

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: P522153

Luminaire Tested: **CTN-CA10-630-740-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522153  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-630-740-U-T5R-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 71083.9 lumens  
Efficiency: N/A  
Efficacy: 112.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - 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

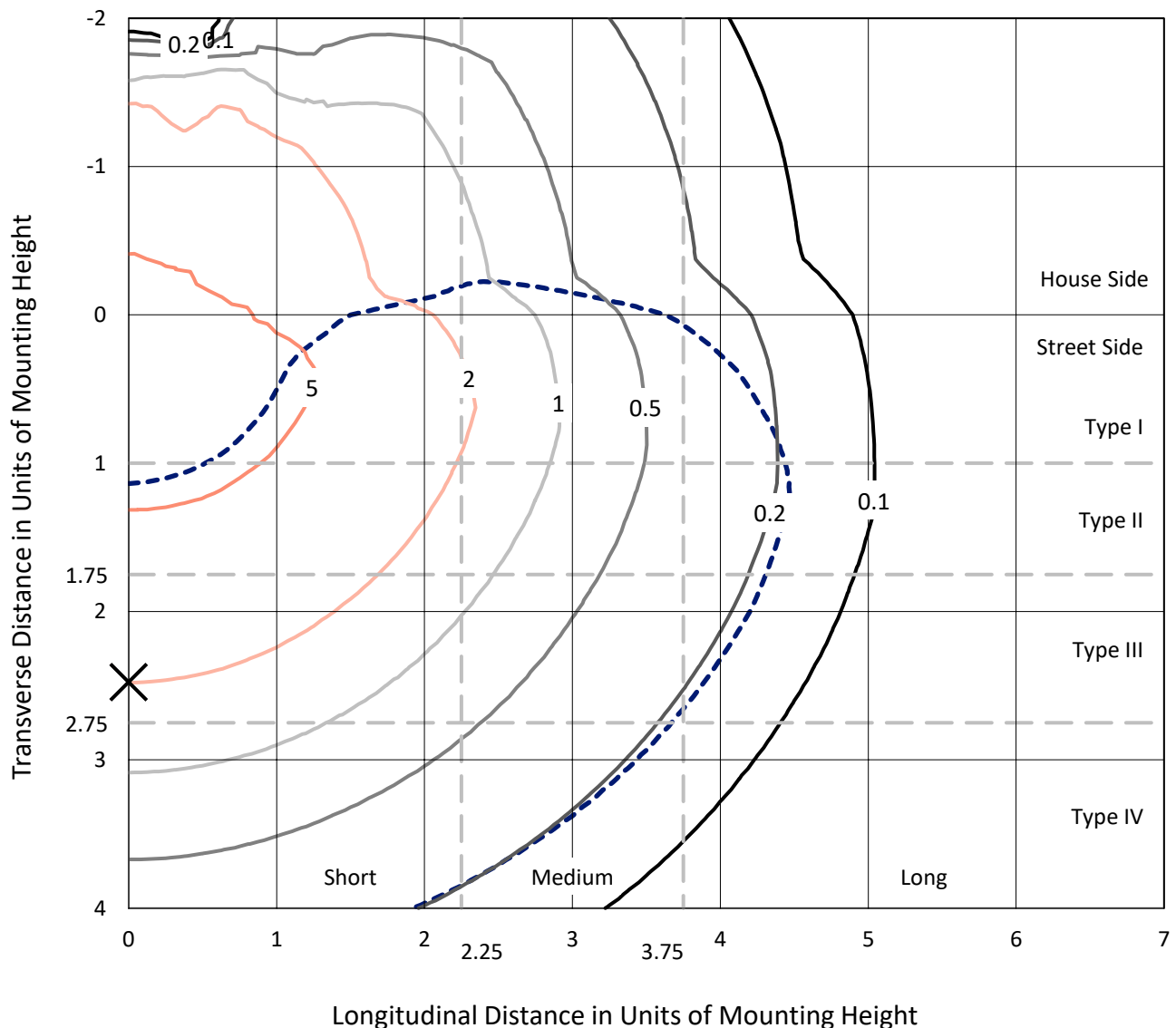


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## Iso-Footcandle Lines of Horizontal Illumination

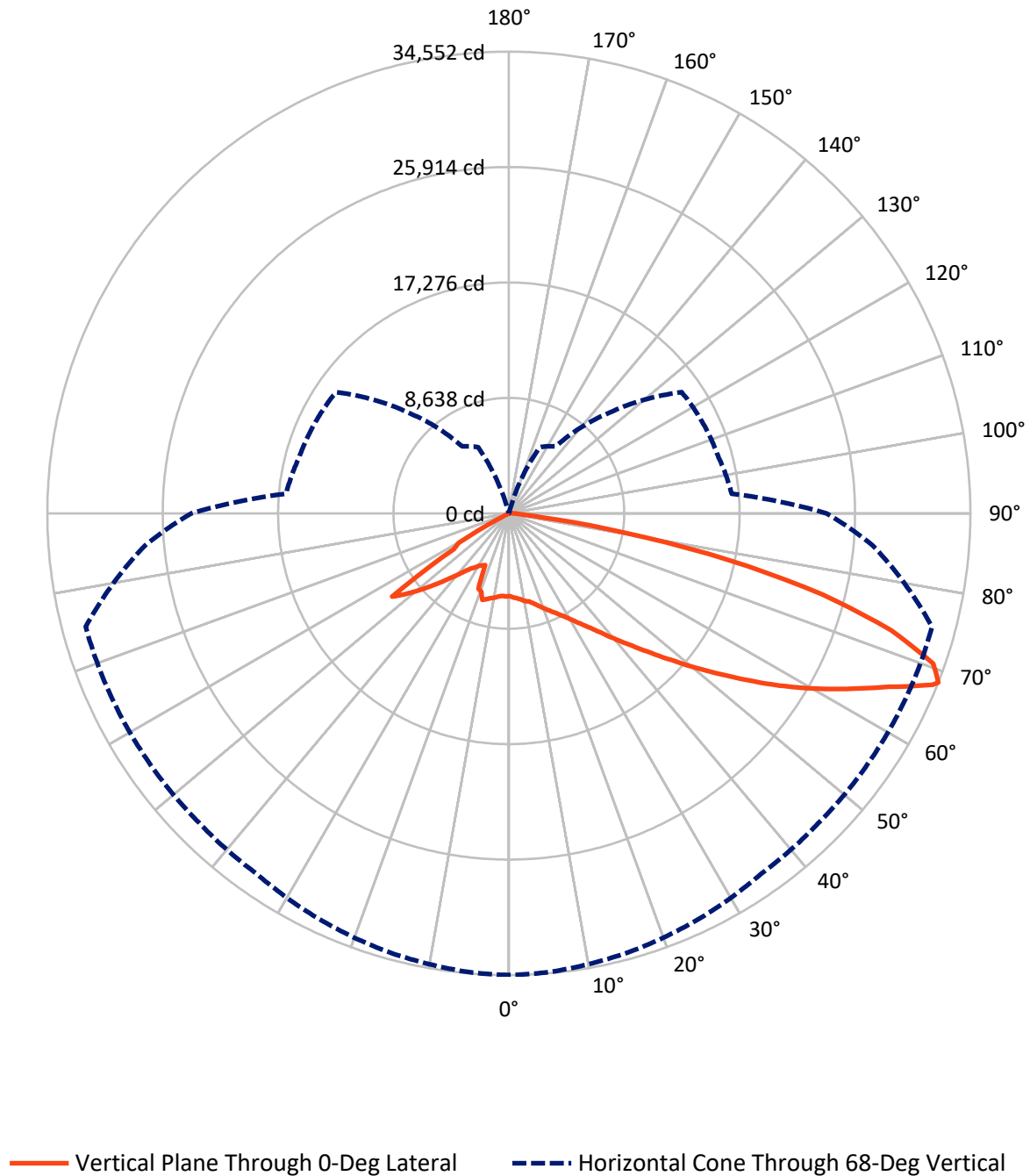
× Max cd  
- - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7 fc  
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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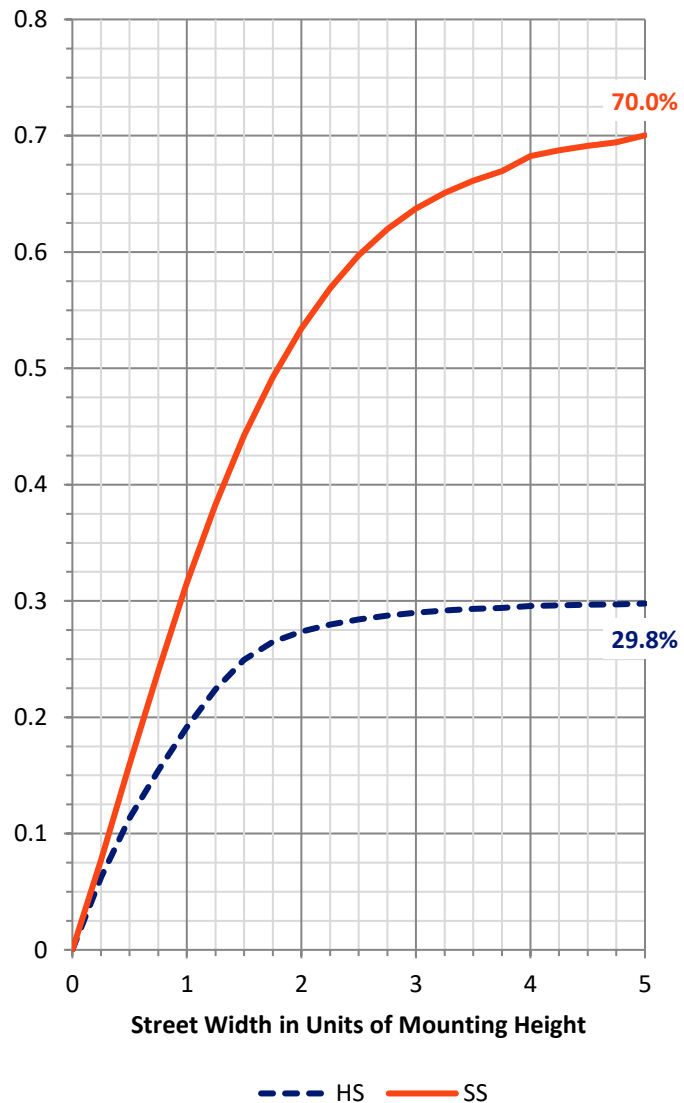
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	21189.3	3.3	21192.6
	% Fixture	29.8	0.0	29.8
<b>Street Side</b>	Lumens	49862.3	29.1	49891.3
	% Fixture	70.1	0.0	70.2
<b>Total</b>	Lumens	71051.6	32.3	71083.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	601.5	0.8
10°-20°	1914.3	2.7
20°-30°	3279.0	4.6
30°-40°	5319.3	7.5
40°-50°	8970.7	12.6
50°-60°	14622.5	20.6
60°-70°	19611.2	27.6
70°-80°	15232.8	21.4
80°-90°	1500.2	2.1
90°-100°	28.5	0.0
100°-110°	1.6	0.0
110°-120°	0.4	0.0
120°-130°	0.3	0.0
130°-140°	0.4	0.0
140°-150°	0.4	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-90°	71051.6	100.0
0°-180°	71083.9	100.0

