

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: P510695

Luminaire Tested: **CTN-CA8-230-722-U-T1**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510695  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA8-230-722-U-T1  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30356 lumens  
Efficiency: N/A  
Efficacy: 132.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5

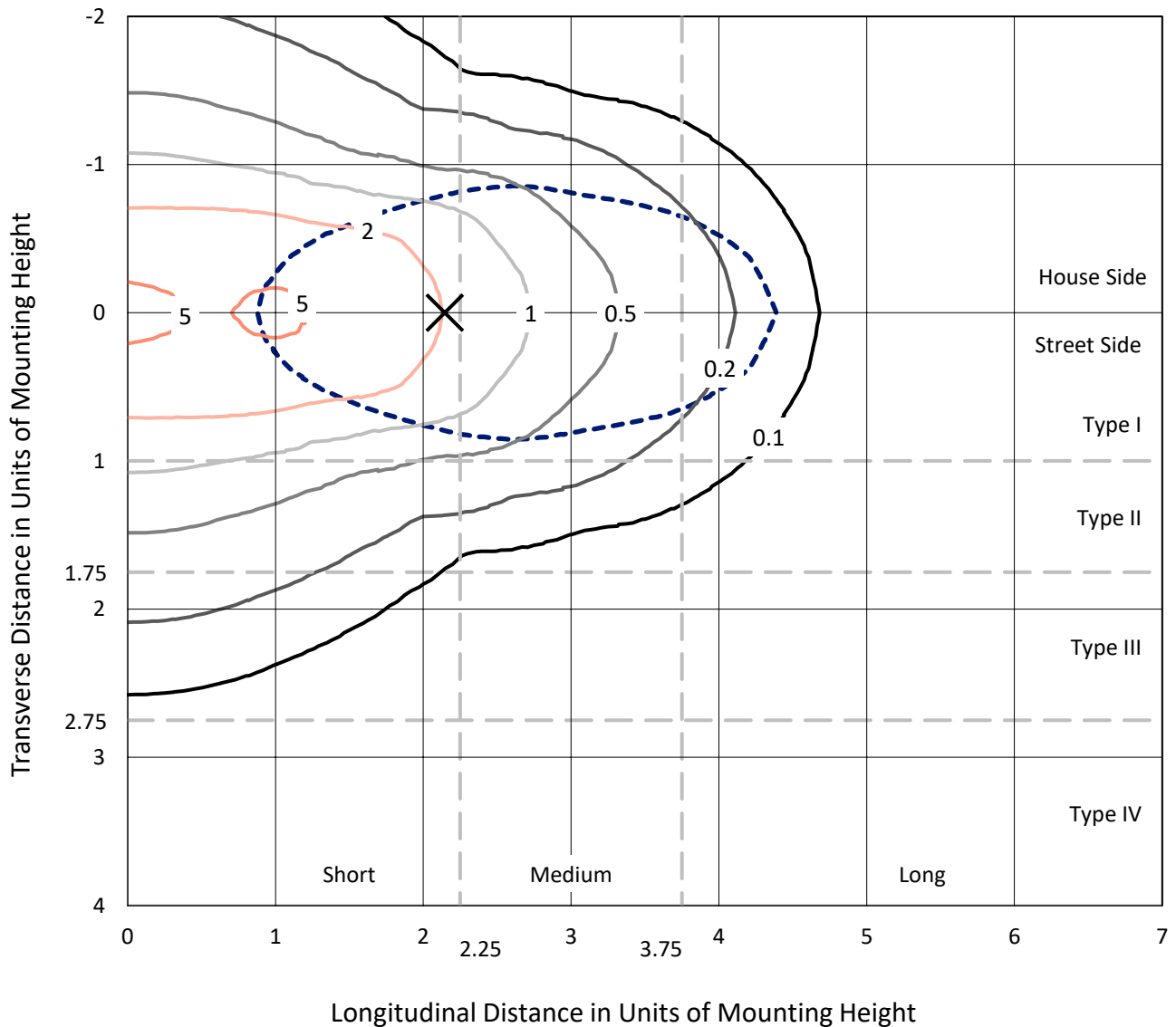
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

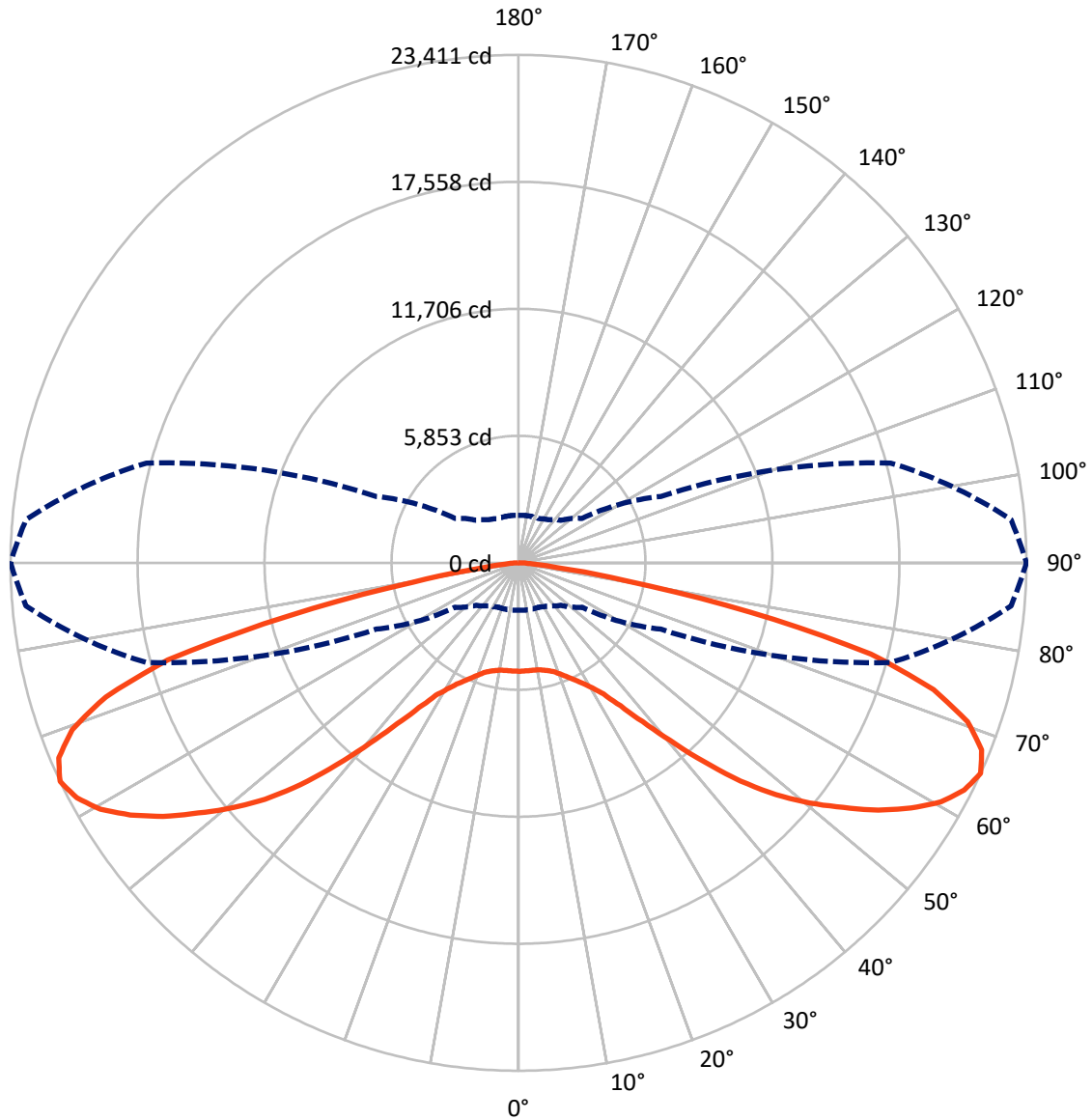
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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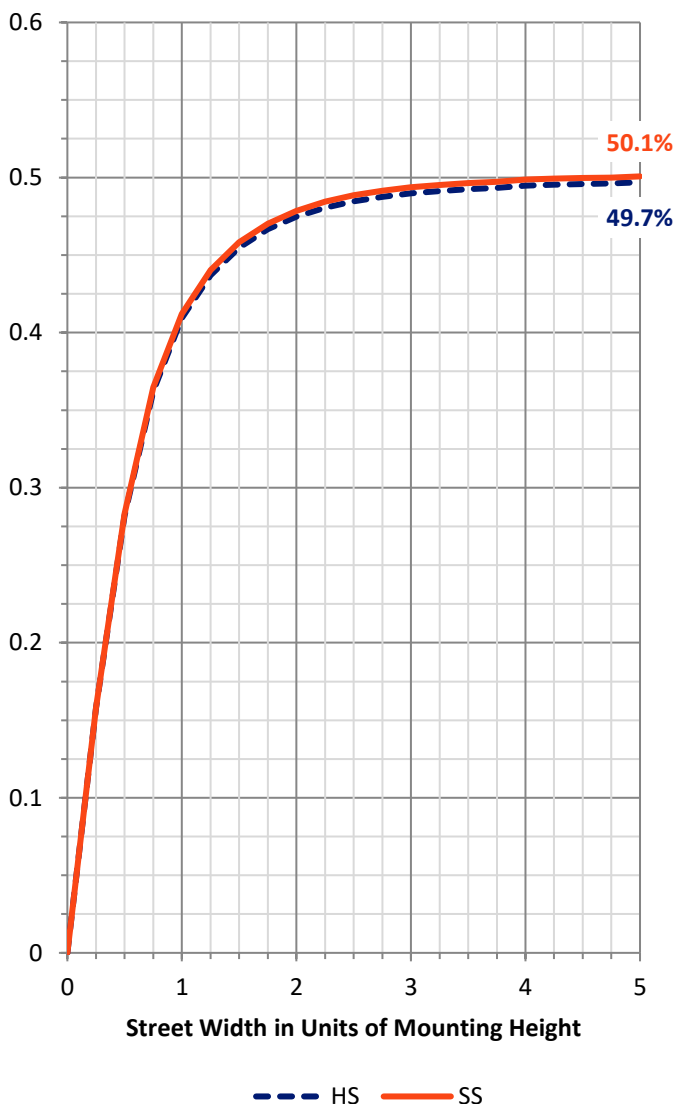
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15178.0	0.0	15178.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	15178.0	0.0	15178.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	30356.0	0.0	30356.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	474.6	1.6
10°-20°	1400.5	4.6
20°-30°	2307.0	7.6
30°-40°	3380.0	11.1
40°-50°	4997.7	16.5
50°-60°	6555.7	21.6
60°-70°	6839.4	22.5
70°-80°	3932.3	13.0
80°-90°	468.8	1.5
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°	30356.0	100.0
0°-180°	30356.0	100.0

**Coefficient of Utilization**

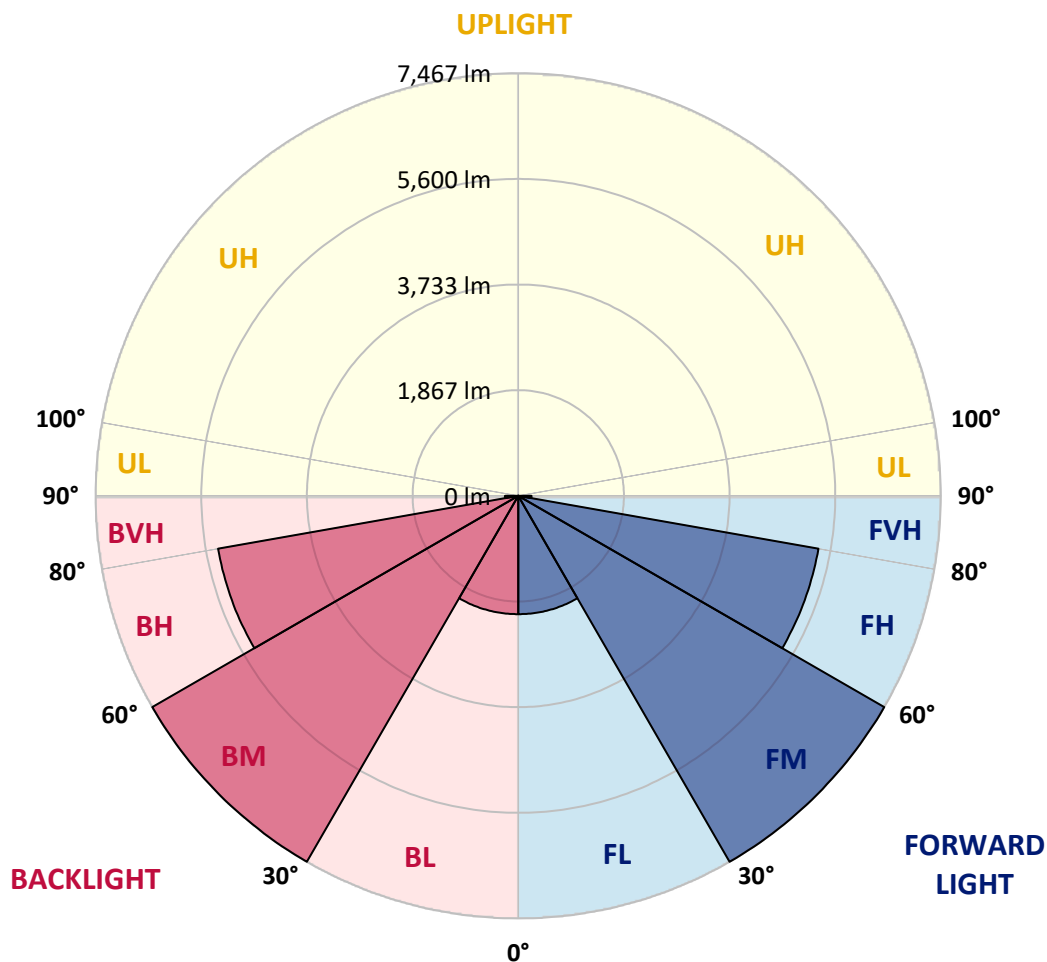


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2091.0	6.9			
