

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: P591424

Luminaire Tested: **CTN-CA10-760-740-U-T2-SSS-HM-EX90**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591424  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-760-740-U-T2-SSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 77406 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type II - Short  
BUG Rating: B5 - U0 - G5

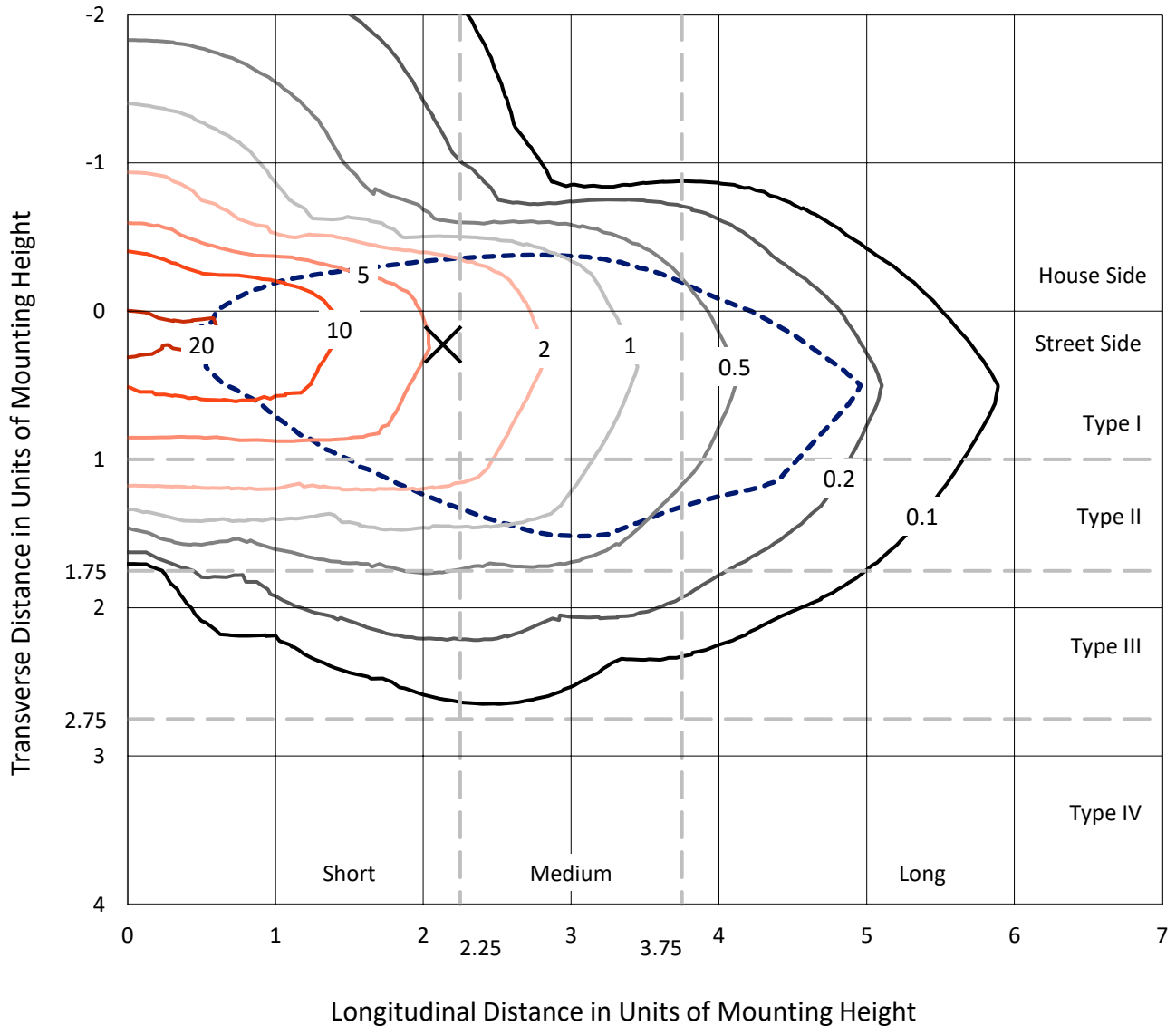
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P591424  
 CATALOG NUMBER: CTN-CA10-760-740-U-T2-SSS-HM-EX90

