

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: P579464

Luminaire Tested: **CTN-CA8-330-730-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579464  
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-CA8-330-730-U-T5N-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32555 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G3

Input Watts (W): 331.5  
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

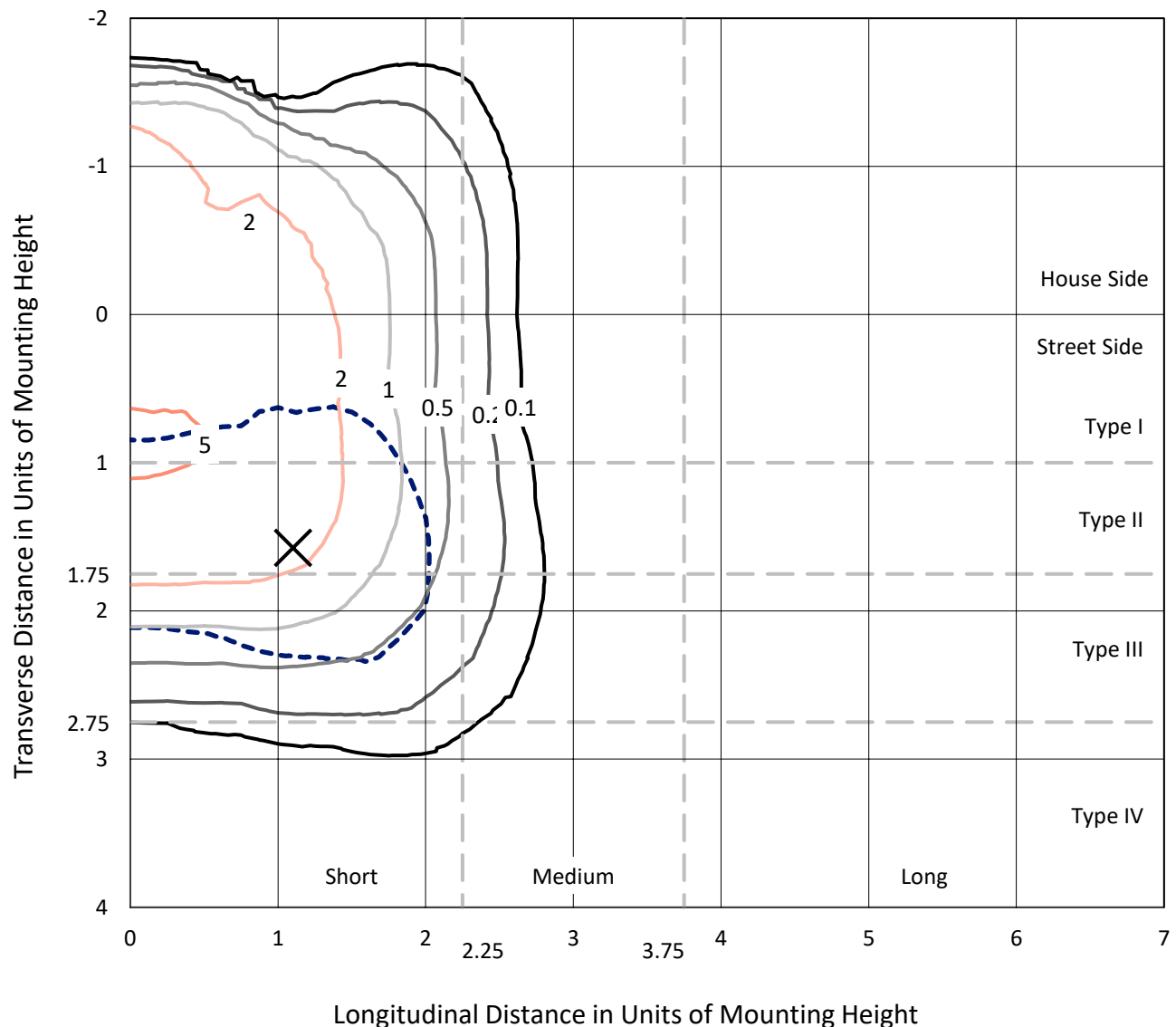


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## Iso-Footcandle Lines of Horizontal Illumination

