

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: McGRAW-EDISON

Report Number: P591284

Luminaire Tested: **CTN-CA8-480-727-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591284
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-727-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32657 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 480.8
Input Voltage (V): 120
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



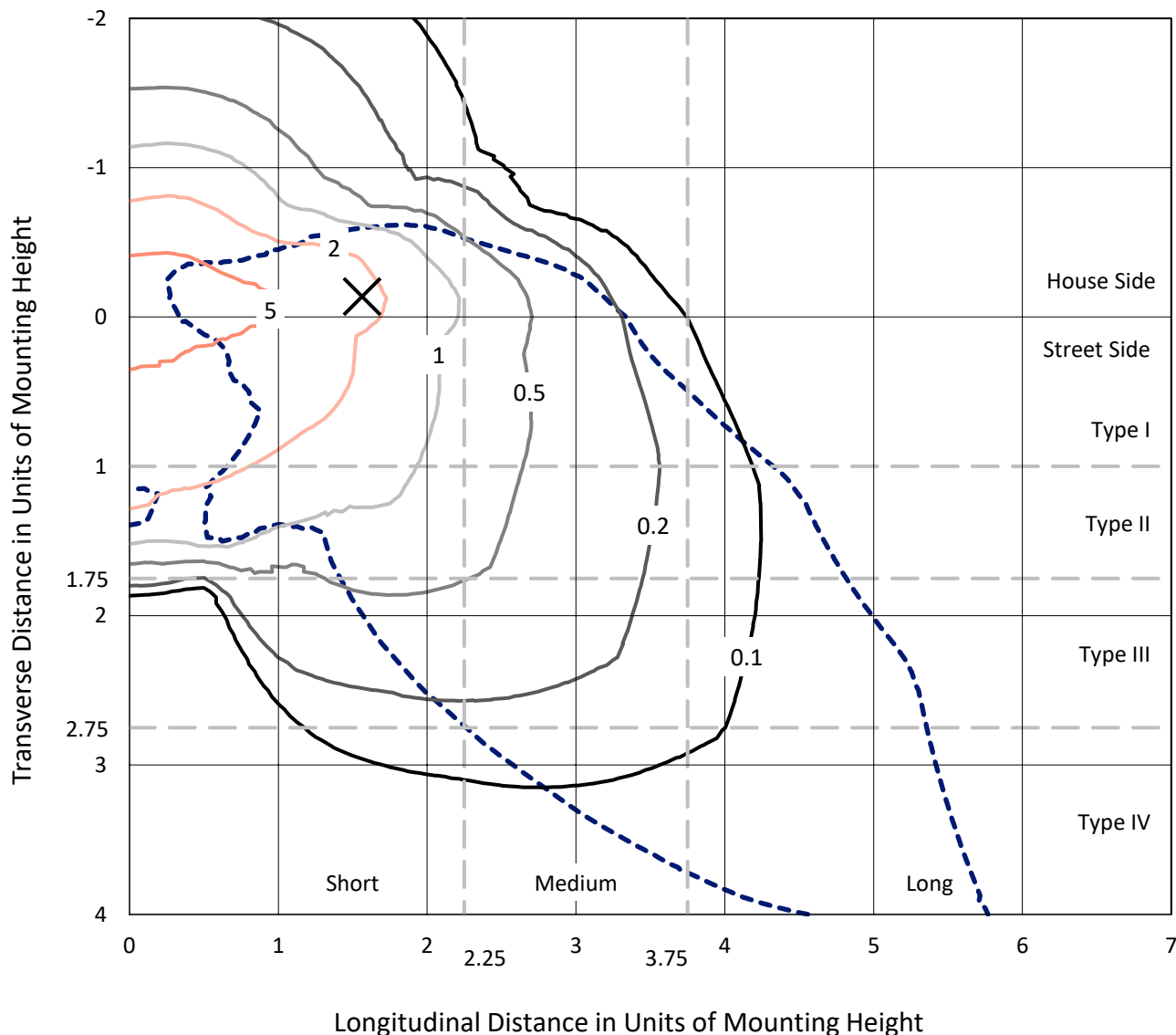
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

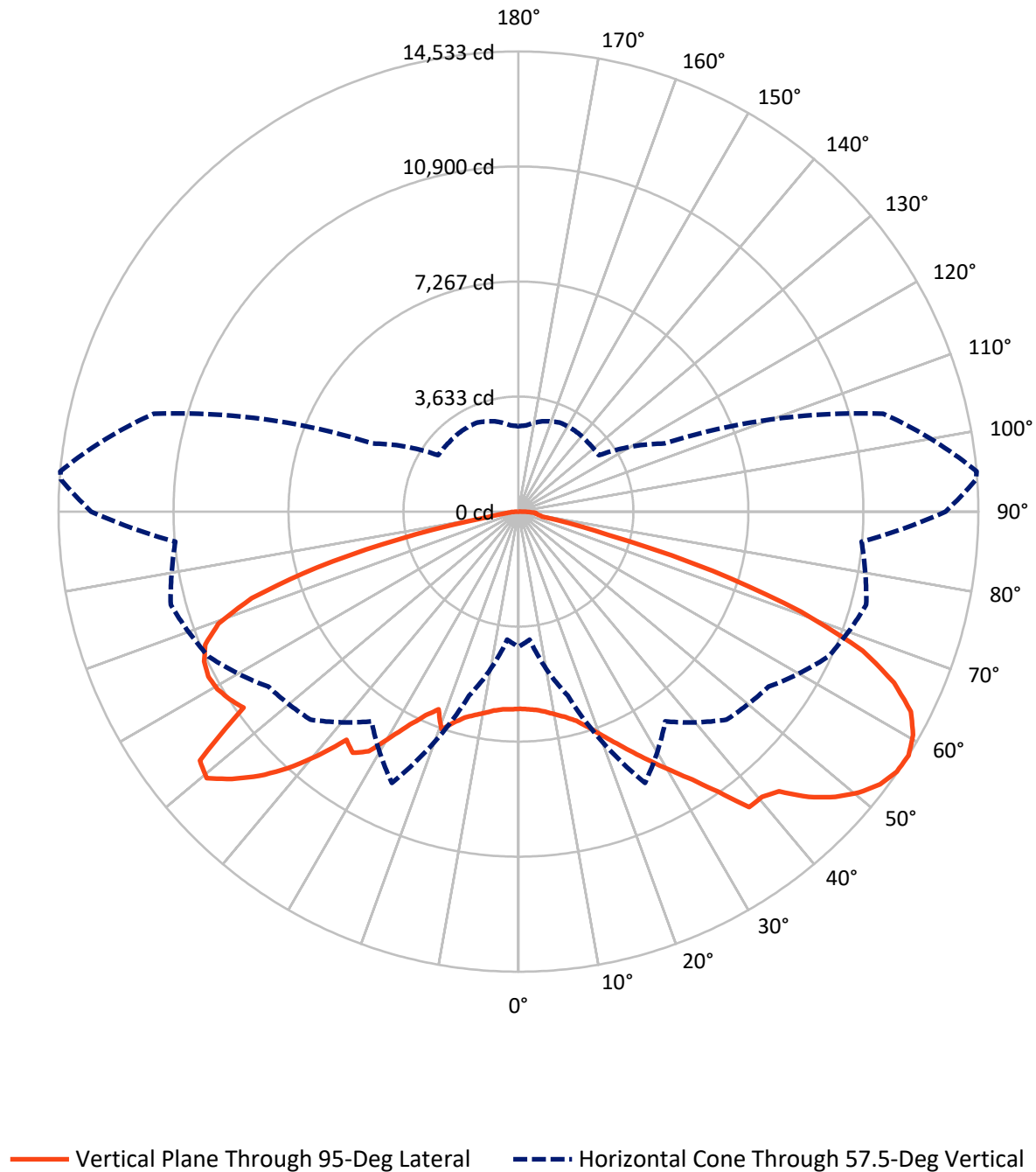


Based on 30 foot mounting height. Maximum calculated value = 7.4 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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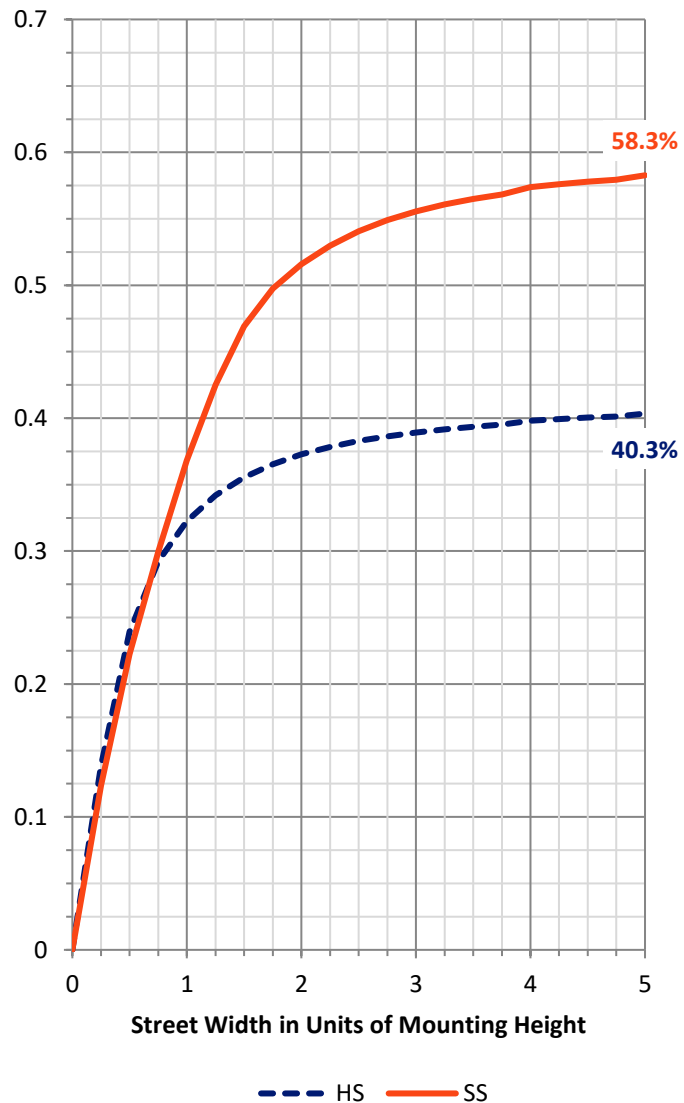
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13450.4	0.0	13450.4
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	19206.6	0.0	19206.6
	% Fixture	58.8	0.0	58.8
Total	Lumens	32657.0	0.0	32657.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	608.4	1.9
10°-20°	1860.6	5.7
20°-30°	2940.2	9.0
30°-40°	4062.8	12.4
40°-50°	5478.0	16.8
50°-60°	6452.9	19.8
60°-70°	5764.8	17.7
70°-80°	4304.5	13.2
80°-90°	1184.8	3.6
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°	32657.0	100.0
