

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: P836140

Luminaire Tested: **ARCH3-140-750-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836140
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21499 lumens
Efficiency: N/A
Efficacy: 150.9 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 142.5
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

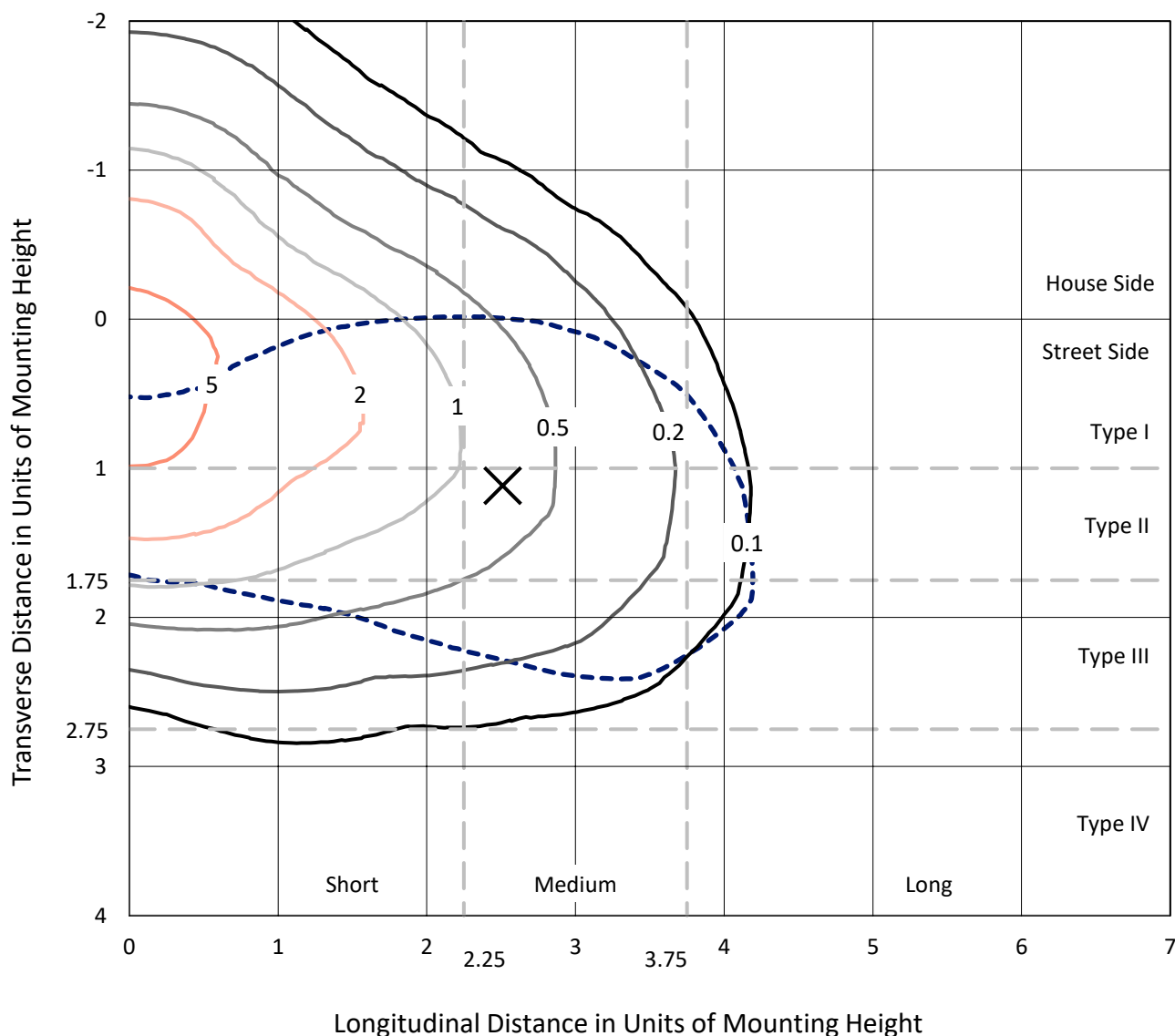


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Iso-Footcandle Lines of Horizontal Illumination

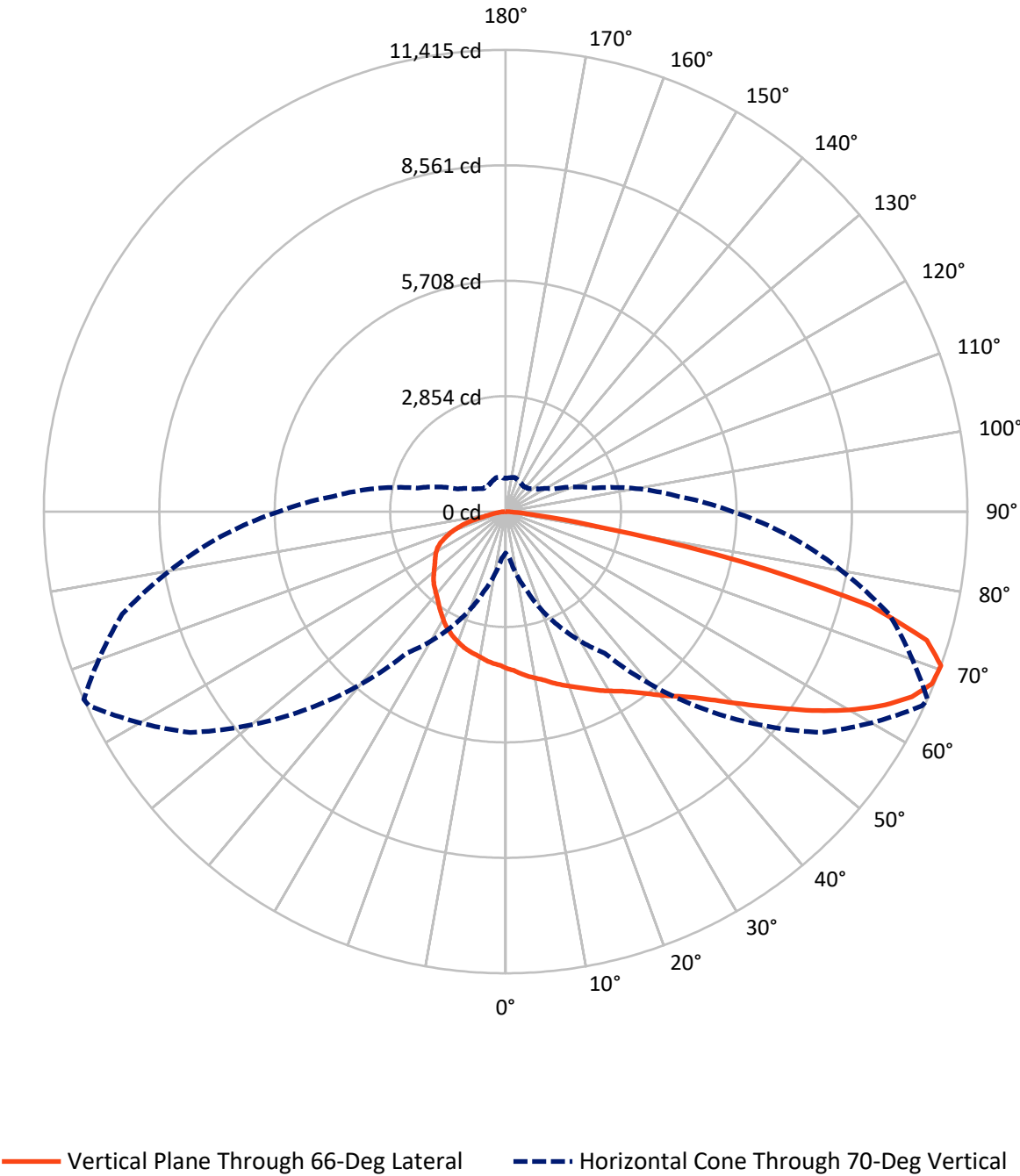
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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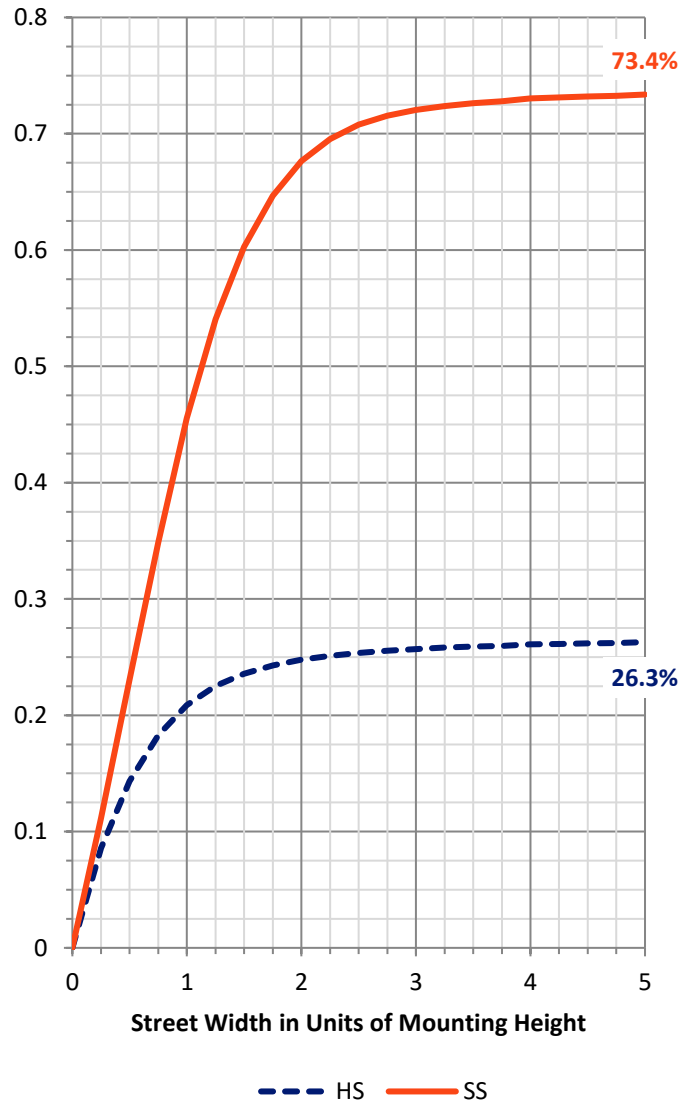
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5696.7	0.0	5696.7
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	15802.2	0.0	15802.2
	% Fixture	73.5	0.0	73.5
Total	Lumens	21499.0	0.0	21499.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.8	1.7
10°-20°	1118.4	5.2
20°-30°	1874.8	8.7
30°-40°	2807.1	13.1
40°-50°	3753.1	17.5
50°-60°	4381.9	20.4
60°-70°	4357.1	20.3
70°-80°	2579.5	12.0
80°-90°	254.2	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°	21499.0	100.0
0°-180°	21499.0	100.0

Coefficient of Utilization