### Iso-Footcandle Lines of Horizontal Illumination

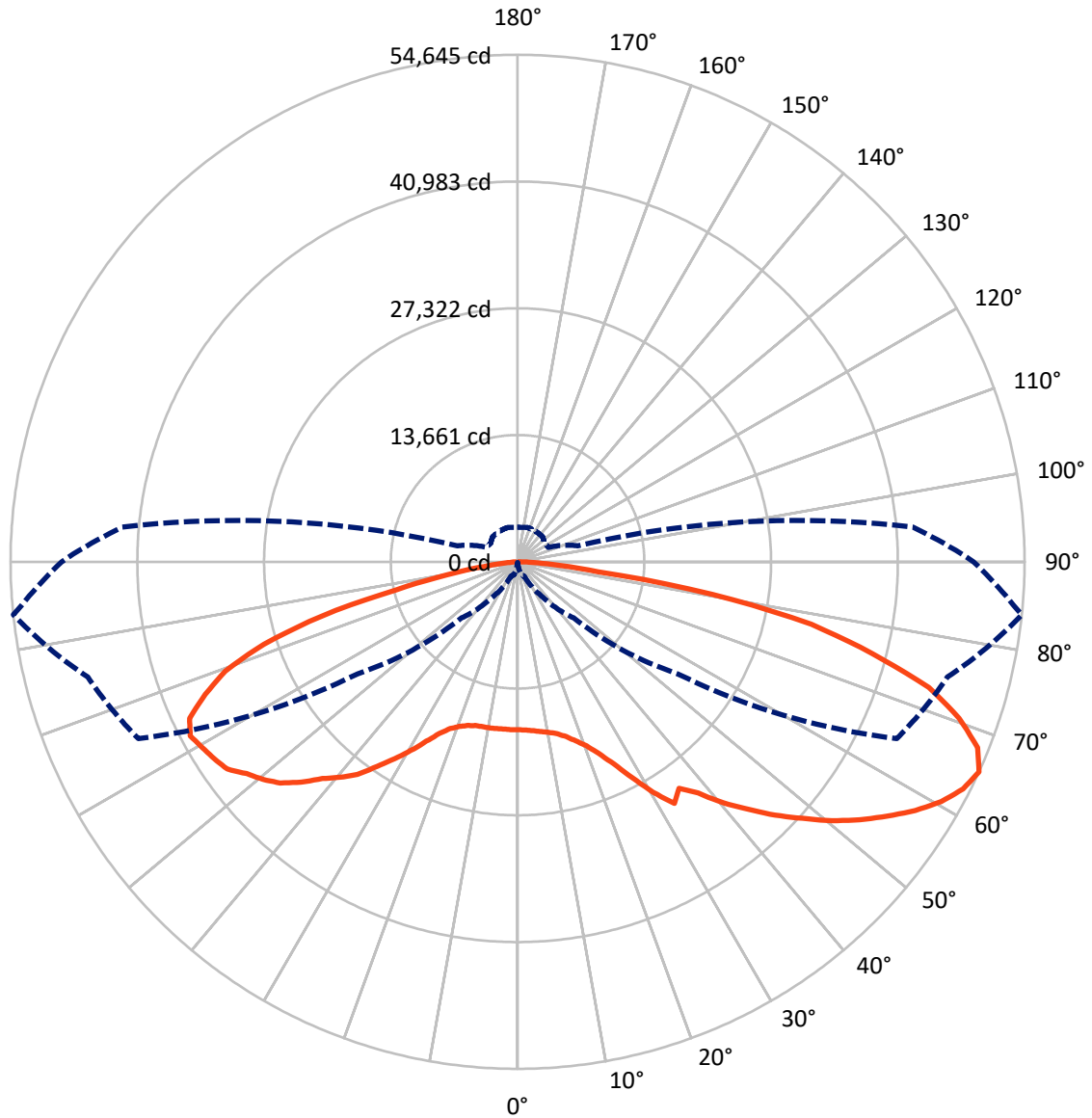
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 23.3 fc  
 Type II - Short - N/A

REPORT NUMBER: P591424  
CATALOG NUMBER: CTN-CA10-760-740-U-T2-SSS-HM-EX90

### Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P591424  
 CATALOG NUMBER: CTN-CA10-760-740-U-T2-SSS-HM-EX90

