

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: P841483

Luminaire Tested: **ARCH4-180-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30026 lumens
Efficiency: N/A
Efficacy: 166.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
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



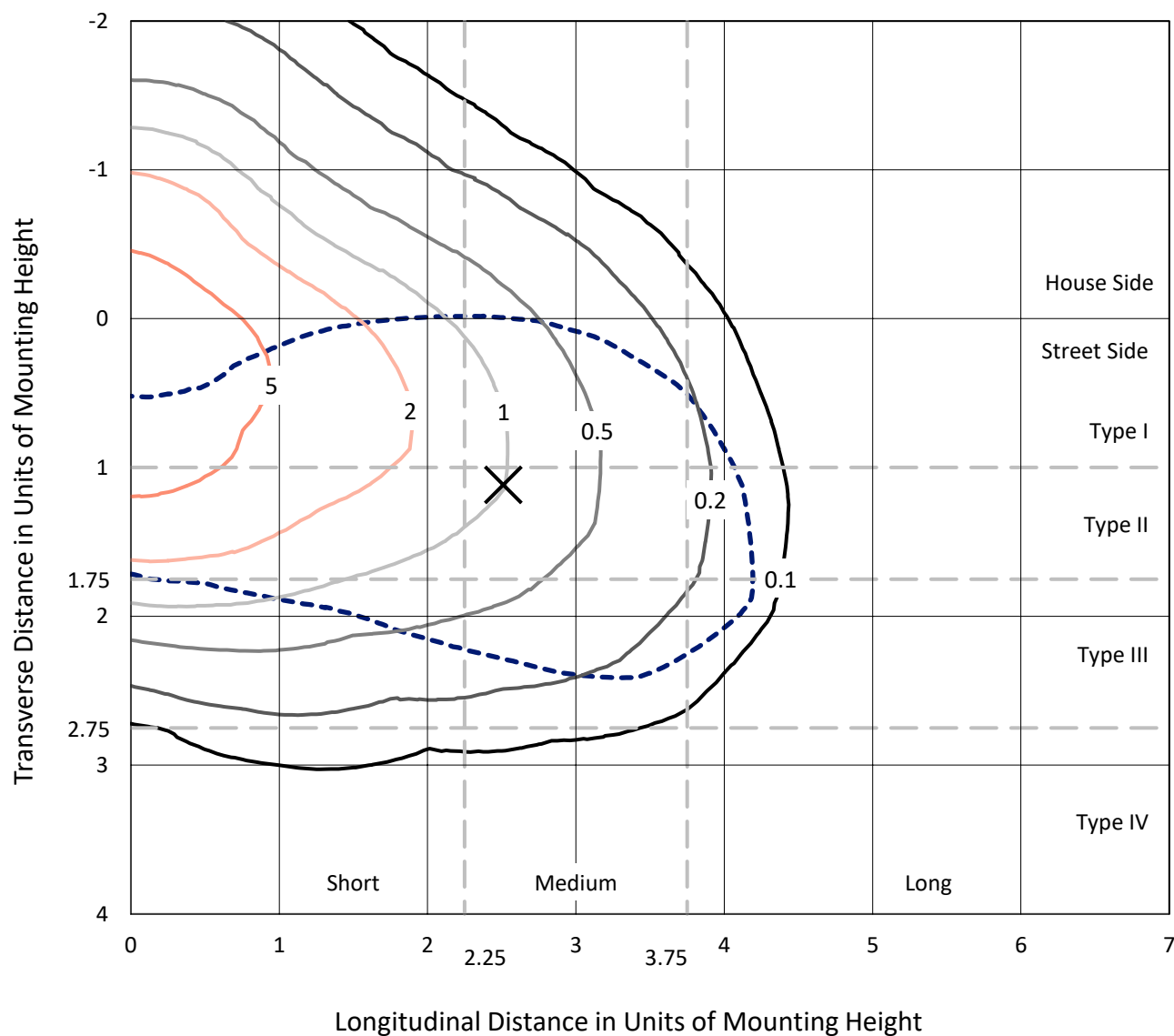
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

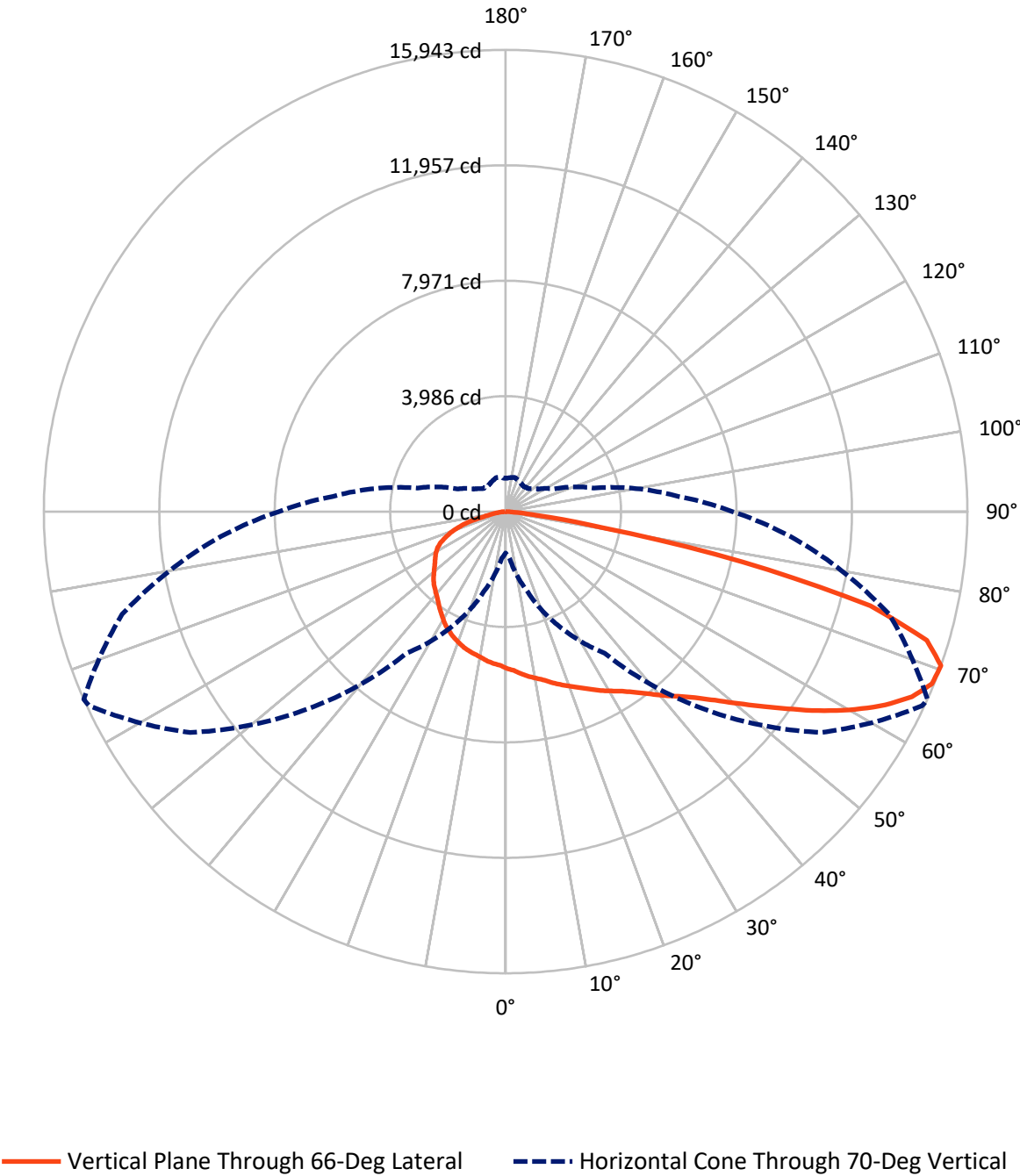
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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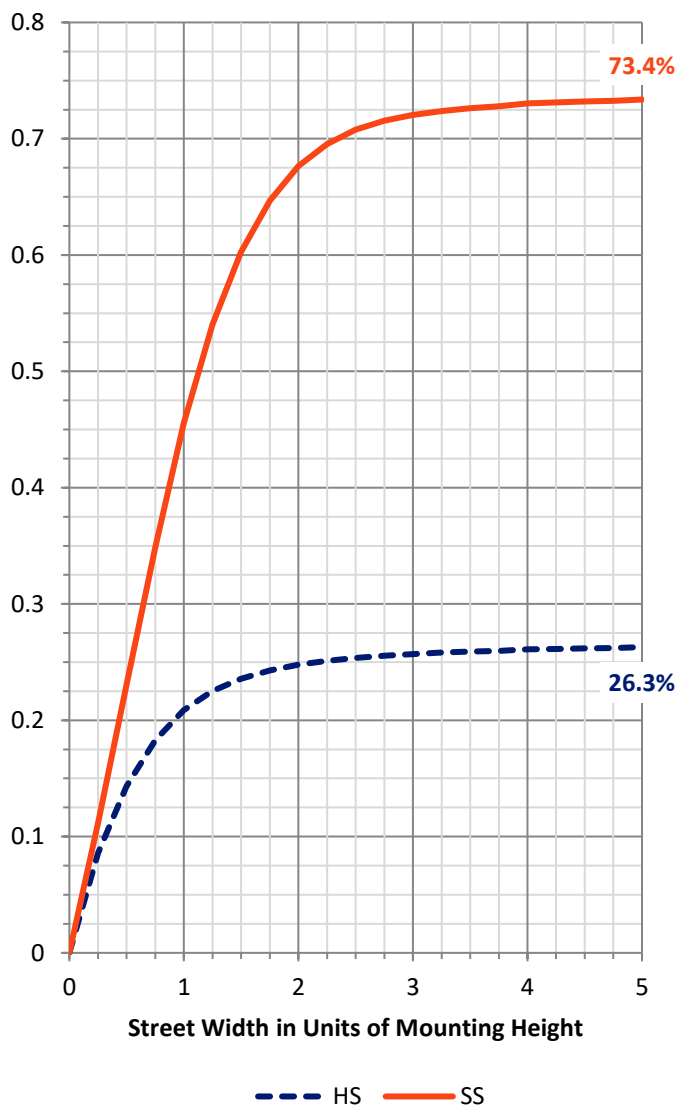
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7956.2	0.0	7956.2
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	22069.8	0.0	22069.8
	% Fixture	73.5	0.0	73.5
Total	Lumens	30026.0	0.0	30026.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	520.7	1.7
10°-20°	1561.9	5.2
20°-30°	2618.3	8.7
30°-40°	3920.5	13.1
40°-50°	5241.7	17.5
50°-60°	6119.9	20.4
60°-70°	6085.3	20.3
70°-80°	3602.6	12.0
80°-90°	355.1	1.2
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°	30026.0	100.0
0°-180°	30026.0	100.0

Coefficient of Utilization



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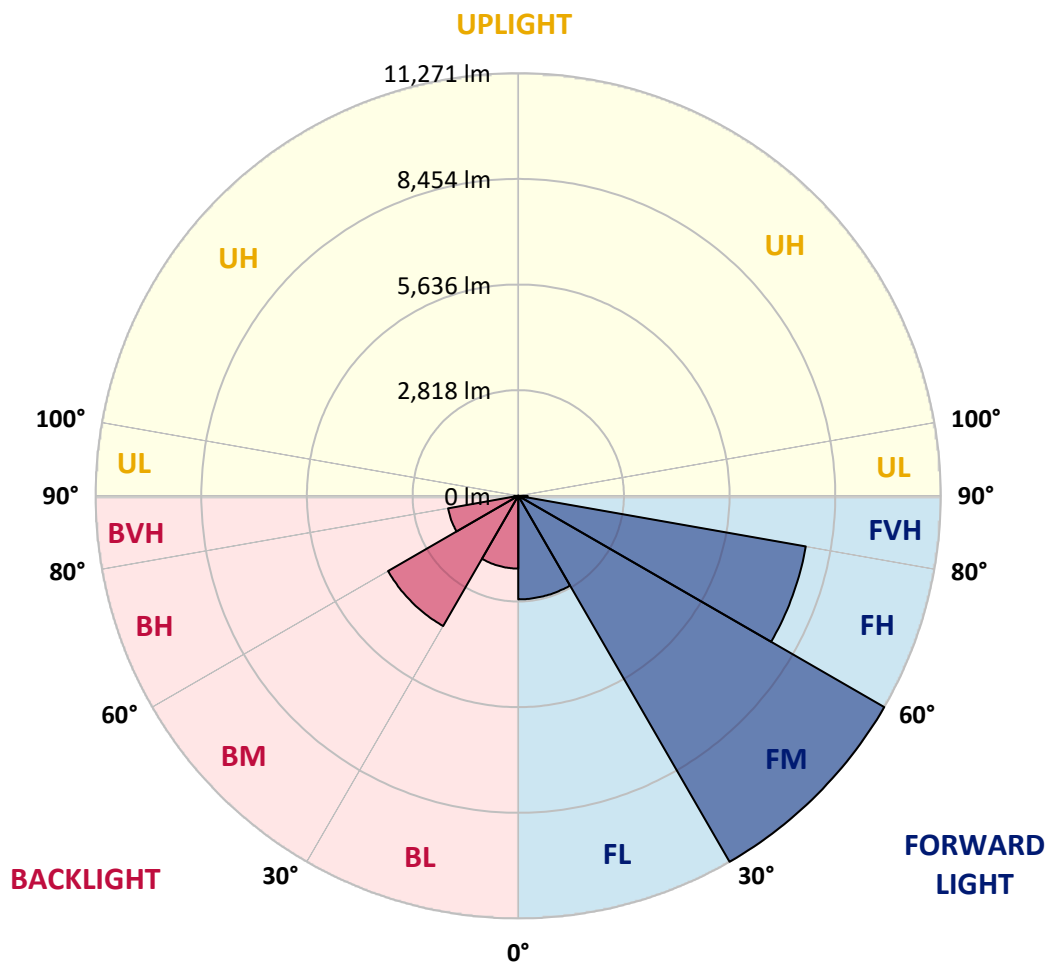
