

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: P842777

Luminaire Tested: **ARCH4-90-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842777
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-90-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16876 lumens
Efficiency: N/A
Efficacy: 181.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 93.1
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

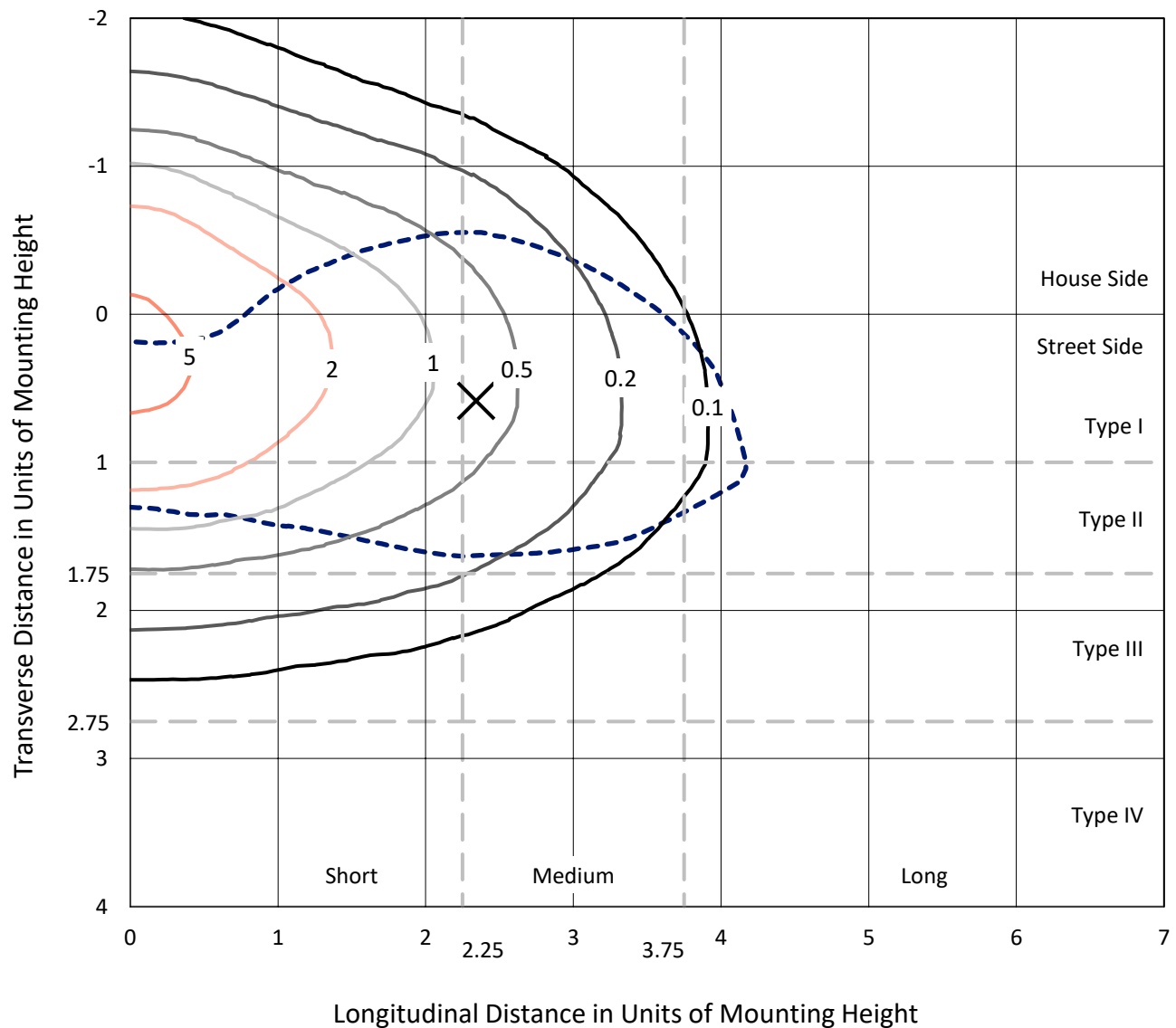


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Iso-Footcandle Lines of Horizontal Illumination

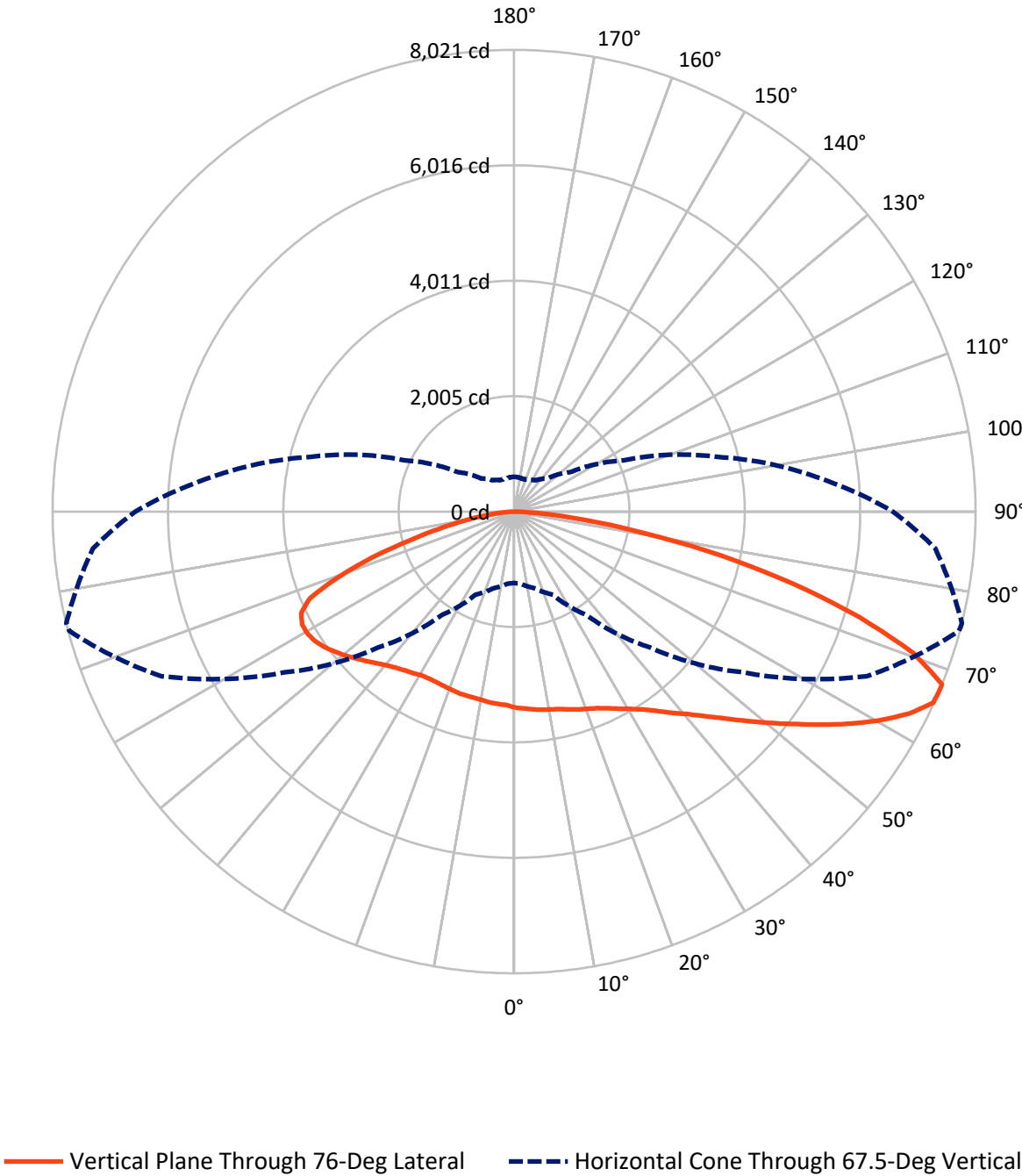
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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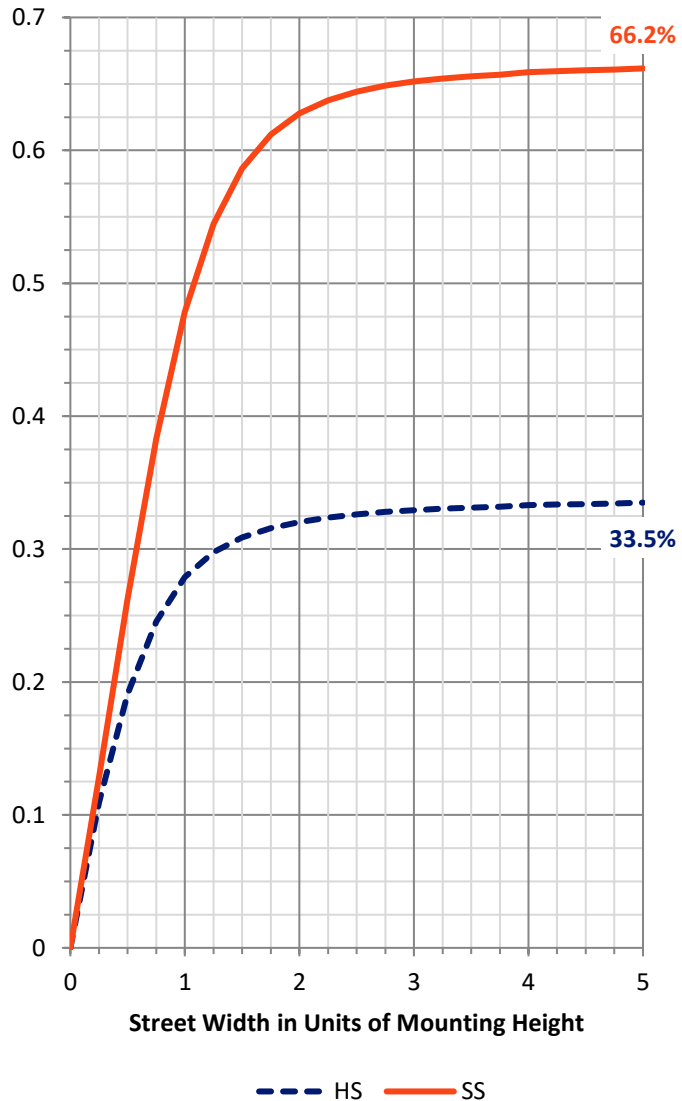
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5702.5	0.0	5702.5
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	11173.5	0.0	11173.5
	% Fixture	66.2	0.0	66.2
Total	Lumens	16876.0	0.0	16876.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.7	1.9
10°-20°	1004.9	6.0
20°-30°	1707.4	10.1
30°-40°	2429.4	14.4
40°-50°	3068.3	18.2
50°-60°	3322.0	19.7
60°-70°	3089.8	18.3
70°-80°	1659.5	9.8
80°-90°	265.9	1.6
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°	16876.0	100.0
