

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: P841731

Luminaire Tested: **ARCH4-220-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32474 lumens
Efficiency: N/A
Efficacy: 146.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 221.8
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

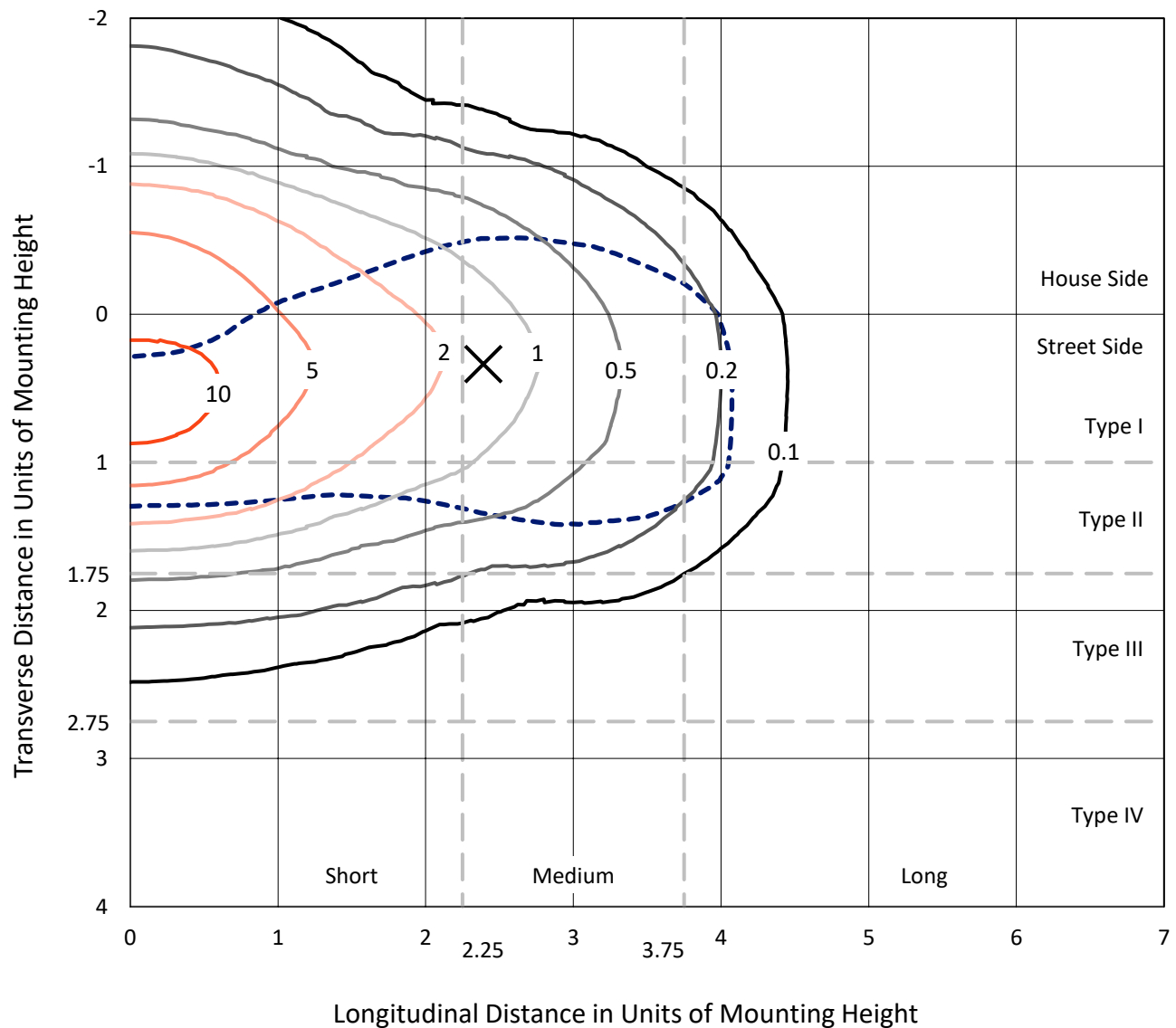


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Iso-Footcandle Lines of Horizontal Illumination

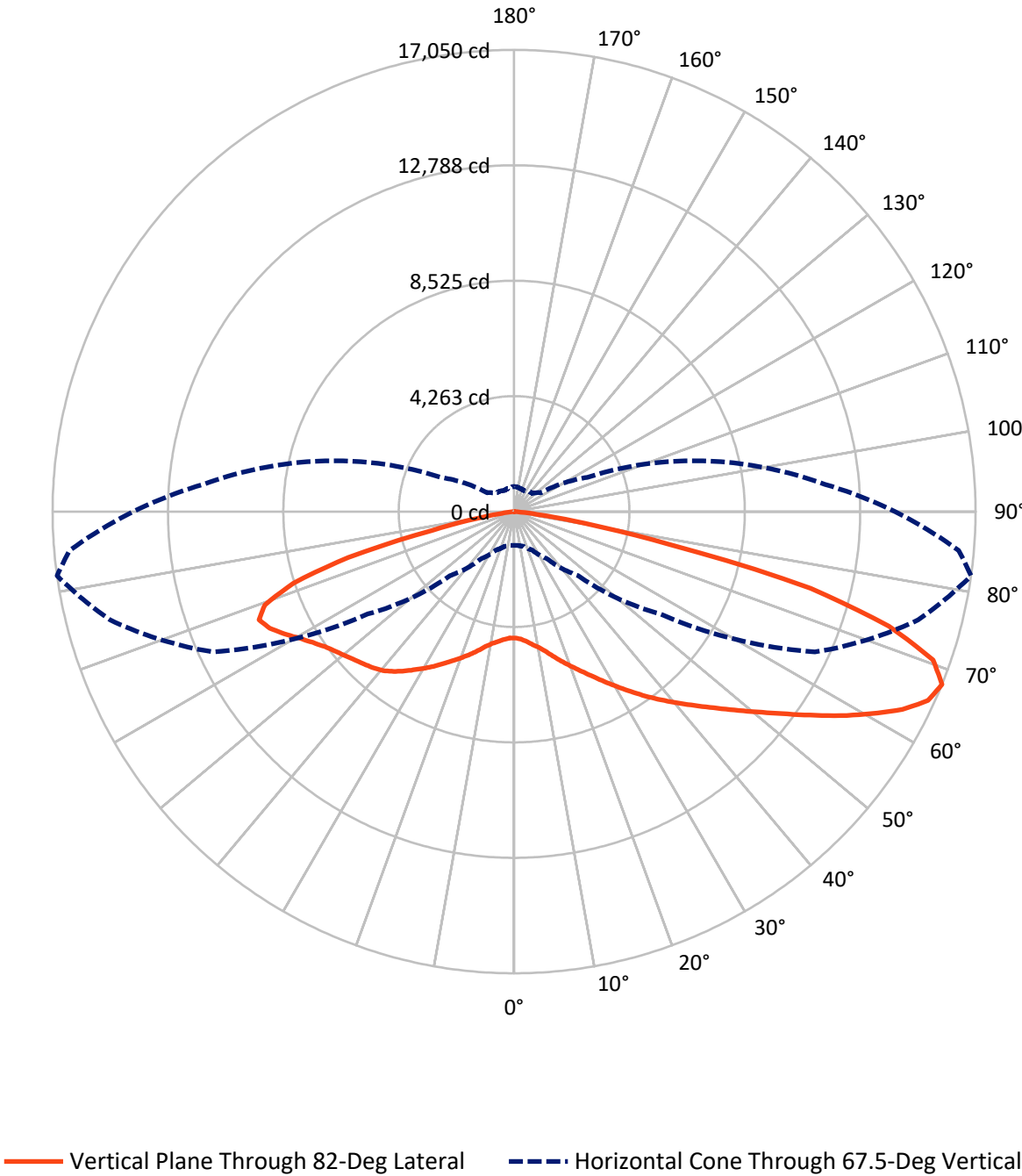
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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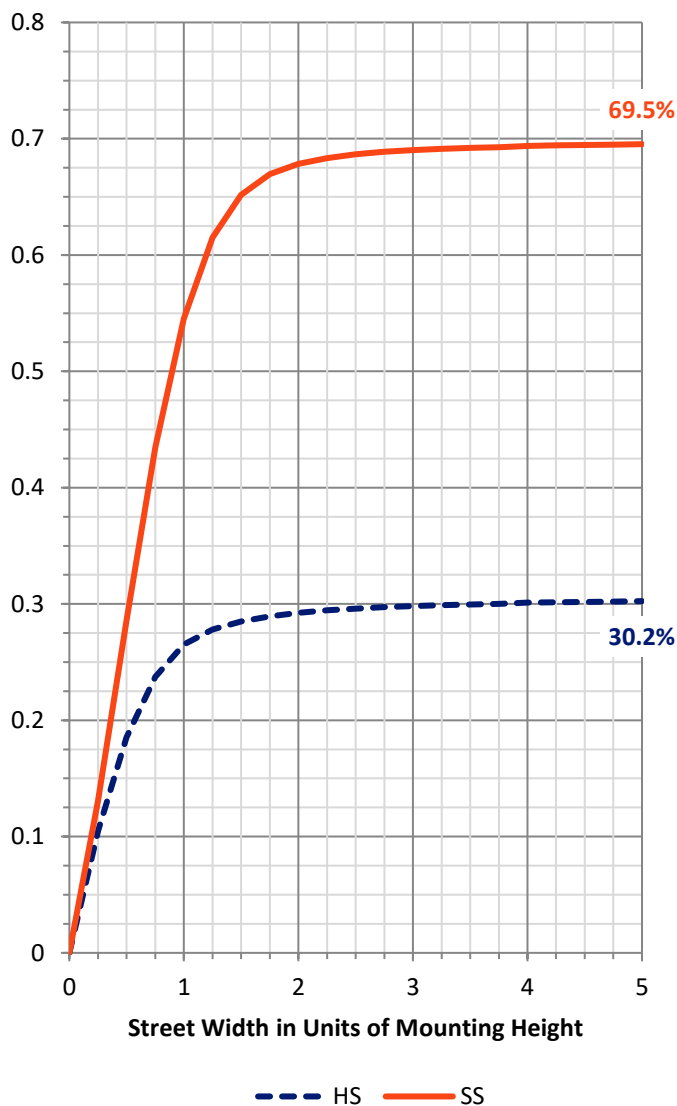
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9889.7	0.0	9889.7
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	22584.4	0.0	22584.4
	% Fixture	69.5	0.0	69.5
Total	Lumens	32474.0	0.0	32474.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	482.4	1.5
10°-20°	1737.7	5.4
20°-30°	3492.4	10.8
30°-40°	5486.1	16.9
40°-50°	6683.2	20.6
50°-60°	6314.8	19.4
60°-70°	5214.5	16.1
70°-80°	2839.6	8.7
80°-90°	223.3	0.7
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°	32474.0	100.0
0°-180°	32474.0	100.0

Coefficient of Utilization



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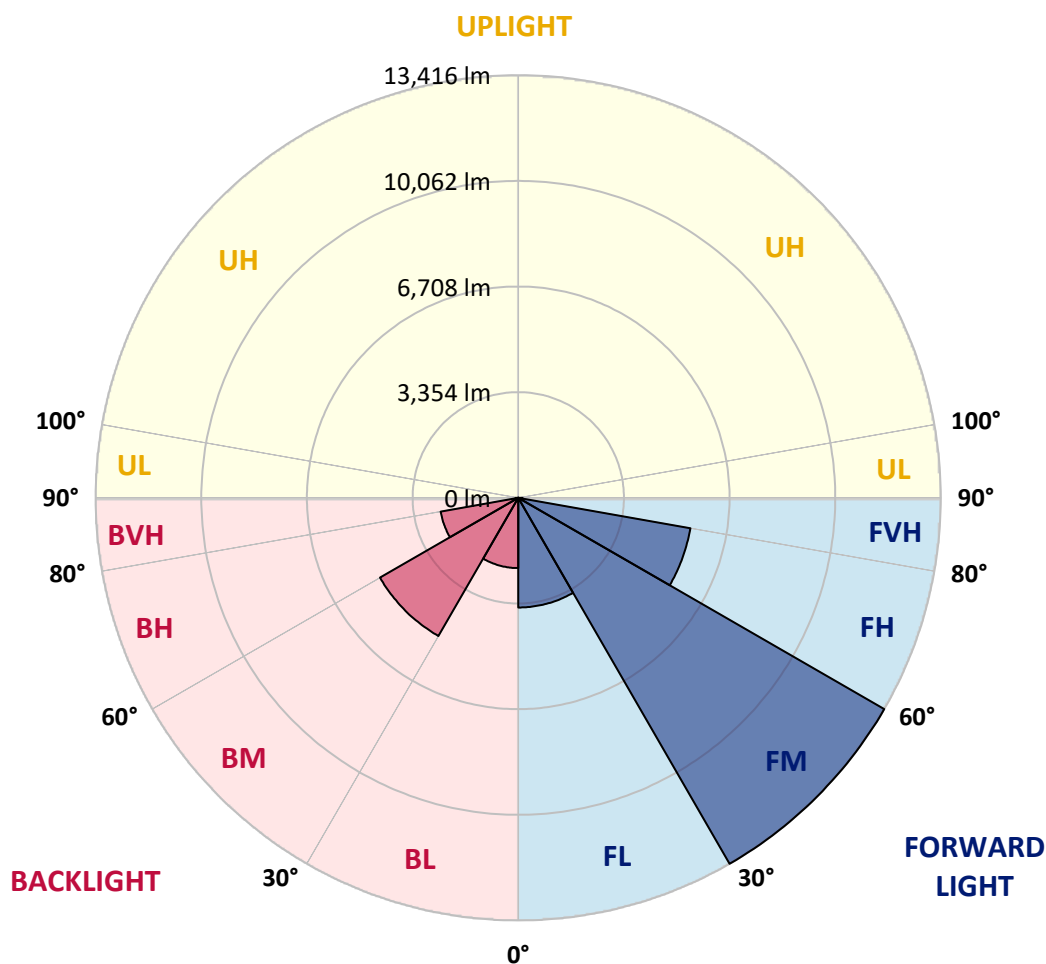