FM (30°-60°)	7466.7	24.6			
FH (60°-80°)	5385.9	17.7			G3/7500
FVH (80°-90°)	234.4	0.8			G3/500
BL (0°-30°)	2091.0	6.9	B3/2500		
BM (30°-60°)	7466.7	24.6	B4/8500		
BH (60°-80°)	5385.9	17.7	B5		G5
BVH (80°-90°)	234.4	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1
2.5°	4999.9	4996.3	4995.1	4993.3	4996.3	4998.7	5004.6	5010.0	5008.8	5007.6	5008.8
5°	4972.0	4973.8	4974.4	4975.0	4977.3	4979.1	4987.4	4995.7	4994.5	4993.3	4999.3
7.5°	4932.8	4932.8	4931.6	4930.5	4935.2	4939.4	4947.7	4956.0	4962.5	4968.4	4977.9
10°	4875.9	4873.5	4872.9	4872.3	4877.7	4882.4	4897.8	4913.3	4926.3	4938.8	4954.8
12.5°	4806.5	4805.9	4807.0	4808.2	4819.5	4830.8	4856.9	4883.0	4909.1	4935.2	4958.3
15°	4724.0	4716.9	4722.8	4728.1	4746.5	4764.3	4814.8	4865.2	4904.9	4944.1	4989.2
17.5°	4598.2	4591.1	4600.0	4608.3	4645.1	4681.9	4753.1	4823.7	4898.4	4973.2	5037.8
20°	4407.7	4407.7	4430.3	4452.8	4515.1	4577.4	4675.3	4772.6	4873.5	4974.4	5068.1
22.5°	4204.8	4198.9	4247.0	4295.0	4369.8	4443.9	4567.3	4690.8	4824.3	4957.2	5085.9
25°	3975.8	3985.9	4046.4	4106.3	4211.4	4315.8	4467.7	4619.0	4786.9	4954.8	5133.4
27.5°	3782.4	3784.2	3857.1	3930.1	4061.8	4193.0	4377.5	4562.0	4766.7	4971.4	5196.3
30°	3582.4	3615.1	3692.2	3768.7	3915.9	4063.0	4286.1	4508.6	4751.3	4993.9	5268.1
