

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: P232689

Luminaire Tested: **CTN-10-3-D-E1-T3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232689  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-19)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: CTN-10-3-D-E1-T3-7030  
Description: CELESTEON HIGH MAST LUMINAIRE  
(10) 70 CRI, 3000K LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30839 lumens  
Efficiency: N/A  
Efficacy: 145.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 212  
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: 25 FT

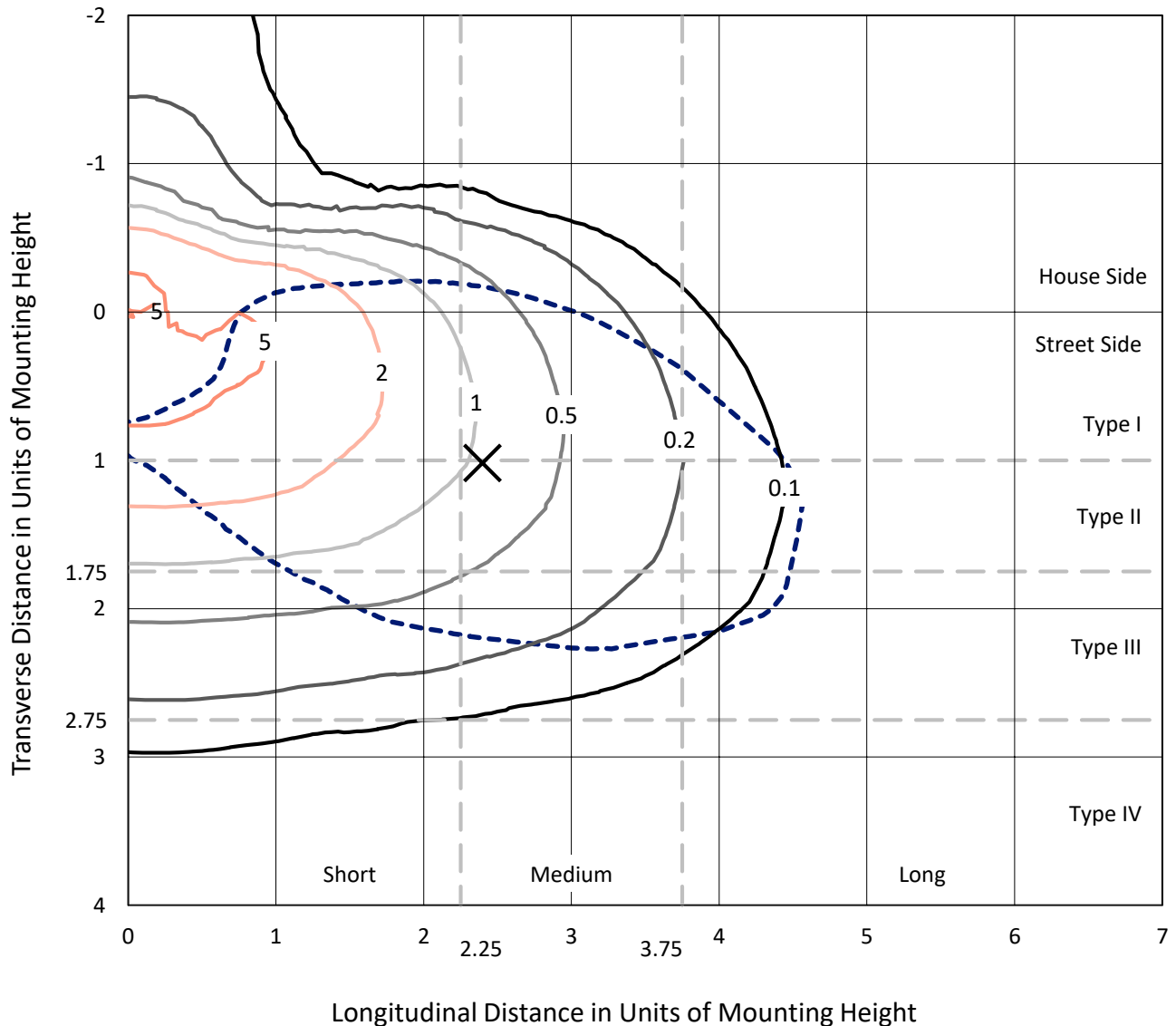


REPORT NUMBER: P232689

CATALOG NUMBER: CTN-10-3-D-E1-T3-7030

### Iso-Footcandle Lines of Horizontal Illumination

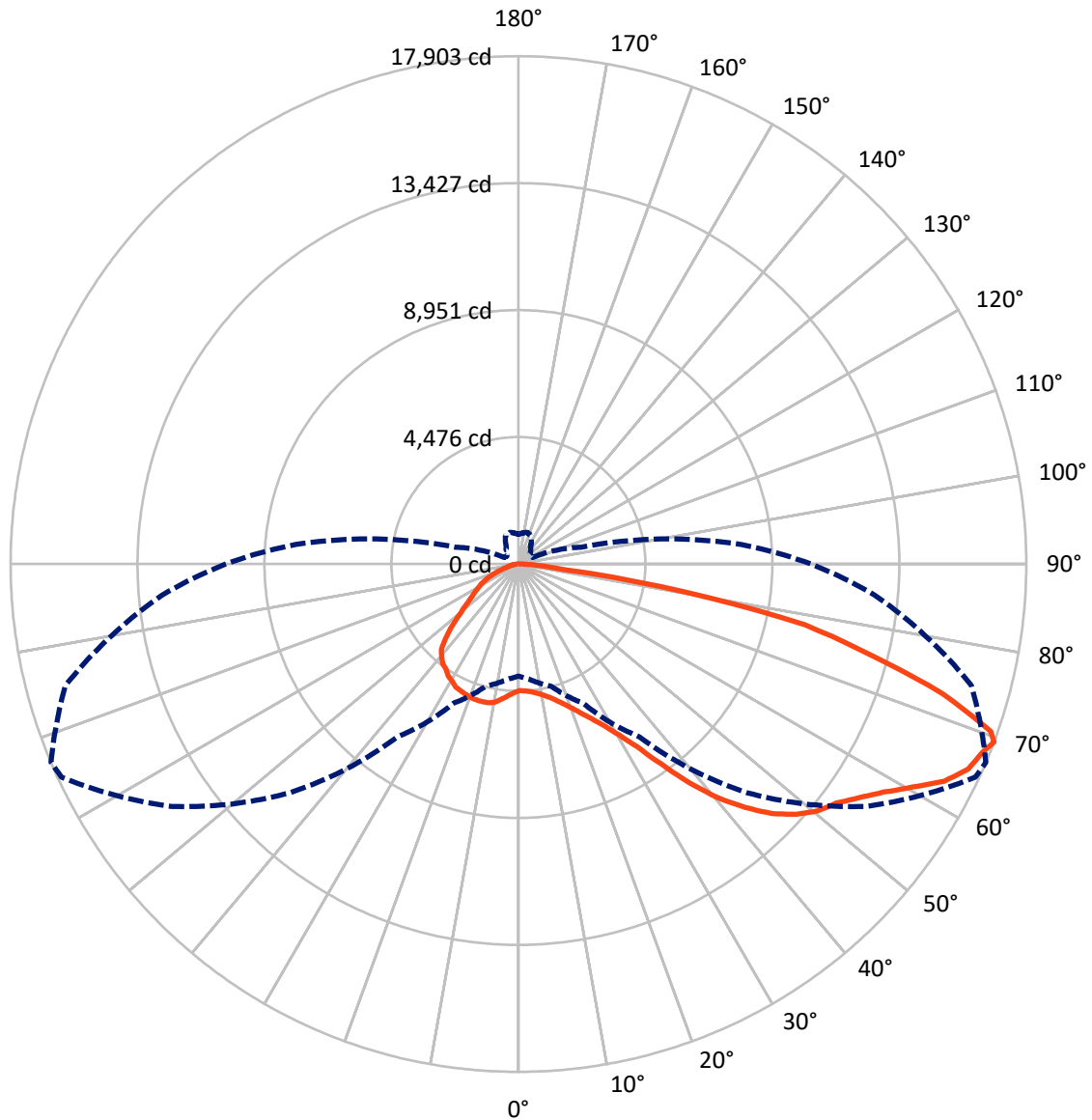
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.9 fc  
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P232689  
CATALOG NUMBER: CTN-10-3-D-E1-T3-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P232689