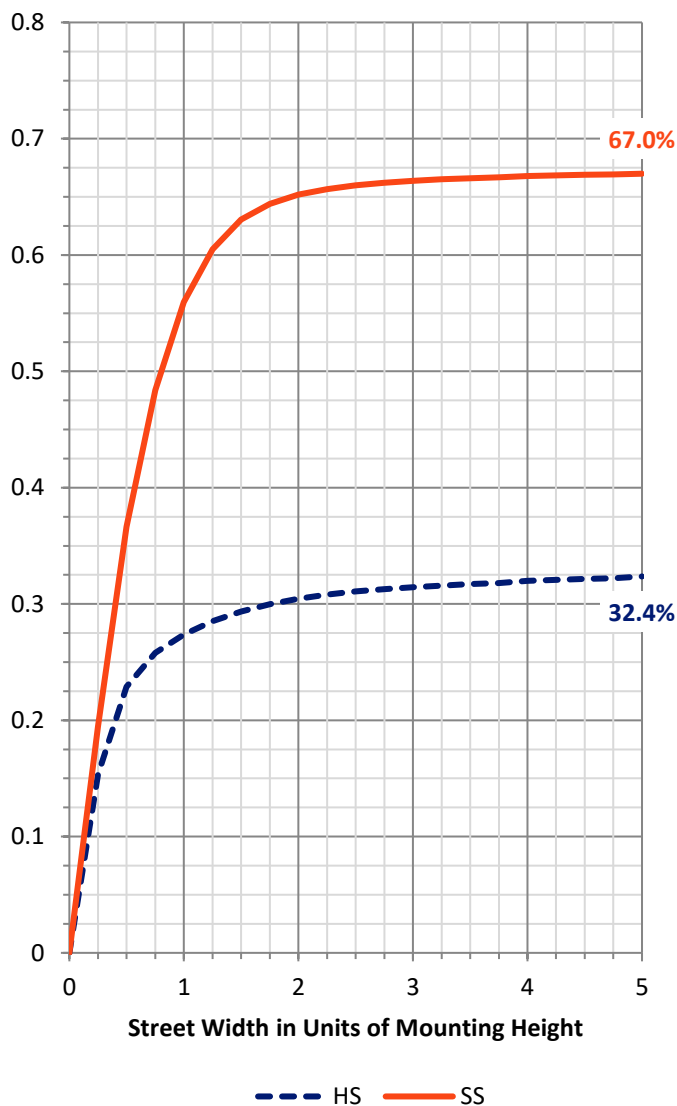
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	25625.3	0.0	25625.3
	% Fixture	33.1	0.0	33.1
<b>Street Side</b>	Lumens	51780.8	0.0	51780.8
	% Fixture	66.9	0.0	66.9
<b>Total</b>	Lumens	77406.0	0.0	77406.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1746.9	2.3
10°-20°	5199.7	6.7
20°-30°	7812.4	10.1
30°-40°	10389.0	13.4
40°-50°	12827.2	16.6
50°-60°	14414.2	18.6
60°-70°	14137.2	18.3
70°-80°	9192.4	11.9
80°-90°	1687.0	2.2
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°	77406.0	100.0
0°-180°	77406.0	100.0