32.5°	3428.8	3436.5	3523.7	3610.3	3764.0	3917.7	4176.9	4436.2	4727.5	5018.9	5352.3
35°	3284.0	3296.5	3377.7	3459.0	3619.2	3778.8	4063.0	4346.6	4694.9	5042.6	5443.7
37.5°	3155.3	3170.7	3247.8	3324.9	3479.2	3633.5	3934.9	4236.3	4644.5	5052.7	5543.9
40°	3060.9	3074.0	3139.2	3204.5	3343.9	3482.8	3798.4	4113.5	4573.9	5034.3	5622.9
42.5°	2992.7	2998.6	3051.4	3104.2	3228.8	3353.4	3666.1	3978.2	4481.9	4985.6	5684.0
45°	2900.1	2913.2	2965.4	3017.0	3129.1	3240.7	3526.7	3812.6	4345.4	4877.7	5684.6
47.5°	2831.3	2839.6	2888.9	2937.5	3041.9	3146.4	3403.3	3660.2	4191.2	4721.6	5620.5
50°	2780.9	2776.7	2822.4	2867.5	2955.9	3043.7	3272.7	3501.2	4000.1	4499.1	5460.3
52.5°	2709.1	2713.8	2750.6	2787.4	2863.9	2939.9	3145.2	3349.9	3788.3	4226.2	5200.4
55°	2613.0	2634.9	2665.8	2696.0	2763.1	2830.1	3014.6	3199.2	3576.5	3953.3	4865.8
57.5°	2518.6	2534.6	2560.8	2586.9	2639.7	2691.9	2865.7	3039.6	3353.4	3667.3	4443.3
60°	2441.5	2445.6	2462.3	2478.3	2518.6	2559.0	2702.6	2846.1	3120.2	3393.8	4022.1
62.5°	2341.8	2343.0	2354.3	2365.6	2390.5	2414.8	2527.5	2639.7	2873.4	3107.2	3603.2
65°	2185.8	2195.3	2205.9	2216.0	2232.6	2248.7	2334.7	2420.7	2595.8	2770.8	3170.7
67.5°	2028.0	2019.6	2032.1	2044.6	2046.9	2049.3	2114.6	2179.8	2323.4	2467.0	2788.6
70°	1771.0	1777.6	1776.4	1774.6	1764.5	1753.8	1799.5	1845.2	1921.2	1996.5	2229.1
72.5°	1358.1	1349.2	1326.7	1303.5	1292.8	1282.2	1335.6	1388.4	1444.1	1499.9	1667.8