**Coefficient of Utilization**



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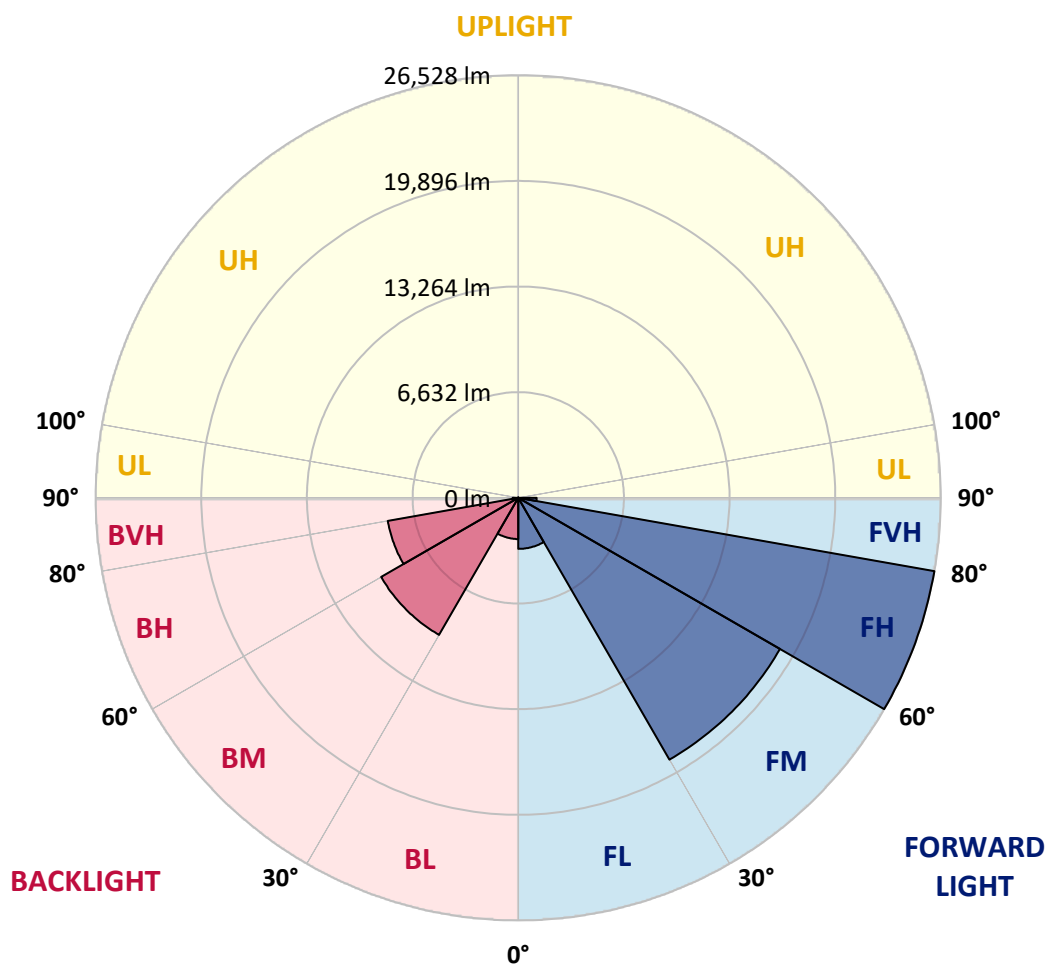
CATALOG NUMBER: CTN-CA10-630-740-U-T5R-HSS-HM-EX120

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3206.3	4.5			
FM	(30°-60°)	18974.8	26.7			
FH	(60°-80°)	26527.7	37.3			G5
FVH	(80°-90°)	1153.5	1.6			G5
BL	(0°-30°)	2588.5	3.6	B4/5000		
BM	(30°-60°)	9937.7	14.0	B5		
BH	(60°-80°)	8316.3	11.7	B5		G5
BVH	(80°-90°)	346.8	0.5			G3/500
UL	(90°-100°)	28.5	0.0		U2/50	
UH	(100°-180°)	3.9	0.0		U1/10	

**BUG Rating: B5-U2-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2
2.5°	6300.1	6282.5	6279.5	6314.8	6203.1	6258.9	6209.0	6250.1	6223.7	6244.2	6247.2
5°	6385.4	6353.0	6332.4	6373.6	6303.0	6329.5	6273.6	6291.3	6217.8	6258.9	6264.8
7.5°	6508.8	6455.9	6450.0	6461.8	6400.1	6420.6	6329.5	6350.1	6297.2	6273.6	6294.2
10°	6676.4	6626.4	6588.2	6614.7	6532.4	6544.1	6447.1	6450.0	6411.8	6367.7	6403.0
12.5°	6770.5	6776.4	6758.7	6779.3	6711.7	6673.5	6605.9	6582.3	6544.1	6491.2	6473.6
15°	7005.7	6993.9	6958.6	6991.0	6982.2	6946.9	6864.6	6811.6	6729.3	6699.9	6670.5
17.5°	7293.8	7255.6	7226.2	7267.3	7311.4	7237.9	7158.5	7085.0	6976.3	6917.5	6882.2
20°	7596.6	7570.1	7540.7	7605.4	7620.1	7564.2	7505.4	7396.7	7270.3	7193.8	7120.3
22.5°	7934.7	7881.7	7890.6	7975.8	7949.4	7922.9	7846.5	7758.3	7605.4	7508.4	7296.7
25°	8284.5	8255.1	8296.3	8334.5	8313.9	8258.0	8219.8	8155.2	7984.6	7867.0	7558.4
27.5°	8719.6	8672.6	8725.5	8740.2	8722.5	8707.8	8654.9	8605.0	8419.7	8287.4	7902.3
