

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P841485

Luminaire Tested: **ARCH4-180-750-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841485
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29272 lumens
Efficiency: N/A
Efficacy: 162.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

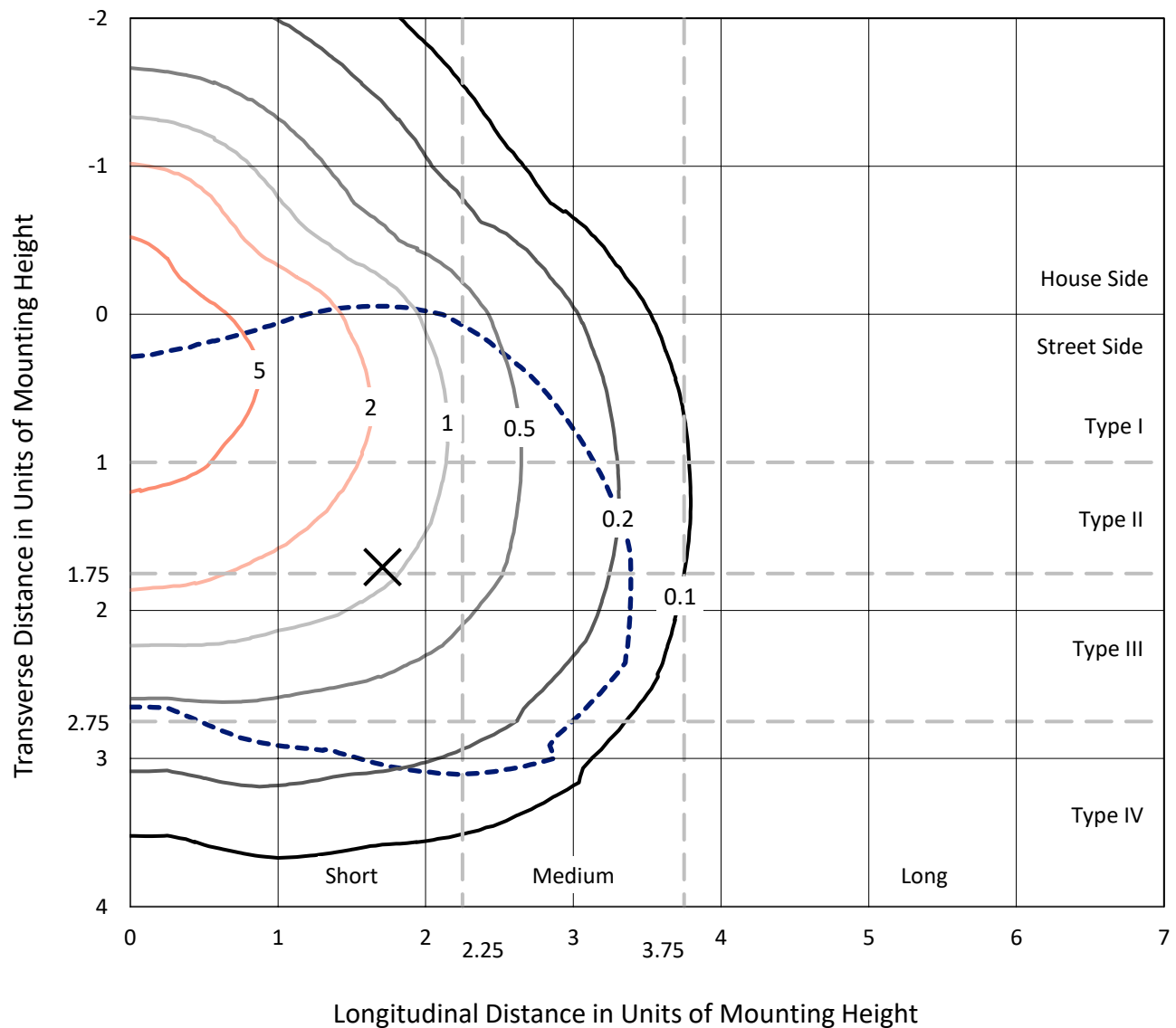
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

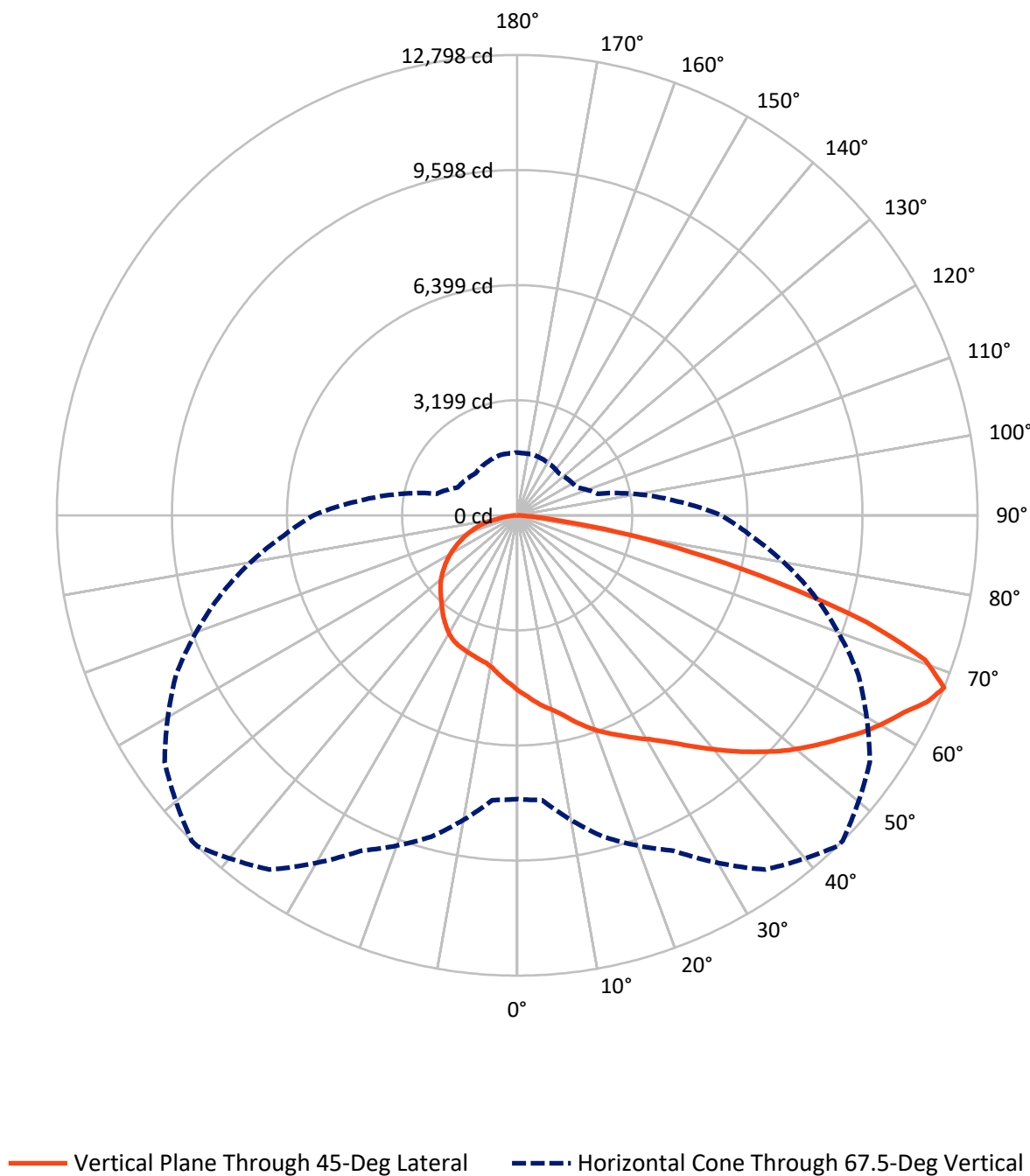
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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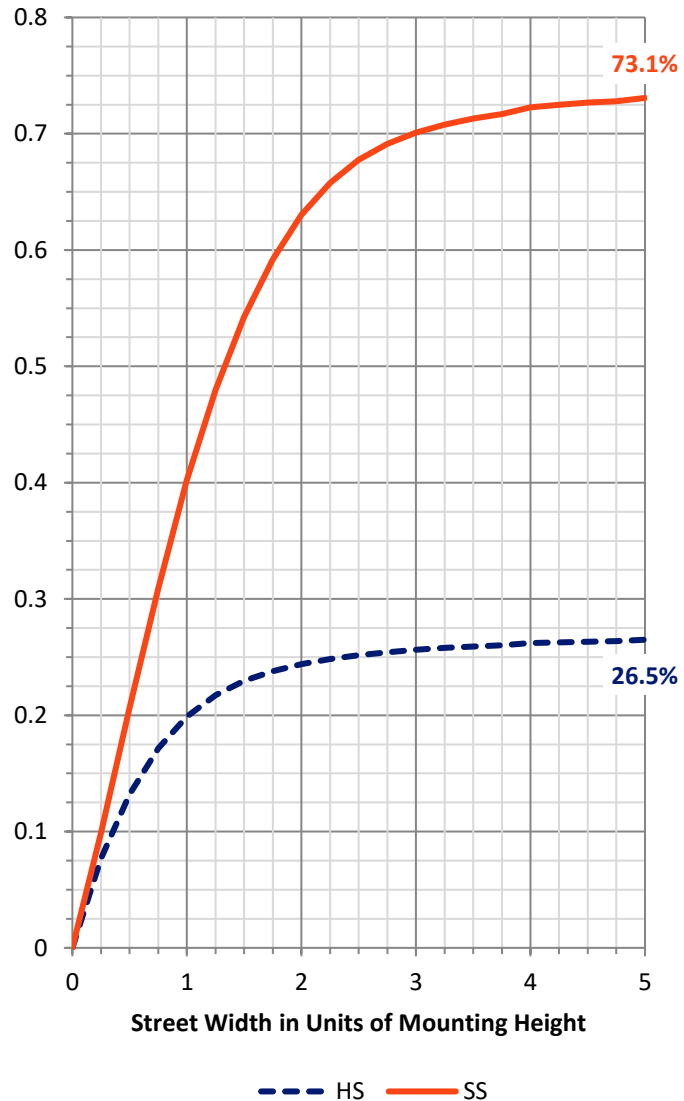
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7820.0	0.0	7820.0
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	21452.0	0.0	21452.0
	% Fixture	73.3	0.0	73.3
Total	Lumens	29272.0	0.0	29272.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	467.4	1.6
10°-20°	1443.9	4.9
20°-30°	2492.4	8.5
30°-40°	3675.4	12.6
40°-50°	4979.5	17.0
50°-60°	6086.1	20.8
60°-70°	6277.0	21.4
70°-80°	3438.1	11.7
80°-90°	412.1	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	29272.0	100.0
0°-180°	29272.0	100.0

Coefficient of Utilization



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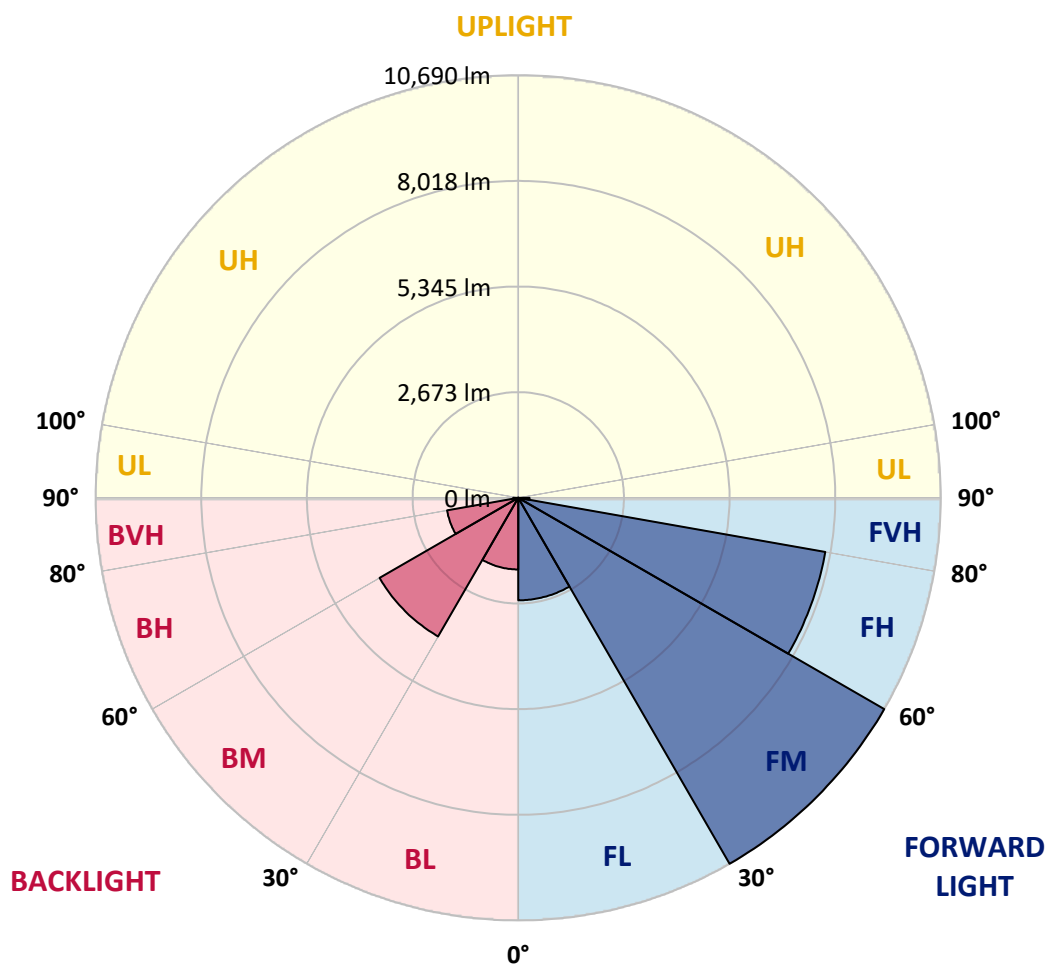