75°	830.0	855.6	902.4	948.7	966.5	984.3	981.3	977.8	973.0	968.3	1177.7
77.5°	562.5	576.1	586.8	596.9	623.0	648.5	678.2	707.8	707.2	706.6	838.4
80°	357.8	347.1	351.8	356.6	371.4	386.2	431.3	475.8	488.3	500.2	590.9
82.5°	224.3	226.1	232.0	237.3	220.7	204.1	239.1	273.5	303.2	332.3	374.4
85°	145.4	164.9	162.0	159.0	139.4	119.8	150.7	181.6	195.8	209.4	225.5
87.5°	46.9	54.6	56.4	57.6	57.6	57.0	63.5	70.0	72.4	74.2	80.1
90°	0.0	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	0.0
95°	0.0	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	0.0
100°	0.0	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	0.0
105°	0.0	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	0.0
110°	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):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1	5001.1
2.5°	5009.4	5003.4	4997.5	4995.7	4993.9	4992.8	4991.6	4990.4
5°	5004.6	5003.4	5002.2	4997.5	4992.8	4992.2	4991.6	4993.3
7.5°	4987.4	4987.4	4987.4	4992.8	4998.1	4995.7	4992.8	4996.3
10°	4970.2	4984.4	4998.7	5002.8	5007.0	5010.0	5012.9	5015.9
12.5°	4981.5	5005.8	5029.5	5043.2	5056.8	5064.0	5070.5	5072.3
15°	5034.3	5065.1	5096.0	5114.4	5132.2	5144.1	5155.9	5158.9
17.5°	5102.5	5150.0	5196.9	5223.6	5250.3	5263.9	5277.0	5272.8
20°	5161.3	5226.5	5291.8	5348.7	5405.7	5437.1	5468.0	5471.6