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3482.4	10.7			
FM	(30°-60°)	13416.4	41.3			
FH	(60°-80°)	5551.0	17.1			G3/7500
FVH	(80°-90°)	134.6	0.4			G2/225
BL	(0°-30°)	2230.2	6.9	B3/2500		
BM	(30°-60°)	5067.7	15.6	B4/8500		
BH	(60°-80°)	2503.1	7.7	B4/5000		G4/5000
BVH	(80°-90°)	88.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1
2.5°	4880.3	4880.3	4918.0	4918.0	4885.0	4833.2	4819.0	4762.4	4710.6	4710.6	4715.3
5°	5347.1	5342.4	5370.7	5333.0	5252.8	5149.1	5078.3	4955.8	4852.0	4819.0	4814.3
7.5°	5917.7	5913.0	5927.1	5865.8	5714.9	5545.2	5403.7	5205.7	5035.9	4965.2	4946.3
10°	6554.2	6549.5	6535.4	6431.6	6228.9	5964.8	5752.6	5479.1	5224.5	5111.4	5087.8
12.5°	7285.1	7275.7	7242.7	7091.8	6813.6	6474.1	6167.6	5813.9	5474.4	5318.8	5267.0
15°	8100.8	8086.7	8025.4	7841.5	7469.0	7039.9	6643.8	6191.2	5776.2	5573.5	5502.7
17.5°	8959.0	8959.0	8864.7	8591.2	8176.3	7643.5	7153.1	6577.8	6092.1	5842.2	5757.3
20°	9831.3	9826.6	9708.7	9378.7	8888.3	8275.3	7652.9	7021.0	6417.5	6115.7	6012.0
22.5°	10750.8	10741.4	10595.2	10218.0	9633.3	8940.2	8214.0	7459.6	6775.8	6412.8	6280.7
25°	11807.0	11792.9	11613.7	11151.6	10458.5	9675.7	8845.9	7973.5	7186.1	6742.8	6587.2
27.5°	12929.3	12910.4	12698.2	12160.7	11401.5	10458.5	9543.7	8567.7	7638.7	7110.6	6936.2
