

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: P841809

Luminaire Tested: **ARCH4-230-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841809
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: ARCH4-230-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 905mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32674 lumens
Efficiency: N/A
Efficacy: 141.3 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): 231.2
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

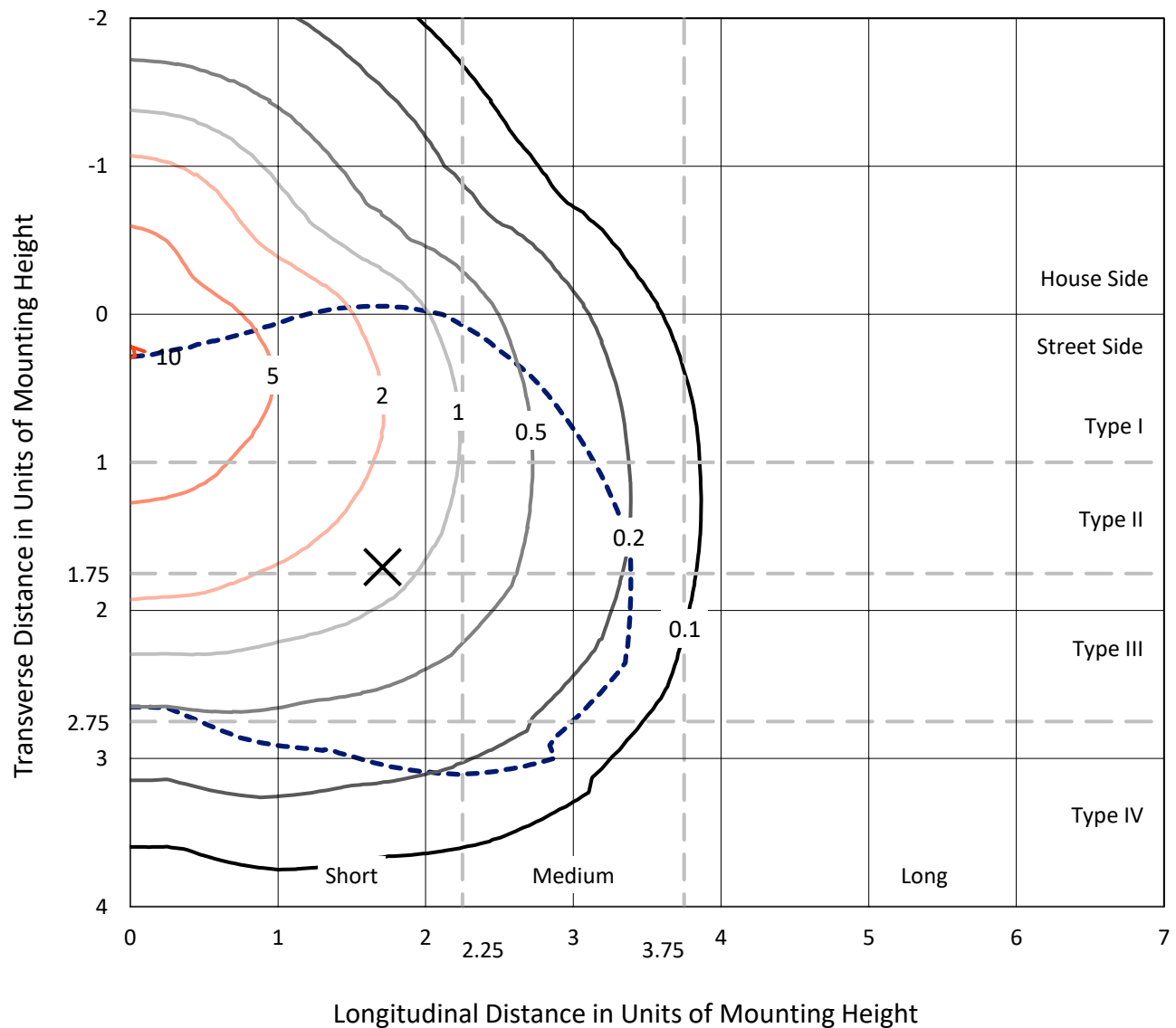


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Iso-Footcandle Lines of Horizontal Illumination

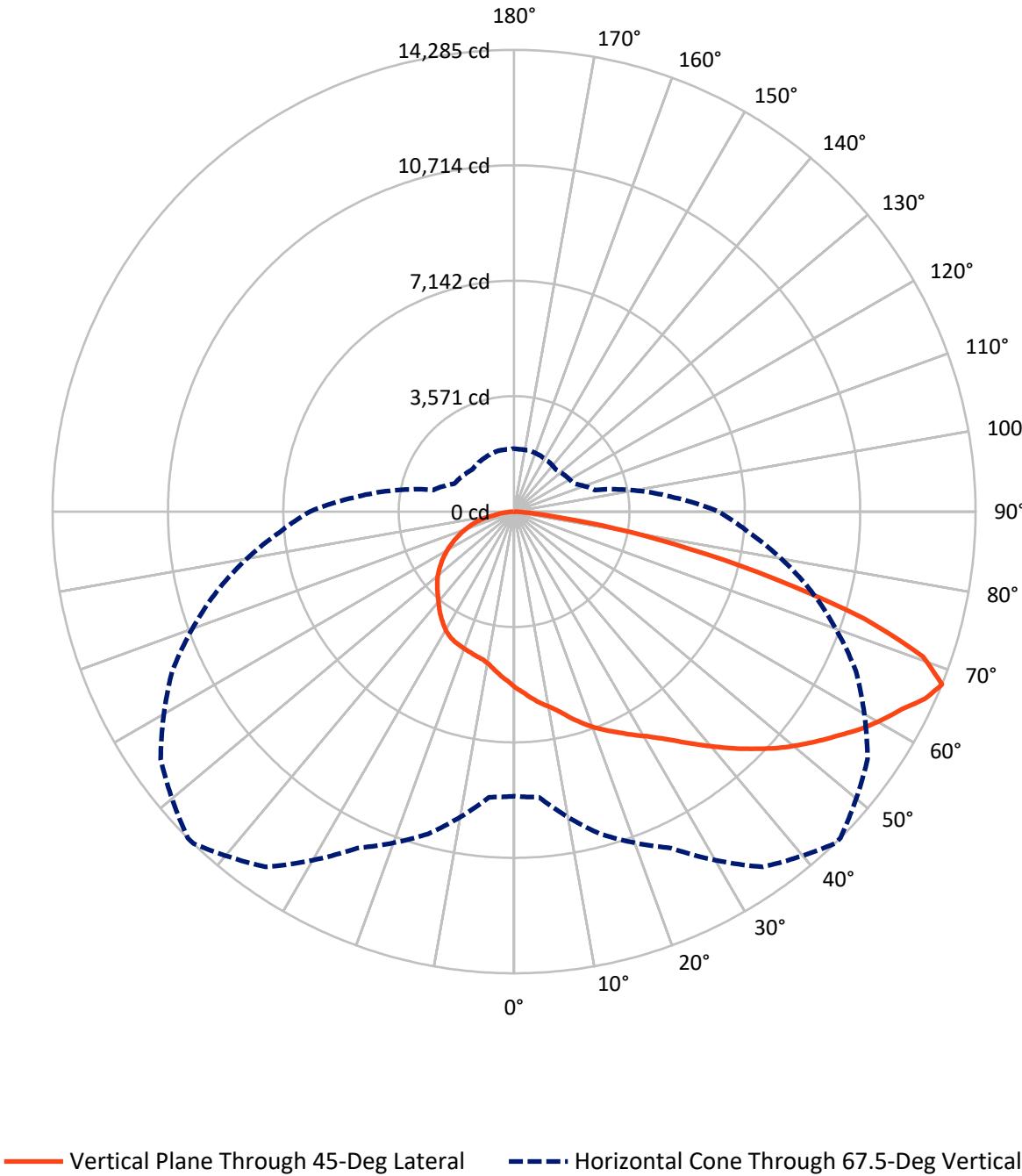
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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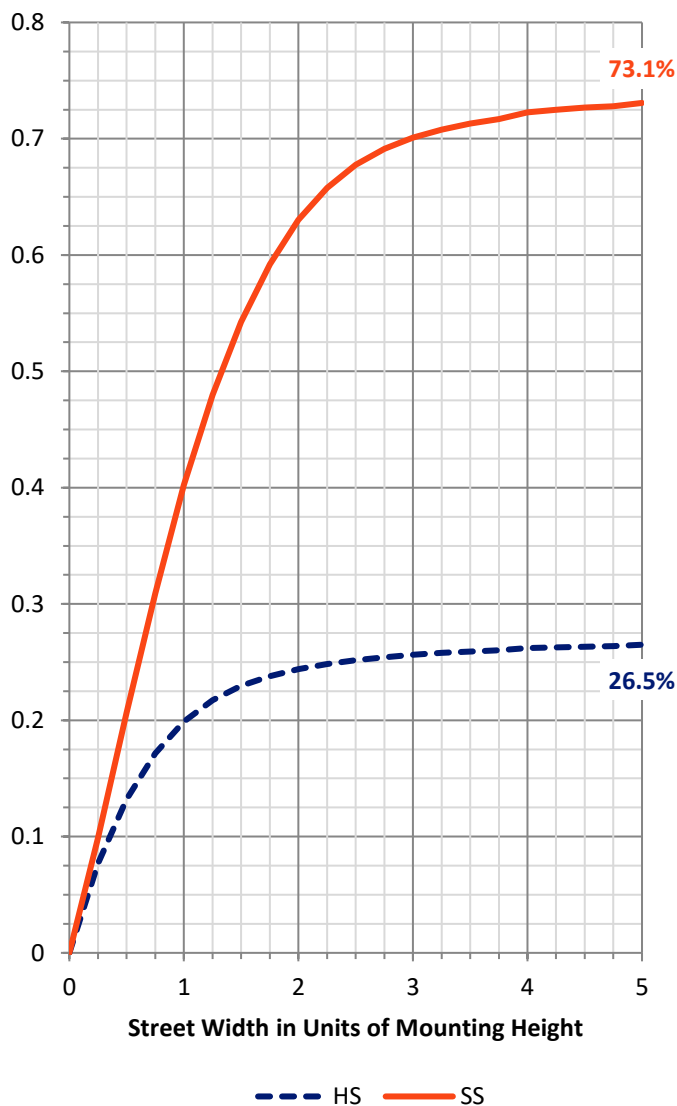
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8728.9	0.0	8728.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	23945.1	0.0	23945.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	32674.0	0.0	32674.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	521.8	1.6
10°-20°	1611.8	4.9
20°-30°	2782.1	8.5
30°-40°	4102.6	12.6
40°-50°	5558.2	17.0
50°-60°	6793.5	20.8
60°-70°	7006.5	21.4
70°-80°	3837.7	11.7
80°-90°	460.0	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°	32674.0	100.0
