

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: P232732

Luminaire Tested: **CST-8-6-D-U-T4-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232732  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-20)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-8-6-D-U-T4-7050  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 5000K LEDS AND TYPE IV OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 62485 lumens  
Efficiency: N/A  
Efficacy: 131.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G5

Input Watts (W): 477  
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: 28.75 FT

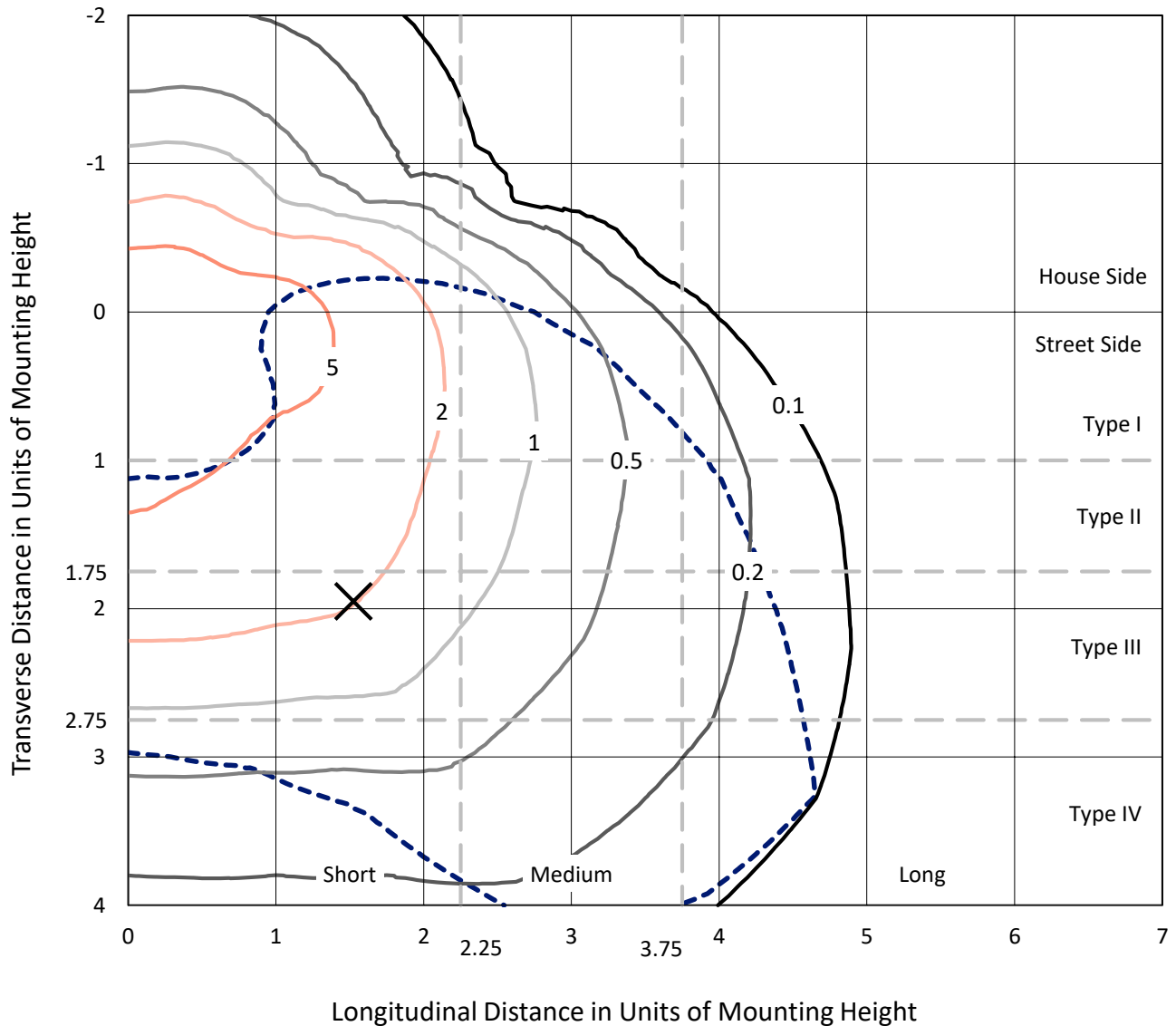


REPORT NUMBER: P232732

CATALOG NUMBER: CST-8-6-D-U-T4-7050

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

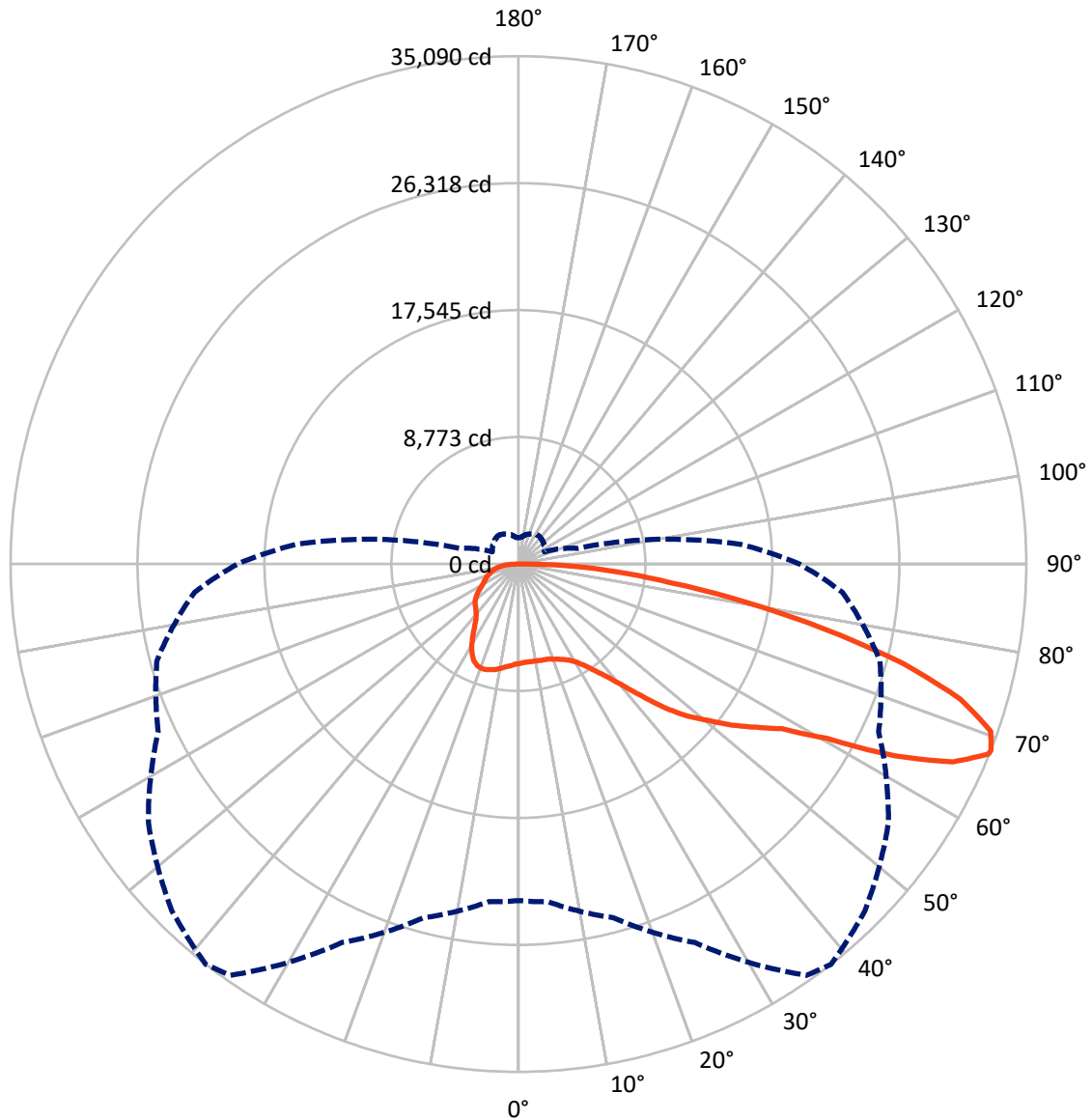


Based on 30 foot mounting height. Maximum calculated value = 7.9 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P232732