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2761.6	9.2			
FM	(30°-60°)	11271.4	37.5			
FH	(60°-80°)	7787.3	25.9			G4/12000
FVH	(80°-90°)	249.5	0.8			G3/500
BL	(0°-30°)	1939.4	6.5	B3/2500		
BM	(30°-60°)	4010.8	13.4	B3/5000		
BH	(60°-80°)	1900.5	6.3	B3/2500		G3/2500
BVH	(80°-90°)	105.5	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0
2.5°	5618.2	5609.4	5605.0	5587.2	5547.4	5565.1	5525.3	5498.7	5494.3	5432.3	5396.9
5°	5848.5	5844.0	5835.2	5808.6	5746.6	5755.5	5689.1	5640.4	5627.1	5529.7	5454.4
7.5°	6043.3	6034.4	6030.0	5994.6	5928.1	5923.7	5844.0	5773.2	5751.1	5618.2	5503.1
10°	6193.8	6180.5	6189.4	6153.9	6083.1	6069.8	5968.0	5875.0	5852.9	5684.6	5525.3
12.5°	6322.2	6313.3	6326.6	6295.6	6238.1	6224.8	6122.9	6003.4	5976.8	5782.0	5574.0
15°	6463.9	6432.9	6459.4	6446.1	6406.3	6401.9	6308.9	6176.1	6140.7	5906.0	5649.2
17.5°	6539.1	6521.4	6552.4	6556.8	6539.1	6570.1	6481.6	6322.2	6291.2	6021.1	5715.6
20°	6592.2	6565.7	6601.1	6627.7	6640.9	6702.9	6632.1	6477.1	6441.7	6131.8	5777.6
22.5°	6773.8	6716.2	6720.6	6738.3	6747.2	6835.7	6791.5	6640.9	6605.5	6269.0	5852.9
25°	7229.8	7114.7	7039.4	6986.3	6924.3	6999.6	6973.0	6826.9	6795.9	6432.9	5945.9
27.5°	7938.1	7792.0	7641.5	7486.6	7243.1	7212.1	7167.8	7035.0	6999.6	6596.7	6038.8