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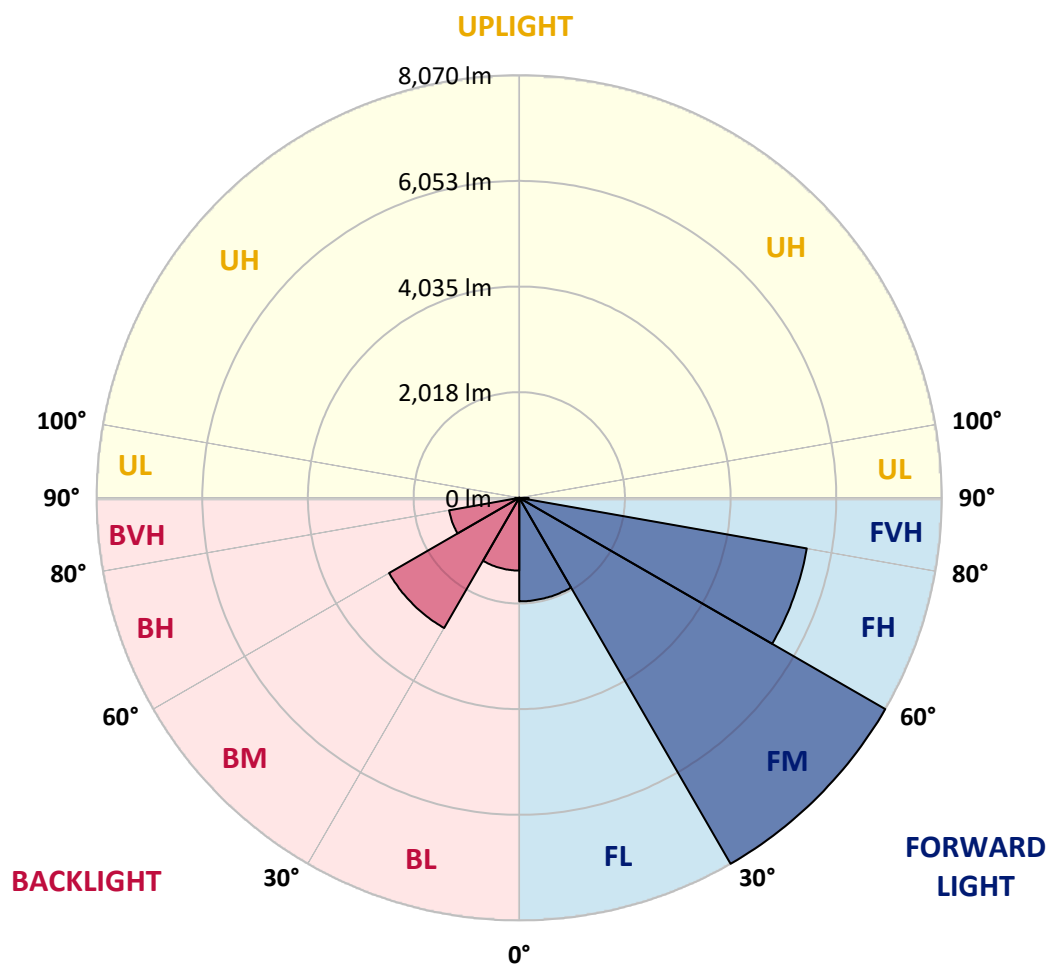
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1977.3	9.2			
FM	(30°-60°)	8070.4	37.5			
FH	(60°-80°)	5575.8	25.9			G3/7500
FVH	(80°-90°)	178.7	0.8			G2/225
BL	(0°-30°)	1388.6	6.5	B3/2500		
BM	(30°-60°)	2871.7	13.4	B3/5000		
BH	(60°-80°)	1360.8	6.3	B3/2500		G3/2500
BVH	(80°-90°)	75.6	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1
2.5°	4022.7	4016.4	4013.2	4000.5	3972.0	3984.7	3956.2	3937.1	3934.0	3889.6	3864.2
5°	4187.6	4184.4	4178.1	4159.0	4114.7	4121.0	4073.4	4038.6	4029.1	3959.3	3905.4
7.5°	4327.0	4320.7	4317.5	4292.2	4244.6	4241.5	4184.4	4133.7	4117.8	4022.7	3940.3
10°	4434.8	4425.3	4431.7	4406.3	4355.6	4346.1	4273.2	4206.6	4190.7	4070.3	3956.2
12.5°	4526.8	4520.4	4529.9	4507.7	4466.5	4457.0	4384.1	4298.5	4279.5	4140.0	3991.0
15°	4628.2	4606.0	4625.0	4615.5	4587.0	4583.8	4517.2	4422.1	4396.8	4228.8	4044.9
17.5°	4682.1	4669.4	4691.6	4694.8	4682.1	4704.3	4640.9	4526.8	4504.6	4311.2	4092.5
20°	4720.1	4701.1	4726.5	4745.5	4755.0	4799.4	4748.7	4637.7	4612.3	4390.4	4136.8
22.5°	4850.1	4808.9	4812.1	4824.7	4831.1	4894.5	4862.8	4755.0	4729.6	4488.7	4190.7
25°	5176.6	5094.2	5040.3	5002.3	4957.9	5011.8	4992.7	4888.1	4865.9	4606.0	4257.3
