

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: P836322

Luminaire Tested: **ARCH3-170-727-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-170-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1310mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21751 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 170.6
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



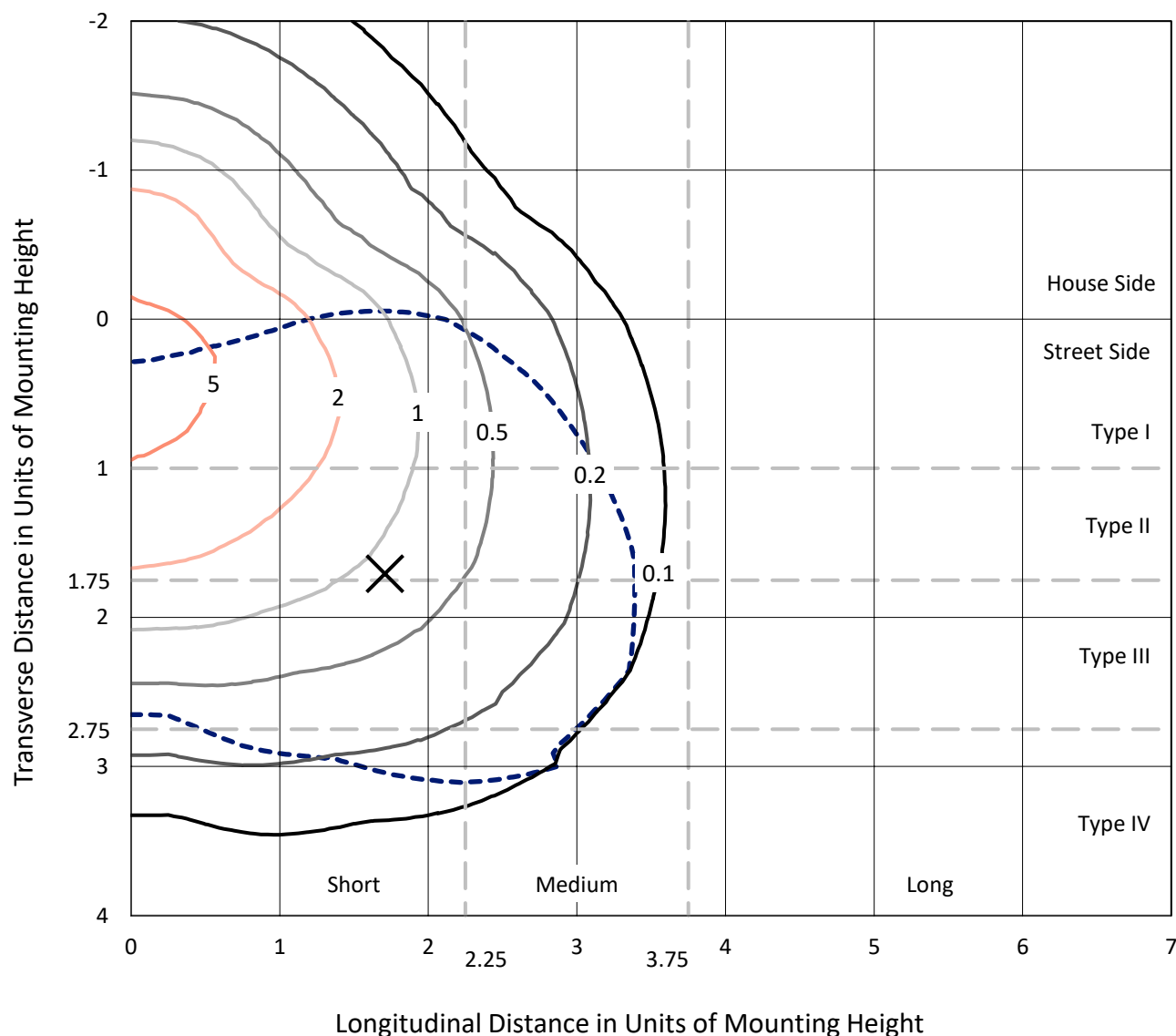
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

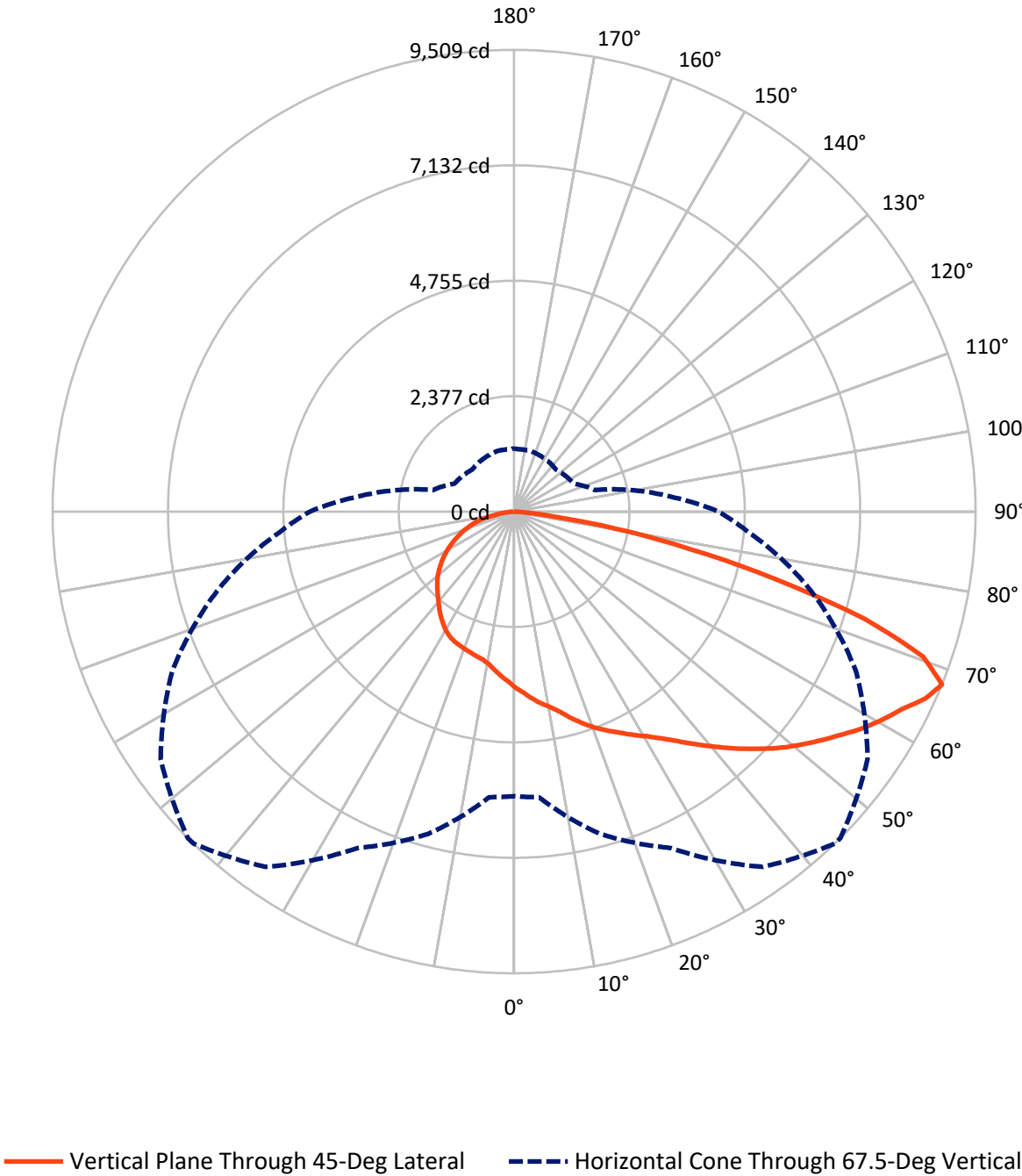


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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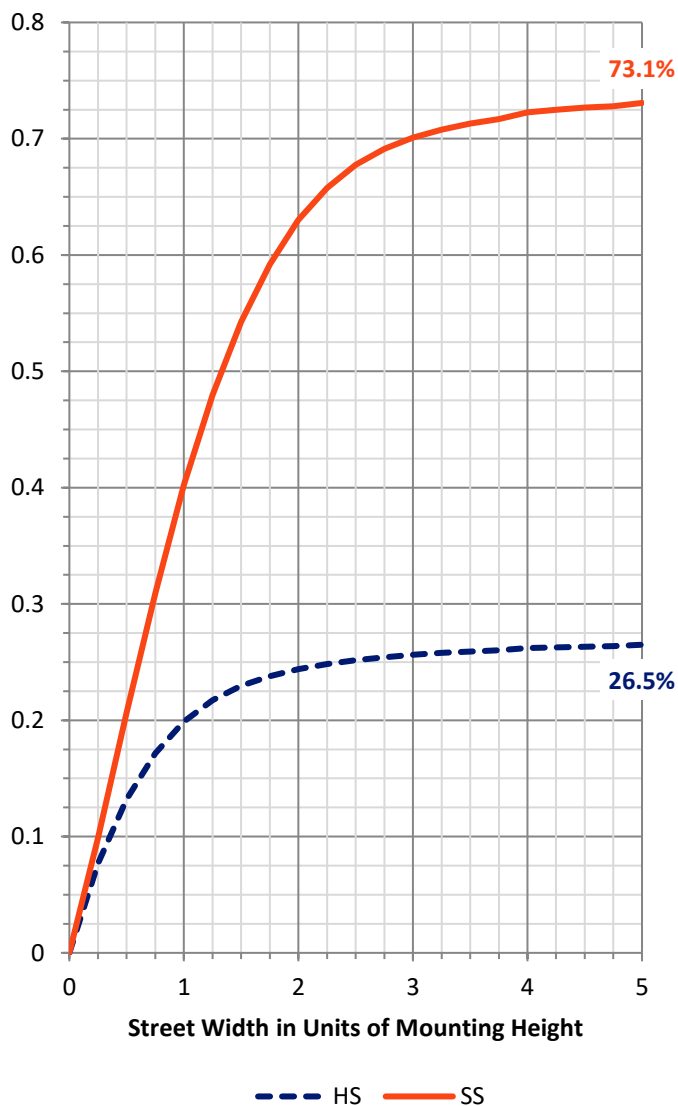
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5810.8	0.0	5810.8
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	15940.2	0.0	15940.2
	% Fixture	73.3	0.0	73.3
Total	Lumens	21751.0	0.0	21751.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.3	1.6
10°-20°	1072.9	4.9
20°-30°	1852.0	8.5
30°-40°	2731.1	12.6
40°-50°	3700.1	17.0
50°-60°	4522.4	20.8
60°-70°	4664.2	21.4
70°-80°	2554.7	11.7
80°-90°	306.2	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°	21751.0	100.0
0°-180°	21751.0	100.0

Coefficient of Utilization