0°-180°	32657.0	100.0

Coefficient of Utilization



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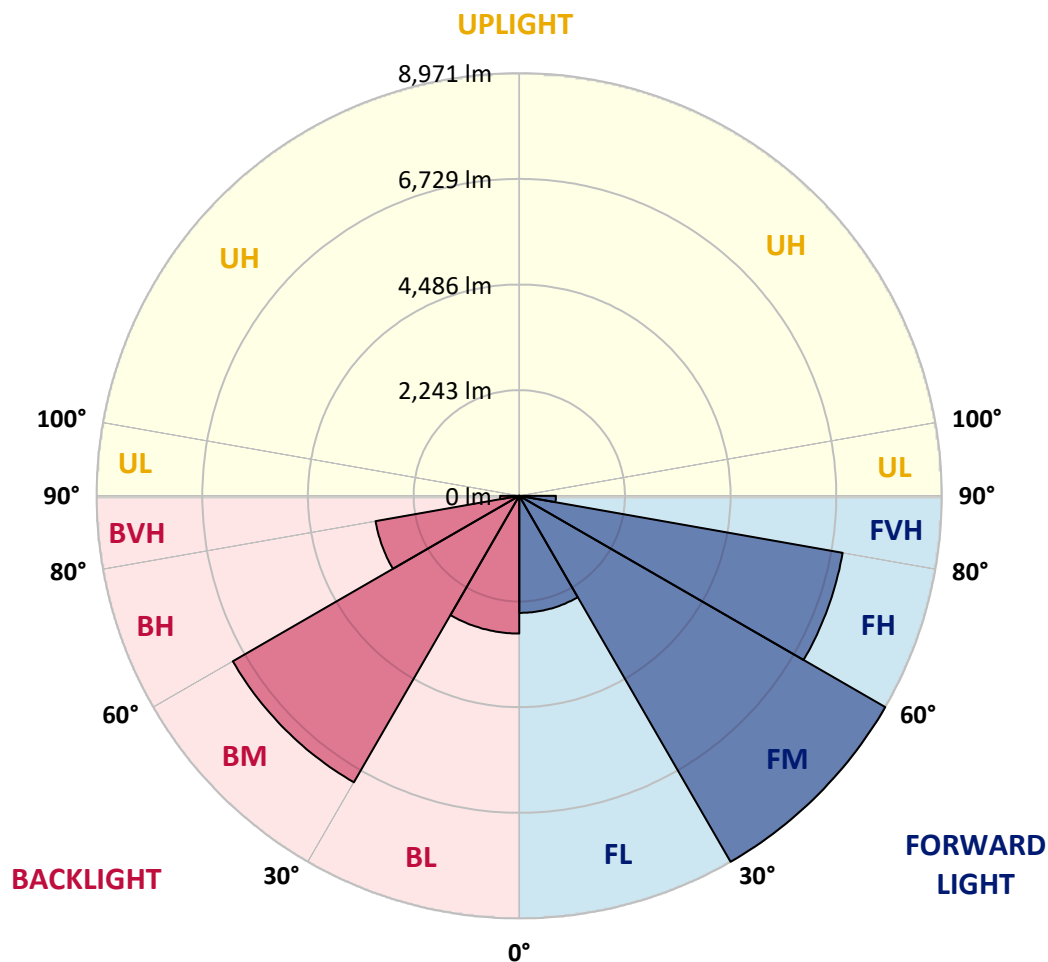
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2485.6	7.6			
FM	(30°-60°)	8971.5	27.5			
FH	(60°-80°)	6971.2	21.3			G3/7500
FVH	(80°-90°)	778.2	2.4			G5
BL	(0°-30°)	2923.6	9.0	B4/5000		
BM	(30°-60°)	7022.2	21.5	B4/8500		
BH	(60°-80°)	3098.0	9.5	B4/5000		G4/5000
BVH	(80°-90°)	406.6	1.2			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7
2.5°	6148.9	6109.8	6111.7	6165.6	6085.6	6143.3	6135.8	6225.1	6212.1	6247.4	6258.6
5°	6098.6	6065.2	6067.0	6135.8	6081.9	6134.0	6098.6	6180.5	6210.2	6264.2	6275.3
7.5°	6111.7	6081.9	6093.1	6158.2	6091.2	6143.3	6147.0	6223.3	6238.1	6331.1	6346.0
10°	6145.1	6113.5	6121.0	6173.0	6130.3	6223.3	6212.1	6312.5	6316.3	6446.5	6465.1
12.5°	6100.5	6078.2	6078.2	6143.3	6165.6	6258.6	6286.5	6390.7	6413.0	6563.6	6587.8
15°	6020.5	5983.3	6037.3	6134.0	6178.6	6320.0	6372.1	6528.3	6554.3	6710.6	6762.6
17.5°	5882.9	5862.4	6061.5	6091.2	5922.0	6029.8	6251.2	6688.2	6777.5	6961.6	7058.4
20°	5471.9	5241.2	4709.3	4806.0	5326.8	5715.5	5784.3	5994.5	6377.6	7294.6	7445.2
22.5°	4023.0	4222.0	4925.0	4982.7	4966.0	5287.7	6011.2	6214.0	6396.2	6732.9	7733.5