0°-180°	16876.0	100.0

Coefficient of Utilization



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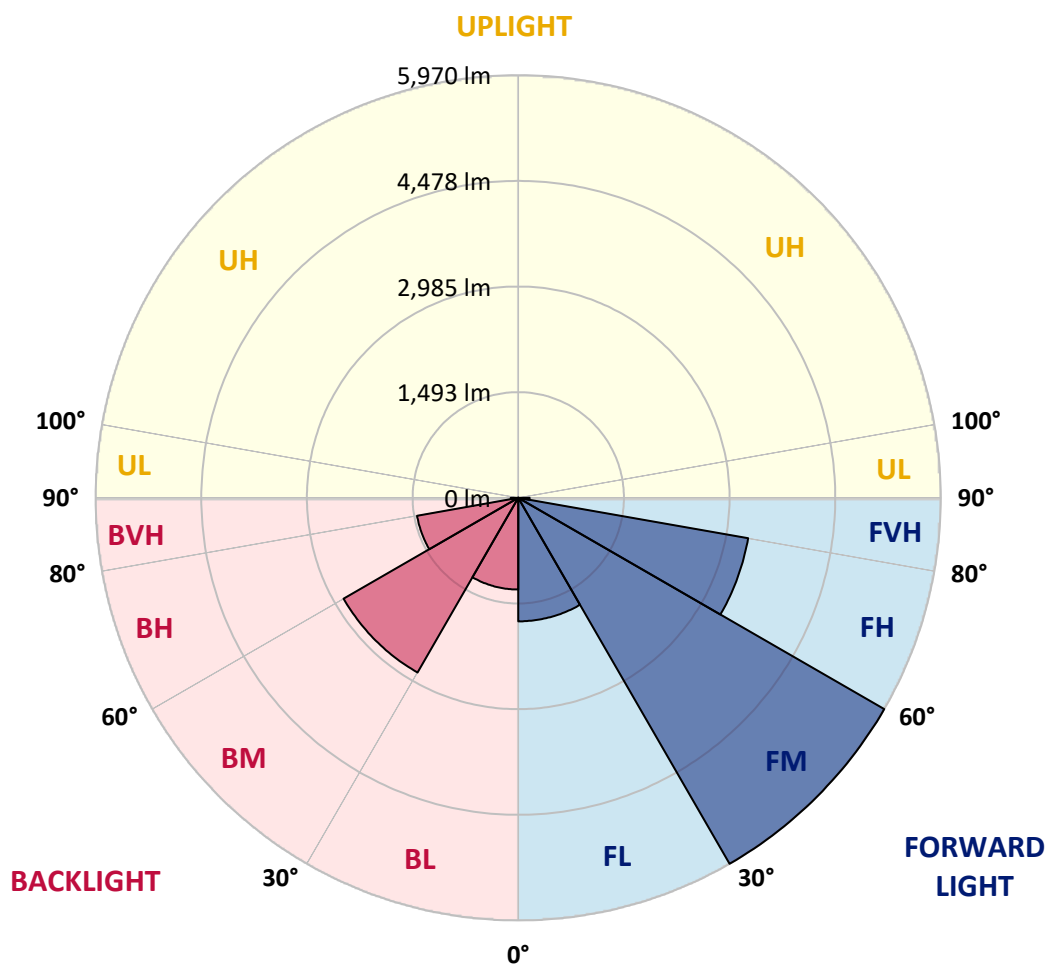
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1745.2	10.3			
FM	(30°-60°)	5970.1	35.4			
FH	(60°-80°)	3297.4	19.5			G2/5000
FVH	(80°-90°)	160.9	1.0			G2/225
BL	(0°-30°)	1295.9	7.7	B3/2500		
BM	(30°-60°)	2849.6	16.9	B3/5000		
BH	(60°-80°)	1451.9	8.6	B3/2500		G3/2500
BVH	(80°-90°)	105.1	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9
2.5°	3512.3	3506.0	3481.0	3484.1	3484.1	3481.0	3443.4	3427.7	3427.7	3424.6	3390.1
5°	3637.6	3628.2	3600.0	3593.8	3581.2	3565.6	3506.0	3471.6	3455.9	3452.8	3405.8
7.5°	3784.9	3772.4	3737.9	3719.1	3687.8	3647.0	3571.8	3518.6	3481.0	3477.8	3412.0
10°	3932.2	3919.6	3878.9	3844.4	3800.6	3734.8	3637.6	3559.3	3499.8	3493.5	3415.2
12.5°	4107.6	4095.1	4045.0	4001.1	3935.3	3847.6	3719.1	3612.6	3531.1	3521.7	3424.6
15°	4292.5	4273.7	4223.5	4173.4	4092.0	3979.2	3825.6	3684.6	3581.2	3565.6	3452.8
17.5°	4446.0	4420.9	4380.2	4330.1	4239.2	4107.6	3932.2	3756.7	3628.2	3615.7	3481.0
20°	4577.6	4558.8	4514.9	4467.9	4370.8	4226.7	4032.4	3828.8	3672.1	3656.4	3502.9
22.5°	4702.9	4677.9	4652.8	4618.3	4511.8	4352.0	4148.3	3916.5	3728.5	3709.7	3531.1
