

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: P842100

Luminaire Tested: **ARCH4-270-730-U-T2R**

Issue Date: 5/27/2024

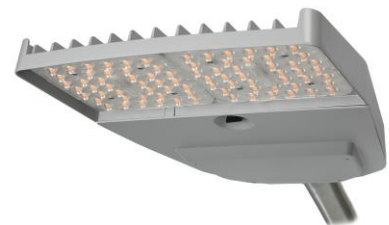
Test Information

Test Method: LM-79-08
Report Number: P842100
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-730-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38562 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

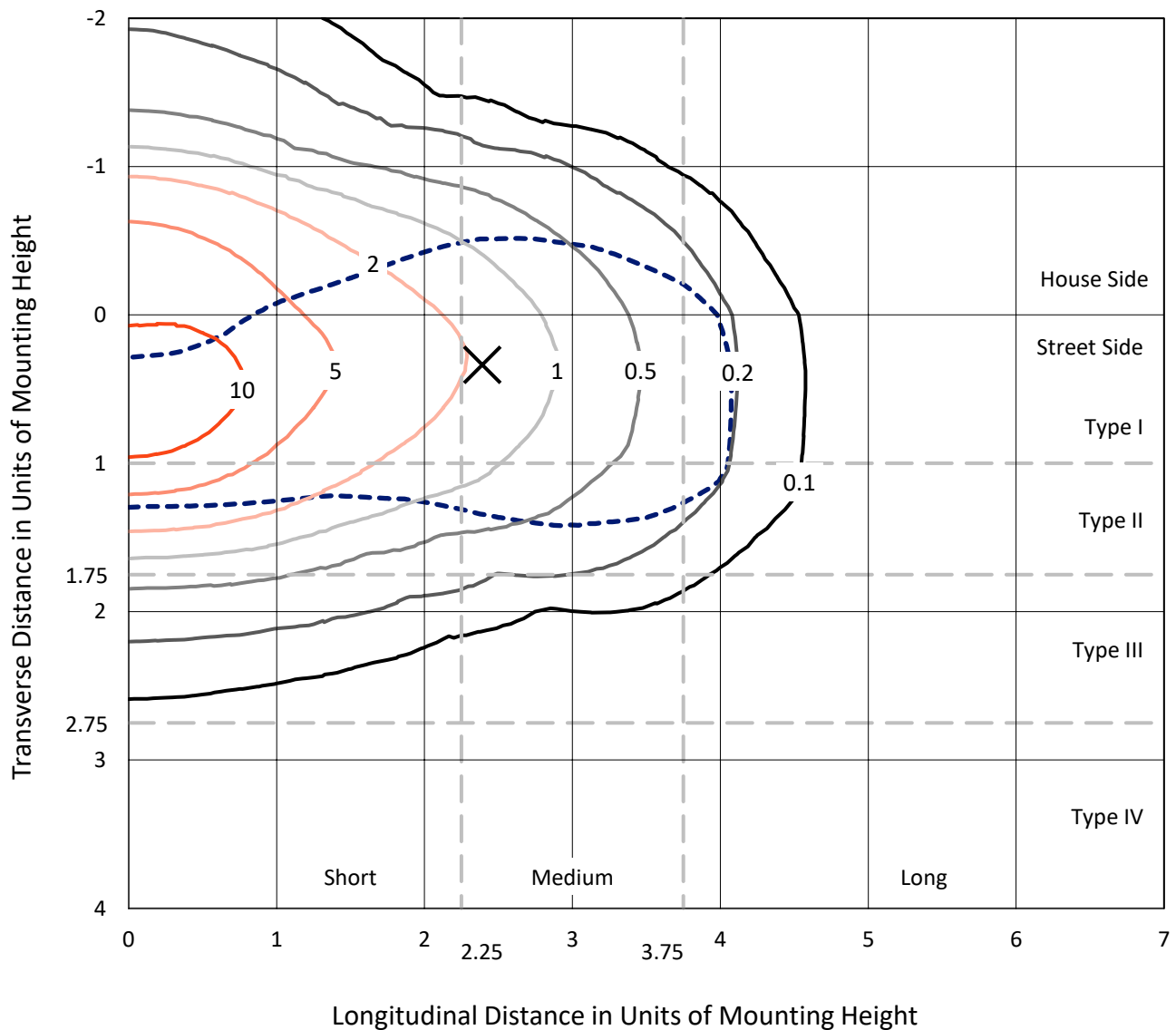
Input Watts (W): 269
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

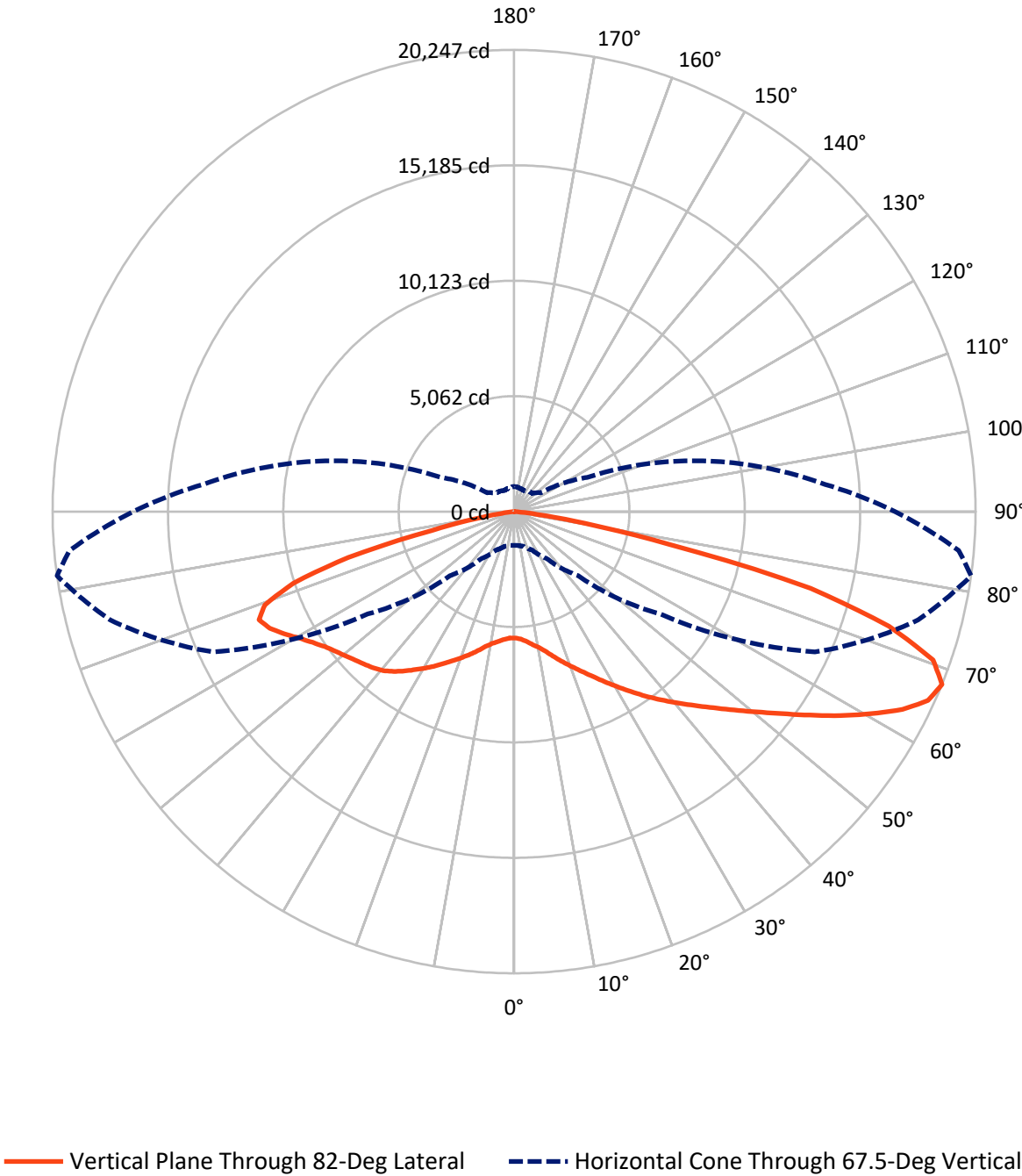
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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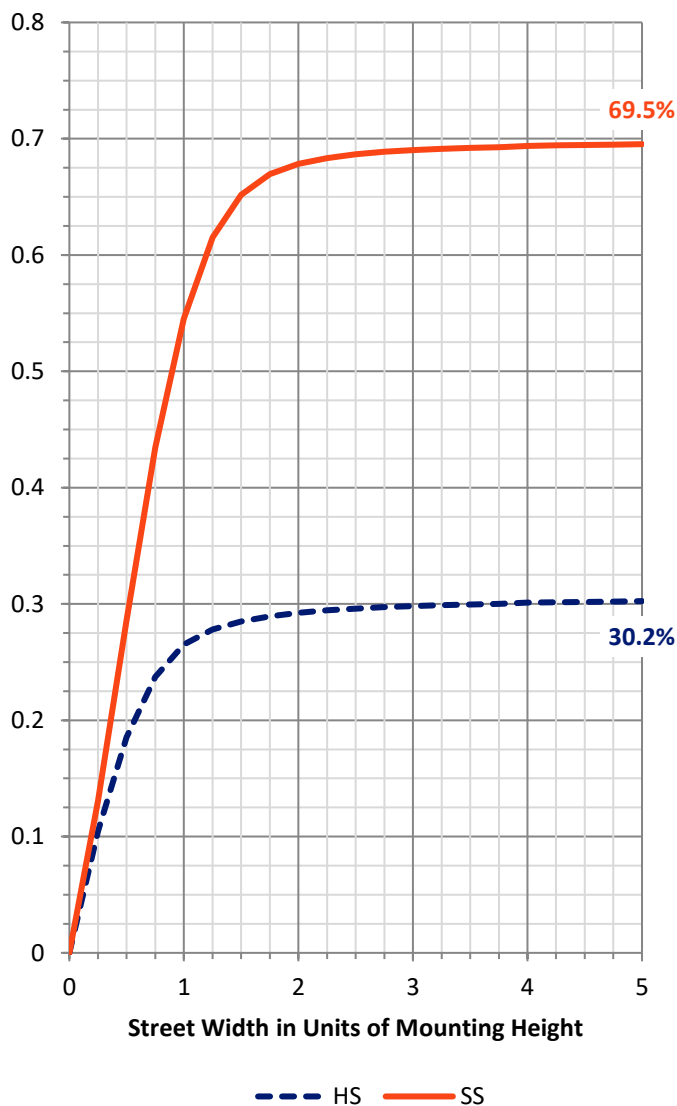
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11743.7	0.0	11743.7
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	26818.3	0.0	26818.3
	% Fixture	69.5	0.0	69.5
Total	Lumens	38562.0	0.0	38562.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	572.9	1.5
10°-20°	2063.5	5.4
20°-30°	4147.2	10.8
30°-40°	6514.6	16.9
40°-50°	7936.1	20.6
50°-60°	7498.6	19.4
60°-70°	6192.1	16.1
70°-80°	3371.9	8.7
80°-90°	265.1	0.7
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°	38562.0	100.0
0°-180°	38562.0	100.0

Coefficient of Utilization