27.5°	5683.8	5579.2	5471.4	5360.5	5186.1	5163.9	5132.2	5037.1	5011.8	4723.3	4323.9
30°	6260.7	6156.1	6029.3	5851.8	5525.3	5354.1	5281.2	5176.6	5148.1	4827.9	4387.3
32.5°	6834.5	6742.6	6615.8	6400.2	5934.2	5585.5	5430.2	5322.4	5293.9	4942.0	4463.4
35°	7281.5	7224.4	7142.0	6872.6	6340.0	5858.2	5645.8	5515.8	5484.1	5122.7	4602.8
37.5°	7642.9	7601.7	7531.9	7249.8	6634.8	6130.8	5893.0	5744.0	5709.2	5319.3	4751.8
40°	8175.4	8067.6	8010.6	7601.7	6891.6	6378.0	6172.0	6016.7	5978.6	5528.5	4872.3
42.5°	8628.7	8549.5	8479.7	7915.5	7135.7	6590.4	6435.1	6292.4	6241.7	5734.5	5002.3
45°	8704.8	8736.5	8701.6	8070.8	7522.4	6799.6	6701.4	6609.4	6561.9	6013.5	5198.8
47.5°	8708.0	8708.0	8501.9	8159.6	8001.1	7034.2	6986.7	7018.4	6967.7	6368.5	5433.4
50°	8479.7	8521.0	8413.2	8181.8	8127.9	7268.8	7335.4	7506.6	7455.8	6745.8	5687.0
52.5°	8007.4	8143.7	8140.6	8146.9	7944.0	7468.5	7703.1	8093.0	8007.4	7170.5	5956.4
55°	7173.7	7446.3	7690.4	7899.6	7785.5	7589.0	8153.2	8717.5	8628.7	7646.0	6229.0
57.5°	6460.5	6634.8	6939.1	7531.9	7598.5	7693.6	8574.8	9370.5	9291.3	8172.3	6514.3
60°	5645.8	5886.7	6191.0	7034.2	7370.2	7829.9	9037.7	10007.7	9931.6	8704.8	6790.1
62.5°	4393.6	4704.3	5312.9	6270.3	7037.4	7915.5	9402.2	10568.8	10533.9	9208.8	7037.4