22.5°	5214.1	5323.8	5433.6	5507.2	5580.1	5635.9	5691.7	5697.6
25°	5311.4	5454.9	5598.5	5716.0	5833.5	5884.5	5934.9	5964.6
27.5°	5420.5	5612.8	5805.0	5962.2	6119.5	6197.2	6274.3	6278.5
30°	5541.6	5785.4	6028.7	6239.9	6450.5	6545.5	6639.8	6689.6
32.5°	5685.2	5994.9	6304.0	6581.7	6859.3	7003.5	7147.7	7198.1
35°	5844.2	6245.8	6646.9	7029.6	7411.7	7687.6	7963.5	8096.4
37.5°	6035.2	6546.6	7058.1	7633.0	8207.9	8678.4	9148.3	9282.4
40°	6211.4	6869.4	7526.8	8325.4	9124.0	9870.4	10616.2	10761.6
42.5°	6382.3	7178.5	7974.8	9064.1	10153.4	11152.6	12151.7	12529.6
45°	6490.9	7453.8	8416.2	9852.6	11289.0	12660.8	14031.9	14349.3
47.5°	6518.8	7650.2	8781.7	10561.0	12340.4	13954.8	15568.6	15976.2
50°	6421.5	7752.3	9083.1	11431.4	13779.2	15423.3	17066.7	17401.4
52.5°	6174.6	7719.6	9264.6	12106.0	14947.4	16687.6	18427.8	18731.6
55°	5778.3	7521.5	9264.6	12661.4	16057.5	17862.4	19666.6	20128.2
57.5°	5219.4	7142.9	9066.5	13032.2	16997.9	18958.2	20918.5	21333.3
60°	4650.4	6692.6	8734.2	13236.9	17739.6	19816.2	21892.8	22376.9
62.5°	4098.6	6080.9	8062.6	13022.1	17981.6	20173.9	22365.6	23062.2
65°	3570.6	5401.5	7232.5	12498.2	17763.3	20275.4	22786.9	23411.1
67.5°	3110.2	4833.7	6557.3	11620.1	16682.9	19463.1	22242.8	23020.7
70°	2461.7	4047.6	5633.5	10063.2	14492.9	17749.0	21005.2	21965.2
72.5°	1835.7	3180.8	4525.2	7916.0	11306.8	15051.2	18795.1	20003.1
75°	1386.6	2540.6	3694.6	6257.1	8819.6	11989.7	15159.8	16776.6
77.5°	970.1	1835.7	2700.8	4612.4	6524.1	8279.1	10034.2	10895.7
80°	681.1	1161.1	1640.5	2560.2	3479.2	4257.6	5035.5	4973.8
82.5°	415.9	617.6	818.8	1110.7	1402.6	1590.7	1778.8	1770.5
85°	241.5	293.7	345.3	427.8	510.3	603.4	696.6	619.4
87.5°	85.4	85.4	85.4	97.9	110.4	151.9	193.4	204.1
90°	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
95°	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
100°	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
105°	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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	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
117.5°	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
122.5°	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
127.5°	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
132.5°	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
137.5°	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
142.5°	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
147.5°	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
152.5°	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
157.5°	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
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)