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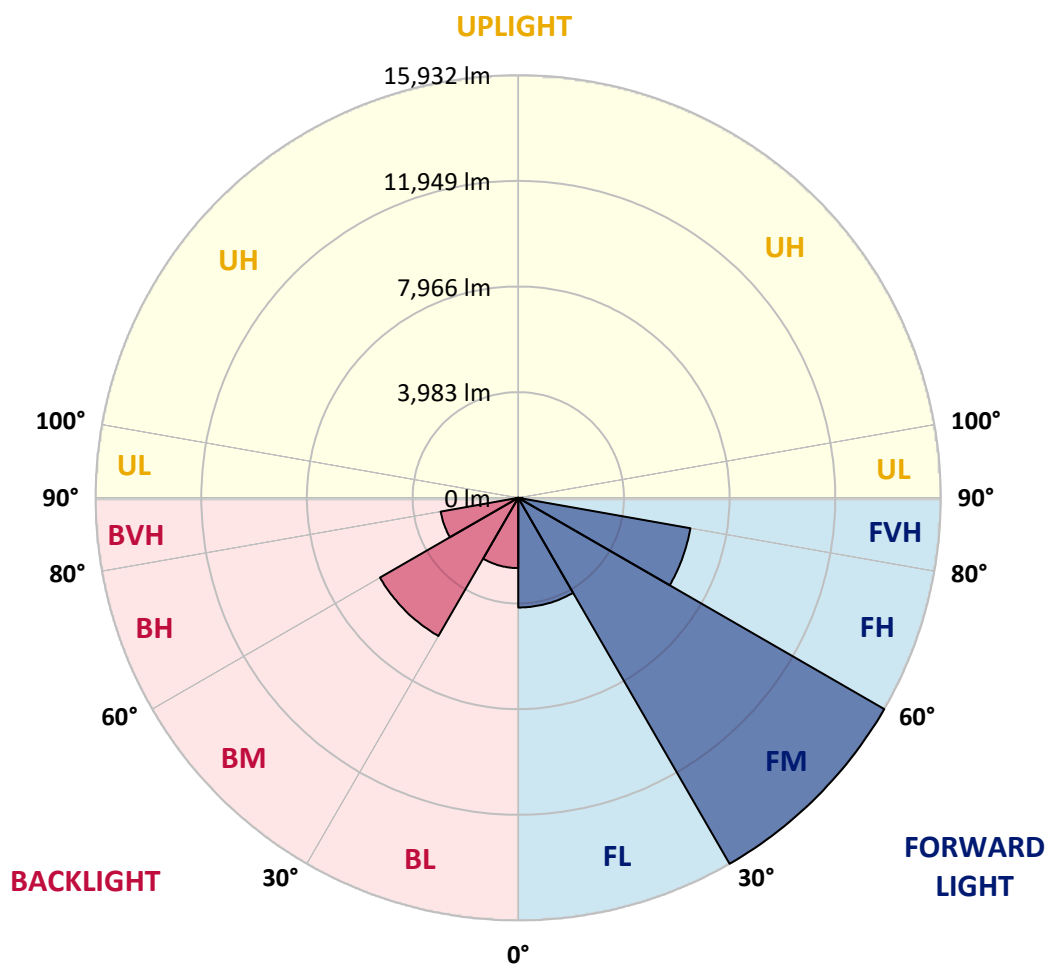
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4135.3	10.7			
FM	(30°-60°)	15931.6	41.3			
FH	(60°-80°)	6591.6	17.1			G3/7500
FVH	(80°-90°)	159.8	0.4			G2/225
BL	(0°-30°)	2648.3	6.9	B4/5000		
BM	(30°-60°)	6017.7	15.6	B4/8500		
BH	(60°-80°)	2972.4	7.7	B4/5000		G4/5000
BVH	(80°-90°)	105.3	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3
2.5°	5795.2	5795.2	5840.0	5840.0	5800.8	5739.2	5722.4	5655.3	5593.7	5593.7	5599.3
5°	6349.6	6344.0	6377.6	6332.8	6237.6	6114.4	6030.4	5884.8	5761.6	5722.4	5716.8
7.5°	7027.1	7021.5	7038.3	6965.5	6786.3	6584.7	6416.8	6181.6	5980.0	5896.0	5873.6
10°	7783.0	7777.4	7760.6	7637.4	7396.6	7083.1	6831.1	6506.3	6204.0	6069.6	6041.6
12.5°	8650.9	8639.7	8600.5	8421.3	8090.9	7687.8	7323.8	6903.9	6500.7	6316.0	6254.4
15°	9619.5	9602.7	9529.9	9311.6	8869.2	8359.7	7889.4	7351.8	6859.1	6618.3	6534.3
17.5°	10638.6	10638.6	10526.6	10201.9	9709.1	9076.4	8494.1	7811.0	7234.2	6937.5	6836.7
20°	11674.5	11668.9	11528.9	11136.9	10554.6	9826.7	9087.6	8337.3	7620.6	7262.2	7139.1
22.5°	12766.3	12755.1	12581.5	12133.6	11439.3	10616.2	9753.9	8858.0	8046.1	7615.0	7458.2
25°	14020.5	14003.7	13791.0	13242.3	12419.2	11489.7	10504.2	9468.3	8533.3	8006.9	7822.2