65°	3062.2	3338.0	4190.7	5331.9	6508.0	7877.4	9693.9	11069.6	11037.9	9620.9	7211.7
67.5°	1787.9	2108.0	3071.7	4292.2	5572.9	7614.3	9789.0	11364.4	11364.4	9871.4	7259.3
70°	1020.7	1169.7	2025.6	3128.8	4273.2	6888.4	9522.7	11361.3	11415.2	9814.3	7062.8
72.5°	713.2	779.8	1363.1	2104.9	2897.4	5572.9	8825.3	10812.9	10885.8	9275.4	6390.7
75°	554.7	602.3	960.5	1436.0	1825.9	3785.0	7300.5	9116.9	9310.3	7906.0	5167.1
77.5°	421.6	456.5	561.1	897.1	1169.7	2174.6	4818.4	5978.6	5991.3	4840.6	2770.6
80°	307.5	342.4	374.1	548.4	621.3	1017.6	1819.6	2498.0	2428.2	2342.6	1499.4
82.5°	183.9	218.7	228.2	298.0	304.3	434.3	637.2	805.2	773.5	1030.2	703.7
85°	79.2	110.9	117.3	136.3	130.0	177.5	253.6	212.4	190.2	218.7	152.2
87.5°	19.0	31.7	31.7	34.9	28.5	44.4	47.5	34.9	31.7	38.0	38.0
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°	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1	3880.1
2.5°	3857.9	3848.4	3851.5	3797.7	3781.8	3766.0	3756.4	3750.1	3743.8	3753.3	3762.8
5°	3886.4	3864.2	3838.9	3759.6	3727.9	3693.0	3667.7	3645.5	3636.0	3636.0	3645.5
7.5°	3908.6	3870.6	3816.7	3712.1	3655.0	3607.5	3566.2	3537.7	3521.9	3521.9	3531.4
10°	3911.8	3857.9	3772.3	3645.5	3569.4	3499.7	3452.1	3420.4	3398.2	3398.2	3404.6