30°	13928.9	13914.8	13683.7	13132.0	12259.7	11236.5	10208.6	9161.8	8115.0	7502.0	7285.1
32.5°	14683.4	14683.4	14475.9	13933.6	13028.3	11981.5	10878.1	9722.9	8610.1	7921.7	7667.0
35°	15140.7	15154.9	14975.7	14541.9	13688.4	12684.1	11571.3	10383.0	9138.2	8369.6	8096.1
37.5°	15206.8	15253.9	15150.2	14857.8	14145.8	13268.8	12250.3	11019.6	9685.2	8822.3	8515.8
40°	14900.3	14933.3	14938.0	14824.8	14334.4	13688.4	12849.1	11693.9	10265.2	9298.5	8944.9
42.5°	14287.3	14310.9	14353.3	14386.3	14197.7	13872.3	13306.5	12321.0	10882.9	9784.2	9369.2
45°	13495.1	13490.4	13561.1	13702.6	13693.2	13768.6	13561.1	12891.6	11524.1	10335.9	9840.8
47.5°	12311.6	12288.0	12537.9	12858.6	13018.9	13372.5	13565.8	13339.5	12222.0	10944.1	10378.3
50°	10458.5	10434.9	10981.9	11736.3	12207.8	12745.4	13306.5	13608.3	12952.9	11627.9	10963.0
52.5°	8204.6	8181.0	8874.1	10194.4	11222.4	12005.1	12783.1	13669.6	13646.0	12391.7	11623.1
55°	6101.6	6082.7	6757.0	8185.7	9850.2	11146.9	12141.8	13509.3	14296.7	13268.8	12424.7
57.5°	4300.3	4290.9	4875.6	6059.1	8086.7	10100.1	11524.1	13198.1	14895.5	14221.3	13330.1
60°	3017.8	3003.6	3428.0	4342.8	6115.7	8520.5	10911.1	12783.1	15343.5	15159.6	14292.0