27.5°	15353.2	15330.8	15078.8	14440.5	13539.0	12419.2	11332.9	10173.9	9070.8	8443.7	8236.5
30°	16540.2	16523.4	16249.1	15593.9	14558.1	13343.0	12122.4	10879.4	9636.3	8908.4	8650.9
32.5°	17436.1	17436.1	17189.7	16545.8	15470.8	14227.7	12917.5	11545.7	10224.2	9406.8	9104.4
35°	17979.2	17996.0	17783.3	17268.1	16254.7	15062.0	13740.6	12329.6	10851.4	9938.7	9613.9
37.5°	18057.6	18113.6	17990.4	17643.3	16797.8	15756.3	14546.9	13085.5	11500.9	10476.2	10112.3
40°	17693.7	17732.9	17738.5	17604.1	17021.8	16254.7	15258.0	13886.2	12189.6	11041.7	10621.8
42.5°	16965.8	16993.8	17044.1	17083.3	16859.4	16473.0	15801.1	14630.9	12923.1	11618.5	11125.7
45°	16025.1	16019.5	16103.5	16271.5	16260.3	16349.8	16103.5	15308.4	13684.6	12273.6	11685.7
47.5°	14619.7	14591.7	14888.4	15269.2	15459.6	15879.5	16109.1	15840.3	14513.3	12995.9	12324.0
50°	12419.2	12391.2	13040.7	13936.6	14496.5	15134.8	15801.1	16159.5	15381.2	13807.8	13018.3
52.5°	9742.7	9714.7	10537.8	12105.6	13326.2	14255.7	15179.6	16232.3	16204.3	14714.9	13802.2
55°	7245.4	7223.0	8023.7	9720.3	11696.9	13236.7	14418.1	16041.9	16977.0	15756.3	14754.1
57.5°	5106.5	5095.3	5789.6	7195.0	9602.7	11993.6	13684.6	15672.3	17688.1	16887.4	15829.1
60°	3583.5	3566.7	4070.7	5156.9	7262.2	10117.9	12956.7	15179.6	18220.0	18001.6	16971.4
