

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: P579440

Luminaire Tested: **CTN-CA10-630-730-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579440  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: CTN-CA10-630-730-U-T5N-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 61368 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G5

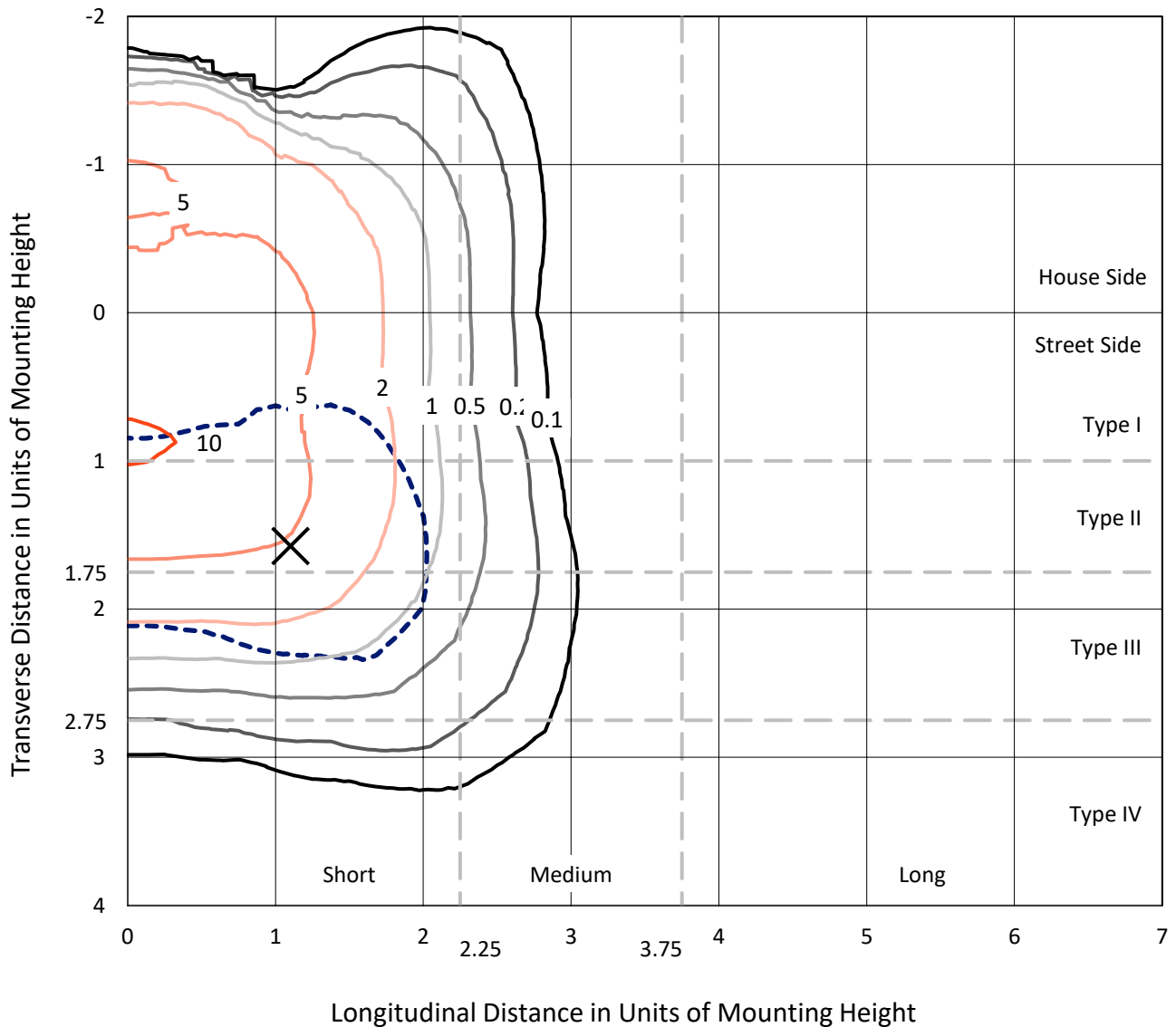
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

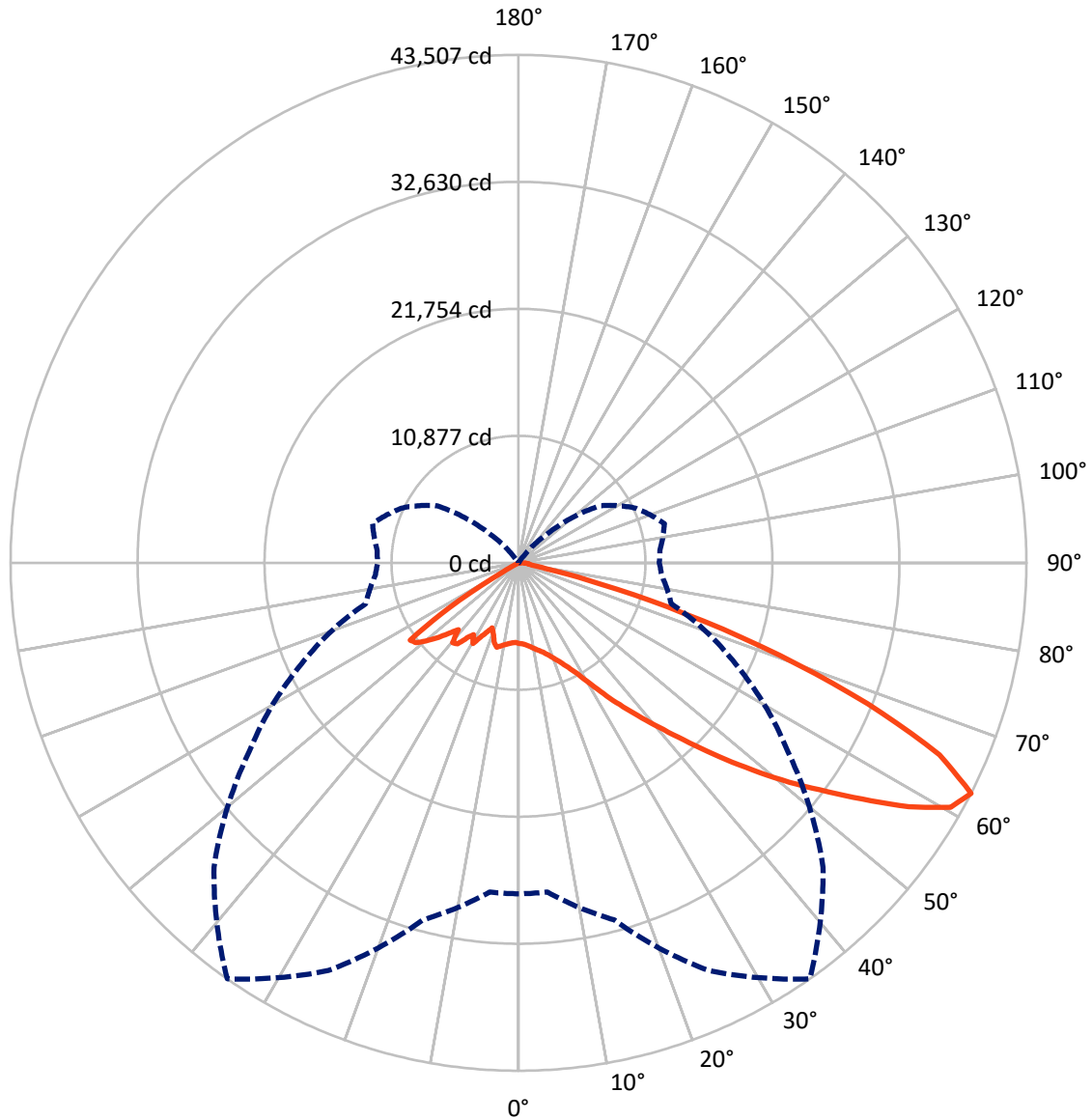
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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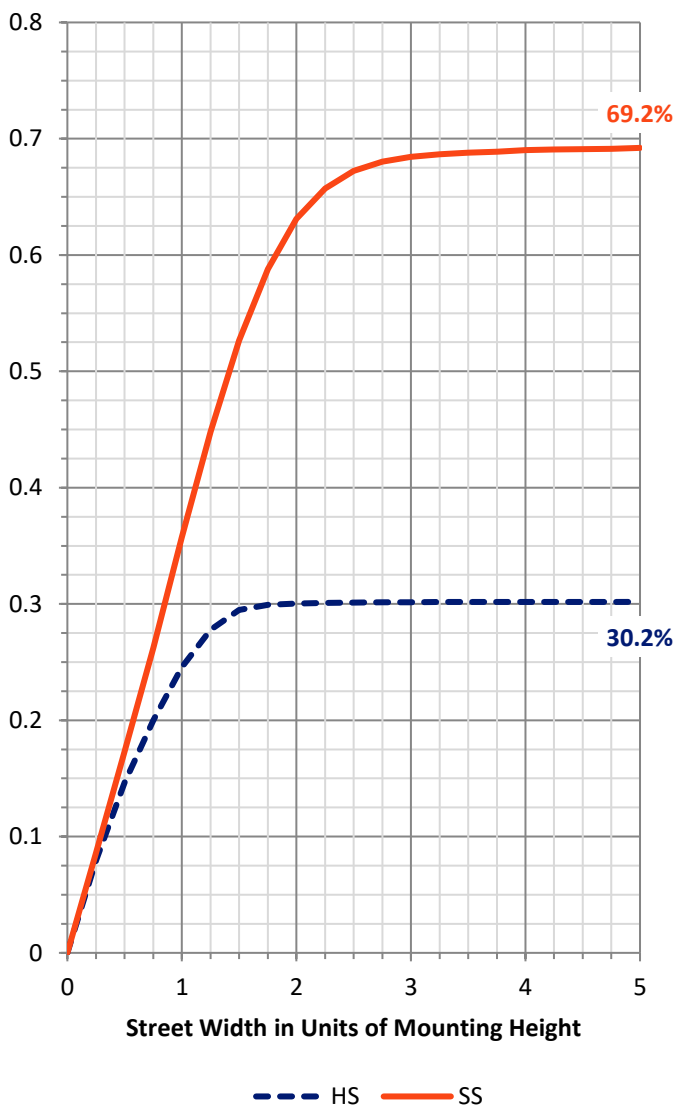
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	18625.4	0.0	18625.4
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	42689.3	53.3	42742.6
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	61314.7	53.3	61368.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	681.9	1.1
10°-20°	2188.4	3.6
20°-30°	3999.8	6.5
30°-40°	7622.3	12.4
40°-50°	13083.1	21.3
50°-60°	17551.3	28.6
60°-70°	13342.5	21.7
70°-80°	2526.4	4.1
80°-90°	319.0	0.5
90°-100°	46.9	0.1
100°-110°	6.3	0.0
110°-120°	0.1	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°	61314.7	99.9
0°-180°	61368.0	100.0

**Coefficient of Utilization**

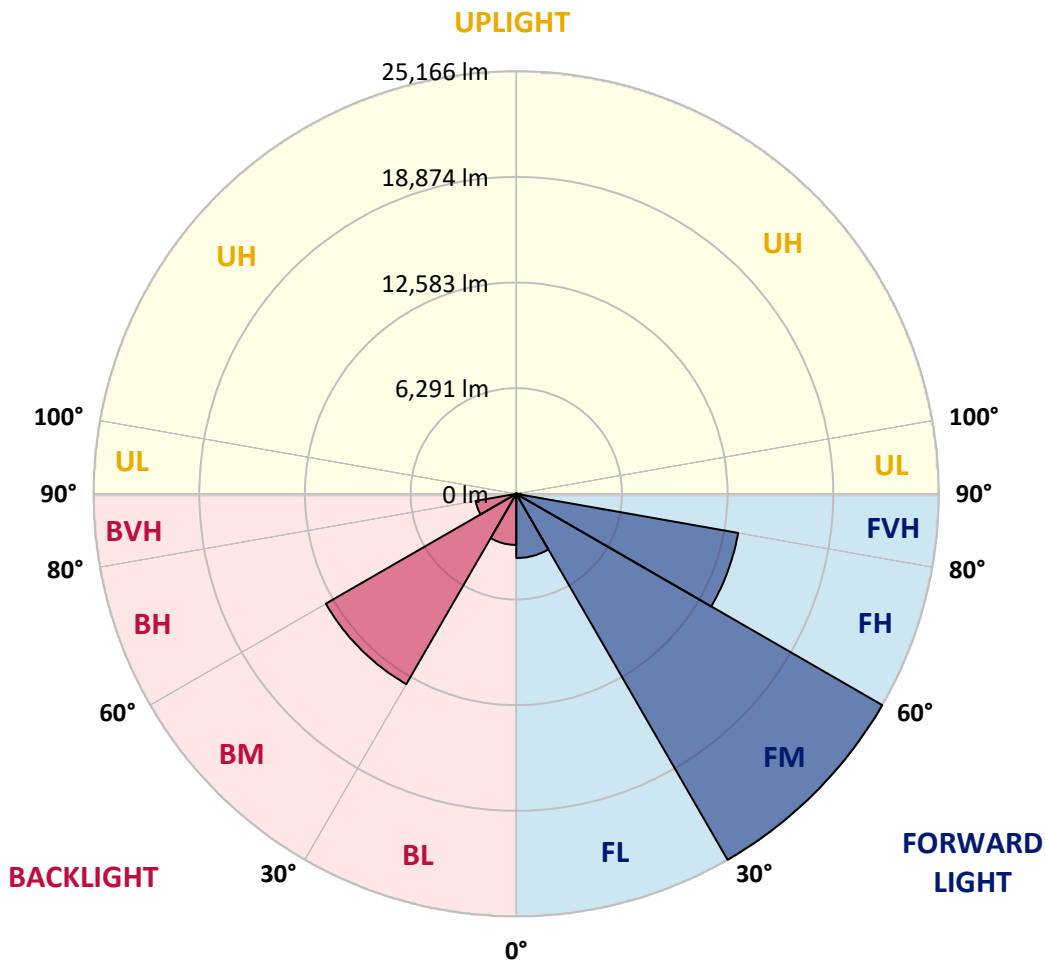


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3825.5	6.2			