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2591.4	8.9			
FM	(30°-60°)	10690.4	36.5			
FH	(60°-80°)	7886.3	26.9			G4/12000
FVH	(80°-90°)	283.9	1.0			G3/500
BL	(0°-30°)	1812.4	6.2	B3/2500		
BM	(30°-60°)	4050.7	13.8	B3/5000		
BH	(60°-80°)	1828.8	6.2	B3/2500		G3/2500
BVH	(80°-90°)	128.2	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0
2.5°	5095.8	5091.4	5100.3	5069.1	5029.0	5024.6	5024.6	4997.8	4966.6	4904.3	4855.3
5°	5336.4	5327.5	5331.9	5287.4	5233.9	5207.2	5202.7	5144.8	5073.6	4975.6	4886.5
7.5°	5559.1	5550.2	5545.7	5496.7	5416.5	5372.0	5367.5	5282.9	5198.3	5046.8	4917.6
10°	5768.4	5759.5	5750.6	5683.8	5585.8	5519.0	5510.1	5403.2	5296.3	5109.2	4944.4
12.5°	6035.7	6017.9	6009.0	5928.8	5786.3	5715.0	5701.6	5559.1	5425.5	5198.3	4997.8
15°	6316.3	6303.0	6289.6	6213.9	6053.5	5960.0	5937.7	5759.5	5576.9	5314.1	5078.0
17.5°	6525.7	6512.3	6512.3	6445.5	6298.5	6191.6	6173.8	5960.0	5732.8	5421.0	5140.4
20°	6654.9	6641.5	6654.9	6614.8	6503.4	6414.3	6396.5	6160.4	5888.7	5519.0	5193.8
22.5°	6748.4	6735.0	6757.3	6739.5	6659.3	6605.9	6592.5	6360.9	6049.1	5621.4	5247.3
25°	6913.2	6913.2	6913.2	6882.0	6806.3	6788.5	6788.5	6588.0	6254.0	5755.1	5327.5
27.5°	7242.8	7225.0	7202.8	7113.7	6984.5	6980.0	7006.8	6819.7	6490.1	5928.8	5425.5