CATALOG NUMBER: CTN-10-3-D-E1-T3-7030

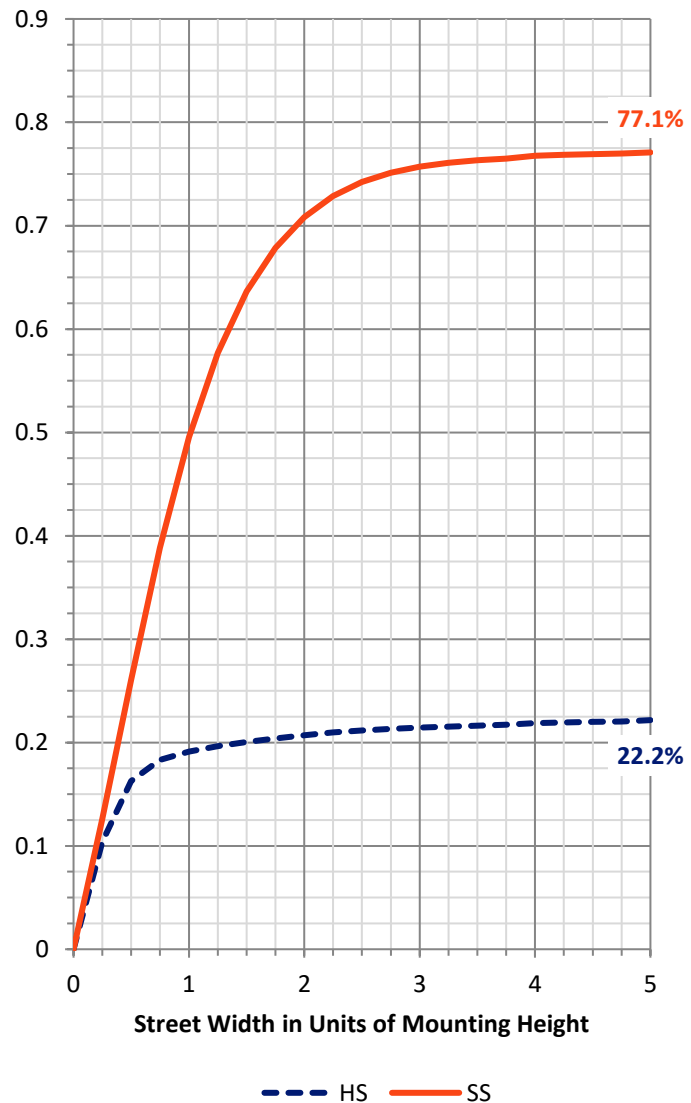
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7015.2	0.0	7015.2
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	23823.8	0.0	23823.8
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	30839.0	0.0	30839.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	453.0	1.5
10°-20°	1455.0	4.7
20°-30°	2530.3	8.2
30°-40°	3811.5	12.4
40°-50°	5264.1	17.1
50°-60°	6282.7	20.4
60°-70°	6616.8	21.5
70°-80°	3881.5	12.6
80°-90°	544.0	1.8
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°	30839.0	100.0
0°-180°	30839.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P232689