FM (30°-60°)	25166.0	41.0			
FH (60°-80°)	13416.2	21.9			G5
FVH (80°-90°)	281.7	0.5			G3/500
BL (0°-30°)	3044.6	5.0	B4/5000		
BM (30°-60°)	13090.7	21.3	B5		
BH (60°-80°)	2452.7	4.0	B3/2500		G3/2500
BVH (80°-90°)	37.4	0.1			G1/100
UL (90°-100°)	46.9	0.1		U2/50	
UH (100°-180°)	6.4	0.0		U1/10	

**BUG Rating: B5-U2-G5**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8
2.5°	7081.5	7029.4	7032.3	7078.6	6945.5	6994.7	6936.8	6994.7	6962.9	6986.0	6997.6
5°	7205.9	7153.8	7148.0	7197.2	7084.4	7119.1	7061.2	7101.7	7058.3	7087.2	7087.2
7.5°	7393.9	7341.8	7324.5	7362.1	7257.9	7284.0	7223.2	7246.3	7197.2	7234.8	7214.5
10°	7616.6	7558.8	7538.5	7558.8	7469.1	7483.6	7411.2	7437.3	7365.0	7408.3	7379.4
12.5°	7853.8	7778.6	7778.6	7796.0	7700.5	7703.4	7636.9	7651.3	7579.0	7625.3	7590.6
15°	8111.3	8027.4	8039.0	8056.3	7955.1	7972.4	7903.0	7926.1	7850.9	7897.2	7862.5
17.5°	8452.6	8363.0	8351.4	8403.5	8308.0	8339.8	8261.7	8290.6	8224.1	8238.6	8221.2
20°	8924.1	8811.3	8785.3	8854.7	8747.7	8770.8	8713.0	8770.8	8701.4	8597.3	8305.1
22.5°	9488.2	9389.9	9346.5	9392.8	9265.5	9306.0	9303.1	9395.7	9204.7	8548.1	8255.9
25°	10231.7	10165.1	10081.2	10087.0	9933.7	9994.5	10104.4	10176.7	9363.8	8788.2	8794.0
27.5°	11223.9	11157.4	11041.6	10998.3	10775.5	10923.0	11093.7	10387.9	9748.6	9896.1	9815.1