25°	4166.2	4155.0	4499.1	5230.1	5204.0	5265.4	5568.6	6554.3	6736.6	7071.4	8112.9
27.5°	4294.5	4303.8	4277.8	4966.0	5453.3	5516.5	5609.5	6282.8	7164.4	7547.5	8527.7
30°	4549.3	4510.3	4439.6	4437.7	5670.9	5763.9	5922.0	6147.0	7558.7	8166.9	9046.6
32.5°	4979.0	4934.3	4841.3	4694.4	4900.9	6020.5	6238.1	6524.6	6974.7	8927.6	9654.8
35°	5297.0	5265.4	5202.2	5099.9	4934.3	6148.9	6546.9	6926.3	7521.5	9243.8	10452.7
37.5°	5689.5	5644.8	5572.3	5445.8	5321.2	5271.0	6844.5	7382.0	8284.0	9029.9	10625.7
40°	6134.0	6107.9	5975.9	5812.2	5674.6	5535.1	7049.1	7977.2	9264.2	9989.6	10467.6
42.5°	6468.8	6448.3	6370.2	6238.1	6104.2	6015.0	6247.4	8708.1	10331.8	10917.7	11269.2
45°	6760.8	6738.5	6738.5	6703.1	6665.9	6673.4	6773.8	9232.6	11345.5	11710.0	12028.0
47.5°	6985.8	6946.8	6790.5	6822.2	6876.1	7037.9	7342.9	8027.4	12162.0	12383.3	12666.0
50°	7534.5	7475.0	6969.1	7086.3	7261.1	7521.5	7913.9	8775.1	11356.6	12958.0	13179.3
52.5°	8040.4	7765.1	5756.4	7475.0	7672.1	8057.1	8522.1	9584.1	10452.7	12772.0	13571.8
55°	7173.7	6892.8	5786.2	8189.2	8155.7	8641.1	9095.0	10248.1	10943.7	10668.5	13473.2
57.5°	4270.4	4058.3	6020.5	9457.6	8085.0	9294.0	9643.6	10815.4	11375.2	10882.3	13499.2
60°	2211.4	2324.9	2235.6	5596.5	6961.6	9580.4	10210.9	11362.2	11667.2	11042.3	13516.0
62.5°	297.6	213.9	89.3	4093.7	4947.4	7982.7	10923.3	11883.0	11881.1	11096.2	13398.8
