

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: P510485

Luminaire Tested: **CTN-CA10-310-740-U-T1**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510485  
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-CA10-310-740-U-T1  
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: 50346 lumens  
Efficiency: N/A  
Efficacy: 161.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5

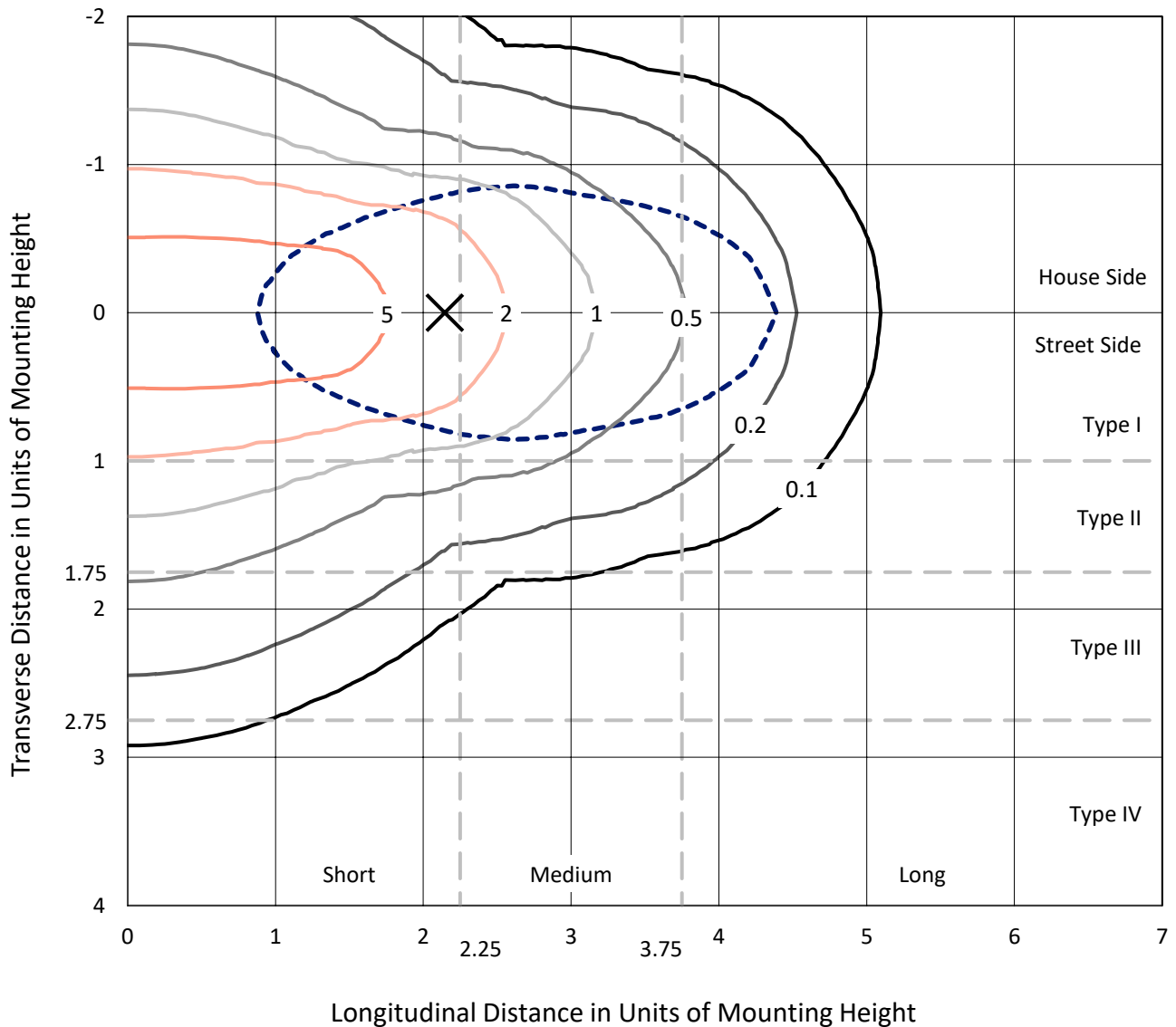
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

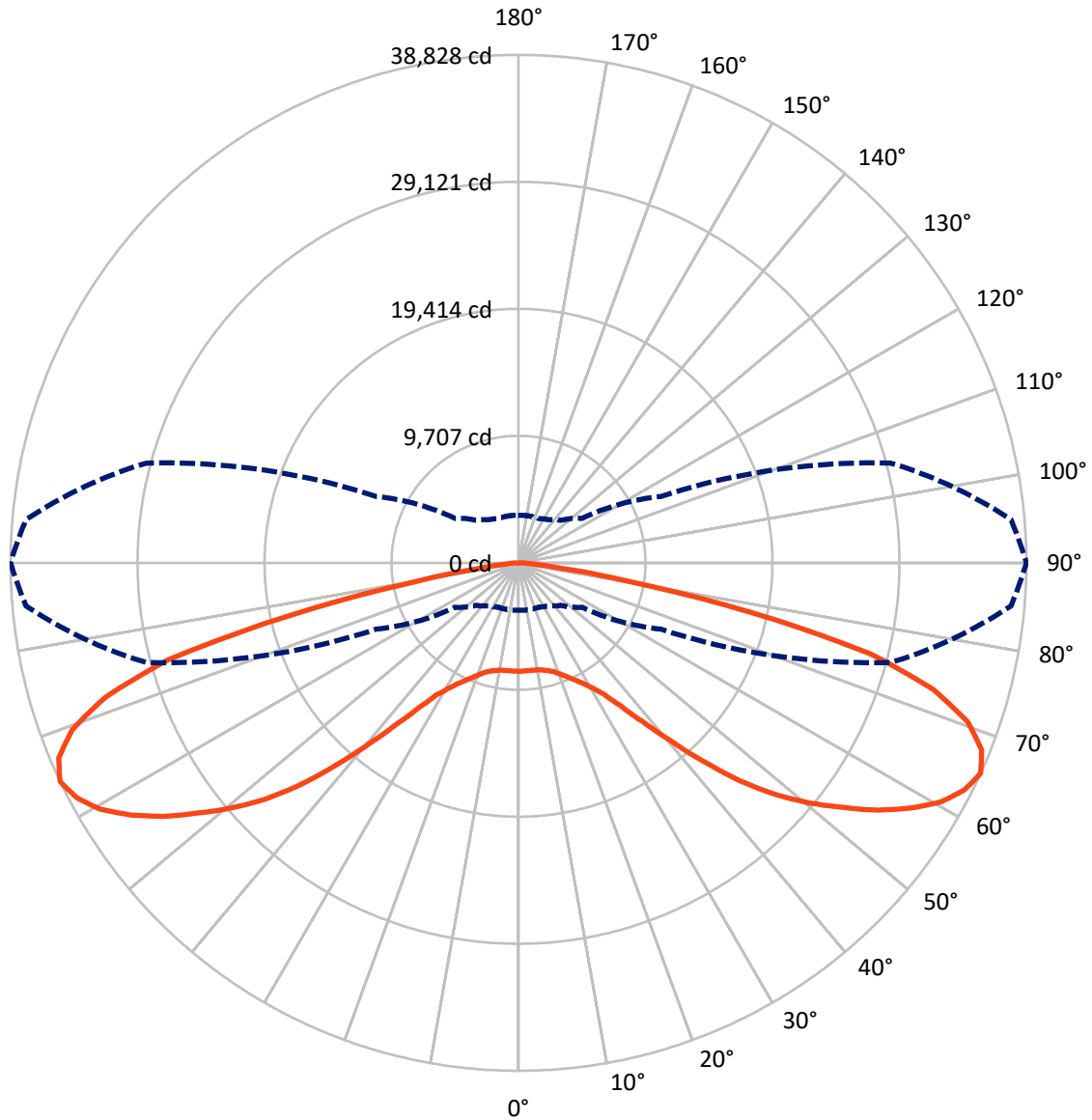
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.3 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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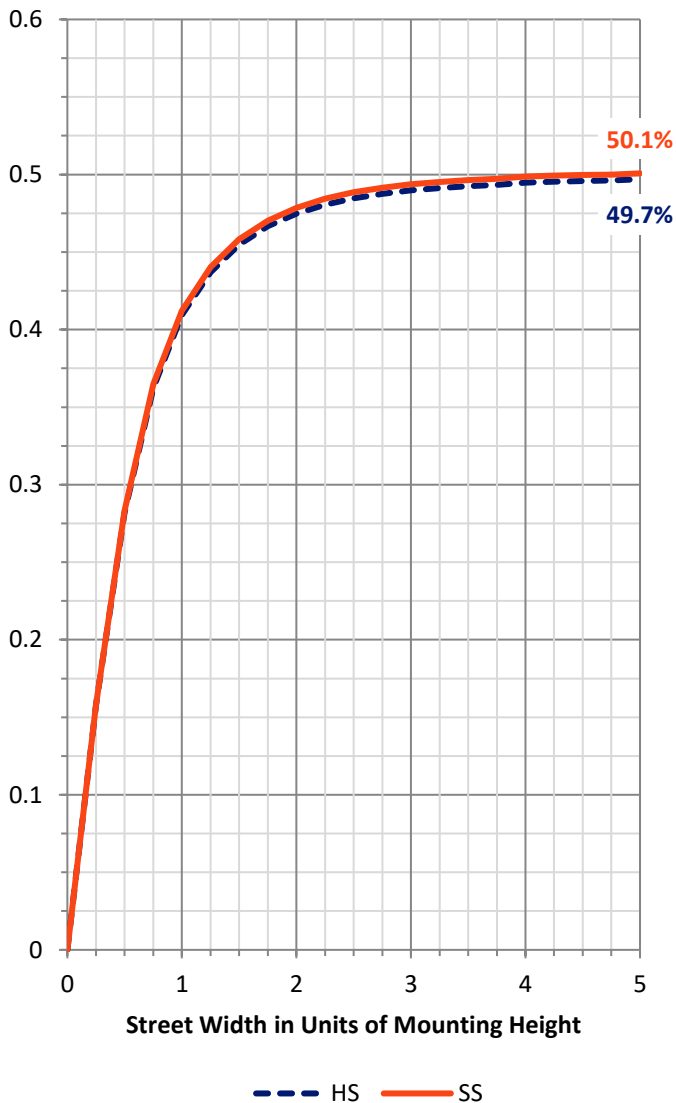
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	25173.0	0.0	25173.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	25173.0	0.0	25173.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	50346.0	0.0	50346.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	787.1	1.6
10°-20°	2322.8	4.6
20°-30°	3826.2	7.6
30°-40°	5605.8	11.1
40°-50°	8288.8	16.5
50°-60°	10872.8	21.6
60°-70°	11343.4	22.5
70°-80°	6521.8	13.0