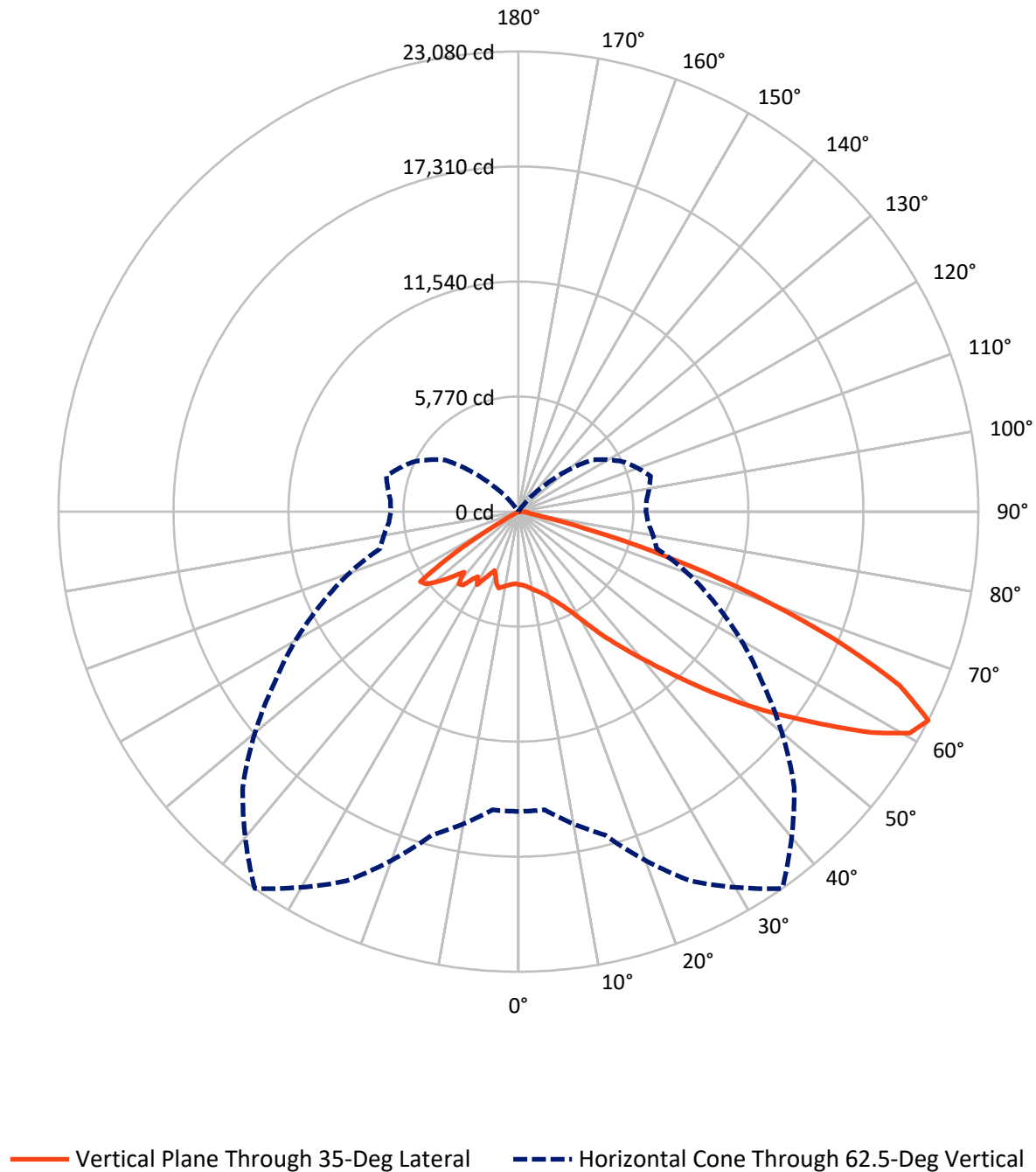
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.6 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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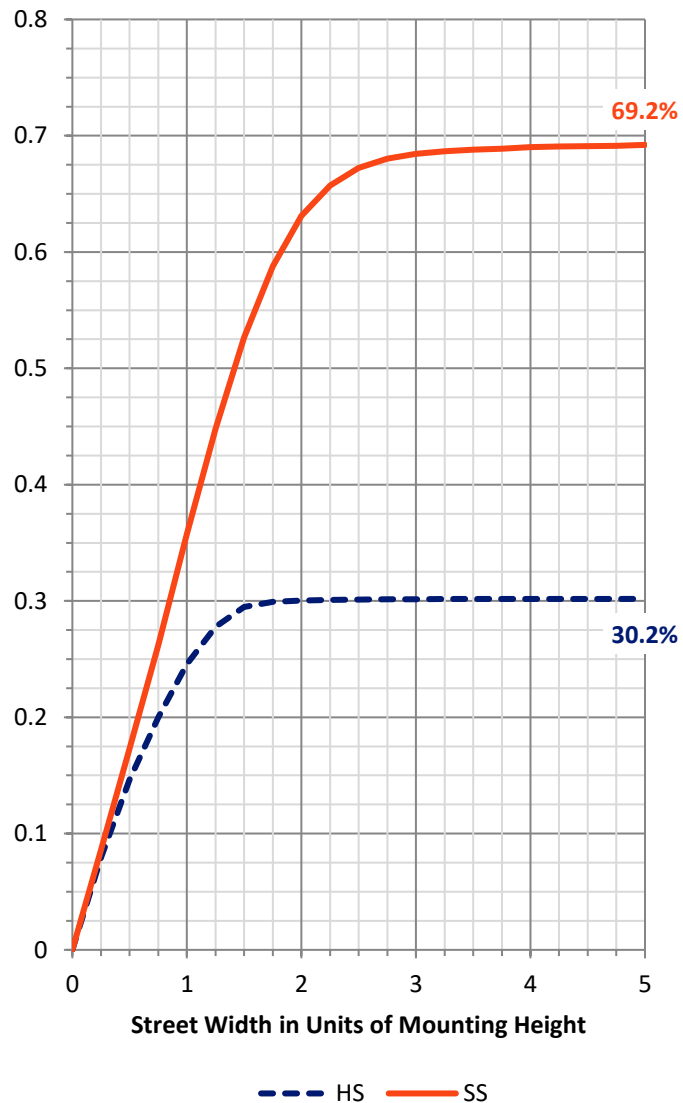
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9880.5	0.0	9880.6
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	22646.2	28.3	22674.4
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	32526.7	28.3	32555.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	361.7	1.1
10°-20°	1160.9	3.6
20°-30°	2121.9	6.5
30°-40°	4043.6	12.4
40°-50°	6940.4	21.3
50°-60°	9310.8	28.6
60°-70°	7078.0	21.7
70°-80°	1340.2	4.1
80°-90°	169.2	0.5
90°-100°	24.9	0.1
100°-110°	3.4	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°	32526.7	99.9
0°-180°	32555.0	100.0