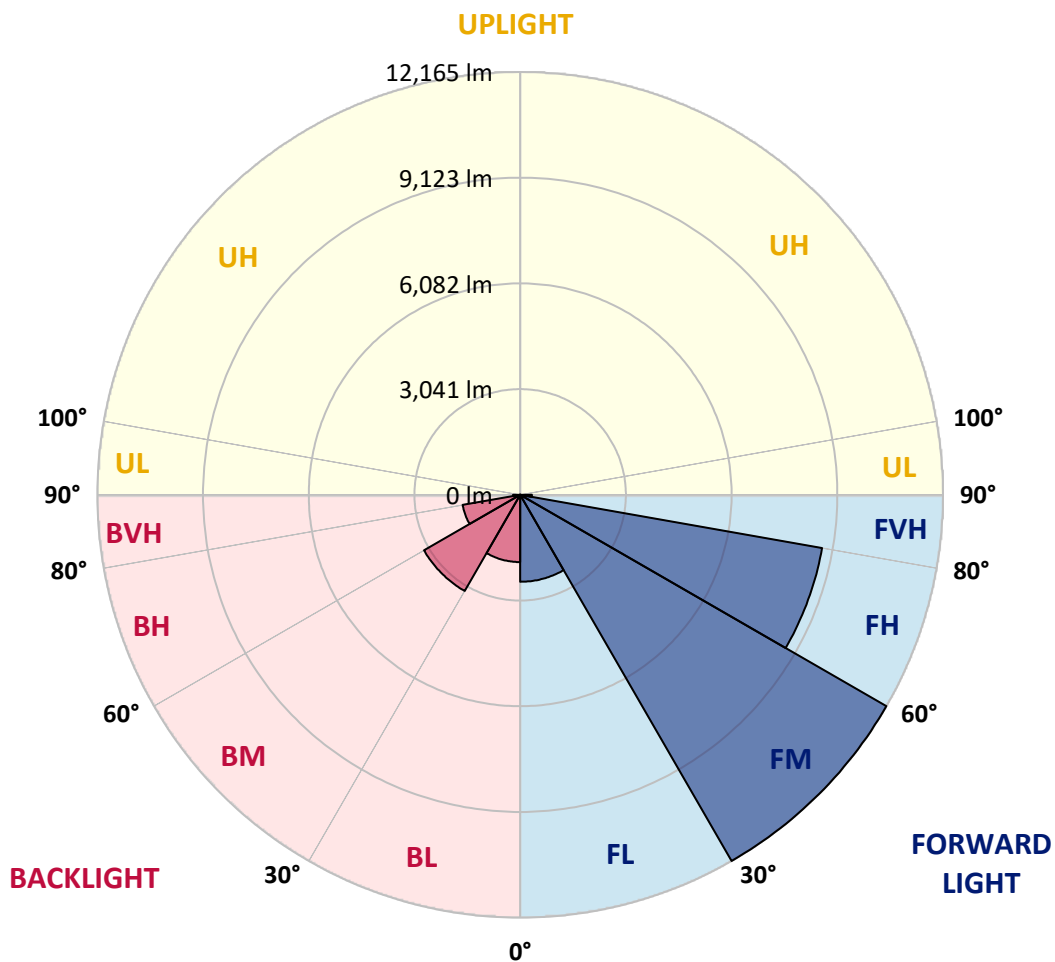
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2502.5	8.1			
FM	(30°-60°)	12164.5	39.4			
FH	(60°-80°)	8818.6	28.6			G4/12000
FVH	(80°-90°)	338.1	1.1			G3/500
BL	(0°-30°)	1935.8	6.3	B3/2500		
BM	(30°-60°)	3193.8	10.4	B3/5000		
BH	(60°-80°)	1679.7	5.4	B3/2500		G3/2500
BVH	(80°-90°)	205.9	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Medium