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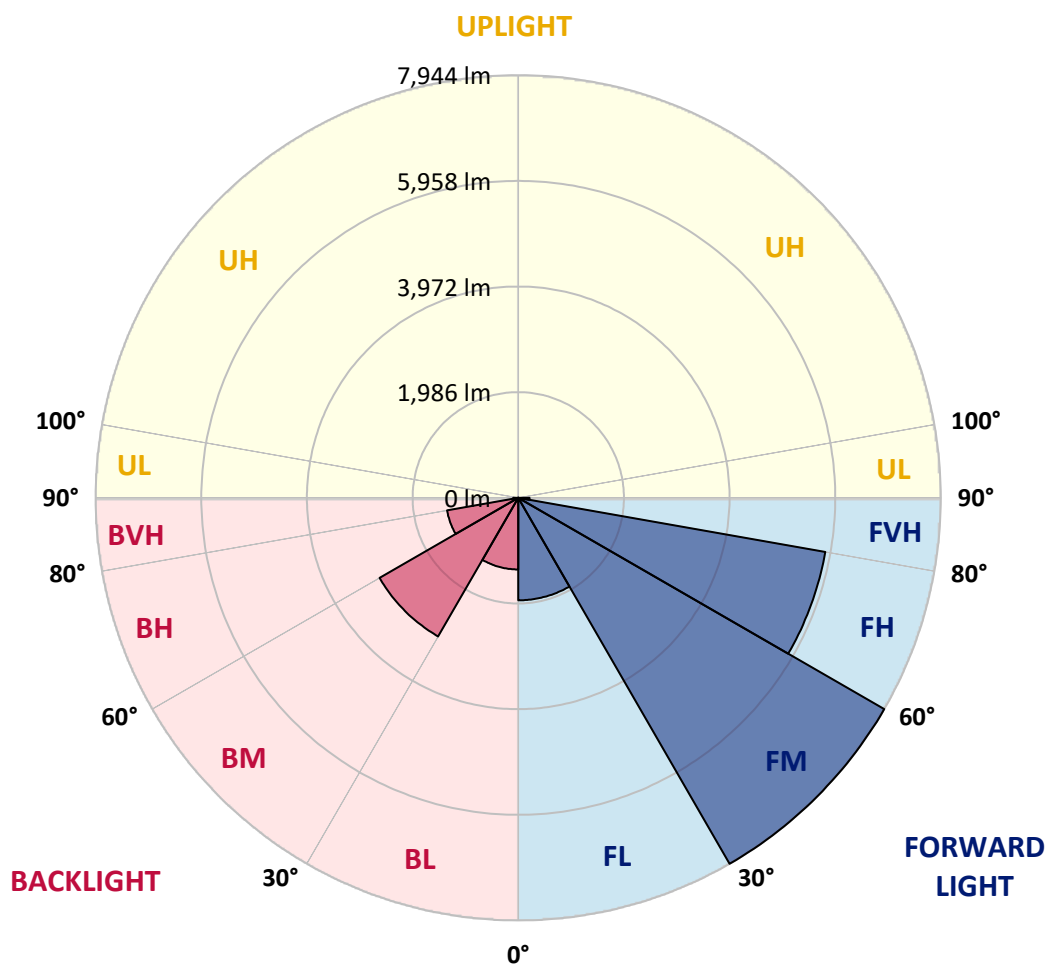
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1925.6	8.9			
FM	(30°-60°)	7943.7	36.5			
FH	(60°-80°)	5860.0	26.9			G3/7500
FVH	(80°-90°)	210.9	1.0			G2/225
BL	(0°-30°)	1346.7	6.2	B3/2500		
BM	(30°-60°)	3009.9	13.8	B3/5000		
BH	(60°-80°)	1358.9	6.2	B3/2500		G3/2500
BVH	(80°-90°)	95.3	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7
2.5°	3786.5	3783.2	3789.8	3766.7	3736.9	3733.6	3733.6	3713.7	3690.5	3644.2	3607.8
5°	3965.3	3958.6	3962.0	3928.9	3889.1	3869.3	3866.0	3822.9	3770.0	3697.2	3631.0
7.5°	4130.8	4124.1	4120.8	4084.4	4024.8	3991.7	3988.4	3925.5	3862.7	3750.1	3654.1
10°	4286.3	4279.7	4273.1	4223.4	4150.6	4101.0	4094.4	4014.9	3935.5	3796.5	3674.0
12.5°	4484.9	4471.7	4465.1	4405.5	4299.6	4246.6	4236.7	4130.8	4031.5	3862.7	3713.7
15°	4693.4	4683.5	4673.6	4617.3	4498.2	4428.7	4412.1	4279.7	4144.0	3948.7	3773.3
17.5°	4849.0	4839.1	4839.1	4789.4	4680.2	4600.8	4587.5	4428.7	4259.8	4028.2	3819.6
20°	4945.0	4935.1	4945.0	4915.2	4832.5	4766.3	4753.0	4577.6	4375.7	4101.0	3859.3
22.5°	5014.5	5004.6	5021.1	5007.9	4948.3	4908.6	4898.7	4726.5	4494.8	4177.1	3899.1
25°	5137.0	5137.0	5137.0	5113.8	5057.5	5044.3	5044.3	4895.3	4647.1	4276.4	3958.6