0°-180°	32674.0	100.0

Coefficient of Utilization



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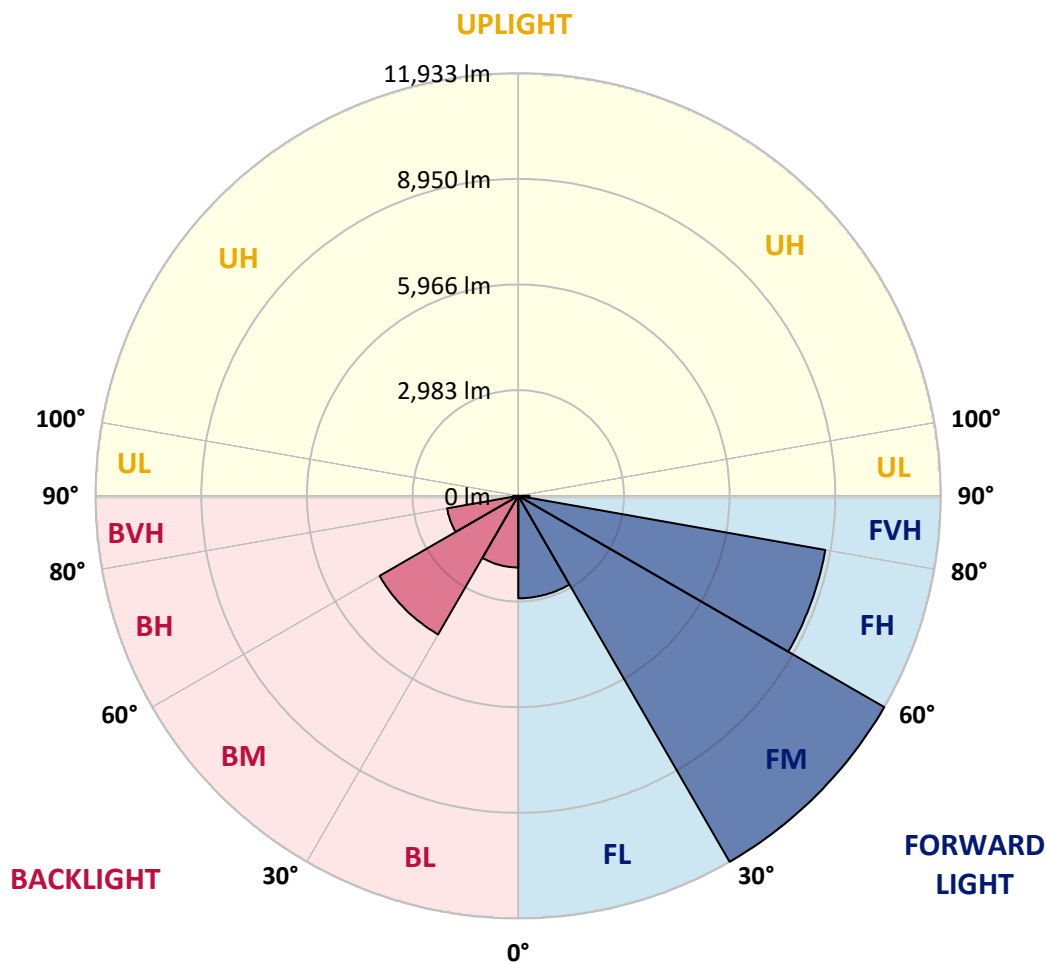
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2892.5	8.9			
FM	(30°-60°)	11932.9	36.5			
FH	(60°-80°)	8802.9	26.9			G4/12000
FVH	(80°-90°)	316.9	1.0			G3/500
BL	(0°-30°)	2023.1	6.2	B3/2500		
BM	(30°-60°)	4521.4	13.8	B3/5000		
BH	(60°-80°)	2041.3	6.2	B3/2500		G3/2500
BVH	(80°-90°)	143.1	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°	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4
2.5°	5688.1	5683.1	5693.0	5658.2	5613.5	5608.5	5608.5	5578.7	5543.9	5474.3	5419.6
5°	5956.6	5946.6	5951.6	5901.9	5842.2	5812.4	5807.4	5742.8	5663.2	5553.8	5454.4
7.5°	6205.2	6195.2	6190.2	6135.6	6046.1	5996.3	5991.4	5896.9	5802.4	5633.4	5489.2
10°	6438.8	6428.9	6419.0	6344.4	6235.0	6160.4	6150.5	6031.1	5911.8	5703.0	5519.0
12.5°	6737.2	6717.3	6707.3	6617.8	6458.7	6379.2	6364.3	6205.2	6056.0	5802.4	5578.7
15°	7050.4	7035.5	7020.6	6936.1	6757.1	6652.6	6627.8	6428.9	6225.0	5931.7	5668.2
17.5°	7284.1	7269.2	7269.2	7194.6	7030.5	6911.2	6891.3	6652.6	6399.1	6051.0	5737.8
20°	7428.3	7413.4	7428.3	7383.5	7259.2	7159.8	7139.9	6876.4	6573.1	6160.4	5797.4
22.5°	7532.7	7517.8	7542.7	7522.8	7433.3	7373.6	7358.7	7100.1	6752.1	6274.8	5857.1