REPORT NUMBER: P232689

CATALOG NUMBER: CTN-10-3-D-E1-T3-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8
2.5°	4481.6	4487.5	4481.6	4471.7	4439.2	4454.0	4441.1	4482.6	4479.6	4463.8	4492.5
5°	4586.2	4593.1	4580.3	4572.4	4522.1	4529.0	4501.3	4524.0	4516.2	4489.5	4533.9
7.5°	4757.0	4763.9	4748.1	4737.3	4666.2	4650.4	4600.1	4607.0	4592.2	4549.7	4601.0
10°	4987.0	4992.9	4966.3	4939.6	4848.8	4810.3	4726.4	4712.6	4690.9	4649.4	4701.7
12.5°	5234.8	5243.7	5211.1	5176.5	5070.9	5007.7	4888.3	4845.9	4819.2	4768.9	4826.1
15°	5500.3	5511.2	5477.6	5438.1	5321.7	5223.9	5074.9	5010.7	4985.0	4921.9	4957.4
17.5°	5848.8	5845.8	5818.2	5763.9	5624.7	5481.6	5298.0	5202.2	5184.4	5123.2	5132.1
20°	6252.5	6238.7	6213.0	6138.0	5987.0	5809.3	5569.4	5448.0	5430.2	5378.9	5324.6
22.5°	6690.8	6677.0	6652.3	6556.6	6407.5	6174.5	5887.3	5744.1	5720.5	5656.3	5565.5
25°	7122.2	7107.4	7093.6	7002.7	6857.6	6593.1	6247.6	6065.0	6054.1	5989.0	5822.1
27.5°	7570.4	7561.5	7565.4	7487.4	7342.3	7067.9	6676.0	6477.6	6458.8	6375.9	6148.9
30°	8031.3	8033.3	8070.8	7987.9	7854.6	7578.2	7189.3	6987.0	6989.9	6915.9	6584.2
32.5°	8444.0	8445.9	8529.8	8488.4	8415.3	8139.9	7782.6	7640.4	7669.1	7663.1	7323.6
35°	8742.1	8754.9	8942.5	8998.7	8971.1	8731.2	8516.0	8550.6	8641.4	8898.1	8541.7
37.5°	9022.4	9027.4	9267.2	9397.5	9500.2	9356.1	9312.6	9640.4	9783.5	10138.9	9611.8
40°	9103.4	9171.5	9474.5	9656.2	9895.1	9966.1	10186.3	10670.9	10839.7	11054.0	10332.4
42.5°	9029.3	9126.1	9506.1	9937.5	10269.2	10621.6	11025.3	11574.2	11727.2	11859.5	11022.4
45°	8874.4	8948.4	9343.2	9988.8	10590.0	11288.9	11754.8	12412.3	12550.5	12464.6	11561.3
47.5°	8668.0	8724.3	9164.6	9906.9	10846.7	11887.1	12423.1	13084.5	13185.2	12984.8	11927.6
50°	8381.8	8448.9	8940.5	9794.4	11035.2	12387.6	12960.1	13589.9	13674.8	13308.6	12286.9
52.5°	8028.4	8112.3	8683.8	9602.9	11176.4	12760.7	13335.2	13926.5	14012.4	13774.5	12571.2
55°	7627.6	7744.1	8332.4	9369.9	11186.2	12959.1	13569.2	14420.1	14542.5	14285.8	12819.9
57.5°	7220.9	7295.9	7918.8	9013.5	11000.7	13025.3	13849.5	14994.6	15173.3	14781.4	13091.4
60°	6724.4	6796.4	7413.4	8536.8	10630.5	13126.9	14410.2	15816.9	15959.0	15358.9	13322.4
62.5°	6137.0	6219.0	6778.7	7884.3	10082.6	13168.4	14981.8	16691.5	16854.4	15884.0	13455.7
65°	5390.8	5481.6	5991.9	7094.6	9299.8	12874.2	15228.6	17338.1	17422.0	16286.8	13398.4
67.5°	4575.4	4650.4	5057.1	6112.4	8216.9	12107.2	15099.2	17577.0	17661.9	16560.2	13055.9
69°	3951.5	4067.0	4457.9	5412.5	7438.1	11405.4	14901.8	17773.4	17902.7	16529.6	12605.7
70°	3452.0	3581.3	3934.7	4795.5	6776.7	10676.9	14534.6	17624.3	17660.9	16234.5	12200.0
72.5°	2181.6	2224.0	2384.9	2957.5	4767.9	8299.8	12719.3	15646.1	15636.2	14484.3	10650.2
75°	1078.0	1133.2	1438.3	1660.4	2349.4	5338.4	10011.5	12850.5	12852.5	12224.7	8755.9
77.5°	647.6	671.3	749.2	1070.1	1342.5	2395.8	6795.4	10173.4	10329.4	9949.4	6300.9
80°	446.2	434.3	457.0	526.1	722.6	1259.6	2793.6	5751.1	5919.9	5459.9	2684.0
82.5°	351.4	341.5	348.5	366.2	344.5	583.4	1181.6	1719.6	1669.2	1471.8	1031.6
85°	245.8	226.1	238.9	232.0	205.3	342.5	574.5	714.7	709.8	733.4	561.7
87.5°	78.0	69.1	71.1	69.1	57.3	121.4	206.3	278.4	256.7	260.6	197.4
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: P232689