30°	12490.9	12479.3	12245.0	12169.8	11926.8	12112.0	11964.4	10755.3	10975.1	11180.5	11056.1
32.5°	14177.4	14096.4	13757.9	13622.0	13367.4	13474.4	12172.7	11999.1	12326.0	12603.7	12473.6
35°	16216.8	15970.9	15626.7	15357.6	14915.0	14319.1	12965.3	13303.8	13792.7	14174.5	13543.9
37.5°	18585.9	18319.8	17781.8	17298.7	16601.5	14744.4	14160.0	14836.9	15450.2	15036.5	13581.5
40°	21024.5	20787.3	20281.1	19659.2	18481.8	16063.5	15609.3	16419.3	17116.4	14747.3	14024.1
42.5°	23445.8	23243.3	22835.4	22222.1	20706.3	17634.2	17197.4	18068.1	17411.5	15311.3	15288.2
45°	25887.3	25786.0	25323.2	24799.6	23341.6	19644.7	18976.5	19656.3	16754.8	16662.3	16607.3
47.5°	27865.9	27883.3	27721.3	27449.3	26153.4	21851.9	20981.1	18964.9	17553.2	17654.5	17680.5
50°	29905.3	29775.1	29766.4	29783.8	29242.9	24695.4	22346.5	18652.5	18597.5	18588.8	18565.7
52.5°	31539.7	31374.8	31716.2	31988.1	32309.2	27868.8	22141.1	19711.2	19395.9	19286.0	18612.0
55°	32870.4	32806.7	33362.1	34282.0	35711.0	31230.2	23957.8	20743.9	20113.3	17544.6	15826.3
57.5°	33677.4	33770.0	34915.5	36723.5	39399.3	34015.9	26072.4	21791.1	17220.6	15453.1	15343.2
60°	32132.7	32621.6	34571.3	38540.2	42517.7	36636.7	27646.1	22002.3	15496.5	14550.6	14330.7
62.5°	28351.9	28305.6	31655.4	38540.2	43507.0	36897.1	28143.6	20506.7	13538.1	12305.8	12059.9
65°	20067.0	20188.5	23766.9	34730.4	39633.6	34319.6	25959.6	17434.6	10798.7	9667.6	9334.9