30°	9231.1	9175.3	9260.5	9240.0	9222.3	9234.1	9201.7	9093.0	8928.3	8749.0	8363.9
32.5°	9839.7	9766.2	9863.2	9819.1	9778.0	9860.3	9783.8	9680.9	9486.9	9278.2	8901.9
35°	10545.3	10548.2	10598.2	10524.7	10510.0	10598.2	10548.2	10421.8	10242.4	10024.9	9489.8
37.5°	11400.8	11377.2	11503.6	11468.4	11415.5	11533.0	11547.7	11389.0	11065.6	10851.0	10218.9
40°	12441.5	12435.6	12476.7	12482.6	12467.9	12523.8	12550.2	12338.6	12129.8	11806.5	9642.7
42.5°	13552.7	13576.2	13649.7	13596.8	13667.4	13740.9	13749.7	13573.3	13273.4	11327.3	10242.4
45°	14887.4	14960.9	15010.9	14999.1	15031.5	15137.3	15146.1	15052.0	14758.1	12270.9	11330.2
47.5°	16419.1	16489.6	16504.3	16598.4	16569.0	16718.9	16698.4	16701.3	16386.7	13585.1	12515.0
50°	18180.1	18212.4	18332.9	18385.8	18312.3	18515.2	18462.3	18527.0	18138.9	15090.3	13787.9
52.5°	20049.8	20105.7	20155.6	20355.5	20261.5	20437.9	20367.3	20517.2	20067.4	16621.9	15202.0
55°	22175.3	22184.1	22269.4	22472.2	22348.8	22560.4	22457.5	22513.4	22154.7	18315.3	16674.8
57.5°	24427.2	24397.8	24430.2	24591.9	24480.2	24638.9	24597.8	24650.7	24315.5	20096.8	17750.8
60°	26655.7	26611.6	26658.6	26767.4	26614.5	26887.9	26740.9	26790.9	26429.3	21916.6	19285.4
62.5°	28895.8	28863.5	28810.6	28919.3	28695.9	28837.0	28898.8	28816.4	28498.9	23562.9	20620.1
65°	31300.6	31268.3	31074.3	31141.9	30742.0	30674.4	30697.9	30724.4	30512.7	25194.5	22084.2
67.5°	34222.8	34175.8	33811.3	33352.6	32776.4	32650.0	32661.8	32732.3	32761.7	27293.6	23798.1
