

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: P840871

Luminaire Tested: **ARCH4-100-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16986 lumens
Efficiency: N/A
Efficacy: 164.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - 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



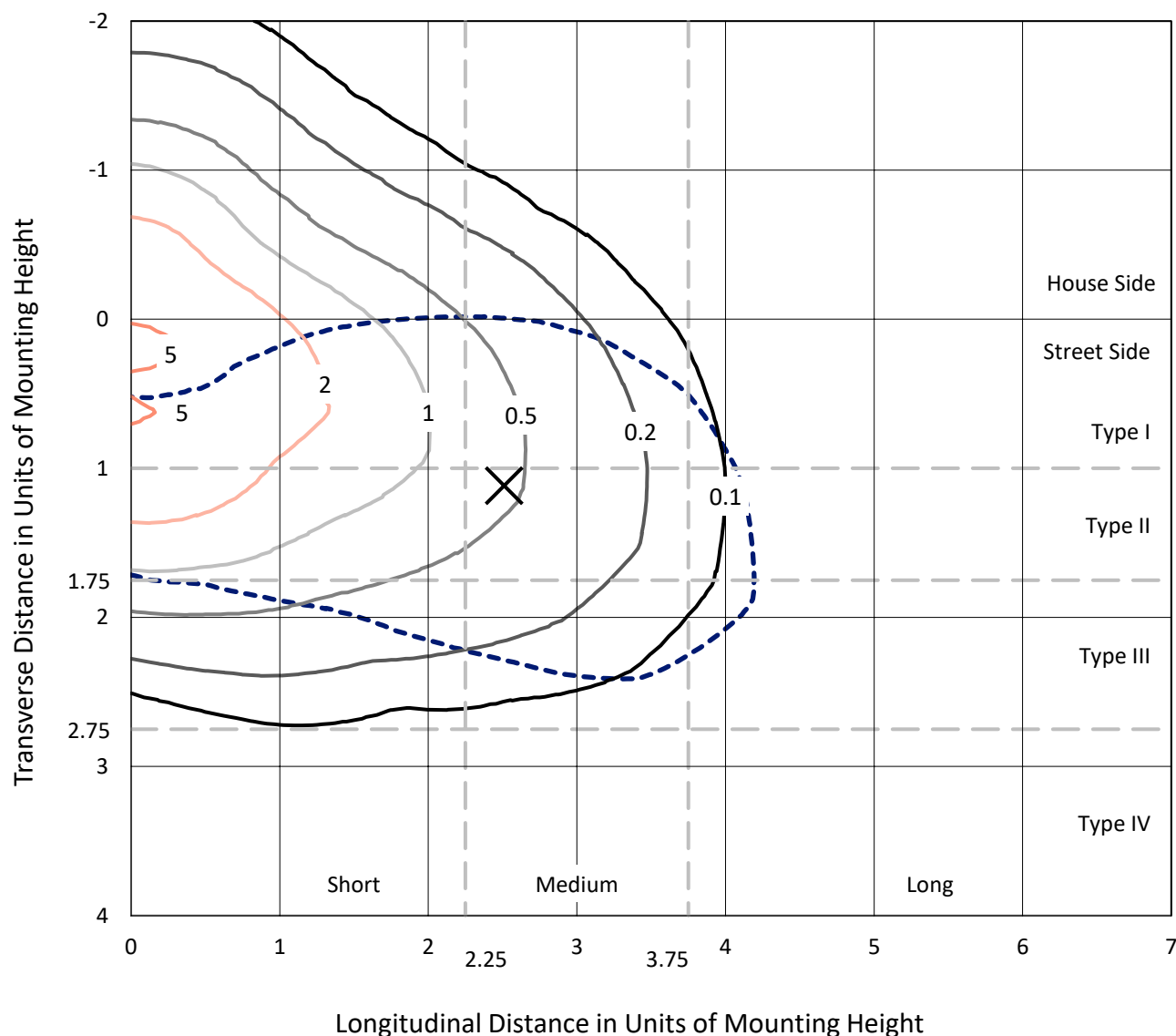
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

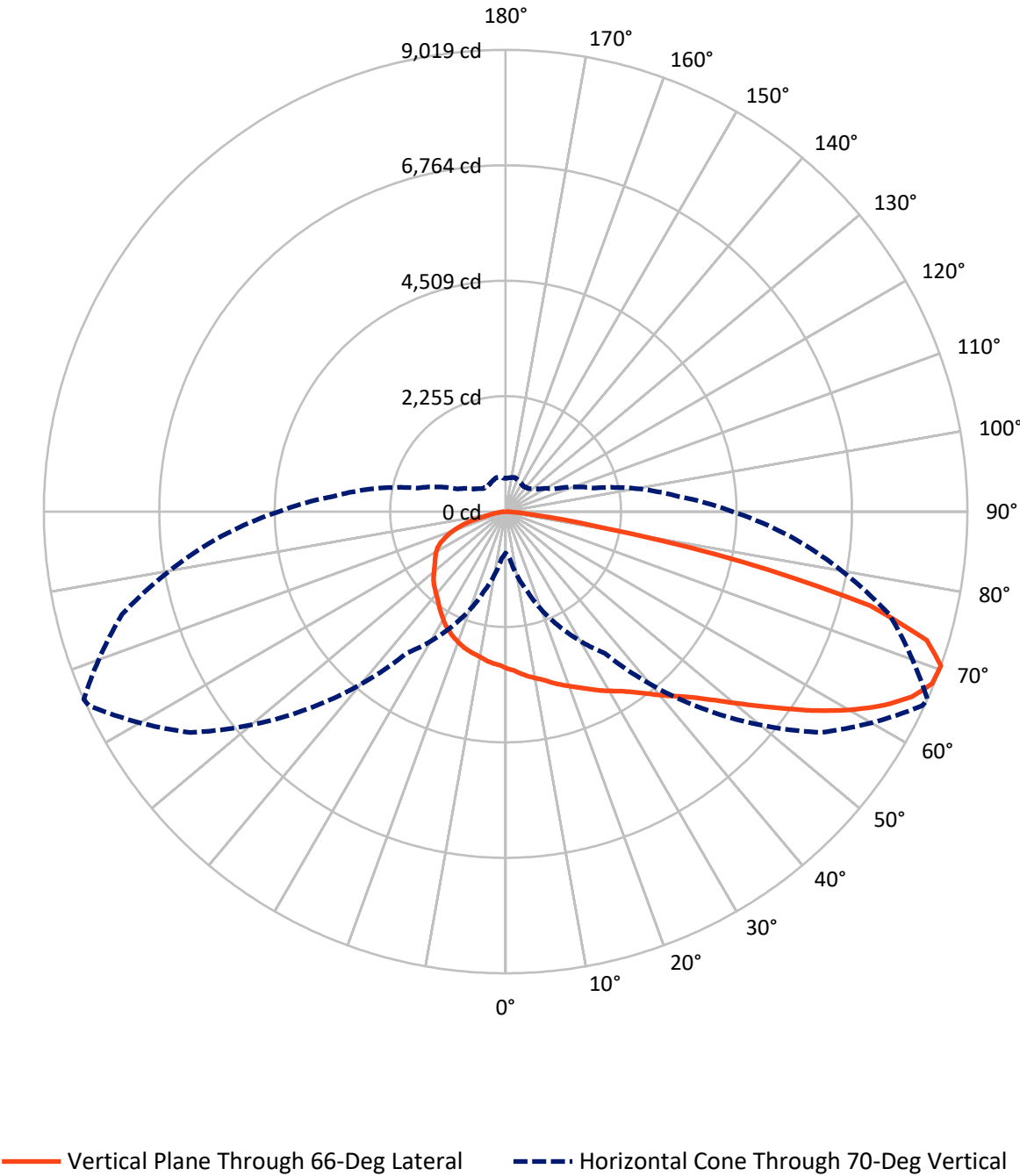


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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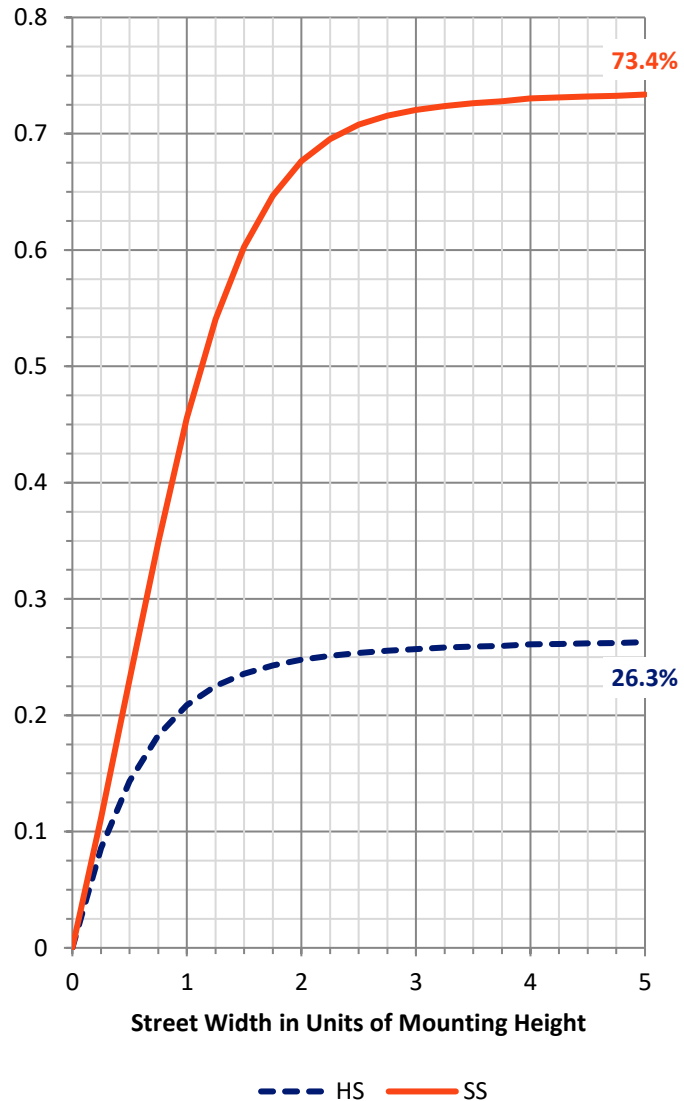
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4500.9	0.0	4500.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	12485.1	0.0	12485.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	16986.0	0.0	16986.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.6	1.7
10°-20°	883.6	5.2
20°-30°	1481.2	8.7
30°-40°	2217.9	13.1
40°-50°	2965.3	17.5
50°-60°	3462.1	20.4
60°-70°	3442.5	20.3
70°-80°	2038.0	12.0
80°-90°	200.9	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°	16986.0	100.0
0°-180°	16986.0	100.0

Coefficient of Utilization



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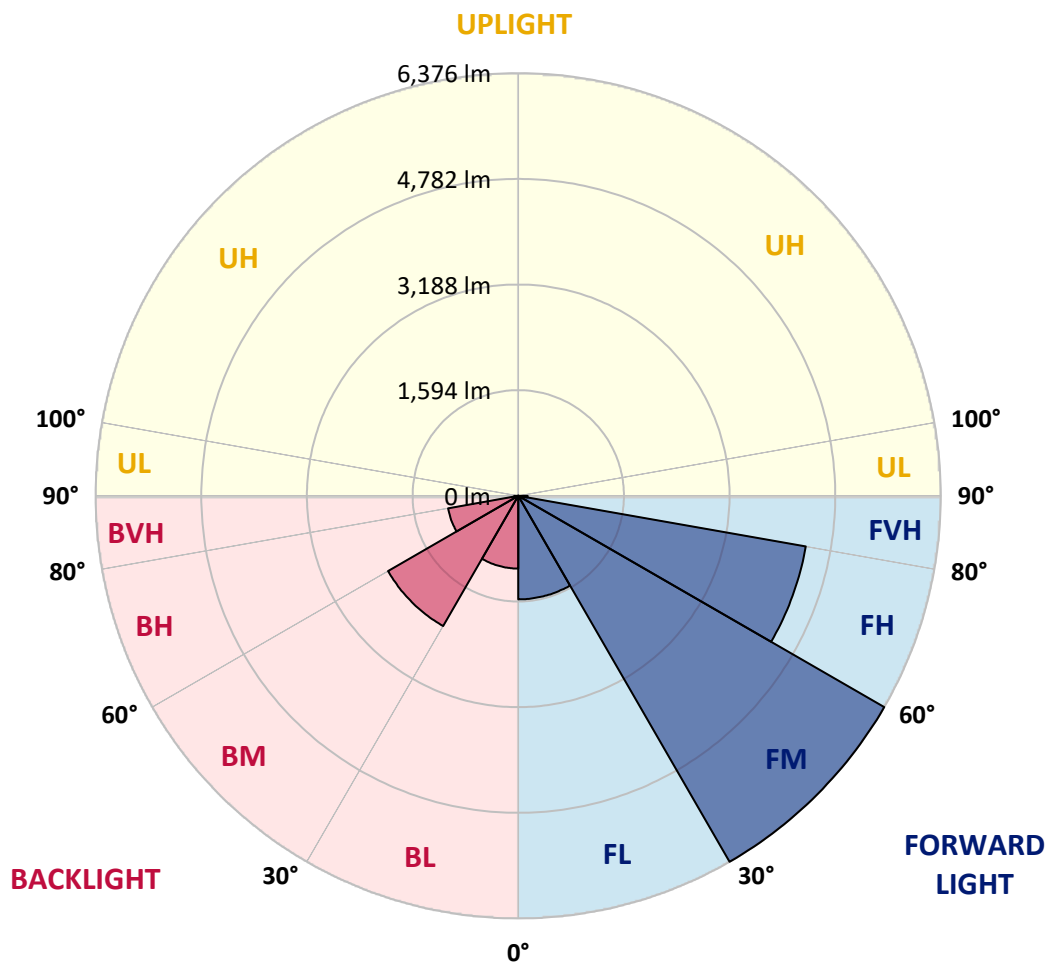