27.5°	5381.9	5368.7	5352.1	5285.9	5189.9	5186.6	5206.5	5067.5	4822.5	4405.5	4031.5
30°	5742.7	5736.1	5673.2	5534.2	5372.0	5355.4	5368.7	5252.8	5011.2	4541.2	4114.2
32.5°	6209.4	6186.2	6057.1	5848.6	5616.9	5540.8	5567.3	5444.8	5209.8	4680.2	4193.6
35°	6540.4	6547.0	6454.3	6265.6	5990.9	5789.0	5808.9	5659.9	5424.9	4835.8	4292.9
37.5°	6921.0	6944.2	6805.2	6662.8	6408.0	6063.7	6083.6	5881.7	5640.1	5031.1	4398.9
40°	7447.3	7400.9	7165.9	6997.1	6715.8	6351.7	6368.3	6129.9	5888.3	5216.4	4521.3
42.5°	7887.5	7804.8	7520.1	7305.0	6967.3	6656.2	6672.8	6398.0	6139.9	5421.6	4657.0
45°	8519.7	8291.3	7880.9	7775.0	7225.5	6954.1	6970.7	6682.7	6404.7	5640.1	4802.7
47.5°	8887.1	8523.0	8261.5	8205.3	7510.2	7261.9	7281.8	6983.9	6689.3	5888.3	4954.9
50°	8863.9	8628.9	8552.8	8413.8	7761.7	7549.9	7569.7	7295.0	6977.3	6133.3	5100.6
52.5°	8711.7	8754.7	8715.0	8483.3	8013.3	7827.9	7851.1	7602.8	7271.9	6361.6	5236.3
55°	8946.7	8976.5	8900.3	8595.8	8291.3	8106.0	8132.4	7927.2	7563.1	6563.5	5352.1
57.5°	9228.0	9122.1	9046.0	8794.4	8579.3	8407.2	8436.9	8258.2	7814.7	6725.7	5441.5
60°	9214.8	8993.0	9069.1	8807.7	8774.6	8685.2	8711.7	8529.6	8006.7	6844.9	5477.9
62.5°	8536.2	8417.1	8801.0	8711.7	8933.4	8933.4	8966.5	8695.1	8122.5	6894.5	5458.0