25°	7716.7	7716.7	7716.7	7681.9	7597.3	7577.5	7577.5	7353.7	6980.8	6423.9	5946.6
27.5°	8084.6	8064.7	8039.9	7940.4	7796.2	7791.3	7821.1	7612.3	7244.3	6617.8	6056.0
30°	8626.6	8616.6	8522.2	8313.3	8069.7	8044.8	8064.7	7890.7	7527.7	6821.7	6180.3
32.5°	9327.6	9292.8	9098.9	8785.7	8437.6	8323.3	8363.0	8179.1	7826.1	7030.5	6299.6
35°	9824.8	9834.8	9695.6	9412.2	8999.5	8696.2	8726.0	8502.3	8149.2	7264.2	6448.8
37.5°	10396.6	10431.4	10222.6	10008.8	9626.0	9108.9	9138.7	8835.4	8472.4	7557.6	6607.9
40°	11187.2	11117.6	10764.6	10511.0	10088.4	9541.4	9566.3	9208.3	8845.3	7836.0	6791.9
42.5°	11848.5	11724.2	11296.6	10973.4	10466.2	9998.9	10023.7	9611.0	9223.2	8144.3	6995.7
45°	12798.1	12455.1	11838.5	11679.4	10854.1	10446.3	10471.2	10038.6	9621.0	8472.4	7214.5
47.5°	13350.0	12803.1	12410.3	12325.8	11281.7	10908.8	10938.6	10491.1	10048.6	8845.3	7443.2
50°	13315.2	12962.2	12847.9	12639.0	11659.5	11341.3	11371.2	10958.5	10481.2	9213.3	7662.0
52.5°	13086.5	13151.2	13091.5	12743.4	12037.4	11759.0	11793.8	11420.9	10923.7	9556.3	7865.8
55°	13439.5	13484.3	13369.9	12912.5	12455.1	12176.6	12216.4	11908.1	11361.2	9859.6	8039.9
57.5°	13862.2	13703.1	13588.7	13210.8	12887.6	12629.1	12673.8	12405.3	11739.1	10103.3	8174.1
60°	13842.3	13509.2	13623.5	13230.7	13181.0	13046.7	13086.5	12813.1	12027.5	10282.3	8228.8
