

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: P840869

Luminaire Tested: **ARCH4-100-727-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840869
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: ARCH4-100-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17012 lumens
Efficiency: N/A
Efficacy: 165.0 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

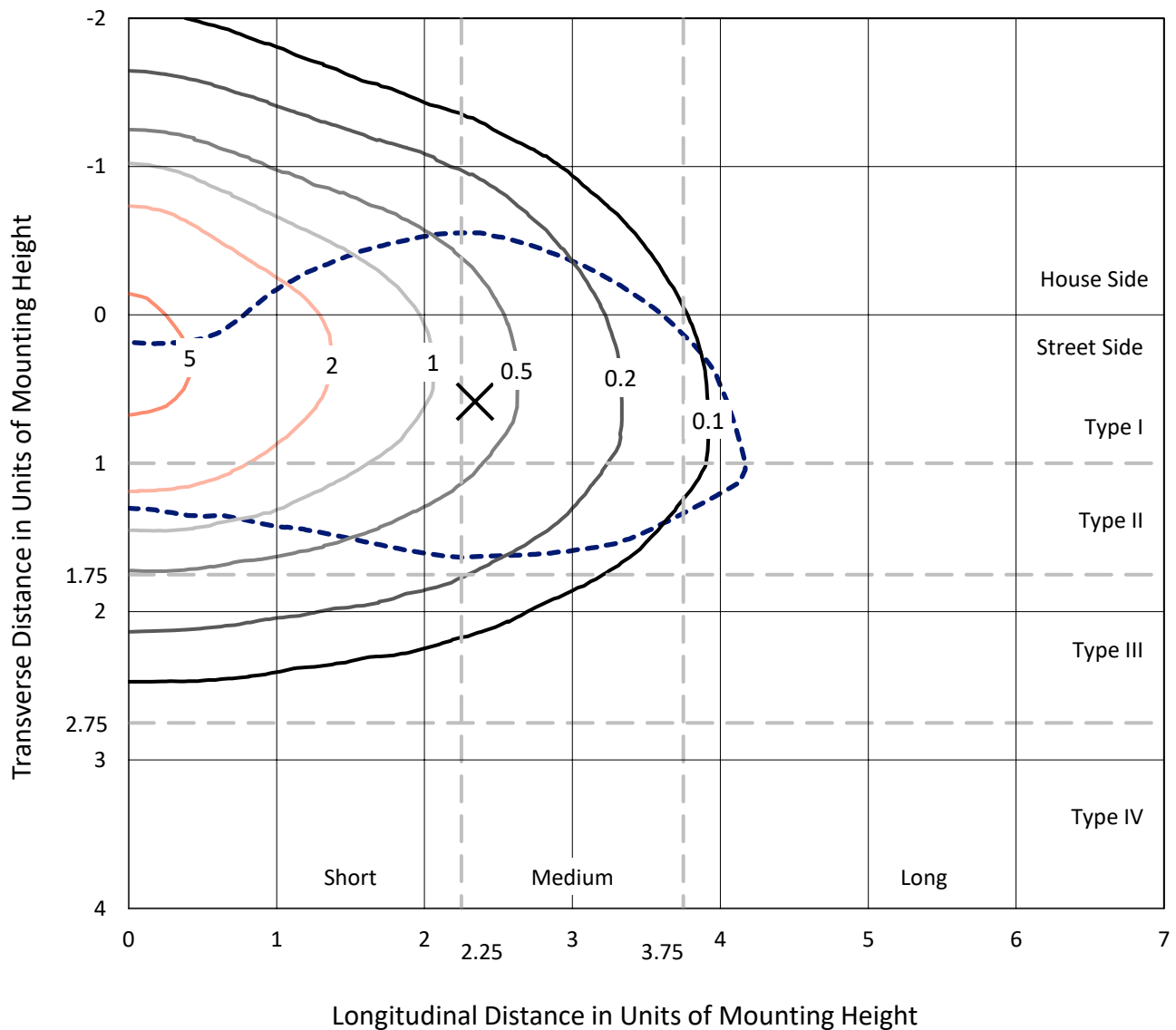
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

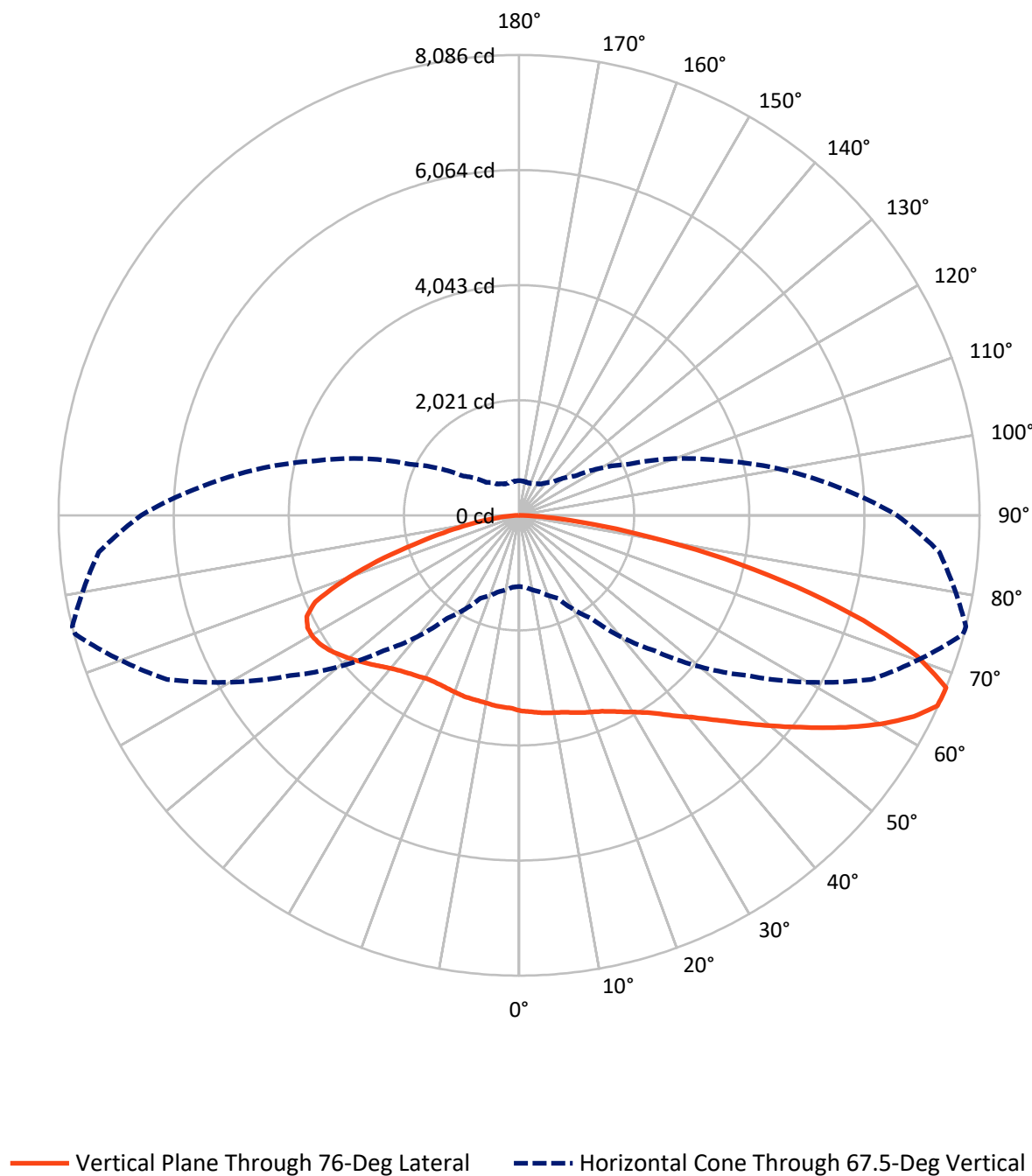
× Max cd
- - - 1/2 Max cd



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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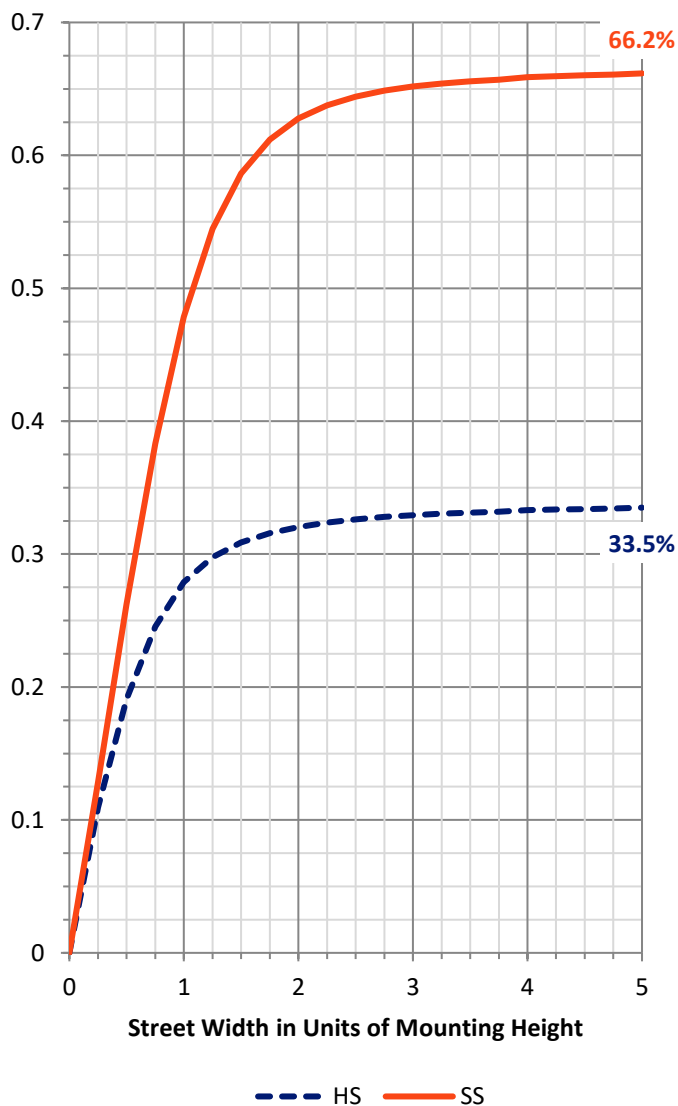
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5748.4	0.0	5748.4
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	11263.6	0.0	11263.6
	% Fixture	66.2	0.0	66.2
Total	Lumens	17012.0	0.0	17012.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.4	1.9
10°-20°	1013.0	6.0
20°-30°	1721.2	10.1
30°-40°	2449.0	14.4
40°-50°	3093.0	18.2
50°-60°	3348.8	19.7
60°-70°	3114.7	18.3
70°-80°	1672.9	9.8
80°-90°	268.1	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°	17012.0	100.0
0°-180°	17012.0	100.0

Coefficient of Utilization