67.5°	12418.6	12409.9	15913.0	25577.7	32262.9	28733.7	21854.8	13364.5	7495.1	6427.7	6066.1
70°	4290.0	4411.5	7156.7	14967.1	23749.5	22511.4	16355.6	8438.2	3951.5	2817.5	2377.8
72.5°	1706.7	1747.2	2568.8	6673.6	14836.9	15039.4	9939.5	4099.0	1183.1	752.1	705.8
75°	1116.6	1122.4	1232.3	2409.7	7200.1	8091.0	4616.8	1177.4	549.6	503.3	491.8
77.5°	963.3	966.2	1024.0	1220.7	2346.0	3147.3	1313.3	697.2	459.9	413.7	402.1
80°	893.9	896.8	925.7	1050.1	1131.1	1073.2	700.0	561.2	387.6	367.4	364.5
82.5°	844.7	856.3	870.7	945.9	914.1	807.1	581.4	454.2	298.0	318.2	326.9
85°	778.2	789.7	798.4	841.8	763.7	590.1	451.3	341.3	190.9	208.3	205.4
87.5°	584.3	590.1	578.6	572.8	532.3	413.7	298.0	217.0	75.2	69.4	63.6
90°	280.6	277.7	266.1	245.9	214.1	167.8	124.4	69.4	31.8	14.5	5.8
92.5°	222.7	219.8	214.1	193.8	167.8	124.4	89.7	49.2	28.9	11.6	2.9
95°	150.4	144.6	138.9	124.4	104.1	75.2	52.1	34.7	23.1	8.7	2.9
97.5°	98.4	95.5	86.8	75.2	57.9	40.5	31.8	26.0	20.2	8.7	2.9
100°	60.7	60.7	55.0	43.4	28.9	23.1	20.2	20.2	14.5	5.8	0.0
102.5°	37.6	34.7	31.8	20.2	14.5	14.5	14.5	14.5	11.6	5.8	0.0
105°	20.2	20.2	14.5	11.6	8.7	5.8	8.7	11.6	8.7	2.9	0.0
107.5°	5.8	5.8	5.8	2.9	2.9	0.0	2.9	5.8	5.8	2.9	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	5.8	2.9	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8	6910.8