65°	7357.9	7364.5	8039.8	8410.5	9122.1	9274.3	9300.8	8797.7	8056.3	6748.9	5272.7
67.5°	5861.8	5904.9	6874.7	7645.9	8933.4	9506.0	9509.4	8890.4	7771.7	6338.5	4842.4
70°	4289.6	4322.7	5468.0	6404.7	8043.1	8993.0	8940.0	8628.9	7152.7	5623.5	4170.5
72.5°	2899.5	2929.3	4107.6	4918.5	6599.9	7659.1	7543.3	7626.0	6096.8	4620.6	3352.9
75°	1949.5	1985.9	2922.6	3518.4	4855.6	5815.5	5557.3	5775.8	4716.6	3498.6	2446.0
77.5°	1228.0	1251.1	1856.9	2307.0	3316.5	3958.6	3700.5	3703.8	2717.4	1883.3	1314.0
80°	781.1	787.8	1125.4	1330.6	1919.7	2379.8	2105.1	1711.2	1224.7	999.6	784.4
82.5°	453.5	443.5	671.9	751.3	913.5	903.6	748.0	708.3	536.2	499.8	400.5
85°	182.0	168.8	294.6	274.7	278.0	294.6	218.5	218.5	175.4	135.7	99.3
87.5°	36.4	36.4	39.7	36.4	36.4	39.7	29.8	29.8	26.5	26.5	26.5
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°	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7	3627.7
2.5°	3601.2	3594.6	3578.0	3535.0	3511.8	3498.6	3478.7	3472.1	3468.8	3472.1	3482.0
5°	3611.1	3587.9	3541.6	3472.1	3425.8	3396.0	3362.9	3349.6	3339.7	3339.7	3349.6
7.5°	3617.7	3581.3	3501.9	3399.3	3333.1	3286.7	3247.0	3230.5	3227.2	3237.1	3240.4
10°	3621.0	3568.1	3455.5	3326.5	3240.4	3180.8	3141.1	3131.2	3141.1	3161.0	3164.3