62.5°	2032.3	2022.9	2324.6	3088.5	4342.8	6558.9	9982.2	12504.9	15598.1	16102.7	15263.3
65°	1541.9	1537.2	1673.9	2093.6	3074.4	4710.6	8506.4	12471.9	15631.1	16809.9	16088.5
67.5°	1244.8	1249.5	1325.0	1565.5	2126.6	3347.8	6596.7	12264.4	15456.7	17050.4	16489.3
70°	1018.5	1018.5	1051.5	1211.8	1570.2	2258.6	4606.8	11321.4	14971.0	16423.3	16013.1
72.5°	778.0	782.7	886.5	980.8	1183.5	1584.3	2951.8	9369.2	13825.2	14480.6	14169.4
75°	617.7	613.0	674.3	806.3	919.5	1131.7	1810.7	6719.3	11764.6	11316.7	11118.6
77.5°	443.2	438.5	485.7	598.8	697.9	801.6	1079.8	3390.3	6398.6	5879.9	5733.8
80°	301.8	292.3	334.8	414.9	462.1	471.5	528.1	1301.4	2791.4	2631.1	2598.1
82.5°	155.6	155.6	179.2	235.8	240.5	245.2	235.8	419.7	924.2	862.9	825.2
85°	61.3	61.3	66.0	80.2	80.2	84.9	84.9	108.5	99.0	94.3	89.6
87.5°	4.7	4.7	9.4	9.4	14.1	14.1	14.1	18.9	23.6	23.6	23.6
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°	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1	4668.1
2.5°	4705.8	4687.0	4625.7	4611.5	4602.1	4588.0	4592.7	4559.7	4545.5	4550.2	4531.4
5°	4790.7	4757.7	4682.3	4649.3	4639.8	4625.7	4639.8	4616.3	4592.7	4602.1	4592.7
7.5°	4908.6	4861.4	4767.1	4734.1	4729.4	4715.3	4734.1	4715.3	4696.4	4705.8	4687.0
10°	5031.2	4969.9	4866.2	4833.2	4833.2	4828.4	4847.3	4819.0	4800.1	4804.9	4795.4