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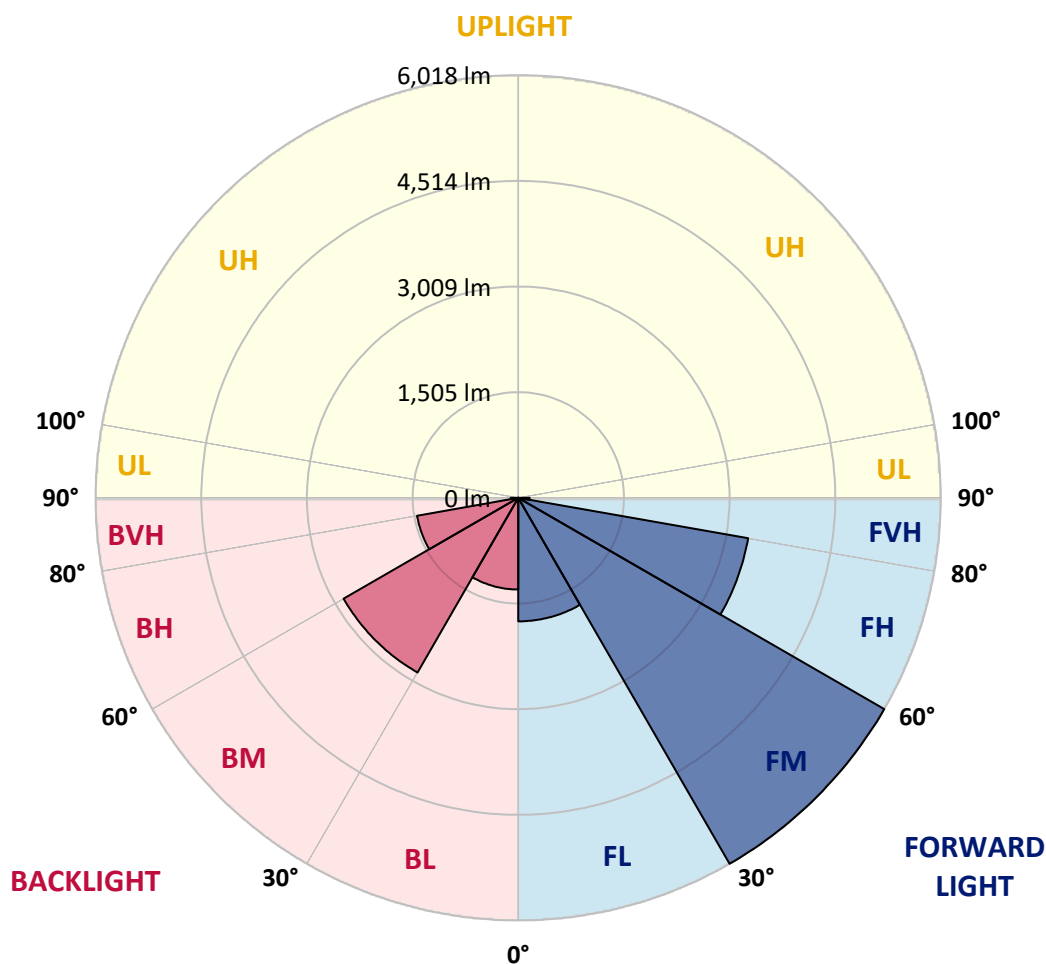
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1759.2	10.3			
FM	(30°-60°)	6018.2	35.4			
FH	(60°-80°)	3324.0	19.5			G2/5000
FVH	(80°-90°)	162.2	1.0			G2/225
BL	(0°-30°)	1306.4	7.7	B3/2500		
BM	(30°-60°)	2872.6	16.9	B3/5000		
BH	(60°-80°)	1463.6	8.6	B3/2500		G3/2500
BVH	(80°-90°)	105.9	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°	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4
2.5°	3540.6	3534.3	3509.0	3512.2	3512.2	3509.0	3471.1	3455.3	3455.3	3452.2	3417.4
5°	3667.0	3657.5	3629.1	3622.7	3610.1	3594.3	3534.3	3499.6	3483.8	3480.6	3433.2
7.5°	3815.4	3802.8	3768.0	3749.1	3717.5	3676.4	3600.6	3546.9	3509.0	3505.9	3439.5
10°	3963.8	3951.2	3910.2	3875.4	3831.2	3764.9	3667.0	3588.0	3528.0	3521.7	3442.7
12.5°	4140.7	4128.1	4077.6	4033.3	3967.0	3878.6	3749.1	3641.7	3559.6	3550.1	3452.2
15°	4327.1	4308.1	4257.6	4207.0	4124.9	4011.2	3856.5	3714.3	3610.1	3594.3	3480.6
17.5°	4481.8	4456.6	4415.5	4365.0	4273.4	4140.7	3963.8	3787.0	3657.5	3644.8	3509.0
20°	4614.5	4595.5	4551.3	4503.9	4406.0	4260.7	4064.9	3859.6	3701.7	3685.9	3531.1
22.5°	4740.8	4715.6	4690.3	4655.5	4548.2	4387.1	4181.8	3948.1	3758.5	3739.6	3559.6