CATALOG NUMBER: CST-8-6-D-U-T4-7050

### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P232732

CATALOG NUMBER: CST-8-6-D-U-T4-7050

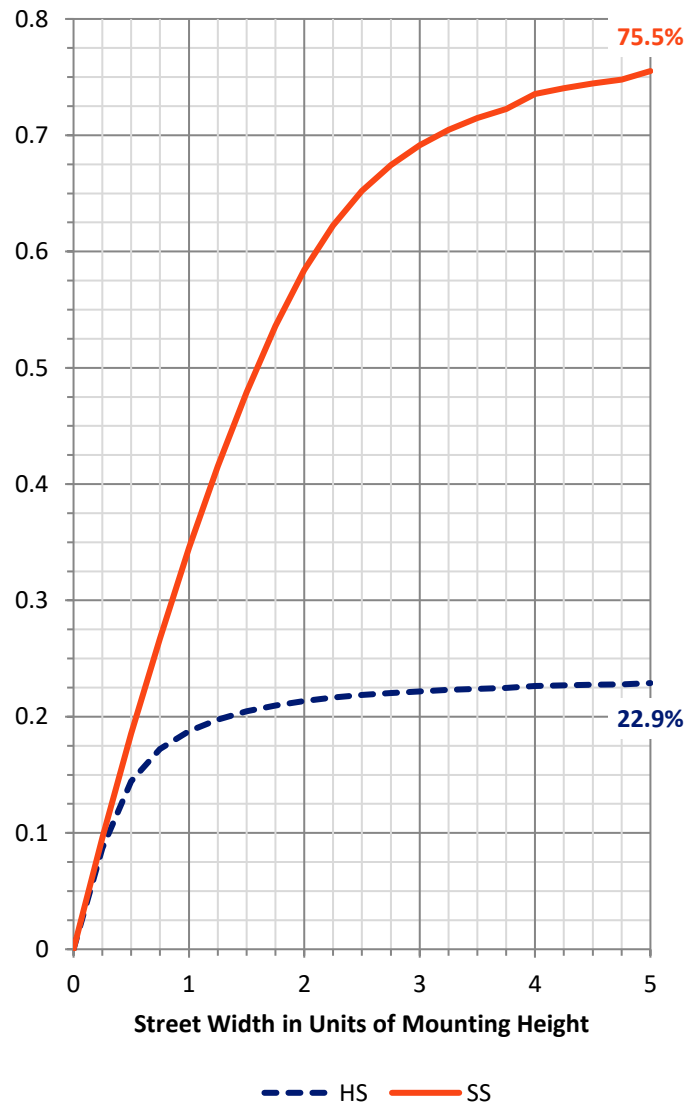
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14582.6	0.0	14582.6
	% Fixture	23.3	0.0	23.3
<b>Street Side</b>	Lumens	47902.4	0.0	47902.4
	% Fixture	76.7	0.0	76.7
<b>Total</b>	Lumens	62485.0	0.0	62485.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	665.7	1.1
10°-20°	2055.0	3.3
20°-30°	3491.2	5.6
30°-40°	5286.9	8.5
40°-50°	8744.6	14.0
50°-60°	12596.1	20.2
60°-70°	15885.5	25.4
70°-80°	11306.0	18.1
80°-90°	2454.0	3.9
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°	62485.0	100.0
0°-180°	62485.0	100.0