CATALOG NUMBER: CTN-10-3-D-E1-T3-7030

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8	4462.8
2.5°	4499.4	4491.5	4500.4	4546.8	4535.9	4576.4	4586.2	4652.4	4655.3	4649.4	4679.0
5°	4554.6	4562.5	4596.1	4670.1	4694.8	4781.7	4821.2	4902.1	4910.0	4913.0	4941.6
7.5°	4634.6	4648.4	4720.5	4817.2	4863.6	4977.1	5036.4	5136.1	5143.0	5153.8	5186.4
10°	4753.1	4772.8	4830.1	4962.3	4977.1	5067.0	5121.3	5207.1	5201.2	5216.0	5245.6
12.5°	4872.5	4883.4	4926.8	5017.6	5007.7	5095.6	5119.3	5175.6	5171.6	5170.6	5192.3
15°	5000.8	4982.1	4988.0	5022.6	4986.0	5040.3	5023.5	5065.0	5010.7	4989.0	5003.8
17.5°	5137.1	5091.7	5033.4	5007.7	4938.6	4929.8	4872.5	4852.8	4815.3	4803.4	4815.3
20°	5299.0	5202.2	5061.1	4987.0	4836.0	4758.0	4648.4	4584.3	4497.4	4504.3	4521.1
22.5°	5463.8	5327.6	5114.4	4915.9	4702.7	4544.8	4326.6	4268.4	4154.9	4121.3	4154.9
25°	5666.2	5483.5	5141.0	4852.8	4501.3	4220.0	3998.9	3792.6	3706.7	3622.8	3654.4
27.5°	5931.7	5684.9	5237.7	4774.8	4273.3	3898.2	3546.8	3280.3	3173.6	3083.8	3089.7
30°	6276.2	5954.4	5274.3	4610.9	3998.9	3457.0	3014.7	2718.6	2585.3	2548.8	2533.0
32.5°	6912.9	6388.7	5339.4	4491.5	3657.3	2977.2	2434.3	2116.4	2032.5	2048.3	2099.6
35°	8041.2	7297.9	5536.9	4241.7	3280.3	2454.0	1891.4	1645.6	1659.4	1688.0	1682.1
37.5°	9014.5	8118.2	5865.6	4066.0	2819.3	1858.8	1428.4	1298.1	1381.0	1437.3	1435.3
40°	9675.9	8716.4	6296.0	3737.3	2236.9	1324.7	1051.3	979.2	1084.9	1205.3	1226.0
42.5°	10332.4	9260.3	6504.2	3446.1	1570.5	934.8	761.1	779.8	915.1	1028.6	1049.3
45°	10804.2	9655.2	6596.0	2926.9	1002.9	715.7	664.3	733.4	879.5	969.4	979.2
47.5°	11150.7	9952.3	6496.3	2368.1	738.4	654.5	655.5	743.3	890.4	992.1	996.0
50°	11456.7	10161.6	6094.6	1846.9	664.3	633.7	668.3	771.9	922.0	1024.6	1021.7
52.5°	11666.0	10222.8	5606.9	1513.3	643.6	621.9	679.2	798.6	931.9	1001.0	995.0
55°	11805.2	10131.0	5231.8	1245.8	625.8	620.9	696.9	832.2	941.7	969.4	955.5
57.5°	11891.0	9945.4	4915.0	1071.0	611.0	620.9	716.7	845.0	978.3	1028.6	1012.8
60°	11865.4	9862.5	4485.5	927.9	590.3	622.9	727.5	863.7	1125.3	1243.8	1246.8
62.5°	11814.1	9700.6	4066.0	814.4	565.6	634.7	741.3	972.3	1382.0	1383.0	1333.6
65°	11570.2	9212.9	3456.0	711.7	540.0	637.7	744.3	1151.0	1549.8	1419.5	1355.3
67.5°	10899.0	8499.2	2742.3	616.0	511.3	619.9	741.3	1126.3	1251.7	1120.4	1087.8
69°	10313.6	7880.3	2291.1	558.7	490.6	602.2	744.3	1079.9	1158.9	1080.9	1051.3
70°	9887.2	7378.8	1946.6	524.2	471.9	593.3	744.3	1063.1	1146.1	1072.0	1043.4
72.5°	8486.4	5796.5	1166.8	437.3	417.6	558.7	737.4	1037.5	1155.9	1092.8	1055.2
75°	6501.3	4216.1	679.2	359.3	351.4	501.5	700.9	1021.7	1189.5	1093.7	1011.8
77.5°	4165.7	1945.6	506.4	292.2	285.3	434.3	654.5	970.4	1222.1	1147.1	1043.4
80°	1447.1	882.5	378.1	231.0	221.1	355.4	573.5	874.6	1163.8	1171.7	1093.7
82.5°	793.7	581.4	267.5	171.8	162.9	223.1	446.2	754.2	1077.0	1159.9	1165.8
85°	436.3	327.7	175.7	110.6	124.4	191.5	309.0	586.4	866.7	1007.9	1052.3
87.5°	176.7	118.5	69.1	43.4	51.3	76.0	104.6	300.1	523.2	675.2	743.3
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)