65°	18.6	20.5	40.9	4073.2	5457.0	9470.7	12102.4	12303.3	11987.1	11001.4	13008.2
67.5°	7.4	9.3	37.2	4045.3	5888.5	9956.1	13489.9	12437.2	11998.3	10746.6	12150.8
70°	7.4	9.3	37.2	3768.2	6182.3	10041.7	13724.3	12387.0	11860.7	10119.8	10556.9
72.5°	9.3	11.2	33.5	3273.4	6003.8	9809.2	13341.1	12284.7	11367.8	8858.8	8196.6
75°	9.3	11.2	33.5	2644.8	5311.9	9301.4	13038.0	11429.2	9965.4	6619.4	5315.6
77.5°	7.4	9.3	33.5	2064.5	4428.4	8243.1	11827.2	9937.5	7880.4	3851.9	2099.8
80°	7.4	9.3	33.5	1437.7	3373.9	6757.1	9634.3	7739.1	4432.2	1101.1	591.5
82.5°	7.4	9.3	31.6	896.5	2386.3	4969.7	6584.1	3567.3	950.4	429.6	461.3
85°	7.4	7.4	24.2	438.9	1525.1	3301.3	3280.9	597.0	377.6	279.0	349.7
87.5°	3.7	5.6	13.0	200.9	851.8	1740.9	1307.5	228.8	161.8	113.5	195.3
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):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7	6230.7
2.5°	6262.3	6253.0	6279.1	6346.0	6342.3	6392.5	6353.5	6429.7	6442.7	6426.0	6452.0
5°	6295.8	6299.5	6370.2	6440.9	6414.8	6496.7	6513.4	6626.9	6630.6	6615.7	6649.2
7.5°	6379.5	6392.5	6463.2	6546.9	6584.1	6652.9	6643.6	6790.5	6777.5	6770.1	6809.1
10°	6496.7	6520.8	6597.1	6729.2	6712.4	6818.4	6770.1	6868.7	6864.9	6850.1	6892.8
12.5°	6639.9	6664.1	6760.8	6887.3	6889.1	6896.6	6857.5	6907.7	6891.0	6855.6	6889.1