80°-90°	777.5	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°	50346.0	100.0
0°-180°	50346.0	100.0

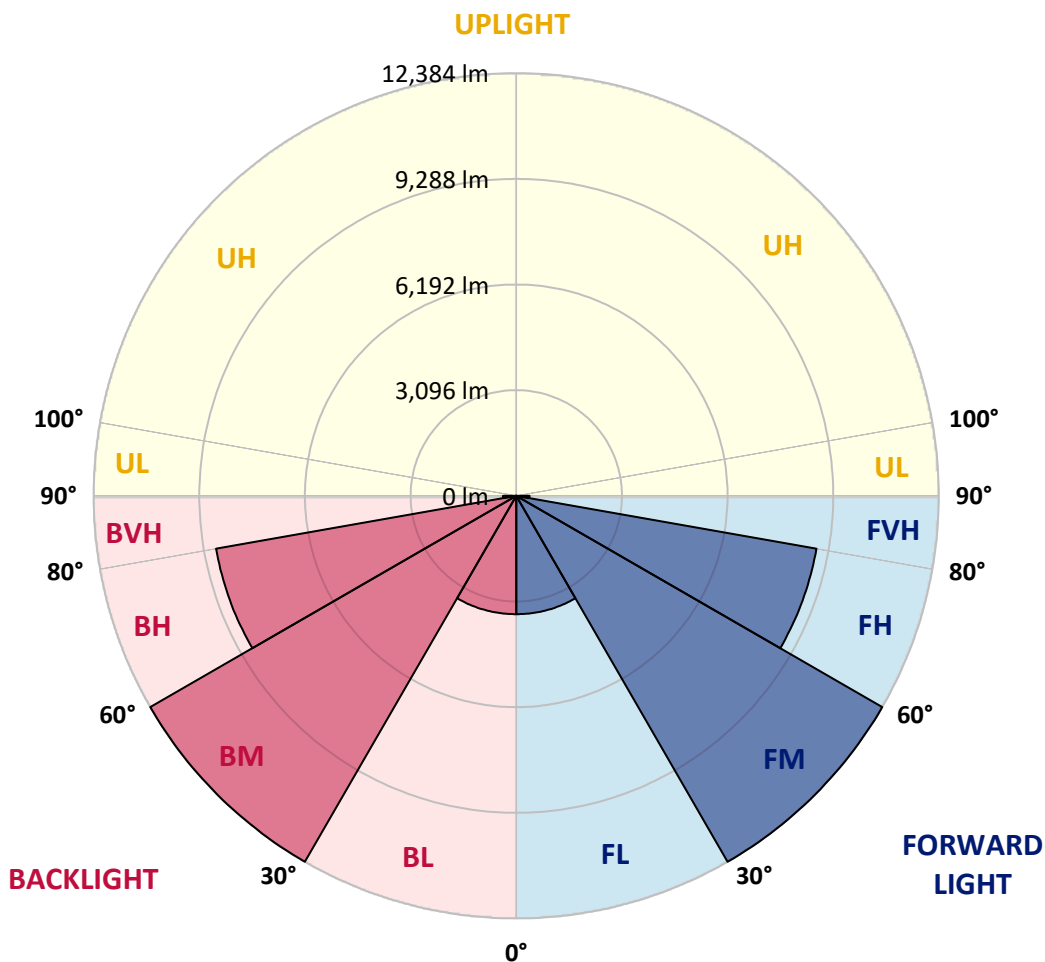


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3468.0	6.9			
FM (30°-60°)	12383.7	24.6			
FH (60°-80°)	8932.6	17.7			G4/12000
FVH (80°-90°)	388.7	0.8			G3/500
BL (0°-30°)	3468.0	6.9	B4/5000		
BM (30°-60°)	12383.7	24.6	B5		
BH (60°-80°)	8932.6	17.7	B5		G5
BVH (80°-90°)	388.7	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°	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4
2.5°	8292.4	8286.5	8284.5	8281.6	8286.5	8290.4	8300.3	8309.1	8307.1	8305.2	8307.1
5°	8246.1	8249.1	8250.1	8251.1	8255.0	8257.9	8271.7	8285.5	8283.5	8281.6	8291.4
7.5°	8181.2	8181.2	8179.2	8177.3	8185.1	8192.0	8205.8	8219.6	8230.4	8240.2	8256.0
10°	8086.7	8082.8	8081.8	8080.8	8089.7	8097.5	8123.1	8148.7	8170.4	8191.0	8217.6
12.5°	7971.6	7970.6	7972.6	7974.5	7993.2	8011.9	8055.2	8098.5	8141.8	8185.1	8223.5
15°	7834.8	7823.0	7832.8	7841.7	7872.2	7901.7	7985.4	8069.0	8134.9	8199.9	8274.7
17.5°	7626.2	7614.4	7629.2	7642.9	7703.9	7764.9	7883.0	8000.1	8124.1	8248.1	8355.4
20°	7310.3	7310.3	7347.7	7385.1	7488.4	7591.8	7754.1	7915.5	8082.8	8250.1	8405.5