68°	34552.1	34466.8	34061.1	33529.0	32926.4	32779.4	32764.7	32779.4	32794.1	27311.2	23780.5
70°	33711.3	33679.0	33370.3	32726.4	32109.1	31756.3	31450.6	31438.8	31297.7	25914.8	22466.4
72.5°	29915.9	29874.8	29507.3	29051.6	28669.5	28116.8	27719.9	27743.4	27511.1	22904.4	19664.7
75°	24209.7	24206.8	23765.8	23383.6	23389.5	23348.3	23216.0	23448.3	23207.2	19426.6	16771.9
77.5°	16871.8	16930.6	16901.2	16677.8	16992.4	17427.5	17900.8	18347.6	18209.5	15346.0	13373.4
80°	8813.7	8978.3	9560.4	9586.9	9807.4	10230.7	10554.1	10853.9	10874.5	8707.8	7725.9
82.5°	2343.1	2393.0	2590.0	2534.2	2516.5	2601.8	2672.3	2681.1	2687.0	2269.6	2119.6
85°	729.1	749.7	726.1	693.8	643.8	588.0	573.3	467.4	370.4	305.7	267.5
87.5°	517.4	552.7	499.8	470.4	417.5	396.9	355.7	279.3	217.5	152.9	102.9
90°	267.5	273.4	244.0	208.7	194.0	182.3	155.8	111.7	55.9	29.4	26.5
92.5°	135.2	138.2	120.5	102.9	88.2	76.4	58.8	32.3	17.6	8.8	2.9
95°	52.9	55.9	50.0	44.1	35.3	26.5	23.5	17.6	11.8	5.9	2.9
97.5°	17.6	17.6	17.6	14.7	14.7	14.7	14.7	11.8	8.8	5.9	2.9
100°	0.0	0.0	0.0	2.9	5.9	8.8	8.8	8.8	5.9	2.9	2.9
102.5°	0.0	0.0	0.0	0.0	0.0	2.9	5.9	5.9	5.9	2.9	2.9
105°	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
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	2.9
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
165°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
170°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
175°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
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°	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2	6197.2