15°	6833.3	6861.2	6993.3	7086.3	7006.3	6985.8	6911.4	6883.5	6820.3	6727.3	6755.2
17.5°	7138.3	7160.7	7309.5	7361.5	7223.9	7142.1	6930.0	6771.9	6593.4	6463.2	6487.4
20°	7523.3	7543.8	7664.7	7651.7	7467.5	7266.7	6937.5	6669.6	6336.7	6081.9	6074.5
22.5°	7947.4	7960.4	8075.7	7960.4	7633.1	7341.1	6922.6	6511.5	5951.7	5622.5	5587.2
25°	8414.2	8425.4	8423.5	8166.9	7727.9	7298.3	6785.0	6247.4	5529.5	5178.0	5140.8
27.5°	8936.9	8938.7	8734.1	8326.8	7687.0	7140.2	6519.0	5773.2	5142.7	4837.6	4809.7
30°	9493.0	9489.3	9018.7	8341.7	7528.9	6840.8	6107.9	5324.9	4794.9	4523.3	4484.2
32.5°	10127.2	10095.6	9271.7	8289.6	7240.6	6411.1	5577.9	4949.2	4521.4	4210.8	4153.2
35°	10940.0	10861.9	9487.4	8109.2	6812.9	5830.8	5086.9	4621.9	4257.3	3941.2	3883.5
37.5°	11946.2	11845.8	9825.9	7854.4	6320.0	5351.0	4726.0	4400.6	4067.6	3706.8	3632.4
40°	11656.1	11849.5	10229.5	7579.1	5843.8	4967.8	4514.0	4294.5	3952.3	3552.4	3481.8
42.5°	12104.3	12080.1	10781.9	7253.7	5386.3	4668.4	4428.4	4262.9	3890.9	3485.5	3403.6
45°	12866.9	12861.3	11377.1	6937.5	4939.9	4428.4	4363.4	4177.4	3803.5	3401.8	3312.5
47.5°	13486.2	13467.6	11946.2	6589.7	4527.0	4240.6	4231.3	4004.4	3647.3	3273.4	3191.6
50°	13917.7	13945.6	12262.4	6254.9	4136.4	4047.2	4011.8	3760.7	3427.8	3119.1	3055.8