12.5°	5210.4	5130.2	5017.1	4988.8	4974.6	4988.8	4993.5	4955.8	4922.7	4927.5	4913.3
15°	5427.3	5337.7	5215.1	5172.7	5163.2	5158.5	5139.6	5092.5	5050.1	5045.3	5031.2
17.5°	5663.0	5549.9	5403.7	5361.3	5318.8	5304.7	5257.5	5196.2	5130.2	5130.2	5111.4
20°	5889.4	5762.1	5587.6	5526.3	5465.0	5408.4	5328.3	5229.2	5144.4	5130.2	5111.4
22.5°	6134.6	5983.7	5780.9	5691.3	5582.9	5469.7	5333.0	5200.9	5092.5	5068.9	5054.8
25°	6408.1	6219.4	5979.0	5846.9	5672.5	5498.0	5295.3	5125.5	4998.2	4960.5	4951.0
27.5°	6709.8	6483.5	6191.2	5997.8	5743.2	5469.7	5210.4	5007.6	4852.0	4804.9	4790.7
30°	7016.3	6747.6	6384.5	6101.6	5743.2	5380.1	5054.8	4819.0	4639.8	4573.8	4564.4
32.5°	7322.8	7021.0	6558.9	6158.1	5686.6	5229.2	4852.0	4573.8	4371.1	4290.9	4309.8
35°	7690.6	7322.8	6719.3	6181.7	5592.3	5045.3	4621.0	4295.6	4088.1	4017.4	4031.6
37.5°	8072.5	7624.6	6846.6	6162.9	5460.3	4837.9	4361.6	4045.7	3786.4	3663.8	3677.9
40°	8402.6	7898.1	6936.2	6096.8	5290.5	4602.1	4107.0	3692.1	3333.7	3215.8	3201.7
42.5°	8713.8	8100.8	6983.3	5997.8	5097.2	4328.6	3743.9	3211.1	2852.7	2706.6	2711.3
45°	9039.2	8298.9	6964.5	5865.8	4856.7	4008.0	3277.1	2739.6	2423.7	2291.6	2296.3
47.5°	9411.7	8511.1	6945.6	5724.3	4564.4	3593.0	2829.2	2324.6	2051.1	1956.8	1947.4