2.5°	6232.5	6214.9	6223.7	6150.2	6167.8	6120.8	6220.7	6194.3	6182.5	6223.7
5°	6247.2	6182.5	6235.4	6185.5	6194.3	6126.7	6209.0	6176.6	6173.7	6197.2
7.5°	6253.1	6220.7	6270.7	6188.4	6214.9	6188.4	6250.1	6217.8	6247.2	6267.8
10°	6335.4	6317.7	6311.9	6282.5	6303.0	6244.2	6320.7	6320.7	6335.4	6391.2
12.5°	6455.9	6432.4	6417.7	6364.8	6385.4	6367.7	6429.5	6441.2	6467.7	6491.2
15°	6620.5	6579.4	6564.7	6517.7	6532.4	6529.4	6573.5	6576.5	6635.2	6632.3
17.5°	6832.2	6773.4	6791.1	6755.8	6758.7	6735.2	6711.7	6711.7	6764.6	6776.4
20°	7085.0	6749.9	6308.9	6062.0	6017.9	6050.2	6176.6	6385.4	6123.7	6197.2
22.5°	6629.4	6326.6	6306.0	6250.1	6214.9	5427.0	5224.1	5159.4	5497.5	6079.6
25°	6688.2	6558.8	6520.6	6450.0	5409.3	5400.5	5341.7	5244.7	4286.3	4265.7
27.5°	6999.8	6873.4	6811.6	5650.4	5626.9	5623.9	5535.7	4562.7	4342.2	4371.6
30°	7364.3	7217.3	6112.0	5935.6	5915.0	5867.9	5362.3	4506.8	4503.9	4506.8
32.5°	7784.7	7296.7	6288.3	6279.5	6291.3	6147.2	4750.8	4733.2	4730.2	4759.6
35°	8360.9	6770.5	6729.3	6773.4	6711.7	5315.3	5036.0	5027.1	5030.1	5015.4
37.5°	7978.8	7299.7	7290.8	7290.8	7146.8	5438.7	5382.9	5424.0	5418.1	5397.6
40°	8140.5	7940.5	7887.6	7870.0	6041.4	5867.9	5835.6	5888.5	5897.3	5912.0
42.5°	8925.4	8743.1	8716.7	8507.9	6573.5	6517.7	6417.7	6473.6	6467.7	6485.3
45°	9889.7	9766.2	9651.5	7376.1	7290.8	7220.3	7117.4	7182.1	7199.7	7187.9
47.5°	11012.7	10877.5	10048.4	8111.1	8108.1	8052.3	7937.6	7990.5	7981.7	7981.7