12.5°	3930.8	3857.9	3746.9	3594.8	3499.7	3414.1	3357.0	3309.5	3300.0	3300.0	3306.3
15°	3962.5	3873.7	3731.1	3550.4	3436.3	3338.0	3274.6	3223.9	3204.9	3217.5	3220.7
17.5°	3991.0	3883.2	3702.6	3493.3	3357.0	3249.2	3179.5	3135.1	3109.8	3138.3	3138.3
20°	4010.0	3883.2	3661.3	3420.4	3271.4	3151.0	3084.4	3030.5	3011.5	3046.4	3049.5
22.5°	4038.6	3880.1	3617.0	3347.5	3179.5	3052.7	2986.1	2944.9	2935.4	2973.5	2986.1
25°	4070.3	3886.4	3569.4	3265.1	3078.1	2954.4	2903.7	2884.7	2891.0	2938.6	2954.4
27.5°	4105.1	3899.1	3521.9	3173.2	2967.1	2856.2	2827.6	2837.1	2862.5	2922.7	2941.8
30°	4136.8	3902.3	3455.3	3065.4	2840.3	2735.7	2748.4	2789.6	2827.6	2887.9	2910.1
32.5°	4178.1	3905.4	3385.6	2948.1	2704.0	2627.9	2685.0	2751.6	2789.6	2846.7	2872.0
35°	4279.5	3959.3	3331.7	2834.0	2577.2	2536.0	2631.1	2716.7	2738.9	2789.6	2811.8
37.5°	4396.8	4048.1	3303.1	2716.7	2453.6	2444.1	2564.5	2650.1	2656.5	2688.2	2710.3
40°	4469.7	4086.1	3271.4	2618.4	2342.6	2349.0	2472.6	2539.2	2526.5	2548.7	2564.5
42.5°	4542.6	4098.8	3204.9	2536.0	2238.0	2244.4	2339.5	2387.0	2393.3	2440.9	2463.1
45°	4666.2	4133.7	3132.0	2459.9	2142.9	2120.7	2177.8	2241.2	2323.6	2415.5	2440.9
47.5°	4831.1	4206.6	3055.9	2368.0	2051.0	1978.1	2000.3	2111.2	2196.8	2282.4	2298.2