2.5°	6983.1	6928.1	6942.6	6887.6	6879.0	6821.1	6919.5	6925.3	6899.2	6928.1
5°	7072.8	7006.3	7032.3	6965.8	6954.2	6879.0	6957.1	6948.4	6928.1	6951.3
7.5°	7200.1	7133.5	7148.0	7069.9	7055.4	6971.5	7046.7	7017.8	6991.8	7023.6
10°	7376.5	7301.3	7312.9	7220.3	7208.7	7110.4	7197.2	7153.8	7116.2	7159.6
12.5°	7593.5	7495.1	7483.6	7385.2	7376.5	7284.0	7373.6	7330.2	7292.6	7362.1
15°	7842.3	7712.1	7694.7	7570.3	7555.9	7460.4	7547.2	7483.6	7454.6	7544.3
17.5°	8174.9	7715.0	7457.5	7275.3	7171.1	7119.1	7275.3	7486.4	7422.8	7425.7
20°	8039.0	7544.3	7200.1	7043.9	6931.0	6427.7	5733.4	5933.0	6338.0	6537.6
22.5°	7998.5	7824.9	7683.2	7419.9	6300.4	6016.9	6057.4	6011.1	5247.5	4955.3
25°	8773.7	8574.1	8267.5	6887.6	6563.7	6500.0	6523.2	5724.8	5149.1	5233.0
27.5°	9765.9	9560.6	8047.6	7275.3	7211.6	7127.7	6670.7	5672.7	5750.8	5831.8
30°	11015.6	9936.6	8391.9	8154.7	8036.1	7949.3	6254.1	6335.1	6465.3	6566.6
32.5°	12233.5	9904.8	9378.3	9083.2	8935.7	7252.1	7067.0	7255.0	7388.1	7466.2
35°	12247.9	11038.7	10483.3	10104.4	9167.1	7796.0	7966.6	8282.0	8608.8	8669.6
37.5°	12580.6	12323.1	11686.7	11209.4	6818.2	8701.4	9077.5	9439.1	9765.9	9786.2
40°	13905.5	13627.8	13031.9	11981.8	7529.8	8875.0	10301.1	10709.0	10983.8	10969.3
42.5°	15227.5	15036.5	14417.5	10648.2	8484.4	7688.9	11585.5	11854.5	12028.1	12149.6
45°	16558.1	16367.2	14275.7	11692.5	9621.3	8420.8	11273.1	12797.5	12988.5	13049.2