62.5°	12823.0	12644.0	13220.8	13086.5	13419.7	13419.7	13469.4	13061.7	12201.5	10356.8	8199.0
65°	11052.9	11062.9	12077.2	12634.1	13703.1	13931.8	13971.6	13215.8	12102.1	10138.1	7920.5
67.5°	8805.6	8870.2	10327.0	11485.5	13419.7	14279.8	14284.8	13355.0	11674.5	9521.5	7274.2
70°	6443.8	6493.5	8213.9	9621.0	12082.2	13509.2	13429.6	12962.2	10744.7	8447.6	6264.8
72.5°	4355.5	4400.3	6170.4	7388.5	9914.3	11505.4	11331.4	11455.7	9158.6	6941.0	5036.7
75°	2928.6	2983.3	4390.3	5285.3	7294.0	8736.0	8348.1	8676.3	7085.2	5255.5	3674.4
77.5°	1844.6	1879.4	2789.3	3465.5	4982.0	5946.6	5558.8	5563.8	4082.1	2829.1	1973.9
80°	1173.4	1183.4	1690.5	1998.8	2883.8	3574.9	3162.2	2570.6	1839.7	1501.6	1178.4
82.5°	681.2	666.3	1009.3	1128.7	1372.3	1357.4	1123.7	1064.0	805.5	750.8	601.6
85°	273.5	253.6	442.5	412.7	417.7	442.5	328.2	328.2	263.5	203.9	149.2
87.5°	54.7	54.7	59.7	54.7	54.7	59.7	44.7	44.7	39.8	39.8	39.8
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°	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4	5449.4
2.5°	5409.6	5399.7	5374.8	5310.2	5275.4	5255.5	5225.7	5215.7	5210.7	5215.7	5230.6
5°	5424.5	5389.7	5320.1	5215.7	5146.1	5101.4	5051.6	5031.7	5016.8	5016.8	5031.7
7.5°	5434.5	5379.8	5260.5	5106.3	5006.9	4937.3	4877.6	4852.8	4847.8	4862.7	4867.7