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1562.3	9.2			
FM	(30°-60°)	6376.3	37.5			
FH	(60°-80°)	4405.4	25.9			G2/5000
FVH	(80°-90°)	141.2	0.8			G2/225
BL	(0°-30°)	1097.1	6.5	B3/2500		
BM	(30°-60°)	2268.9	13.4	B2/2500		
BH	(60°-80°)	1075.2	6.3	B3/2500		G3/2500
BVH	(80°-90°)	59.7	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°	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6
2.5°	3178.3	3173.3	3170.8	3160.8	3138.2	3148.2	3125.7	3110.7	3108.2	3073.1	3053.1
5°	3308.5	3306.0	3301.0	3286.0	3250.9	3255.9	3218.4	3190.8	3183.3	3128.2	3085.6
7.5°	3418.7	3413.7	3411.2	3391.2	3353.6	3351.1	3306.0	3266.0	3253.4	3178.3	3113.2
10°	3503.9	3496.4	3501.4	3481.3	3441.3	3433.8	3376.2	3323.6	3311.0	3215.9	3125.7
12.5°	3576.5	3571.5	3579.0	3561.5	3528.9	3521.4	3463.8	3396.2	3381.2	3271.0	3153.2
15°	3656.7	3639.1	3654.2	3646.6	3624.1	3621.6	3569.0	3493.9	3473.8	3341.1	3195.8
17.5°	3699.2	3689.2	3706.8	3709.3	3699.2	3716.8	3666.7	3576.5	3559.0	3406.2	3233.4
20°	3729.3	3714.3	3734.3	3749.3	3756.8	3791.9	3751.8	3664.2	3644.1	3468.8	3268.5
22.5°	3832.0	3799.4	3801.9	3811.9	3817.0	3867.0	3842.0	3756.8	3736.8	3546.5	3311.0
25°	4090.0	4024.8	3982.3	3952.2	3917.1	3959.7	3944.7	3862.0	3844.5	3639.1	3363.6