12.5°	3644.2	3571.4	3429.1	3276.8	3174.2	3114.6	3084.8	3084.8	3111.3	3147.7	3151.0
15°	3683.9	3594.6	3415.8	3237.1	3131.2	3078.2	3068.3	3084.8	3124.5	3180.8	3187.4
17.5°	3713.7	3607.8	3386.0	3184.1	3074.9	3041.8	3058.4	3098.1	3154.3	3230.5	3237.1
20°	3733.6	3607.8	3343.0	3121.2	3018.6	3012.0	3058.4	3121.2	3180.8	3270.2	3280.1
22.5°	3753.4	3601.2	3293.4	3045.1	2955.7	2975.6	3061.7	3141.1	3200.7	3296.7	3313.2
25°	3789.8	3611.1	3243.7	2969.0	2889.5	2945.8	3058.4	3154.3	3217.2	3316.5	3343.0
27.5°	3839.5	3634.3	3207.3	2899.5	2823.3	2899.5	3035.2	3151.0	3217.2	3313.2	3343.0
30°	3892.4	3660.8	3164.3	2823.3	2747.2	2833.3	2985.5	3114.6	3190.7	3280.1	3316.5
32.5°	3948.7	3690.5	3127.9	2740.6	2654.5	2743.9	2912.7	3058.4	3141.1	3223.8	3263.6
35°	4024.8	3743.5	3108.0	2674.4	2571.8	2651.2	2820.0	2985.5	3074.9	3151.0	3197.4
37.5°	4117.5	3809.7	3098.1	2608.2	2482.4	2548.6	2720.7	2896.2	2992.2	3055.0	3098.1
40°	4223.4	3892.4	3094.8	2545.3	2393.1	2442.7	2618.1	2793.6	2886.2	2935.9	2972.3
42.5°	4342.6	3985.1	3088.1	2482.4	2303.7	2343.4	2518.8	2691.0	2770.4	2813.4	2846.5
45°	4468.4	4077.8	3074.9	2406.3	2207.7	2254.0	2416.2	2568.5	2651.2	2687.6	2724.1
47.5°	4594.1	4170.5	3048.4	2320.2	2121.6	2164.7	2307.0	2439.4	2505.6	2538.7	2575.1
50°	4716.6	4253.2	2985.5	2220.9	2032.3	2072.0	2181.2	2270.6	2320.2	2346.7	2383.1