47.5°	17596.6	17125.1	13081.0	13078.1	11041.6	9358.1	9308.9	13648.0	13815.8	13772.4
50°	18557.0	15288.2	14139.8	13532.3	12511.2	10240.3	9899.0	11484.2	14565.0	14501.4
52.5°	16885.0	14836.9	15048.1	12308.7	13691.4	11116.9	10564.3	10298.2	13234.4	14938.2
55°	15100.2	15389.5	15976.7	13523.6	9933.7	11400.3	11128.4	10599.1	8929.9	7515.4
57.5°	15409.7	15840.7	15869.6	14648.9	10280.8	7122.0	9120.9	7984.0	5045.0	5056.5
60°	14377.0	14938.2	11599.9	9765.9	5528.1	1484.0	144.6	127.3	879.4	1070.3
62.5°	12155.4	12936.4	11073.5	8507.6	3546.5	55.0	14.5	2.9	0.0	0.0
65°	9413.0	10353.2	9358.1	7341.8	3147.3	17.4	0.0	0.0	0.0	0.0
67.5°	6207.9	7055.4	7110.4	6141.3	2623.7	8.7	0.0	0.0	0.0	0.0
70°	2600.6	3662.2	4425.9	4564.8	2062.5	2.9	0.0	0.0	0.0	0.0
72.5°	752.1	1162.9	2129.1	2742.3	1310.4	0.0	0.0	0.0	0.0	0.0
75°	500.4	535.2	616.2	1235.2	653.8	0.0	0.0	0.0	0.0	0.0
77.5°	413.7	422.3	352.9	338.5	188.0	0.0	0.0	0.0	0.0	0.0
80°	376.1	370.3	283.5	199.6	69.4	0.0	0.0	0.0	0.0	0.0
82.5°	347.1	329.8	205.4	104.1	46.3	0.0	0.0	0.0	0.0	0.0
85°	234.3	231.4	92.6	63.6	8.7	0.0	0.0	0.0	0.0	0.0
87.5°	63.6	81.0	20.2	8.7	0.0	0.0	0.0	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
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579440  
 CATALOG NUMBER: CTN-CA10-630-730-U-T5N-HSS-HM-EX180

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)