10°	5439.5	5359.9	5190.9	4996.9	4867.7	4778.2	4718.5	4703.6	4718.5	4748.3	4753.3
12.5°	5474.3	5364.9	5151.1	4922.4	4768.2	4678.7	4634.0	4634.0	4673.8	4728.5	4733.4
15°	5533.9	5399.7	5131.2	4862.7	4703.6	4624.0	4609.1	4634.0	4693.6	4778.2	4788.1
17.5°	5578.7	5419.6	5086.4	4783.1	4619.1	4569.3	4594.2	4653.9	4738.4	4852.8	4862.7
20°	5608.5	5419.6	5021.8	4688.7	4534.5	4524.6	4594.2	4688.7	4778.2	4912.4	4927.3
22.5°	5638.3	5409.6	4947.2	4574.3	4440.1	4469.9	4599.2	4718.5	4808.0	4952.2	4977.1
25°	5693.0	5424.5	4872.6	4460.0	4340.6	4425.2	4594.2	4738.4	4832.9	4982.0	5021.8
27.5°	5767.6	5459.3	4817.9	4355.5	4241.2	4355.5	4559.4	4733.4	4832.9	4977.1	5021.8
30°	5847.2	5499.1	4753.3	4241.2	4126.8	4256.1	4484.8	4678.7	4793.1	4927.3	4982.0
32.5°	5931.7	5543.9	4698.6	4116.9	3987.6	4121.9	4375.4	4594.2	4718.5	4842.8	4902.5
35°	6046.1	5623.4	4668.8	4017.4	3863.3	3982.6	4236.2	4484.8	4619.1	4733.4	4803.0
37.5°	6185.3	5722.9	4653.9	3918.0	3729.1	3828.5	4087.1	4350.6	4494.8	4589.2	4653.9
40°	6344.4	5847.2	4648.9	3823.5	3594.8	3669.4	3932.9	4196.4	4335.7	4410.2	4464.9
42.5°	6523.4	5986.4	4639.0	3729.1	3460.6	3520.2	3783.8	4042.3	4161.6	4226.3	4276.0
45°	6712.3	6125.6	4619.1	3614.7	3316.4	3386.0	3629.6	3858.3	3982.6	4037.3	4092.0
47.5°	6901.3	6264.8	4579.3	3485.4	3187.1	3251.7	3465.5	3664.4	3763.9	3813.6	3868.3