22.5°	6973.8	6964.0	7043.7	7123.4	7247.4	7370.4	7575.0	7779.7	8001.1	8221.5	8435.1
25°	6594.0	6610.7	6711.1	6810.4	6984.6	7157.8	7409.7	7660.6	7939.1	8217.6	8513.8
27.5°	6273.2	6276.1	6397.2	6518.2	6736.6	6954.1	7260.1	7566.2	7905.7	8245.2	8618.1
30°	5941.5	5995.7	6123.6	6250.5	6494.6	6738.6	7108.6	7477.6	7880.1	8282.5	8737.2
32.5°	5686.7	5699.5	5844.1	5987.8	6242.7	6497.5	6927.5	7357.6	7840.7	8323.9	8876.9
35°	5446.6	5467.2	5602.1	5736.9	6002.6	6267.3	6738.6	7209.0	7786.6	8363.2	9028.4
37.5°	5233.0	5258.6	5386.6	5514.5	5770.3	6026.2	6526.1	7025.9	7703.0	8380.0	9194.7
40°	5076.6	5098.2	5206.5	5314.7	5546.0	5776.2	6299.7	6822.3	7585.9	8349.5	9325.6
42.5°	4963.4	4973.3	5060.8	5148.4	5355.1	5561.7	6080.3	6597.9	7433.3	8268.8	9427.0
45°	4809.9	4831.6	4918.2	5003.8	5189.8	5374.7	5849.0	6323.4	7207.0	8089.7	9428.0
47.5°	4695.8	4709.5	4791.2	4871.9	5045.1	5218.3	5644.4	6070.5	6951.2	7830.9	9321.7
50°	4612.1	4605.2	4681.0	4755.8	4902.4	5048.1	5427.9	5806.7	6634.3	7461.9	9056.0
52.5°	4493.1	4500.9	4561.9	4623.0	4749.9	4875.8	5216.3	5555.8	6283.0	7009.2	8625.0
55°	4333.6	4370.1	4421.2	4471.4	4582.6	4693.8	4999.8	5305.9	5931.7	6556.6	8070.0
57.5°	4177.2	4203.8	4247.1	4290.4	4377.9	4464.5	4752.8	5041.2	5561.7	6082.3	7369.4