**Coefficient of Utilization**

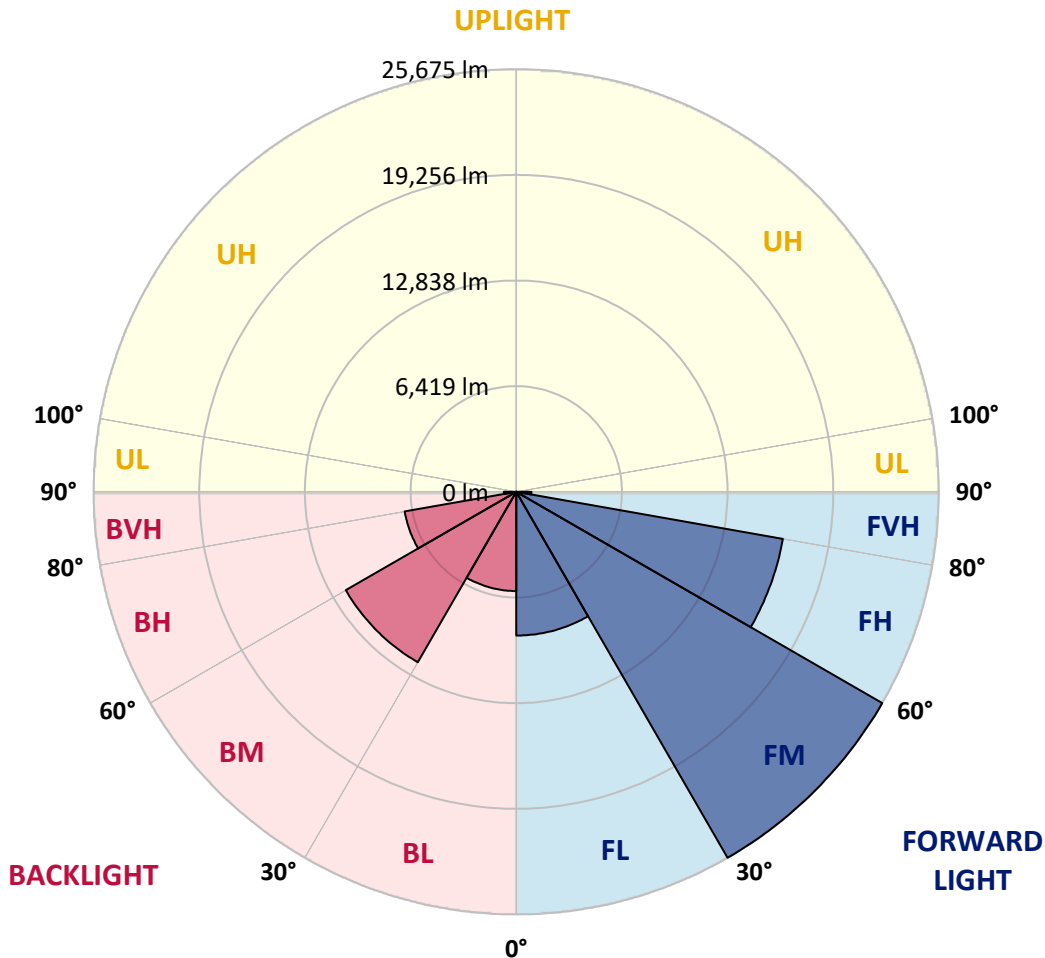


REPORT NUMBER: P591424  
 CATALOG NUMBER: CTN-CA10-760-740-U-T2-SSS-HM-EX90

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8731.0	11.3			
FM (30°-60°)	25675.3	33.2			
FH (60°-80°)	16447.8	21.2			G5
FVH (80°-90°)	926.8	1.2			G5
BL (0°-30°)	6028.0	7.8	B5		
BM (30°-60°)	11955.2	15.4	B5		
BH (60°-80°)	6881.8	8.9	B5		G5
BVH (80°-90°)	760.2	1.0			G5
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**  
 Type II Short