25°	4886.1	4857.7	4848.2	4829.3	4702.9	4538.7	4323.9	4058.6	3837.5	3815.4	3610.1
27.5°	5066.1	5034.6	5015.6	5015.6	4864.0	4693.4	4475.5	4188.1	3929.1	3910.2	3673.3
30°	5255.6	5217.7	5189.3	5189.3	5018.8	4848.2	4624.0	4317.6	4033.3	4011.2	3755.4
32.5°	5423.0	5385.1	5353.6	5350.4	5173.5	5003.0	4778.7	4459.7	4159.7	4131.2	3856.5
35°	5552.5	5517.8	5489.4	5495.7	5328.3	5160.9	4952.4	4649.2	4317.6	4286.0	3989.1
37.5°	5631.5	5618.9	5603.1	5625.2	5470.4	5312.5	5132.5	4832.4	4497.6	4469.2	4153.4
40°	5672.6	5663.1	5726.3	5754.7	5590.4	5448.3	5312.5	5021.9	4693.4	4661.9	4342.9
42.5°	5732.6	5811.5	5836.8	5830.5	5678.9	5552.5	5476.7	5227.2	4924.0	4895.6	4570.3
45°	5517.8	5498.8	5637.8	5713.6	5685.2	5618.9	5631.5	5473.6	5192.5	5164.1	4832.4
47.5°	5230.4	5205.1	5284.1	5470.4	5581.0	5644.1	5770.5	5729.4	5502.0	5476.7	5138.8
50°	4624.0	4658.7	4952.4	5202.0	5419.9	5637.8	5887.3	6004.2	5843.1	5817.9	5467.3
52.5°	3951.2	3986.0	4292.3	4867.2	5224.1	5590.4	5972.6	6279.0	6212.7	6184.2	5817.9
55°	3461.7	3537.5	3884.9	4301.8	4946.1	5442.0	6023.2	6560.1	6610.6	6585.4	6200.0
57.5°	2975.3	3032.1	3294.3	3663.8	4567.1	5183.0	6020.0	6822.2	7027.5	7002.3	6588.5
60°	2403.6	2476.2	2684.7	3082.6	4061.8	4873.5	5931.6	7027.5	7428.7	7409.7	6964.4