**Coefficient of Utilization**



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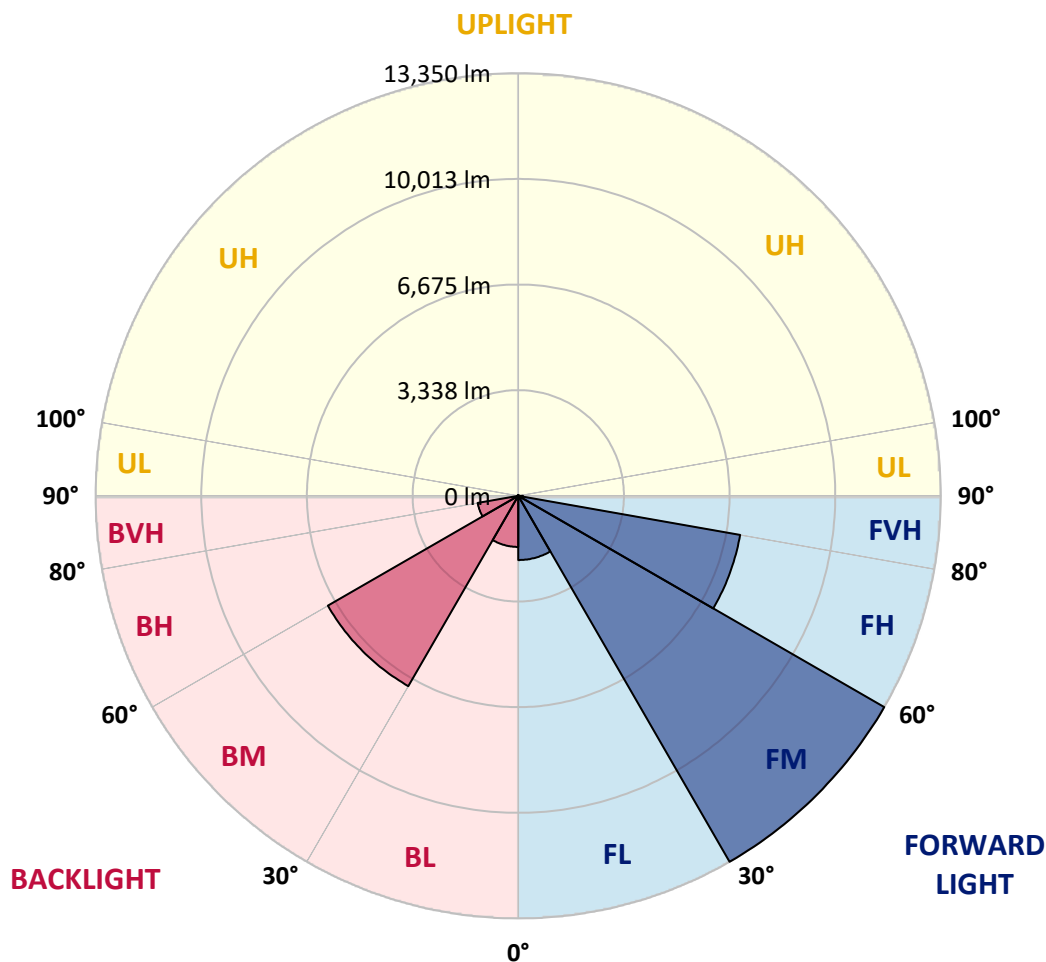
CATALOG NUMBER: CTN-CA8-330-730-U-T5N-HSS-HM-EX180

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2029.4	6.2			
FM	(30°-60°)	13350.3	41.0			
FH	(60°-80°)	7117.1	21.9			G3/7500
FVH	(80°-90°)	149.4	0.5			G2/225
BL	(0°-30°)	1615.1	5.0	B3/2500		
BM	(30°-60°)	6944.5	21.3	B4/8500		
BH	(60°-80°)	1301.1	4.0	B3/2500		G3/2500
BVH	(80°-90°)	19.8	0.1			G1/100
UL	(90°-100°)	24.9	0.1		U2/50	
UH	(100°-180°)	3.4	0.0		U1/10	