62.5°	2413.3	2402.1	2760.4	3667.5	5156.9	7788.6	11853.6	14849.2	18522.4	19121.5	18124.8
65°	1831.0	1825.4	1987.7	2486.1	3650.7	5593.7	10101.1	14810.0	18561.5	19961.4	19104.7
67.5°	1478.2	1483.8	1573.4	1859.0	2525.3	3975.5	7833.4	14563.7	18354.4	20246.9	19580.6
70°	1209.4	1209.4	1248.6	1439.0	1864.6	2682.0	5470.5	13443.8	17777.7	19502.2	19015.1
72.5°	923.9	929.5	1052.7	1164.6	1405.4	1881.4	3505.1	11125.7	16417.0	17195.3	16825.8
75°	733.5	727.9	800.7	957.5	1091.9	1343.8	2150.1	7978.9	13970.2	13438.2	13203.1
77.5°	526.3	520.7	576.7	711.1	828.7	951.9	1282.2	4025.9	7598.2	6982.3	6808.7
80°	358.4	347.2	397.5	492.7	548.7	559.9	627.1	1545.4	3314.8	3124.4	3085.2
82.5°	184.8	184.8	212.8	280.0	285.6	291.2	280.0	498.3	1097.5	1024.7	979.9
85°	72.8	72.8	78.4	95.2	95.2	100.8	100.8	128.8	117.6	112.0	106.4
87.5°	5.6	5.6	11.2	11.2	16.8	16.8	16.8	22.4	28.0	28.0	28.0
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°	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3	5543.3
2.5°	5588.1	5565.7	5492.9	5476.1	5464.9	5448.1	5453.7	5414.5	5397.7	5403.3	5380.9
5°	5688.8	5649.7	5560.1	5520.9	5509.7	5492.9	5509.7	5481.7	5453.7	5464.9	5453.7
7.5°	5828.8	5772.8	5660.9	5621.7	5616.1	5599.3	5621.7	5599.3	5576.9	5588.1	5565.7
10°	5974.4	5901.6	5778.4	5739.2	5739.2	5733.6	5756.0	5722.4	5700.0	5705.6	5694.4