30°	7728.4	7719.5	7634.8	7447.7	7229.5	7207.2	7225.0	7069.1	6744.0	6111.4	5536.8
32.5°	8356.4	8325.3	8151.5	7870.9	7559.1	7456.7	7492.3	7327.5	7011.2	6298.5	5643.7
35°	8801.9	8810.8	8686.1	8432.2	8062.5	7790.7	7817.5	7617.0	7300.7	6507.9	5777.3
37.5°	9314.1	9345.3	9158.2	8966.7	8623.7	8160.4	8187.2	7915.5	7590.3	6770.7	5919.9
40°	10022.4	9960.0	9643.8	9416.6	9038.0	8548.0	8570.3	8249.5	7924.4	7020.1	6084.7
42.5°	10614.8	10503.5	10120.4	9830.8	9376.5	8957.8	8980.1	8610.3	8262.9	7296.3	6267.3
45°	11465.6	11158.3	10605.9	10463.4	9723.9	9358.7	9381.0	8993.4	8619.2	7590.3	6463.3
47.5°	11960.0	11470.1	11118.2	11042.4	10107.0	9772.9	9799.7	9398.8	9002.3	7924.4	6668.2
50°	11928.9	11612.6	11510.2	11323.1	10445.6	10160.5	10187.2	9817.5	9389.9	8254.0	6864.2
52.5°	11724.0	11781.9	11728.4	11416.6	10784.1	10534.6	10565.8	10231.7	9786.3	8561.3	7046.8
55°	12040.2	12080.3	11977.9	11568.1	11158.3	10908.8	10944.4	10668.3	10178.3	8833.1	7202.8
57.5°	12418.8	12276.3	12173.9	11835.3	11545.8	11314.2	11354.2	11113.7	10516.8	9051.3	7323.0
60°	12401.0	12102.6	12205.0	11853.1	11808.6	11688.3	11724.0	11479.0	10775.2	9211.7	7372.0
62.5°	11487.9	11327.5	11844.2	11724.0	12022.4	12022.4	12066.9	11701.7	10931.1	9278.5	7345.3