REPORT NUMBER: P232732

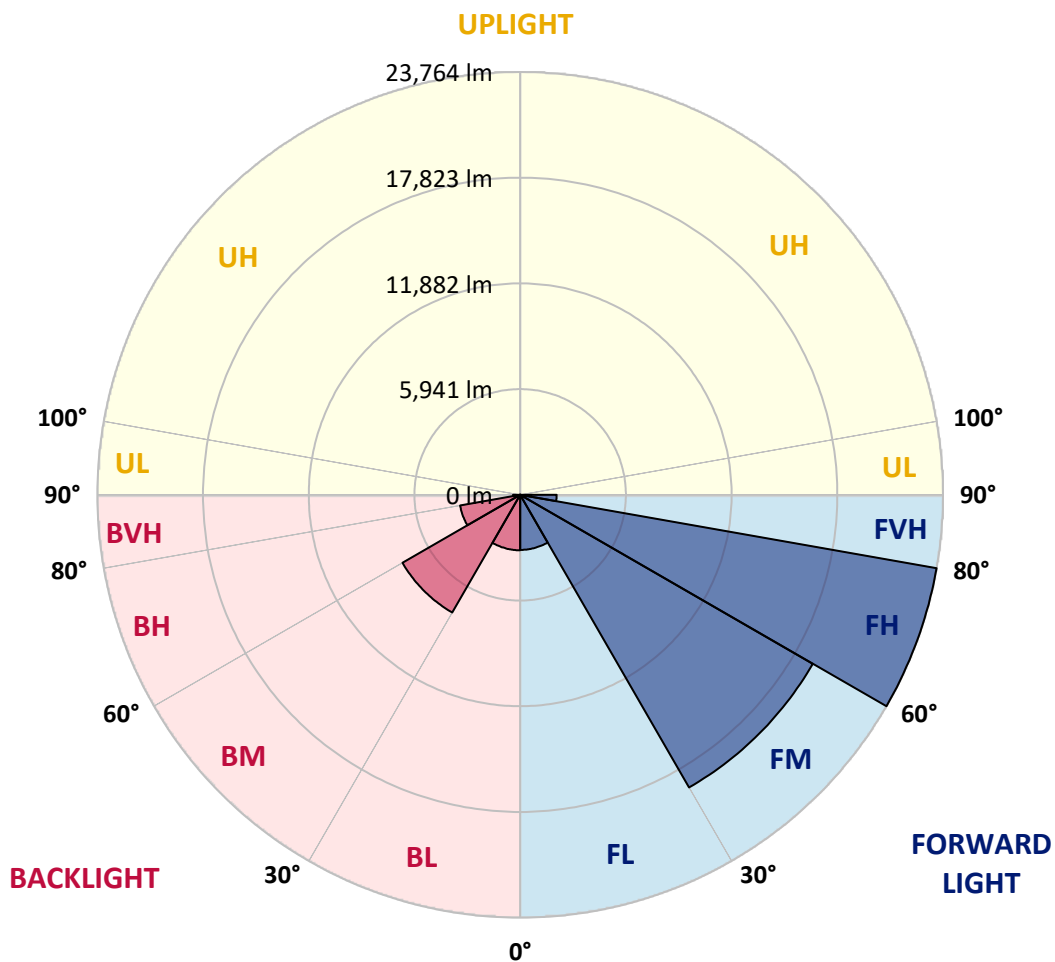
CATALOG NUMBER: CST-8-6-D-U-T4-7050

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3095.8	5.0			
FM	(30°-60°)	18991.2	30.4			
FH	(60°-80°)	23764.1	38.0			G5
FVH	(80°-90°)	2051.3	3.3			G5
BL	(0°-30°)	3116.1	5.0	B4/5000		
BM	(30°-60°)	7636.4	12.2	B4/8500		
BH	(60°-80°)	3427.4	5.5	B4/5000		G4/5000
BVH	(80°-90°)	402.7	0.6			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 IV Short