50°	9807.8	8746.8	6922.0	5549.9	4239.0	3130.9	2385.9	1938.0	1706.9	1645.6	1631.5
52.5°	10255.7	9001.5	6907.9	5342.4	3847.7	2640.6	1989.8	1598.5	1442.9	1400.4	1395.7
55°	10793.3	9298.5	6926.7	5092.5	3376.1	2178.5	1655.1	1376.9	1273.1	1249.5	1244.8
57.5°	11448.7	9680.5	6983.3	4800.1	2881.0	1777.7	1409.9	1240.1	1174.1	1155.2	1155.2
60°	12160.7	10114.3	7087.1	4470.1	2385.9	1466.5	1249.5	1131.7	1103.4	1127.0	1127.0
62.5°	12929.3	10623.5	7271.0	4069.3	1923.8	1240.1	1122.2	1042.1	1023.2	1070.4	1075.1
65°	13641.3	11118.6	7388.8	3588.3	1527.7	1075.1	1023.2	952.5	961.9	1009.1	1004.4
67.5°	14079.8	11528.8	7223.8	2984.8	1211.8	952.5	919.5	858.2	881.8	919.5	924.2
70°	13811.0	11297.8	6408.1	2253.9	947.8	829.9	806.3	768.6	787.5	834.6	853.5
72.5°	12495.5	10119.0	4984.0	1523.0	763.9	697.9	707.3	688.4	712.0	754.4	796.9
75°	10142.6	7648.2	3343.1	976.1	603.6	594.1	608.3	594.1	603.6	646.0	669.6
77.5°	5295.3	3729.8	1664.5	608.3	448.0	462.1	485.7	490.4	518.7	528.1	537.5
80°	2470.8	1678.6	693.1	339.5	297.1	325.4	372.5	377.2	386.7	400.8	405.5
82.5°	806.3	504.5	320.6	183.9	169.7	183.9	240.5	287.6	292.3	320.6	320.6
85°	84.9	51.9	70.7	75.4	66.0	80.2	108.5	103.7	47.2	28.3	28.3
87.5°	23.6	18.9	23.6	23.6	18.9	18.9	14.1	4.7	0.0	0.0	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)