12.5°	6187.2	6092.0	5957.6	5924.0	5907.2	5924.0	5929.6	5884.8	5845.6	5851.2	5834.4
15°	6444.7	6338.4	6192.8	6142.4	6131.2	6125.6	6103.2	6047.2	5996.8	5991.2	5974.4
17.5°	6724.7	6590.3	6416.8	6366.4	6316.0	6299.2	6243.2	6170.4	6092.0	6092.0	6069.6
20°	6993.5	6842.3	6635.1	6562.3	6489.5	6422.4	6327.2	6209.6	6108.8	6092.0	6069.6
22.5°	7284.6	7105.5	6864.7	6758.3	6629.5	6495.1	6332.8	6176.0	6047.2	6019.2	6002.4
25°	7609.4	7385.4	7099.9	6943.1	6735.9	6528.7	6288.0	6086.4	5935.2	5890.4	5879.2
27.5°	7967.7	7699.0	7351.8	7122.3	6819.9	6495.1	6187.2	5946.4	5761.6	5705.6	5688.8
30°	8331.7	8012.5	7581.4	7245.4	6819.9	6388.8	6002.4	5722.4	5509.7	5431.3	5420.1
32.5°	8695.7	8337.3	7788.6	7312.6	6752.7	6209.6	5761.6	5431.3	5190.5	5095.3	5117.7
35°	9132.4	8695.7	7978.9	7340.6	6640.7	5991.2	5487.3	5100.9	4854.6	4770.6	4787.4
37.5°	9585.9	9054.0	8130.1	7318.2	6483.9	5744.8	5179.3	4804.2	4496.2	4350.6	4367.4
40°	9977.9	9378.8	8236.5	7239.8	6282.4	5464.9	4877.0	4384.2	3958.7	3818.7	3801.9
42.5°	10347.4	9619.5	8292.5	7122.3	6052.8	5140.1	4445.8	3813.1	3387.6	3214.0	3219.6
45°	10733.8	9854.7	8270.1	6965.5	5767.2	4759.4	3891.5	3253.2	2878.0	2721.2	2726.8
47.5°	11176.1	10106.7	8247.7	6797.5	5420.1	4266.6	3359.6	2760.4	2435.7	2323.7	2312.5