25°	4847.1	4818.9	4809.5	4790.7	4665.3	4502.4	4289.3	4026.2	3806.8	3784.9	3581.2
27.5°	5025.6	4994.3	4975.5	4975.5	4825.1	4655.9	4439.7	4154.6	3897.7	3878.9	3643.9
30°	5213.6	5176.0	5147.8	5147.8	4978.6	4809.5	4587.0	4283.1	4001.1	3979.2	3725.4
32.5°	5379.7	5342.1	5310.8	5307.6	5132.2	4963.0	4740.5	4424.1	4126.4	4098.2	3825.6
35°	5508.2	5473.7	5445.5	5451.8	5285.7	5119.6	4912.8	4612.1	4283.1	4251.7	3957.2
37.5°	5586.5	5574.0	5558.3	5580.2	5426.7	5270.0	5091.4	4793.8	4461.7	4433.5	4120.1
40°	5627.2	5617.8	5680.5	5708.7	5545.8	5404.8	5270.0	4981.8	4655.9	4624.6	4308.1
42.5°	5686.7	5765.1	5790.1	5783.9	5633.5	5508.2	5433.0	5185.4	4884.6	4856.5	4533.7
45°	5473.7	5454.9	5592.8	5667.9	5639.7	5574.0	5586.5	5429.8	5151.0	5122.8	4793.8
47.5°	5188.6	5163.5	5241.8	5426.7	5536.4	5599.0	5724.3	5683.6	5458.0	5433.0	5097.7
50°	4587.0	4621.5	4912.8	5160.4	5376.6	5592.8	5840.3	5956.2	5796.4	5771.3	5423.6
52.5°	3919.6	3954.1	4258.0	4828.3	5182.3	5545.8	5924.9	6228.8	6163.0	6134.8	5771.3
55°	3434.0	3509.2	3853.8	4267.4	4906.6	5398.5	5975.0	6507.6	6557.8	6532.7	6150.5
57.5°	2951.5	3007.9	3267.9	3634.5	4530.6	5141.6	5971.9	6767.7	6971.4	6946.3	6535.8
60°	2384.4	2456.4	2663.2	3058.0	4029.3	4834.5	5884.1	6971.4	7369.3	7350.5	6908.7