30°	8743.9	8597.8	8420.7	8172.8	7716.8	7477.7	7375.9	7229.8	7189.9	6742.8	6127.4
32.5°	9545.2	9416.9	9239.8	8938.7	8287.9	7800.9	7584.0	7433.4	7393.6	6902.2	6233.6
35°	10169.5	10089.8	9974.7	9598.4	8854.6	8181.6	7885.0	7703.5	7659.2	7154.5	6428.4
37.5°	10674.2	10616.7	10519.3	10125.2	9266.3	8562.4	8230.3	8022.3	7973.6	7429.0	6636.5
40°	11418.0	11267.5	11187.8	10616.7	9624.9	8907.7	8619.9	8403.0	8349.9	7721.2	6804.8
42.5°	12051.1	11940.4	11843.0	11055.0	9965.8	9204.3	8987.4	8788.2	8717.3	8009.0	6986.3
45°	12157.4	12201.6	12152.9	11271.9	10506.0	9496.5	9359.3	9230.9	9164.5	8398.6	7260.8
47.5°	12161.8	12161.8	11874.0	11395.9	11174.5	9824.2	9757.8	9802.0	9731.2	8894.4	7588.4
50°	11843.0	11900.6	11750.0	11426.8	11351.6	10151.8	10244.8	10483.8	10413.0	9421.3	7942.6
52.5°	11183.3	11373.7	11369.3	11378.1	11094.8	10430.7	10758.3	11302.9	11183.3	10014.5	8318.9
55°	10019.0	10399.7	10740.6	11032.8	10873.4	10598.9	11387.0	12175.1	12051.1	10678.6	8699.6
57.5°	9022.8	9266.3	9691.3	10519.3	10612.2	10745.0	11975.8	13087.1	12976.4	11413.6	9098.1
60°	7885.0	8221.5	8646.5	9824.2	10293.5	10935.4	12622.2	13977.0	13870.7	12157.4	9483.3
62.5°	6136.2	6570.1	7420.1	8757.2	9828.6	11055.0	13131.4	14760.6	14711.9	12861.3	9828.6