52.5°	4825.8	4309.5	2896.2	2105.1	1942.9	1962.8	2035.6	2111.7	2151.4	2154.7	2187.8
55°	4918.5	4339.3	2767.1	1985.9	1846.9	1850.2	1890.0	1949.5	1966.1	1952.8	1976.0
57.5°	4971.5	4322.7	2624.8	1863.5	1747.6	1734.4	1764.2	1794.0	1797.3	1764.2	1787.3
60°	4984.7	4246.6	2439.4	1741.0	1648.3	1611.9	1621.9	1615.2	1608.6	1595.4	1615.2
62.5°	4918.5	4084.4	2234.2	1621.9	1542.4	1486.1	1482.8	1479.5	1489.5	1492.8	1496.1
65°	4676.9	3779.9	1989.3	1499.4	1429.9	1353.8	1350.4	1390.2	1403.4	1383.5	1390.2
67.5°	4210.2	3313.2	1721.1	1357.1	1287.6	1221.4	1247.8	1271.0	1294.2	1287.6	1294.2
70°	3548.2	2720.7	1476.2	1198.2	1132.0	1095.6	1125.4	1145.2	1148.5	1141.9	1148.5
72.5°	2790.2	2125.0	1247.8	1036.0	976.4	959.9	996.3	1012.8	1042.6	1055.9	1059.2
75°	2015.7	1568.9	1022.8	860.6	810.9	810.9	844.0	873.8	900.3	883.7	873.8
77.5°	1125.4	936.7	734.8	592.5	602.4	648.7	662.0	695.1	721.6	718.2	711.6
80°	681.8	585.9	496.5	383.9	380.6	417.0	503.1	559.4	572.6	542.8	539.5
82.5°	354.2	307.8	264.8	215.1	238.3	278.0	291.3	350.8	387.3	374.0	390.6
85°	89.4	86.1	96.0	99.3	122.5	135.7	148.9	175.4	115.8	56.3	56.3
87.5°	26.5	26.5	33.1	33.1	43.0	53.0	49.6	49.6	26.5	3.3	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)