60°	4049.3	4056.2	4083.7	4110.3	4177.2	4244.1	4482.2	4720.4	5175.0	5628.6	6670.7
62.5°	3884.0	3885.9	3904.6	3923.3	3964.6	4005.0	4192.0	4377.9	4765.6	5153.3	5976.0
65°	3625.2	3640.9	3658.6	3675.3	3702.9	3729.5	3872.1	4014.8	4305.1	4595.4	5258.6
67.5°	3363.4	3349.6	3370.3	3391.0	3394.9	3398.8	3507.1	3615.3	3853.4	4091.6	4624.9
70°	2937.3	2948.1	2946.2	2943.2	2926.5	2908.8	2984.6	3060.3	3186.3	3311.2	3697.0
72.5°	2252.4	2237.7	2200.3	2161.9	2144.2	2126.5	2215.0	2302.6	2395.1	2487.6	2766.1
75°	1376.7	1419.0	1496.7	1573.5	1603.0	1632.5	1627.6	1621.7	1613.8	1605.9	1953.3
77.5°	932.9	955.5	973.2	989.9	1033.2	1075.5	1124.7	1173.9	1173.0	1172.0	1390.4
80°	593.4	575.7	583.5	591.4	616.0	640.6	715.4	789.2	809.9	829.5	980.1
82.5°	372.0	374.9	384.8	393.6	366.1	338.5	396.6	453.6	502.8	551.1	620.9
85°	241.1	273.6	268.6	263.7	231.2	198.8	249.9	301.1	324.7	347.4	373.9
87.5°	77.7	90.5	93.5	95.5	95.5	94.5	105.3	116.1	120.1	123.0	132.8
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°	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4	8294.4
2.5°	8308.1	8298.3	8288.4	8285.5	8282.5	8280.6	8278.6	8276.6
5°	8300.3	8298.3	8296.3	8288.4	8280.6	8279.6	8278.6	8281.6