65°	4276.8	4661.9	5852.9	7446.7	9089.2	11001.8	13538.7	15460.1	15415.8	13436.8	10072.1
67.5°	2497.0	2944.2	4290.0	5994.6	7783.2	10634.4	13671.5	15871.9	15871.9	13786.6	10138.5
70°	1425.6	1633.7	2829.0	4369.7	5968.0	9620.5	13299.6	15867.4	15942.7	13706.9	9864.0
72.5°	996.1	1089.1	1903.7	2939.7	4046.5	7783.2	12325.6	15101.5	15203.3	12954.3	8925.4
75°	774.8	841.2	1341.5	2005.6	2550.1	5286.2	10196.1	12732.9	13003.0	11041.7	7216.5
77.5°	588.8	637.5	783.6	1252.9	1633.7	3037.1	6729.5	8349.9	8367.6	6760.5	3869.5
80°	429.4	478.1	522.4	765.9	867.7	1421.2	2541.3	3488.7	3391.3	3271.8	2094.1
82.5°	256.8	305.5	318.8	416.2	425.0	606.5	889.9	1124.5	1080.3	1438.9	982.9
85°	110.7	155.0	163.8	190.4	181.5	247.9	354.2	296.6	265.6	305.5	212.5
87.5°	26.6	44.3	44.3	48.7	39.8	62.0	66.4	48.7	44.3	53.1	53.1
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°	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0	5419.0
2.5°	5388.0	5374.7	5379.2	5303.9	5281.8	5259.6	5246.3	5237.5	5228.6	5241.9	5255.2
5°	5427.9	5396.9	5361.5	5250.8	5206.5	5157.8	5122.4	5091.4	5078.1	5078.1	5091.4
7.5°	5458.9	5405.7	5330.5	5184.4	5104.7	5038.3	4980.7	4940.9	4918.7	4918.7	4932.0
10°	5463.3	5388.0	5268.5	5091.4	4985.1	4887.7	4821.3	4777.1	4746.1	4746.1	4754.9