REPORT NUMBER: P591424

CATALOG NUMBER: CTN-CA10-760-740-U-T2-SSS-HM-EX90

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2
2.5°	18872.2	18694.4	18714.2	18799.8	18470.6	18579.2	18394.8	18427.8	18207.2	18167.7	18190.7
5°	20199.1	20008.1	20008.1	20060.8	19507.7	19359.5	18845.9	18760.3	18434.3	18289.5	18296.1
7.5°	20883.9	20696.2	20660.0	20709.4	20311.0	20343.9	19817.2	19313.4	18733.9	18477.1	18464.0
10°	21891.4	21680.7	21555.6	21558.9	21022.2	20818.1	20429.6	20077.3	19191.6	18691.1	18628.6
12.5°	22704.6	22543.3	22477.4	22428.1	21835.4	21700.4	20969.5	20683.1	19738.1	19017.1	18934.8
15°	23175.4	23024.0	22928.5	22816.6	22487.3	22266.7	21950.7	21298.8	20386.8	19540.6	19438.5
17.5°	21947.4	21687.3	21236.2	21038.7	20962.9	21282.3	22642.1	22309.5	21223.0	20284.7	20176.0
20°	18707.6	18944.7	19287.1	18510.1	18750.4	21124.3	23675.9	23646.3	22391.8	21176.9	21035.4
22.5°	15915.6	15290.1	16370.0	17555.3	18312.5	20551.4	24077.6	25190.4	23975.5	22431.4	22266.7
25°	13047.9	13403.5	14858.8	17245.8	18305.9	20116.8	23857.0	26375.7	26000.4	24140.1	23945.9
27.5°	12659.4	12666.0	14065.3	15892.6	18668.1	21124.3	24097.3	26421.8	28288.6	26349.3	25974.0
30°	12577.1	12537.6	12916.2	15135.3	18029.4	22065.9	25644.8	26833.3	28845.0	28818.7	28318.2
32.5°	12191.9	12168.8	12563.9	13571.4	16663.0	23063.5	27109.9	28752.8	28644.2	31044.4	30909.4
35°	11642.0	11724.4	12214.9	13261.9	16021.0	22233.8	28614.5	30952.2	31136.5	29964.4	30501.1
37.5°	11069.2	11115.3	11589.4	12853.7	14947.7	20781.8	29760.3	33108.7	33740.9	31623.8	31195.8
40°	10288.9	10384.3	10940.8	12363.1	14730.3	19435.2	28950.4	35564.9	36549.3	34155.7	33497.2
42.5°	9462.5	9508.5	10186.8	11566.3	14368.2	19455.0	27287.7	37685.2	39137.2	36467.0	35798.6
45°	8738.1	8751.3	9386.7	10621.4	13653.7	19333.2	26237.4	37770.8	42235.3	38942.9	38103.3
47.5°	7852.5	7977.6	8606.4	9837.8	12741.7	18924.9	26728.0	35113.8	45343.4	41303.6	40536.4
50°	6021.9	6120.6	7338.8	9070.7	11744.1	18243.4	27063.8	37253.9	41879.8	43865.1	43315.3
52.5°	5179.0	5011.1	5886.9	8208.0	10832.1	17107.5	27205.4	40256.6	41873.2	46183.0	45633.1
55°	2215.8	3397.8	5304.1	6739.6	9999.1	15593.0	27103.3	43193.4	43914.5	48369.1	48178.2
57.5°	1751.6	1833.9	3898.2	5452.3	9011.4	13801.9	26642.4	45136.0	45705.6	50558.6	50015.4
60°	322.7	365.5	1916.2	2304.7	6525.6	11128.4	24963.2	45412.5	47012.7	52464.9	51770.2
62.5°	148.2	174.5	1540.9	1919.5	5218.5	9153.0	23524.4	45323.6	48221.0	53880.7	53268.3
65°	69.1	88.9	1379.5	1741.7	4517.2	8540.6	21032.1	45083.3	47954.3	54644.5	53650.2
67.5°	52.7	75.7	1267.6	1563.9	3756.7	7931.5	18664.8	42561.3	46670.3	53462.5	52083.0
70°	52.7	75.7	1158.9	1422.3	3187.1	7157.8	15151.8	39403.9	43740.0	50476.3	49327.2
72.5°	56.0	75.7	1030.5	1287.3	2762.4	6179.9	11836.3	34363.1	40227.0	46354.2	45145.9
75°	56.0	75.7	889.0	1139.2	2327.8	5175.7	7924.9	24561.6	34649.6	39453.2	38109.9
77.5°	56.0	75.7	737.5	951.5	1896.4	4135.3	5126.3	13242.2	27261.4	32354.7	30632.8
80°	56.0	75.7	549.8	721.0	1425.6	2917.1	3062.0	6677.1	14667.8	21256.0	21555.6
82.5°	56.0	72.4	381.9	526.8	931.8	1600.1	1692.3	3223.3	5412.8	8718.4	8840.2
85°	52.7	62.6	273.3	349.0	510.3	602.5	823.1	1603.4	2594.4	3720.5	3690.8
87.5°	32.9	32.9	88.9	138.3	207.4	237.1	368.8	592.6	895.5	1228.1	1158.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P591424