62.5°	2011.9	2034.0	2182.5	2526.8	3411.1	4481.8	5732.6	7138.1	7791.9	7779.2	7302.3
65°	1620.3	1623.4	1759.3	2046.7	2782.6	3995.4	5394.6	7097.0	8066.7	8073.0	7545.5
67.5°	1250.7	1266.5	1389.7	1607.6	2210.9	3363.7	4911.4	6819.1	8069.8	8085.6	7406.5
70°	865.4	878.0	1064.4	1276.0	1708.7	2681.5	4257.6	6083.2	7406.5	7419.2	6639.0
72.5°	609.6	615.9	814.9	1020.2	1336.0	2021.4	3212.1	5031.4	6313.7	6323.2	5584.1
75°	454.8	461.1	574.8	773.8	1023.3	1399.2	2195.1	3853.3	5044.0	5044.0	4409.2
77.5°	322.2	325.3	372.7	533.8	682.2	944.4	1320.2	2523.6	3701.7	3708.0	3212.1
80°	217.9	221.1	243.2	360.1	426.4	511.7	717.0	1323.4	2334.1	2343.6	2040.4
82.5°	113.7	120.0	135.8	183.2	214.8	284.3	369.5	672.7	1291.8	1317.1	1225.5
85°	44.2	44.2	50.5	60.0	79.0	110.5	170.6	255.8	584.3	603.3	540.1
87.5°	15.8	15.8	19.0	19.0	22.1	25.3	28.4	37.9	66.3	66.3	63.2
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°	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4	3436.4
2.5°	3404.8	3404.8	3389.0	3395.3	3392.2	3385.9	3379.5	3389.0	3379.5	3357.4	3354.3
5°	3411.1	3404.8	3379.5	3376.4	3366.9	3354.3	3338.5	3344.8	3329.0	3310.0	3306.9
7.5°	3414.3	3401.6	3366.9	3354.3	3335.3	3310.0	3284.8	3284.8	3262.7	3243.7	3240.6
10°	3408.0	3392.2	3344.8	3319.5	3284.8	3246.9	3212.1	3202.7	3177.4	3155.3	3155.3