REPORT NUMBER: P232732

CATALOG NUMBER: CST-8-6-D-U-T4-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7
2.5°	6859.3	6871.5	6863.4	6859.3	6806.5	6818.7	6839.0	6810.6	6879.6	6875.5	6916.1
5°	6794.3	6800.4	6802.5	6820.7	6770.0	6796.4	6820.7	6802.5	6875.5	6855.2	6912.1
7.5°	6776.1	6774.0	6776.1	6810.6	6755.8	6796.4	6824.8	6818.7	6897.9	6881.6	6950.6
10°	6729.4	6731.4	6737.5	6776.1	6747.6	6802.5	6853.2	6879.6	6985.2	6970.9	7050.1
12.5°	6648.2	6664.4	6686.7	6751.7	6757.8	6830.9	6906.0	6958.8	7096.8	7109.0	7208.4
15°	6577.1	6605.5	6644.1	6731.4	6767.9	6851.2	6946.6	7044.0	7224.7	7279.5	7405.4
17.5°	6599.5	6642.1	6692.8	6782.2	6808.5	6895.8	7003.4	7133.3	7356.6	7474.4	7636.8
20°	6737.5	6765.9	6808.5	6891.8	6926.3	7013.6	7100.9	7228.7	7519.0	7709.9	7910.8
22.5°	6910.0	6950.6	6979.1	7029.8	7070.4	7147.5	7238.9	7364.8	7707.8	7947.4	8223.4
25°	7094.8	7115.1	7155.7	7190.2	7240.9	7301.8	7405.4	7559.6	7923.0	8217.3	8603.0
27.5°	7265.3	7275.4	7352.6	7381.0	7480.5	7525.1	7606.3	7811.4	8203.1	8566.5	9041.5
30°	7515.0	7535.3	7594.1	7661.1	7807.3	7852.0	7935.2	8150.4	8576.7	9041.5	9611.9
32.5°	7988.0	8040.7	8032.6	8103.7	8276.2	8335.1	8448.8	8728.9	9193.8	9727.6	10405.7
35°	8946.1	9021.2	8927.8	8832.4	8923.8	9002.9	9177.5	9587.6	10162.1	11043.1	11713.0
37.5°	10515.3	10590.4	10257.5	9953.0	9754.0	9817.0	10054.5	10635.0	11514.0	13044.6	13791.7
40°	12348.3	12429.5	11966.7	11418.6	10970.0	10945.6	11018.7	11757.6	13026.4	15271.5	15854.1
42.5°	13945.9	14159.1	13554.2	13081.2	12500.6	12403.2	12226.6	12973.6	14626.0	17334.0	17662.8
45°	15498.9	15705.9	15228.9	14902.1	14309.3	14151.0	13816.0	14268.7	16195.2	19138.6	19152.8
47.5°	16923.9	17090.4	16536.2	16327.1	15742.5	15673.5	15330.4	15647.1	17648.6	20667.2	20378.9
50°	18517.4	18692.0	17809.0	17551.2	17080.2	16986.8	16875.2	17102.6	19315.2	21984.7	21420.3
52.5°	20466.2	20401.3	19311.2	18720.4	18470.8	18493.1	18367.2	18618.9	21083.3	23101.1	22240.4
55°	22798.7	22465.8	21268.1	20372.8	19798.4	19908.0	19743.6	20113.0	22831.2	24043.0	22833.2
57.5°	24124.2	24215.6	24101.9	22950.9	21489.3	21473.1	21213.3	21568.5	24357.7	24812.4	23194.5
60°	26056.8	26434.4	26578.5	26267.9	24956.5	24438.9	23137.7	23056.5	25646.7	25476.2	23379.2
62.5°	27278.8	27455.4	28322.2	28697.8	29120.0	29209.3	27142.8	24848.9	26598.8	25815.2	23456.4
65°	26694.2	26872.8	28492.8	29964.5	32469.5	32972.9	32315.2	27688.9	27242.3	25890.3	23198.6
67.5°	23698.0	23917.2	26091.3	29107.8	34495.4	35037.4	33975.7	30963.2	27453.4	25845.7	22638.3
68°	23259.5	23421.9	25297.6	28858.2	34698.4	35090.2	33866.1	31210.9	27465.6	25859.9	22465.8
70°	19889.7	20175.9	22151.1	26586.6	34371.6	34621.3	33182.0	31072.9	27189.5	25628.5	21203.1
72.5°	15502.9	15898.8	17401.0	22082.1	31746.8	31949.8	30744.0	29550.4	26355.2	24022.7	18174.4
75°	11231.9	11570.9	13016.2	17041.7	26726.7	27447.3	27244.3	27459.5	23624.9	20354.6	13162.4
77.5°	7756.5	8046.8	9394.7	12715.8	20724.0	21635.5	22689.1	23247.3	19412.7	15101.0	6256.4
80°	4969.4	5192.7	6339.6	8954.2	14944.7	15801.3	16936.1	17514.6	13807.9	7596.2	1110.4
82.5°	2921.1	3073.4	3857.0	5777.3	10072.7	10594.4	11142.5	10172.2	5541.8	1453.5	700.3
85°	1451.4	1552.9	2034.0	3268.3	6262.5	6741.6	6924.3	4340.1	1171.3	531.9	477.0
87.5°	649.6	678.0	872.9	1471.7	2975.9	3136.3	3059.2	1349.9	235.5	198.9	170.5
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: P232732