7.5°	8271.7	8271.7	8271.7	8280.6	8289.4	8285.5	8280.6	8286.5
10°	8243.2	8266.8	8290.4	8297.3	8304.2	8309.1	8314.0	8319.0
12.5°	8261.9	8302.2	8341.6	8364.2	8386.9	8398.7	8409.5	8412.4
15°	8349.5	8400.6	8451.8	8482.3	8511.8	8531.5	8551.2	8556.1
17.5°	8462.6	8541.3	8619.1	8663.4	8707.6	8730.3	8751.9	8745.0
20°	8560.0	8668.3	8776.5	8871.0	8965.5	9017.6	9068.8	9074.7
22.5°	8647.6	8829.7	9011.7	9133.7	9254.8	9347.3	9439.8	9449.6
25°	8809.0	9047.1	9285.3	9480.1	9674.9	9759.6	9843.2	9892.4
27.5°	8990.1	9308.9	9627.7	9888.5	10149.2	10278.2	10406.1	10413.0
30°	9190.8	9595.2	9998.7	10349.0	10698.3	10855.8	11012.2	11094.9
32.5°	9428.9	9942.6	10455.3	10915.8	11376.3	11615.4	11854.6	11938.2
35°	9692.7	10358.8	11024.0	11658.7	12292.5	12750.0	13207.6	13428.0
37.5°	10009.5	10857.7	11706.0	12659.5	13613.0	14393.3	15172.7	15395.1
40°	10301.8	11393.1	12483.4	13807.9	15132.3	16370.3	17607.2	17848.3
42.5°	10585.2	11905.7	13226.3	15033.0	16839.6	18496.7	20153.8	20780.7
45°	10765.2	12362.3	13958.4	16340.7	18723.1	20998.1	23272.2	23798.7
47.5°	10811.5	12688.0	14564.6	17515.7	20466.8	23144.3	25820.8	26496.9
50°	10650.1	12857.3	15064.5	18959.2	22853.0	25579.8	28305.5	28860.5