62.5°	1995.8	2017.8	2165.0	2506.6	3383.8	4446.0	5686.7	7081.0	7729.6	7717.1	7243.9
65°	1607.3	1610.5	1745.2	2030.3	2760.3	3963.5	5351.5	7040.3	8002.2	8008.4	7485.2
67.5°	1240.7	1256.4	1378.6	1594.8	2193.2	3336.9	4872.1	6764.6	8005.3	8021.0	7347.3
70°	858.5	871.0	1055.9	1265.8	1695.1	2660.1	4223.5	6034.5	7347.3	7359.9	6586.0
72.5°	604.7	611.0	808.4	1012.0	1325.3	2005.2	3186.5	4991.2	6263.3	6272.7	5539.5
75°	451.2	457.4	570.2	767.6	1015.2	1388.0	2177.6	3822.5	5003.7	5003.7	4373.9
77.5°	319.6	322.7	369.7	529.5	676.8	936.8	1309.7	2503.4	3672.1	3678.4	3186.5
80°	216.2	219.3	241.3	357.2	423.0	507.6	711.2	1312.8	2315.4	2324.8	2024.0
82.5°	112.8	119.1	134.7	181.7	213.1	282.0	366.6	667.4	1281.5	1306.5	1215.7
85°	43.9	43.9	50.1	59.5	78.3	109.7	169.2	253.8	579.6	598.4	535.8
87.5°	15.7	15.7	18.8	18.8	21.9	25.1	28.2	37.6	65.8	65.8	62.7
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°	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9	3408.9
2.5°	3377.6	3377.6	3361.9	3368.2	3365.1	3358.8	3352.5	3361.9	3352.5	3330.6	3327.5
5°	3383.8	3377.6	3352.5	3349.4	3340.0	3327.5	3311.8	3318.1	3302.4	3283.6	3280.5
7.5°	3387.0	3374.4	3340.0	3327.5	3308.7	3283.6	3258.5	3258.5	3236.6	3217.8	3214.7
10°	3380.7	3365.1	3318.1	3293.0	3258.5	3220.9	3186.5	3177.1	3152.0	3130.1	3130.1
