9	197.9	154.8
60°	740.5	675.9	611.2	548.6	485.9	429.0	372.2	319.3	270.4	217.5	168.5
57.5°	820.9	748.4	675.9	605.4	536.8	470.2	407.5	348.7	291.9	237.1	182.2
55°	903.2	820.9	740.5	662.2	585.8	511.3	442.8	378.1	315.4	254.7	197.9
52.5°	985.4	895.3	805.2	721.0	640.6	556.4	478.0	405.5	337.0	274.3	211.6
50°	1069.7	967.8	871.8	777.8	685.7	597.5	513.3	434.9	360.5	291.9	225.3
47.5°	1155.9	1044.2	936.5	834.6	736.6	640.6	548.6	462.4	382.0	309.5	239.0
45°	1248.0	1118.7	1003.1	893.4	785.6	683.7	583.8	489.8	405.5	327.2	252.7
42.5°	1338.1	1199.0	1069.7	954.1	834.6	724.9	619.1	519.2	427.1	342.8	264.5
40°	1439.9	1279.3	1132.4	1005.0	881.6	764.1	652.4	546.6	448.6	358.5	276.2
37.5°	1537.9	1357.7	1202.9	1059.9	926.7	803.2	685.7	574.0	470.2	374.2	288.0
35°	1637.8	1443.9	1267.5	1110.8	971.7	842.4	717.0	599.5	487.8	387.9	299.7
32.5°	1739.7	1526.1	1336.1	1165.7	1016.8	877.7	746.4	623.0	507.4	403.6	309.5
30°	1837.6	1604.5	1400.8	1218.6	1057.9	912.9	775.8	646.5	527.0	417.3	319.3
27.5°	1937.6	1686.8	1465.4	1267.5	1097.1	944.3	801.3	668.1	544.6	431.0	329.1
25°	2033.6	1765.2	1526.1	1314.6	1132.4	975.6	828.7	689.6	560.3	442.8	337.0
22.5°	2121.7	1833.7	1581.0	1359.6	1169.6	1003.1	852.2	709.2	576.0	454.5	344.8
20°	2202.0	1904.3	1637.8	1404.7	1204.9	1030.5	871.8	726.8	589.7	464.3	352.6
17.5°	2280.4	1968.9	1688.8	1445.8	1234.2	1054.0	891.4	740.5	601.4	472.1	358.5
15°	2347.0	2025.7	1733.8	1481.1	1261.7	1073.6	907.1	754.3	611.2	480.0	362.4
12.5°	2405.8	2074.7	1773.0	1510.5	1283.2	1091.2	922.7	766.0	621.0	485.9	368.3
10°	2452.8	2113.9	1804.3	1535.9	1302.8	1104.9	932.5	775.8	626.9	491.7	372.2
7.5°	2490.0	2145.2	1829.8	1553.6	1316.5	1116.7	942.3	781.7	632.8	495.7	378.1
5°	2517.5	2168.7	1847.4	1567.3	1328.3	1130.4	954.1	791.5	640.6	501.5	378.1
2.5°	2539.0	2186.4	1861.2	1579.0	1336.1	1130.4	954.1	791.5	640.6	501.5	378.1
0°	2539.0	2186.4	1861.2	1579.0	1336.1	1130.4	954.1	791.5	640.6	501.5	378.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.8	7.8	3.9	0.0
85°	21.6	13.7	7.8	0.0
82.5°	31.3	21.6	9.8	0.0
80°	41.1	27.4	13.7	0.0
77.5°	52.9	35.3	17.6	0.0
75°	62.7	41.1	21.6	0.0
72.5°	72.5	49.0	23.5	0.0
70°	82.3	54.9	27.4	0.0
67.5°	94.0	60.7	31.3	0.0
65°	103.8	68.6	33.3	0.0
62.5°	113.6	74.4	37.2	0.0
60°	123.4	80.3	39.2	0.0
57.5°	133.2	86.2	43.1	0.0
55°	143.0	94.0	47.0	0.0
52.5°	152.8	99.9	49.0	0.0
50°	162.6	105.8	50.9	0.0
47.5°	170.4	111.7	54.9	0.0
45°	180.2	117.5	56.8	0.0
42.5°	190.0	121.5	58.8	0.0
40°	197.9	127.3	60.7	0.0
37.5°	207.7	131.3	64.7	0.0
35°	215.5	137.1	66.6	0.0
32.5°	221.4	141.1	68.6	0.0
30°	229.2	145.0	70.5	0.0
27.5°	235.1	148.9	70.5	0.0
25°	241.0	152.8	72.5	0.0
22.5°	246.8	154.8	74.4	0.0
20°	252.7	158.7	76.4	0.0
17.5°	256.6	160.6	76.4	0.0
15°	260.6	162.6	80.3	0.0
12.5°	262.5	164.6	80.3	0.0
10°	266.4	168.5	80.3	0.0
7.5°	270.4	168.5	80.3	0.0
5°	270.4	168.5	80.3	0.0
2.5°	270.4	168.5	80.3	0.0
0°	270.4	168.5	80.3	0.0

(END OF REPORT)