**BUG Rating: B4-U2-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1
2.5°	3756.6	3729.0	3730.5	3755.1	3684.5	3710.6	3679.9	3710.6	3693.7	3706.0	3712.1
5°	3822.6	3795.0	3791.9	3818.0	3758.2	3776.6	3745.9	3767.4	3744.4	3759.7	3759.7
7.5°	3922.4	3894.7	3885.5	3905.5	3850.2	3864.1	3831.8	3844.1	3818.0	3838.0	3827.2
10°	4040.5	4009.8	3999.1	4009.8	3962.3	3969.9	3931.6	3945.4	3907.0	3930.0	3914.7
12.5°	4166.4	4126.5	4126.5	4135.7	4085.0	4086.6	4051.3	4058.9	4020.6	4045.1	4026.7
15°	4302.9	4258.4	4264.6	4273.8	4220.1	4229.3	4192.5	4204.7	4164.8	4189.4	4171.0
17.5°	4484.0	4436.4	4430.3	4457.9	4407.3	4424.2	4382.7	4398.1	4362.8	4370.5	4361.3
20°	4734.2	4674.3	4660.5	4697.3	4640.5	4652.8	4622.1	4652.8	4616.0	4560.7	4405.8
22.5°	5033.4	4981.2	4958.2	4982.8	4915.2	4936.7	4935.2	4984.3	4883.0	4534.7	4379.7
25°	5427.8	5392.5	5348.0	5351.1	5269.7	5301.9	5360.3	5398.6	4967.4	4662.0	4665.1
27.5°	5954.1	5918.8	5857.5	5834.4	5716.3	5794.5	5885.1	5510.6	5171.5	5249.8	5206.8
30°	6626.3	6620.1	6495.8	6455.9	6327.0	6425.3	6347.0	5705.5	5822.2	5931.1	5865.1
32.5°	7520.9	7478.0	7298.4	7226.3	7091.3	7148.0	6457.5	6365.4	6538.8	6686.1	6617.1
35°	8602.8	8472.4	8289.8	8147.0	7912.3	7596.1	6878.0	7057.5	7316.8	7519.4	7184.9
37.5°	9859.6	9718.4	9433.0	9176.7	8806.9	7821.7	7511.7	7870.8	8196.1	7976.7	7204.8
40°	11153.3	11027.4	10758.9	10429.0	9804.4	8521.5	8280.6	8710.2	9080.1	7823.2	7439.6
42.5°	12437.7	12330.3	12113.9	11788.6	10984.5	9354.8	9123.0	9584.9	9236.6	8122.5	8110.2
45°	13732.9	13679.2	13433.6	13155.9	12382.5	10421.3	10066.8	10427.4	8888.2	8839.1	8810.0
47.5°	14782.5	14791.7	14705.8	14561.6	13874.1	11592.2	11130.3	10060.7	9311.8	9365.5	9379.3
50°	15864.4	15795.3	15790.7	15800.0	15513.0	13100.6	11854.6	9894.9	9865.8	9861.2	9848.9
52.5°	16731.4	16644.0	16825.0	16969.3	17139.6	14784.1	11745.6	10456.6	10289.3	10231.0	9873.4
55°	17437.3	17403.6	17698.2	18186.2	18944.3	16567.2	12709.3	11004.4	10669.9	9307.2	8395.6
57.5°	17865.5	17914.6	18522.3	19481.4	20900.9	18045.0	13831.1	11559.9	9135.3	8197.7	8139.4
60°	17046.0	17305.4	18339.7	20445.1	22555.1	19435.4	14665.9	11672.0	8220.7	7718.9	7602.3
62.5°	15040.3	15015.8	16792.8	20445.1	23080.0	19573.5	14929.9	10878.6	7181.8	6528.1	6397.6
65°	10645.3	10709.8	12608.0	18424.1	21025.2	18206.2	13771.2	9248.9	5728.6	5128.5	4952.1
67.5°	6587.9	6583.3	8441.7	13568.7	17115.1	15242.9	11593.7	7089.7	3976.1	3409.8	3218.0
70°	2275.8	2340.2	3796.5	7939.9	12598.8	11942.0	8676.5	4476.3	2096.2	1494.7	1261.4
72.5°	905.4	926.9	1362.7	3540.3	7870.8	7978.2	5272.8	2174.5	627.6	399.0	374.4
75°	592.3	595.4	653.7	1278.3	3819.5	4292.2	2449.2	624.6	291.6	267.0	260.9
77.5°	511.0	512.5	543.2	647.6	1244.5	1669.6	696.7	369.8	244.0	219.4	213.3
80°	474.2	475.7	491.1	557.0	600.0	569.3	371.4	297.7	205.6	194.9	193.4
82.5°	448.1	454.2	461.9	501.8	484.9	428.1	308.4	240.9	158.1	168.8	173.4
85°	412.8	418.9	423.5	446.6	405.1	313.1	239.4	181.1	101.3	110.5	109.0
87.5°	310.0	313.1	306.9	303.8	282.4	219.4	158.1	115.1	39.9	36.8	33.8
90°	148.9	147.3	141.2	130.4	113.6	89.0	66.0	36.8	16.9	7.7	3.1
92.5°	118.2	116.6	113.6	102.8	89.0	66.0	47.6	26.1	15.3	6.1	1.5