50°	12141.6	11994.6	9128.2	9045.9	9016.5	8928.3	8834.3	8843.1	8846.0	8875.4
52.5°	13402.8	10712.8	10104.3	9939.6	9963.2	9904.4	9813.2	7429.0	9769.1	9795.6
55°	12526.7	11212.6	11177.3	10959.8	11015.6	10939.2	10880.4	7329.1	9716.2	10736.3
57.5°	12385.6	12291.5	12262.1	12038.7	12109.3	11383.1	11927.0	8019.9	6720.5	4909.6
60°	13464.5	13364.6	13346.9	13150.0	13144.1	9045.9	10842.2	5500.5	4298.1	4327.5
62.5°	14511.1	14349.4	14393.5	14161.3	9983.7	5512.2	4859.6	123.5	197.0	208.7
65°	15678.2	15407.8	15451.9	15237.3	10298.3	5812.1	5253.5	64.7	55.9	52.9
67.5°	16801.3	16327.9	16101.6	15875.2	10695.2	6120.8	5474.0	17.6	0.0	0.0
68°	16745.4	16245.6	16013.4	15798.8	10654.0	6112.0	5462.2	17.6	0.0	0.0
70°	15801.7	15351.9	15131.4	14966.8	10171.9	5903.2	5241.8	17.6	0.0	0.0
72.5°	13814.4	13564.5	13423.4	13279.3	9037.1	5280.0	4700.8	17.6	0.0	0.0
75°	11738.8	11668.3	11580.1	11262.6	7531.9	4321.6	3863.0	17.6	0.0	0.0
77.5°	9301.7	9298.8	9084.1	8710.8	5671.0	3172.1	2848.7	14.7	0.0	0.0
80°	5030.1	5482.8	5318.2	5127.1	3216.2	1725.7	1643.4	11.8	0.0	0.0
82.5°	1414.1	1337.6	1284.7	1202.4	676.2	376.3	367.5	11.8	0.0	0.0
85°	197.0	217.5	241.1	273.4	155.8	100.0	88.2	5.9	0.0	0.0
87.5°	111.7	126.4	155.8	161.7	58.8	47.0	14.7	0.0	0.0	0.0
90°	23.5	26.5	29.4	29.4	11.8	11.8	0.0	0.0	0.0	0.0
92.5°	0.0	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.9	2.9	2.9	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°
110°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.9	2.9	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)