27.5°	4490.7	4408.0	4322.9	4235.2	4097.5	4079.9	4054.9	3979.8	3959.7	3731.8	3416.2
30°	4946.5	4863.9	4763.7	4623.4	4365.5	4230.2	4172.6	4090.0	4067.4	3814.5	3466.3
32.5°	5399.8	5327.2	5227.0	5056.7	4688.5	4413.0	4290.3	4205.2	4182.6	3904.6	3526.4
35°	5753.0	5707.9	5642.8	5429.9	5009.1	4628.4	4460.6	4357.9	4332.9	4047.4	3636.6
37.5°	6038.5	6005.9	5950.8	5727.9	5242.1	4843.8	4656.0	4538.3	4510.7	4202.7	3754.3
40°	6459.3	6374.1	6329.0	6005.9	5444.9	5039.2	4876.4	4753.7	4723.6	4368.0	3849.5
42.5°	6817.4	6754.8	6699.7	6253.9	5637.8	5207.0	5084.3	4971.6	4931.5	4530.8	3952.2
45°	6877.5	6902.6	6875.0	6376.6	5943.3	5372.3	5294.6	5222.0	5184.4	4751.2	4107.5
47.5°	6880.0	6880.0	6717.2	6446.7	6321.5	5557.6	5520.1	5545.1	5505.0	5031.7	4292.8
50°	6699.7	6732.3	6647.1	6464.3	6421.7	5743.0	5795.6	5930.8	5890.7	5329.7	4493.2
52.5°	6326.5	6434.2	6431.7	6436.7	6276.4	5900.8	6086.1	6394.2	6326.5	5665.3	4706.1
55°	5667.8	5883.2	6076.1	6241.4	6151.2	5995.9	6441.7	6887.6	6817.4	6041.0	4921.5
57.5°	5104.3	5242.1	5482.5	5950.8	6003.4	6078.6	6774.8	7403.5	7340.9	6456.8	5146.9
60°	4460.6	4651.0	4891.4	5557.6	5823.1	6186.3	7140.5	7906.9	7846.8	6877.5	5364.8
62.5°	3471.3	3716.8	4197.6	4954.0	5560.1	6253.9	7428.5	8350.2	8322.7	7275.8	5560.1