95°	79.8	76.7	73.7	66.0	55.2	39.9	27.6	18.4	12.3	4.6	1.5
97.5°	52.2	50.6	46.0	39.9	30.7	21.5	16.9	13.8	10.7	4.6	1.5
100°	32.2	32.2	29.2	23.0	15.3	12.3	10.7	10.7	7.7	3.1	0.0
102.5°	19.9	18.4	16.9	10.7	7.7	7.7	7.7	7.7	6.1	3.1	0.0
105°	10.7	10.7	7.7	6.1	4.6	3.1	4.6	6.1	4.6	1.5	0.0
107.5°	3.1	3.1	3.1	1.5	1.5	0.0	1.5	3.1	3.1	1.5	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.1	1.5	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°	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1	3666.1
2.5°	3704.5	3675.3	3683.0	3653.8	3649.2	3618.5	3670.7	3673.8	3660.0	3675.3
5°	3752.0	3716.7	3730.5	3695.2	3689.1	3649.2	3690.6	3686.0	3675.3	3687.6
7.5°	3819.5	3784.3	3791.9	3750.5	3742.8	3698.3	3738.2	3722.9	3709.1	3725.9
10°	3913.2	3873.3	3879.4	3830.3	3824.2	3772.0	3818.0	3795.0	3775.0	3798.1
12.5°	4028.3	3976.1	3969.9	3917.8	3913.2	3864.1	3911.6	3888.6	3868.7	3905.5
15°	4160.2	4091.2	4082.0	4016.0	4008.3	3957.7	4003.7	3969.9	3954.6	4002.2
17.5°	4336.7	4092.7	3956.1	3859.4	3804.2	3776.6	3859.4	3971.5	3937.7	3939.2
20°	4264.6	4002.2	3819.5	3736.7	3676.8	3409.8	3041.5	3147.4	3362.2	3468.1
22.5°	4243.1	4151.0	4075.8	3936.2	3342.3	3191.9	3213.4	3188.8	2783.7	2628.7
25°	4654.4	4548.5	4385.8	3653.8	3481.9	3448.2	3460.5	3036.9	2731.5	2776.0
27.5°	5180.7	5071.8	4269.2	3859.4	3825.7	3781.2	3538.7	3009.3	3050.7	3093.7
30°	5843.6	5271.3	4451.8	4326.0	4263.0	4217.0	3317.7	3360.7	3429.8	3483.5
32.5°	6489.7	5254.4	4975.1	4818.6	4740.3	3847.2	3749.0	3848.7	3919.3	3960.7
35°	6497.4	5855.9	5561.3	5360.3	4863.1	4135.7	4226.2	4393.5	4566.9	4599.1
37.5°	6673.9	6537.3	6199.7	5946.5	3617.0	4616.0	4815.5	5007.3	5180.7	5191.5
40°	7376.7	7229.4	6913.2	6356.2	3994.5	4708.1	5464.6	5681.0	5826.8	5819.1
42.5°	8078.0	7976.7	7648.3	5648.8	4500.9	4078.9	6146.0	6288.7	6380.8	6445.2
45°	8783.9	8682.6	7573.1	6202.7	5104.0	4467.1	5980.2	6788.9	6890.2	6922.5
47.5°	9334.8	9084.7	6939.3	6937.8	5857.5	4964.3	4938.3	7240.1	7329.1	7306.1
50°	9844.3	8110.2	7501.0	7178.7	6637.0	5432.4	5251.3	6092.3	7726.6	7692.8
52.5°	8957.3	7870.8	7982.8	6529.6	7263.1	5897.4	5604.3	5463.1	7020.7	7924.5
55°	8010.5	8163.9	8475.4	7174.1	5269.7	6047.7	5903.5	5622.7	4737.2	3986.8
57.5°	8174.7	8403.3	8418.7	7771.1	5453.9	3778.1	4838.5	4235.4	2676.3	2682.4
60°	7626.8	7924.5	6153.6	5180.7	2932.6	787.2	76.7	67.5	466.5	567.8
62.5°	6448.3	6862.6	5874.3	4513.2	1881.4	29.2	7.7	1.5	0.0	0.0
65°	4993.5	5492.2	4964.3	3894.7	1669.6	9.2	0.0	0.0	0.0	0.0
67.5°	3293.2	3742.8	3772.0	3257.9	1391.9	4.6	0.0	0.0	0.0	0.0
70°	1379.6	1942.8	2347.9	2421.6	1094.1	1.5	0.0	0.0	0.0	0.0
72.5°	399.0	616.9	1129.4	1454.8	695.2	0.0	0.0	0.0	0.0	0.0
75°	265.5	283.9	326.9	655.3	346.8	0.0	0.0	0.0	0.0	0.0
77.5°	219.4	224.0	187.2	179.5	99.7	0.0	0.0	0.0	0.0	0.0
80°	199.5	196.4	150.4	105.9	36.8	0.0	0.0	0.0	0.0	0.0
82.5°	184.1	174.9	109.0	55.2	24.6	0.0	0.0	0.0	0.0	0.0
85°	124.3	122.8	49.1	33.8	4.6	0.0	0.0	0.0	0.0	0.0
87.5°	33.8	43.0	10.7	4.6	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: P579464

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**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)