12.5°	5489.8	5388.0	5233.1	5020.6	4887.7	4768.2	4688.5	4622.1	4608.8	4608.8	4617.7
15°	5534.1	5410.2	5210.9	4958.6	4799.2	4661.9	4573.4	4502.6	4476.0	4493.7	4498.1
17.5°	5574.0	5423.4	5171.1	4878.9	4688.5	4538.0	4440.6	4378.6	4343.2	4383.0	4383.0
20°	5600.5	5423.4	5113.5	4777.1	4569.0	4400.7	4307.8	4232.5	4205.9	4254.6	4259.1
22.5°	5640.4	5419.0	5051.5	4675.2	4440.6	4263.5	4170.5	4113.0	4099.7	4152.8	4170.5
25°	5684.6	5427.9	4985.1	4560.1	4298.9	4126.2	4055.4	4028.8	4037.7	4104.1	4126.2
27.5°	5733.3	5445.6	4918.7	4431.7	4143.9	3989.0	3949.1	3962.4	3997.8	4082.0	4108.5
30°	5777.6	5450.0	4825.8	4281.2	3966.9	3820.8	3838.5	3896.0	3949.1	4033.3	4064.3
32.5°	5835.2	5454.4	4728.4	4117.4	3776.5	3670.2	3749.9	3842.9	3896.0	3975.7	4011.1
35°	5976.8	5529.7	4653.1	3958.0	3599.4	3541.8	3674.7	3794.2	3825.2	3896.0	3927.0
37.5°	6140.7	5653.7	4613.2	3794.2	3426.7	3413.4	3581.7	3701.2	3710.1	3754.3	3785.3
40°	6242.5	5706.8	4569.0	3656.9	3271.8	3280.6	3453.3	3546.3	3528.6	3559.5	3581.7
42.5°	6344.3	5724.5	4476.0	3541.8	3125.7	3134.5	3267.3	3333.8	3342.6	3409.0	3440.0
45°	6517.0	5773.2	4374.2	3435.6	2992.9	2961.9	3041.6	3130.1	3245.2	3373.6	3409.0
47.5°	6747.2	5875.0	4267.9	3307.2	2864.5	2762.6	2793.6	2948.6	3068.1	3187.7	3209.8
50°	6981.8	5976.8	4170.5	3152.2	2736.1	2550.1	2563.4	2705.1	2802.5	2895.5	2908.7