12.5°	3411.1	3389.0	3329.0	3287.9	3240.6	3193.2	3149.0	3136.3	3114.2	3092.1	3089.0
15°	3430.1	3398.5	3322.7	3269.0	3199.5	3145.8	3098.4	3089.0	3070.0	3054.2	3054.2
17.5°	3449.0	3408.0	3313.2	3237.4	3152.1	3092.1	3047.9	3047.9	3035.3	3025.8	3025.8
20°	3458.5	3411.1	3294.3	3193.2	3095.3	3032.1	2991.0	2997.4	2994.2	2991.0	2991.0
22.5°	3480.6	3417.4	3278.5	3152.1	3035.3	2968.9	2931.0	2940.5	2937.4	2937.4	2940.5
25°	3515.3	3433.2	3265.8	3114.2	2978.4	2905.8	2864.7	2871.0	2871.0	2871.0	2871.0
27.5°	3562.7	3464.8	3262.7	3079.5	2921.6	2839.4	2788.9	2788.9	2776.3	2779.4	2782.6
30°	3635.4	3524.8	3269.0	3047.9	2861.5	2757.3	2697.3	2687.8	2684.7	2691.0	2694.2
32.5°	3723.8	3606.9	3306.9	3025.8	2798.4	2665.7	2589.9	2586.8	2577.3	2577.3	2577.3
35°	3834.4	3685.9	3341.6	3022.6	2735.2	2567.8	2485.7	2476.2	2454.1	2444.6	2444.6
37.5°	3976.5	3809.1	3382.7	3000.5	2681.5	2473.1	2375.1	2343.6	2318.3	2315.1	2315.1
40°	4150.2	3948.1	3442.7	2975.3	2624.7	2375.1	2245.7	2192.0	2195.1	2207.8	2207.8
42.5°	4355.5	4118.6	3518.5	2962.6	2542.5	2274.1	2094.0	2030.9	2053.0	2065.6	2068.8
45°	4595.5	4320.8	3603.8	2946.8	2466.7	2160.4	1933.0	1854.0	1863.5	1866.6	1869.8
47.5°	4873.5	4545.0	3692.2	2934.2	2381.5	2018.2	1756.1	1651.9	1648.7	1629.8	1636.1