65°	9902.1	9911.0	10819.7	11318.6	12276.3	12481.2	12516.8	11839.8	10842.0	9082.5	7095.8
67.5°	7888.7	7946.6	9251.8	10289.6	12022.4	12793.0	12797.5	11964.5	10458.9	8530.2	6516.8
70°	5772.9	5817.4	7358.7	8619.2	10824.2	12102.6	12031.3	11612.6	9625.9	7568.0	5612.5
72.5°	3902.0	3942.1	5527.9	6619.2	8882.1	10307.5	10151.6	10262.9	8205.0	6218.3	4512.3
75°	2623.6	2672.6	3933.2	4735.0	6534.6	7826.4	7478.9	7772.9	6347.5	4708.3	3291.8
77.5°	1652.6	1683.8	2498.9	3104.7	4463.3	5327.5	4980.0	4984.5	3657.1	2534.5	1768.4
80°	1051.2	1060.1	1514.5	1790.7	2583.5	3202.7	2833.0	2302.9	1648.1	1345.2	1055.7
82.5°	610.3	596.9	904.2	1011.1	1229.4	1216.0	1006.7	953.2	721.6	672.6	539.0
85°	245.0	227.2	396.4	369.7	374.2	396.4	294.0	294.0	236.1	182.6	133.6
87.5°	49.0	49.0	53.5	49.0	49.0	53.5	40.1	40.1	35.6	35.6	35.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0	4882.0
2.5°	4846.4	4837.5	4815.2	4757.3	4726.1	4708.3	4681.6	4672.7	4668.2	4672.7	4686.0
5°	4859.7	4828.6	4766.2	4672.7	4610.3	4570.2	4525.7	4507.8	4494.5	4494.5	4507.8
7.5°	4868.7	4819.7	4712.7	4574.7	4485.6	4423.2	4369.8	4347.5	4343.0	4356.4	4360.9
10°	4873.1	4801.8	4650.4	4476.7	4360.9	4280.7	4227.2	4213.9	4227.2	4253.9	4258.4
12.5°	4904.3	4806.3	4614.8	4409.8	4271.8	4191.6	4151.5	4151.5	4187.1	4236.1	4240.6