CATALOG NUMBER: CTN-CA10-760-740-U-T2-SSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2	18095.2
2.5°	18187.4	18111.7	18016.2	17989.9	17766.0	17660.6	17446.6	17542.1	17433.4	17344.5	17446.6
5°	18213.7	18101.8	17901.0	17663.9	17186.5	16969.2	16666.3	16699.2	16541.2	16419.4	16488.5
7.5°	18279.6	18141.3	17825.2	17291.9	16722.3	16379.9	16063.8	16310.7	16202.1	16109.9	16179.0
10°	18312.5	18203.9	17644.2	17081.1	16261.3	16073.7	15678.6	15648.9	15658.8	15648.9	15757.6
12.5°	18401.4	18246.7	17433.4	16715.7	16017.7	15520.5	15276.9	15273.6	14960.8	14825.8	14885.1
15°	18664.8	18329.0	17291.9	16281.1	15510.7	15181.4	14411.0	14414.3	14282.6	14127.8	14124.5
17.5°	19191.6	18575.9	17291.9	15988.1	15043.1	14378.1	13706.4	13340.9	13252.0	13271.8	13258.6
20°	19886.3	18990.8	17285.3	15556.8	14384.6	13696.5	12728.5	12419.1	12139.2	12159.0	12159.0
22.5°	20883.9	19603.2	17298.4	15161.7	13755.8	12820.7	11730.9	11339.1	11039.5	11049.4	11049.4
25°	22316.1	20653.4	17453.2	14921.3	12912.9	11790.2	10690.5	10081.4	9775.2	9778.5	9785.1
27.5°	24140.1	22118.6	17989.9	14411.0	12211.6	10572.0	9367.0	8919.2	8613.0	8534.0	8534.0
30°	26204.5	23876.7	18684.6	14078.4	11125.1	9199.1	8198.2	7865.6	7496.9	7388.2	7388.2
32.5°	28492.7	25641.5	19402.3	13670.2	10101.2	8020.4	7187.4	6881.2	6420.2	6285.3	6239.2
35°	30873.2	27465.5	20274.8	13097.3	8813.8	7049.1	6311.6	5939.6	5607.0	5429.2	5386.4
37.5°	32157.2	29543.0	21061.7	12517.8	7819.5	6282.0	5458.9	5169.1	4948.5	4823.4	4800.4
40°	33921.9	31054.2	21470.0	11559.7	6749.5	5501.7	4672.0	4658.8	4688.4	4576.5	4569.9
42.5°	35719.6	32545.7	21358.0	10275.7	5916.5	4704.9	4276.9	4504.0	4668.7	4569.9	4576.5
45°	37968.3	34554.1	21766.3	8925.8	5093.4	4263.7	4194.6	4461.2	4688.4	4665.4	4665.4
47.5°	40243.4	36496.6	21012.3	7273.0	4540.3	4135.3	4204.4	4392.1	4675.3	4751.0	4734.5
50°	42097.1	37826.8	20548.1	5870.4	4227.5	4138.6	4237.4	4306.5	4616.0	4737.8	4734.5
52.5°	43595.1	39094.4	18816.3	4955.1	4049.7	4151.8	4342.7	4293.3	4510.6	4639.0	4714.8
55°	45715.4	40849.2	16844.1	4602.8	3957.5	4138.6	4378.9	4339.4	4428.3	4487.6	4543.6
57.5°	47355.1	41721.7	14203.6	4375.6	3875.2	4118.8	4349.3	4352.6	4395.4	4372.4	4349.3
60°	48731.3	42518.5	11619.0	4155.1	3769.8	4076.0	4224.2	4270.3	4257.1	4227.5	4168.2
62.5°	49403.0	43381.1	9024.6	3921.3	3657.9	3950.9	4020.1	4072.7	4043.1	3944.3	3937.8
65°	49149.5	42762.1	6690.2	3667.8	3522.9	3812.6	3809.3	3832.4	3845.6	3720.5	3733.6
67.5°	47727.1	40042.6	5096.7	3345.1	3368.2	3615.1	3598.6	3611.8	3575.6	3490.0	3503.1
70°	43591.8	36954.3	3615.1	2801.9	3052.1	3305.6	3328.7	3384.6	3302.3	3150.9	3160.7
72.5°	37477.8	31646.9	2535.2	2232.3	2680.0	3002.7	2989.5	2986.2	2874.3	2933.6	3006.0
75°	31966.2	24235.6	1926.1	1797.7	2117.0	2584.6	2732.7	2742.6	2759.1	3351.7	3394.5
77.5°	24607.7	14661.2	1639.6	1419.0	1642.9	2143.4	2419.9	2531.9	3476.8	3601.9	3536.1
80°	14664.5	8468.1	1267.6	1106.3	1326.9	1636.3	2067.6	2673.5	3493.3	3121.2	2986.2
82.5°	7138.0	3927.9	921.9	842.9	977.9	1188.6	1623.2	3114.6	2956.6	2413.4	2380.4
85°	2663.6	1326.9	553.1	576.2	651.9	780.3	1234.7	2973.1	2268.5	1965.6	1856.9
87.5°	665.1	243.6	223.9	230.5	293.0	391.8	632.1	1432.2	1099.7	912.0	892.2
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)