CATALOG NUMBER: CST-8-6-D-U-T4-7050

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7	6883.7
2.5°	6920.2	6904.0	6899.9	6926.3	6897.9	6932.4	6922.2	6999.4	7009.5	6981.1	7027.8
5°	6930.3	6922.2	6928.3	6977.0	6966.9	7037.9	7056.2	7133.3	7133.3	7111.0	7159.7
7.5°	6977.0	6977.0	6995.3	7084.6	7084.6	7145.5	7165.8	7251.1	7249.0	7249.0	7293.7
10°	7094.8	7094.8	7133.3	7247.0	7218.6	7297.8	7307.9	7352.6	7342.4	7344.5	7391.1
12.5°	7269.3	7279.5	7346.5	7446.0	7427.7	7456.1	7435.8	7427.7	7354.6	7354.6	7385.1
15°	7470.3	7512.9	7604.3	7695.6	7634.7	7624.6	7508.9	7407.4	7251.1	7184.1	7218.6
17.5°	7732.2	7805.3	7910.8	7975.8	7860.1	7776.8	7567.8	7303.9	7050.1	6901.9	6906.0
20°	8022.5	8119.9	8249.8	8272.2	8101.6	7894.6	7545.4	7131.3	6694.9	6459.4	6443.1
22.5°	8345.2	8467.0	8617.3	8530.0	8251.9	7914.9	7415.5	6865.4	6278.7	5882.9	5876.8
25°	8739.1	8871.0	8966.4	8722.8	8286.4	7811.4	7190.2	6451.3	5726.6	5300.3	5271.9
27.5°	9240.5	9327.7	9256.7	8822.3	8182.8	7563.7	6808.5	5919.4	5152.1	4766.4	4723.8
30°	9835.2	9825.1	9439.4	8793.9	7973.7	7171.9	6288.9	5342.9	4681.1	4350.2	4311.7
32.5°	10557.9	10411.8	9616.0	8657.9	7636.8	6658.3	5671.8	4863.8	4340.1	4005.1	3964.5
35°	11710.9	11298.9	9845.4	8452.8	7167.8	6039.2	5089.2	4494.4	4076.2	3692.5	3613.4
37.5°	13499.3	12630.5	10227.0	8237.6	6629.9	5432.2	4654.7	4226.4	3869.1	3434.7	3341.3
40°	15338.5	14177.4	10807.6	8006.2	6126.5	4973.4	4409.1	4100.6	3743.3	3325.1	3231.7
42.5°	16936.1	15620.7	11503.9	7715.9	5610.9	4612.1	4283.3	4060.0	3702.7	3304.8	3215.5
45°	18346.9	16917.8	12230.6	7379.0	5070.9	4319.8	4175.7	4003.1	3641.8	3258.1	3176.9
47.5°	19522.3	17951.1	12870.1	7005.5	4541.1	4104.6	4070.1	3869.1	3526.1	3156.6	3087.6
50°	20431.7	18685.9	13298.4	6589.3	4088.4	3936.1	3917.9	3664.1	3331.2	2978.0	2909.0
52.5°	21077.3	19179.2	13548.1	6433.0	3733.1	3741.2	3710.8	3440.8	3118.0	2766.9	2712.0
55°	21487.3	19518.2	13487.2	6232.0	3373.8	3467.2	3471.3	3276.4	2992.2	2651.1	2606.5
57.5°	21643.6	19504.0	13127.9	5225.2	3024.7	3138.3	3193.2	3162.7	2911.0	2578.1	2541.5
60°	21558.4	19274.6	12362.6	3828.5	2663.3	2817.6	2951.6	2945.5	2732.3	2417.7	2379.1
62.5°	21416.3	18742.8	10862.4	2740.5	2391.3	2590.3	2752.6	2697.8	2494.8	2218.8	2192.4
65°	20906.7	17804.9	8398.0	2192.4	2277.6	2462.4	2596.3	2503.0	2304.0	2015.8	2001.6
67.5°	19780.1	15929.2	4902.4	1999.5	2194.4	2354.8	2450.2	2334.5	2149.7	1869.6	1845.2
68°	19398.5	15448.1	4169.6	1981.3	2178.2	2328.4	2415.7	2293.9	2113.2	1841.2	1816.8
70°	17472.0	12520.9	1989.4	1906.1	2107.1	2206.6	2257.3	2145.7	1969.1	1727.5	1711.3
72.5°	13598.8	7553.5	1329.6	1792.5	1969.1	2064.5	2076.7	1902.1	1735.6	1557.0	1546.8
75°	8034.6	2507.0	1236.3	1624.0	1778.3	1910.2	1944.7	1770.1	1585.4	1378.4	1374.3
77.5°	1956.9	972.4	1167.2	1449.4	1611.8	1739.7	1766.1	1638.2	1475.8	1242.3	1234.2
80°	805.9	807.9	1088.1	1201.7	1382.4	1506.2	1544.8	1431.1	1285.0	1134.8	1118.5
82.5°	669.9	682.1	923.6	887.1	1106.3	1250.5	1289.0	1209.9	1159.1	996.7	980.5
85°	477.0	604.9	613.1	596.8	775.5	891.2	1086.0	1047.5	992.7	854.6	773.4
87.5°	223.3	353.2	265.9	255.8	393.8	527.8	621.2	651.6	564.3	438.5	406.0
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)