50°	7085.2	6389.1	4484.8	3336.3	3052.9	3112.5	3276.6	3410.8	3485.4	3525.2	3579.9
52.5°	7249.3	6473.7	4350.6	3162.2	2918.6	2948.4	3057.8	3172.2	3231.9	3236.8	3286.5
55°	7388.5	6518.4	4156.7	2983.3	2774.4	2779.4	2839.1	2928.6	2953.4	2933.5	2968.3
57.5°	7468.1	6493.5	3942.9	2799.3	2625.3	2605.4	2650.1	2694.9	2699.8	2650.1	2684.9
60°	7488.0	6379.2	3664.4	2615.3	2476.1	2421.4	2436.3	2426.4	2416.4	2396.5	2426.4
62.5°	7388.5	6135.6	3356.2	2436.3	2317.0	2232.5	2227.5	2222.5	2237.4	2242.4	2247.4
65°	7025.6	5678.1	2988.2	2252.4	2147.9	2033.6	2028.6	2088.3	2108.2	2078.3	2088.3
67.5°	6324.5	4977.1	2585.5	2038.6	1934.1	1834.7	1874.5	1909.3	1944.1	1934.1	1944.1
70°	5330.1	4087.1	2217.5	1799.9	1700.5	1645.8	1690.5	1720.3	1725.3	1715.4	1725.3
72.5°	4191.5	3192.1	1874.5	1556.3	1466.8	1441.9	1496.6	1521.5	1566.2	1586.1	1591.1
75°	3028.0	2356.8	1536.4	1292.7	1218.2	1218.2	1267.9	1312.6	1352.4	1327.5	1312.6
77.5°	1690.5	1407.1	1103.8	890.0	904.9	974.5	994.4	1044.1	1083.9	1078.9	1069.0
80°	1024.2	880.1	745.8	576.8	571.8	626.5	755.8	840.3	860.2	815.4	810.4
82.5°	532.0	462.4	397.8	323.2	358.0	417.7	437.5	527.0	581.7	561.8	586.7
85°	134.2	129.3	144.2	149.2	184.0	203.9	223.7	263.5	174.0	84.5	84.5
87.5°	39.8	39.8	49.7	49.7	64.6	79.6	74.6	74.6	39.8	5.0	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)