50°	11646.5	10386.6	8219.7	6590.3	5033.7	3717.9	2833.2	2301.3	2026.9	1954.1	1937.3
52.5°	12178.4	10689.0	8202.9	6344.0	4569.0	3135.6	2362.9	1898.1	1713.4	1663.0	1657.4
55°	12816.7	11041.7	8225.3	6047.2	4009.1	2586.9	1965.3	1635.0	1511.8	1483.8	1478.2
57.5°	13595.0	11495.3	8292.5	5700.0	3421.1	2110.9	1674.2	1472.6	1394.2	1371.8	1371.8
60°	14440.5	12010.4	8415.7	5308.1	2833.2	1741.4	1483.8	1343.8	1310.2	1338.2	1338.2
62.5°	15353.2	12615.1	8634.1	4832.2	2284.5	1472.6	1332.6	1237.4	1215.0	1271.0	1276.6
65°	16198.7	13203.1	8774.0	4261.0	1814.2	1276.6	1215.0	1131.1	1142.2	1198.2	1192.6
67.5°	16719.4	13690.2	8578.1	3544.3	1439.0	1131.1	1091.9	1019.1	1047.1	1091.9	1097.5
70°	16400.2	13415.8	7609.4	2676.4	1125.5	985.5	957.5	912.7	935.1	991.1	1013.5
72.5°	14838.0	12016.0	5918.4	1808.6	907.1	828.7	839.9	817.5	845.5	895.9	946.3
75°	12044.0	9082.0	3969.9	1159.0	716.7	705.5	722.3	705.5	716.7	767.1	795.1
77.5°	6288.0	4429.0	1976.5	722.3	531.9	548.7	576.7	582.3	615.9	627.1	638.3
80°	2934.0	1993.3	823.1	403.1	352.8	386.3	442.3	447.9	459.1	475.9	481.5
82.5°	957.5	599.1	380.7	218.4	201.6	218.4	285.6	341.6	347.2	380.7	380.7
85°	100.8	61.6	84.0	89.6	78.4	95.2	128.8	123.2	56.0	33.6	33.6
87.5°	28.0	22.4	28.0	28.0	22.4	22.4	16.8	5.6	0.0	0.0	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)