52.5°	14258.1	14310.2	12400.0	6223.3	3794.2	3797.9	3736.6	3507.8	3247.4	2998.2	2931.2
55°	14425.5	14505.4	12258.7	6018.7	3459.4	3481.8	3422.2	3277.2	3122.8	2894.0	2845.7
57.5°	14494.3	14533.3	11931.3	5090.6	3100.5	3096.8	3115.4	3100.5	2955.4	2730.3	2695.0
60°	14377.1	14325.0	11219.0	3868.6	2735.9	2752.7	2871.7	2856.8	2728.5	2557.4	2509.0
62.5°	14016.3	13914.0	9915.2	2860.5	2443.9	2579.7	2706.2	2663.4	2507.2	2350.9	2313.7
65°	13328.1	13039.8	7900.9	2233.8	2304.4	2490.4	2607.6	2544.4	2365.8	2181.7	2159.4
67.5°	12093.1	11732.3	5185.4	2003.1	2244.9	2414.2	2536.9	2430.9	2257.9	2058.9	2027.3
70°	9868.7	9472.5	2455.1	1867.4	2111.0	2278.4	2367.7	2259.8	2083.1	1884.1	1861.8
72.5°	6881.7	6431.6	1322.4	1720.4	1956.6	2101.7	2161.2	2029.2	1874.8	1787.4	1781.8
75°	3429.7	2931.2	1199.6	1569.8	1757.6	1884.1	1984.5	1893.4	1757.6	1597.7	1556.7
77.5°	913.2	784.9	1129.0	1402.4	1599.5	1742.7	1800.4	1705.5	1549.3	1413.5	1389.4
80°	634.2	647.2	1054.6	1162.4	1394.9	1523.3	1577.2	1456.3	1378.2	1244.3	1207.1
82.5°	537.5	565.4	851.8	876.0	1108.5	1246.1	1341.0	1320.5	1208.9	1101.1	1086.2
85°	504.0	535.7	545.0	606.3	794.2	956.0	1119.7	1129.0	1054.6	916.9	872.3
87.5°	290.1	286.4	262.2	308.7	435.2	530.1	641.7	611.9	498.5	431.5	422.2
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)