15°	4957.7	4837.5	4596.9	4356.4	4213.9	4142.6	4129.2	4151.5	4204.9	4280.7	4289.6
17.5°	4997.8	4855.3	4556.8	4285.1	4138.1	4093.6	4115.9	4169.3	4245.0	4347.5	4356.4
20°	5024.6	4855.3	4498.9	4200.5	4062.4	4053.5	4115.9	4200.5	4280.7	4400.9	4414.3
22.5°	5051.3	4846.4	4432.1	4098.0	3977.8	4004.5	4120.3	4227.2	4307.4	4436.6	4458.8
25°	5100.3	4859.7	4365.3	3995.6	3888.7	3964.4	4115.9	4245.0	4329.7	4463.3	4498.9
27.5°	5167.1	4890.9	4316.3	3902.0	3799.6	3902.0	4084.7	4240.6	4329.7	4458.8	4498.9
30°	5238.4	4926.6	4258.4	3799.6	3697.1	3813.0	4017.9	4191.6	4294.0	4414.3	4463.3
32.5°	5314.1	4966.6	4209.4	3688.2	3572.4	3692.7	3919.9	4115.9	4227.2	4338.6	4392.0
35°	5416.5	5037.9	4182.7	3599.1	3461.1	3568.0	3795.1	4017.9	4138.1	4240.6	4302.9
37.5°	5541.3	5127.0	4169.3	3510.1	3340.8	3429.9	3661.5	3897.6	4026.8	4111.4	4169.3
40°	5683.8	5238.4	4164.9	3425.4	3220.5	3287.3	3523.4	3759.5	3884.2	3951.0	4000.0
42.5°	5844.2	5363.1	4155.9	3340.8	3100.3	3153.7	3389.8	3621.4	3728.3	3786.2	3830.8
45°	6013.4	5487.8	4138.1	3238.3	2971.1	3033.4	3251.7	3456.6	3568.0	3617.0	3666.0
47.5°	6182.7	5612.5	4102.5	3122.5	2855.3	2913.2	3104.7	3282.9	3372.0	3416.5	3465.5
50°	6347.5	5723.9	4017.9	2988.9	2735.0	2788.4	2935.4	3055.7	3122.5	3158.2	3207.2