52.5°	10240.8	12803.2	15365.6	20078.1	24790.6	27676.7	30562.9	31066.7
55°	9583.4	12474.5	15365.6	20999.1	26631.7	29625.1	32617.5	33383.1
57.5°	8656.5	11846.7	15036.9	21614.1	28191.4	31442.6	34693.8	35381.6
60°	7712.8	11099.8	14485.8	21953.6	29421.4	32865.5	36309.6	37112.5
62.5°	6797.7	10085.3	13371.9	21597.4	29822.9	33458.8	37093.8	38249.1
65°	5921.9	8958.6	11995.3	20728.5	29460.8	33627.1	37792.5	38827.7
67.5°	5158.3	8016.9	10875.5	19272.1	27668.8	32280.0	36890.1	38180.2
70°	4082.7	6713.0	9343.3	16690.1	24036.8	29437.1	34837.5	36429.6
72.5°	3044.6	5275.4	7505.2	13128.9	18752.6	24962.8	31172.0	33175.4
75°	2299.7	4213.6	6127.5	10377.5	14627.5	19885.2	25142.8	27824.3
77.5°	1608.9	3044.6	4479.3	7649.8	10820.3	13731.1	16641.8	18070.7
80°	1129.7	1925.7	2720.8	4246.1	5770.3	7061.4	8351.4	8249.1
82.5°	689.8	1024.4	1358.0	1842.1	2326.2	2638.2	2950.1	2936.3
85°	400.5	487.1	572.7	709.5	846.3	1000.8	1155.2	1027.3
87.5°	141.7	141.7	141.7	162.4	183.0	251.9	320.8	338.5
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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 CATALOG NUMBER: CTN-CA10-310-740-U-T1

**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)