50°	4999.1	4279.5	2986.1	2257.0	1959.1	1825.9	1835.4	1936.9	2006.6	2073.2	2082.7
52.5°	5163.9	4342.9	2925.9	2152.4	1854.4	1645.2	1683.3	1787.9	1835.4	1867.1	1876.6
55°	5328.8	4396.8	2872.0	2063.7	1734.0	1502.6	1537.4	1635.7	1683.3	1699.1	1705.5
57.5°	5499.9	4460.2	2830.8	1987.6	1597.7	1375.8	1398.0	1467.7	1512.1	1531.1	1524.8
60°	5642.6	4514.1	2808.6	1908.3	1461.4	1258.5	1252.1	1315.5	1378.9	1398.0	1391.6
62.5°	5753.5	4548.9	2773.7	1806.9	1340.9	1141.2	1109.5	1191.9	1258.5	1271.2	1280.7
65°	5813.8	4552.1	2688.2	1676.9	1217.3	1014.4	992.2	1074.6	1115.8	1128.5	1128.5
67.5°	5804.3	4501.4	2520.1	1502.6	1103.2	900.3	881.3	932.0	992.2	1001.7	992.2
70°	5607.7	4292.2	2250.7	1318.7	966.8	798.8	764.0	814.7	871.7	836.9	821.0
72.5°	5049.8	3750.1	1854.4	1115.8	814.7	672.0	656.2	706.9	710.1	716.4	700.6
75°	3984.7	2792.8	1388.5	868.6	659.4	564.3	561.1	551.6	564.3	589.6	570.6
77.5°	2092.2	1394.8	751.3	532.6	478.7	453.3	431.1	427.9	466.0	481.8	462.8
80°	1134.9	783.0	431.1	320.2	291.6	294.8	323.3	317.0	358.2	367.7	351.9
82.5°	494.5	370.9	212.4	193.4	193.4	190.2	199.7	221.9	266.3	266.3	212.4
85°	107.8	91.9	82.4	95.1	107.8	107.8	107.8	107.8	76.1	41.2	28.5
87.5°	34.9	34.9	34.9	38.0	41.2	41.2	34.9	25.4	15.8	3.2	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)