52.5°	6494.5	5799.6	3897.6	2833.0	2614.7	2641.5	2739.5	2841.9	2895.4	2899.8	2944.4
55°	6619.2	5839.7	3723.9	2672.6	2485.6	2490.0	2543.5	2623.6	2645.9	2628.1	2659.3
57.5°	6690.5	5817.4	3532.3	2507.8	2351.9	2334.1	2374.2	2414.3	2418.7	2374.2	2405.4
60°	6708.3	5715.0	3282.9	2343.0	2218.3	2169.3	2182.7	2173.7	2164.8	2147.0	2173.7
62.5°	6619.2	5496.7	3006.7	2182.7	2075.7	2000.0	1995.6	1991.1	2004.5	2008.9	2013.4
65°	6294.1	5086.9	2677.1	2017.8	1924.3	1821.8	1817.4	1870.8	1888.7	1861.9	1870.8
67.5°	5666.0	4458.8	2316.3	1826.3	1732.8	1643.7	1679.3	1710.5	1741.7	1732.8	1741.7
70°	4775.1	3661.5	1986.7	1612.5	1523.4	1474.4	1514.5	1541.2	1545.7	1536.8	1545.7
72.5°	3755.1	2859.7	1679.3	1394.2	1314.0	1291.8	1340.8	1363.0	1403.1	1421.0	1425.4
75°	2712.7	2111.4	1376.4	1158.1	1091.3	1091.3	1135.9	1176.0	1211.6	1189.3	1176.0
77.5°	1514.5	1260.6	988.9	797.3	810.7	873.1	890.9	935.4	971.1	966.6	957.7
80°	917.6	788.4	668.2	516.7	512.3	561.3	677.1	752.8	770.6	730.5	726.1
82.5°	476.6	414.3	356.4	289.5	320.7	374.2	392.0	472.2	521.2	503.3	525.6
85°	120.3	115.8	129.2	133.6	164.8	182.6	200.4	236.1	155.9	75.7	75.7
87.5°	35.6	35.6	44.5	44.5	57.9	71.3	66.8	66.8	35.6	4.5	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)