65°	2419.4	2637.3	3311.0	4212.7	5141.9	6223.8	7659.0	8745.9	8720.9	7601.4	5697.9
67.5°	1412.6	1665.5	2426.9	3391.2	4403.0	6016.0	7734.1	8978.9	8978.9	7799.2	5735.5
70°	806.5	924.2	1600.4	2472.0	3376.2	5442.4	7523.7	8976.4	9018.9	7754.1	5580.2
72.5°	563.5	616.1	1077.0	1663.0	2289.2	4403.0	6972.7	8543.1	8600.7	7328.4	5049.2
75°	438.3	475.9	758.9	1134.6	1442.6	2990.4	5768.0	7203.1	7355.9	6246.4	4082.4
77.5°	333.1	360.7	443.3	708.8	924.2	1718.1	3806.9	4723.6	4733.6	3824.5	2189.0
80°	242.9	270.5	295.5	433.3	490.9	804.0	1437.6	1973.6	1918.5	1850.9	1184.7
82.5°	145.3	172.8	180.3	235.4	240.4	343.1	503.4	636.2	611.1	814.0	556.0
85°	62.6	87.7	92.7	107.7	102.7	140.3	200.4	167.8	150.3	172.8	120.2
87.5°	15.0	25.0	25.0	27.6	22.5	35.1	37.6	27.6	25.0	30.1	30.1
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°	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6
2.5°	3048.1	3040.5	3043.0	3000.5	2987.9	2975.4	2967.9	2962.9	2957.9	2965.4	2972.9
5°	3070.6	3053.1	3033.0	2970.4	2945.4	2917.8	2897.8	2880.2	2872.7	2872.7	2880.2
7.5°	3088.1	3058.1	3015.5	2932.8	2887.8	2850.2	2817.6	2795.1	2782.6	2782.6	2790.1
10°	3090.6	3048.1	2980.4	2880.2	2820.1	2765.0	2727.5	2702.4	2684.9	2684.9	2689.9