52.5°	7212.1	6065.4	4086.4	3006.1	2590.0	2297.8	2350.9	2497.0	2563.4	2607.7	2621.0
55°	7442.3	6140.7	4011.1	2882.2	2421.7	2098.5	2147.2	2284.5	2350.9	2373.0	2381.9
57.5°	7681.4	6229.2	3953.6	2775.9	2231.4	1921.4	1952.4	2049.8	2111.8	2138.4	2129.5
60°	7880.6	6304.5	3922.6	2665.2	2041.0	1757.6	1748.8	1837.3	1925.9	1952.4	1943.6
62.5°	8035.5	6353.2	3873.9	2523.6	1872.7	1593.8	1549.6	1664.7	1757.6	1775.3	1788.6
65°	8119.7	6357.6	3754.3	2342.0	1700.1	1416.7	1385.7	1500.9	1558.4	1576.1	1576.1
67.5°	8106.4	6286.8	3519.7	2098.5	1540.7	1257.4	1230.8	1301.6	1385.7	1399.0	1385.7
70°	7831.9	5994.6	3143.4	1841.8	1350.3	1115.7	1067.0	1137.8	1217.5	1168.8	1146.7
72.5°	7052.7	5237.5	2590.0	1558.4	1137.8	938.6	916.5	987.3	991.7	1000.6	978.4
75°	5565.1	3900.4	1939.2	1213.1	920.9	788.1	783.6	770.3	788.1	823.5	796.9
77.5°	2922.0	1948.0	1049.3	743.8	668.5	633.1	602.1	597.7	650.8	672.9	646.4
80°	1585.0	1093.5	602.1	447.2	407.3	411.7	451.6	442.7	500.3	513.6	491.4
82.5°	690.7	518.0	296.6	270.1	270.1	265.6	278.9	309.9	371.9	371.9	296.6
85°	150.5	128.4	115.1	132.8	150.5	150.5	150.5	150.5	106.3	57.6	39.8
87.5°	48.7	48.7	48.7	53.1	57.6	57.6	48.7	35.4	22.1	4.4	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)