12.5°	3383.8	3361.9	3302.4	3261.7	3214.7	3167.7	3123.8	3111.3	3089.3	3067.4	3064.3
15°	3402.6	3371.3	3296.1	3242.9	3173.9	3120.7	3073.7	3064.3	3045.5	3029.8	3029.8
17.5°	3421.4	3380.7	3286.7	3211.5	3126.9	3067.4	3023.5	3023.5	3011.0	3001.6	3001.6
20°	3430.8	3383.8	3267.9	3167.7	3070.5	3007.9	2967.1	2973.4	2970.3	2967.1	2967.1
22.5°	3452.8	3390.1	3252.3	3126.9	3011.0	2945.2	2907.6	2917.0	2913.9	2913.9	2917.0
25°	3487.2	3405.8	3239.7	3089.3	2954.6	2882.5	2841.8	2848.1	2848.1	2848.1	2848.1
27.5°	3534.2	3437.1	3236.6	3054.9	2898.2	2816.7	2766.6	2766.6	2754.1	2757.2	2760.3
30°	3606.3	3496.6	3242.9	3023.5	2838.7	2735.3	2675.7	2666.3	2663.2	2669.5	2672.6
32.5°	3694.0	3578.1	3280.5	3001.6	2776.0	2644.4	2569.2	2566.1	2556.7	2556.7	2556.7
35°	3803.7	3656.4	3314.9	2998.5	2713.3	2547.3	2465.8	2456.4	2434.5	2425.1	2425.1
37.5°	3944.7	3778.6	3355.7	2976.5	2660.1	2453.3	2356.2	2324.8	2299.8	2296.6	2296.6
40°	4117.0	3916.5	3415.2	2951.5	2603.7	2356.2	2227.7	2174.4	2177.6	2190.1	2190.1
42.5°	4320.7	4085.7	3490.4	2938.9	2522.2	2255.9	2077.3	2014.6	2036.6	2049.1	2052.2
45°	4558.8	4286.2	3575.0	2923.3	2447.0	2143.1	1917.5	1839.2	1848.6	1851.7	1854.9
47.5°	4834.5	4508.7	3662.7	2910.7	2362.4	2002.1	1742.1	1638.7	1635.5	1616.7	1623.0