12.5°	3105.7	3048.1	2960.4	2840.2	2765.0	2697.4	2652.3	2614.8	2607.3	2607.3	2612.3
15°	3130.7	3060.6	2947.9	2805.1	2714.9	2637.3	2587.2	2547.1	2532.1	2542.1	2544.6
17.5°	3153.2	3068.1	2925.3	2760.0	2652.3	2567.2	2512.1	2477.0	2457.0	2479.5	2479.5
20°	3168.3	3068.1	2892.8	2702.4	2584.7	2489.5	2436.9	2394.4	2379.3	2406.9	2409.4
22.5°	3190.8	3065.6	2857.7	2644.8	2512.1	2411.9	2359.3	2326.7	2319.2	2349.3	2359.3
25°	3215.9	3070.6	2820.1	2579.7	2431.9	2334.3	2294.2	2279.2	2284.2	2321.7	2334.3
27.5°	3243.4	3080.6	2782.6	2507.1	2344.3	2256.6	2234.1	2241.6	2261.6	2309.2	2324.2
30°	3268.5	3083.1	2730.0	2421.9	2244.1	2161.4	2171.5	2204.0	2234.1	2281.7	2299.2
32.5°	3301.0	3085.6	2674.9	2329.2	2136.4	2076.3	2121.4	2174.0	2204.0	2249.1	2269.1
35°	3381.2	3128.2	2632.3	2239.1	2036.2	2003.7	2078.8	2146.4	2163.9	2204.0	2221.5
37.5°	3473.8	3198.3	2609.8	2146.4	1938.5	1931.0	2026.2	2093.8	2098.8	2123.9	2141.4
40°	3531.4	3228.4	2584.7	2068.8	1850.9	1855.9	1953.6	2006.2	1996.1	2013.7	2026.2
42.5°	3589.0	3238.4	2532.1	2003.7	1768.2	1773.2	1848.4	1885.9	1890.9	1928.5	1946.0
45°	3686.7	3266.0	2474.5	1943.5	1693.1	1675.6	1720.6	1770.7	1835.8	1908.5	1928.5
47.5°	3817.0	3323.6	2414.4	1870.9	1620.5	1562.8	1580.4	1668.0	1735.7	1803.3	1815.8