50°	5164.1	4781.9	3783.8	2912.1	2277.2	1850.8	1569.7	1446.6	1421.3	1392.9	1396.0
52.5°	5473.6	5025.1	3869.1	2877.3	2147.7	1680.3	1392.9	1260.2	1209.7	1178.1	1184.4
55°	5814.7	5274.6	3951.2	2823.6	2011.9	1509.7	1235.0	1099.1	1036.0	1010.7	1013.9
57.5°	6127.4	5514.6	4011.2	2757.3	1863.5	1355.0	1096.0	963.3	922.3	919.1	922.3
60°	6430.6	5716.8	4036.5	2665.7	1711.9	1212.8	966.5	865.4	837.0	852.8	855.9
62.5°	6686.4	5846.3	4023.9	2542.5	1557.1	1077.0	862.3	789.6	770.7	802.2	805.4
65°	6834.9	5887.3	3935.4	2365.7	1389.7	944.4	764.3	685.4	675.9	694.9	704.3
67.5°	6639.0	5631.5	3695.4	2122.5	1203.4	821.2	669.6	606.4	590.6	606.4	606.4
70°	5884.2	4879.8	3126.9	1737.1	998.1	701.2	581.2	536.9	524.3	536.9	533.8
72.5°	4901.9	4058.6	2463.6	1355.0	786.5	590.6	505.4	464.3	451.7	439.0	432.7
75°	3802.8	3082.6	1787.7	994.9	593.8	473.8	423.2	385.3	353.7	366.4	360.1
77.5°	2785.7	2163.5	1266.5	688.5	426.4	366.4	331.6	303.2	281.1	306.4	303.2
80°	1794.0	1399.2	846.5	461.1	293.7	255.8	243.2	227.4	249.5	325.3	331.6
82.5°	1096.0	887.5	505.4	300.1	192.7	170.6	157.9	157.9	255.8	281.1	284.3
85°	489.6	470.6	274.8	154.8	107.4	97.9	88.4	113.7	104.2	75.8	79.0
87.5°	79.0	82.1	60.0	53.7	41.1	41.1	31.6	22.1	15.8	9.5	9.5
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)