50°	5122.8	4743.7	3753.6	2888.8	2259.0	1836.1	1557.2	1435.0	1409.9	1381.7	1384.9
52.5°	5429.8	4984.9	3838.2	2854.3	2130.6	1666.9	1381.7	1250.1	1200.0	1168.7	1174.9
55°	5768.2	5232.4	3919.6	2801.1	1995.8	1497.7	1225.1	1090.4	1027.7	1002.6	1005.8
57.5°	6078.4	5470.6	3979.2	2735.3	1848.6	1344.1	1087.2	955.6	914.9	911.8	914.9
60°	6379.2	5671.1	4004.2	2644.4	1698.2	1203.1	958.8	858.5	830.3	846.0	849.1
62.5°	6633.0	5799.5	3991.7	2522.2	1544.7	1068.4	855.4	783.3	764.5	795.8	799.0
65°	6780.2	5840.3	3904.0	2346.8	1378.6	936.8	758.2	679.9	670.5	689.3	698.7
67.5°	6586.0	5586.5	3665.8	2105.5	1193.7	814.6	664.2	601.6	585.9	601.6	601.6
70°	5837.1	4840.8	3101.9	1723.3	990.1	695.6	576.5	532.6	520.1	532.6	529.5
72.5°	4862.7	4026.2	2443.9	1344.1	780.2	585.9	501.3	460.6	448.0	435.5	429.2
75°	3772.4	3058.0	1773.4	987.0	589.0	470.0	419.8	382.2	350.9	363.5	357.2
77.5°	2763.5	2146.2	1256.4	683.0	423.0	363.5	329.0	300.8	278.9	303.9	300.8
80°	1779.7	1388.0	839.7	457.4	291.4	253.8	241.3	225.6	247.5	322.7	329.0
82.5°	1087.2	880.4	501.3	297.7	191.1	169.2	156.7	156.7	253.8	278.9	282.0
85°	485.6	466.8	272.6	153.5	106.5	97.1	87.7	112.8	103.4	75.2	78.3
87.5°	78.3	81.5	59.5	53.3	40.7	40.7	31.3	21.9	15.7	9.4	9.4
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)