50°	3949.7	3381.2	2359.3	1783.2	1547.8	1442.6	1450.1	1530.3	1585.4	1638.0	1645.5
52.5°	4079.9	3431.3	2311.7	1700.6	1465.2	1299.9	1329.9	1412.6	1450.1	1475.2	1482.7
55°	4210.2	3473.8	2269.1	1630.5	1370.0	1187.2	1214.7	1292.4	1329.9	1342.4	1347.5
57.5°	4345.4	3523.9	2236.6	1570.4	1262.3	1087.0	1104.5	1159.6	1194.7	1209.7	1204.7
60°	4458.1	3566.5	2219.0	1507.7	1154.6	994.3	989.3	1039.4	1089.5	1104.5	1099.5
62.5°	4545.8	3594.0	2191.5	1427.6	1059.4	901.6	876.6	941.7	994.3	1004.3	1011.8
65°	4593.4	3596.6	2123.9	1324.9	961.8	801.5	783.9	849.0	881.6	891.6	891.6
67.5°	4585.9	3556.5	1991.1	1187.2	871.6	711.3	696.3	736.3	783.9	791.4	783.9
70°	4430.6	3391.2	1778.2	1041.9	763.9	631.2	603.6	643.7	688.8	661.2	648.7
72.5°	3989.8	2962.9	1465.2	881.6	643.7	531.0	518.4	558.5	561.0	566.0	553.5
75°	3148.2	2206.5	1097.0	686.3	520.9	445.8	443.3	435.8	445.8	465.8	450.8
77.5°	1653.0	1102.0	593.6	420.8	378.2	358.2	340.6	338.1	368.2	380.7	365.7
80°	896.6	618.6	340.6	253.0	230.4	232.9	255.5	250.5	283.0	290.5	278.0
82.5°	390.7	293.0	167.8	152.8	152.8	150.3	157.8	175.3	210.4	210.4	167.8
85°	85.2	72.6	65.1	75.1	85.2	85.2	85.2	85.2	60.1	32.6	22.5
87.5°	27.6	27.6	27.6	30.1	32.6	32.6	27.6	20.0	12.5	2.5	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)