

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: P579481

Luminaire Tested: **CTN-CA10-310-740-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579481  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-310-740-U-T5N-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 38060 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G4

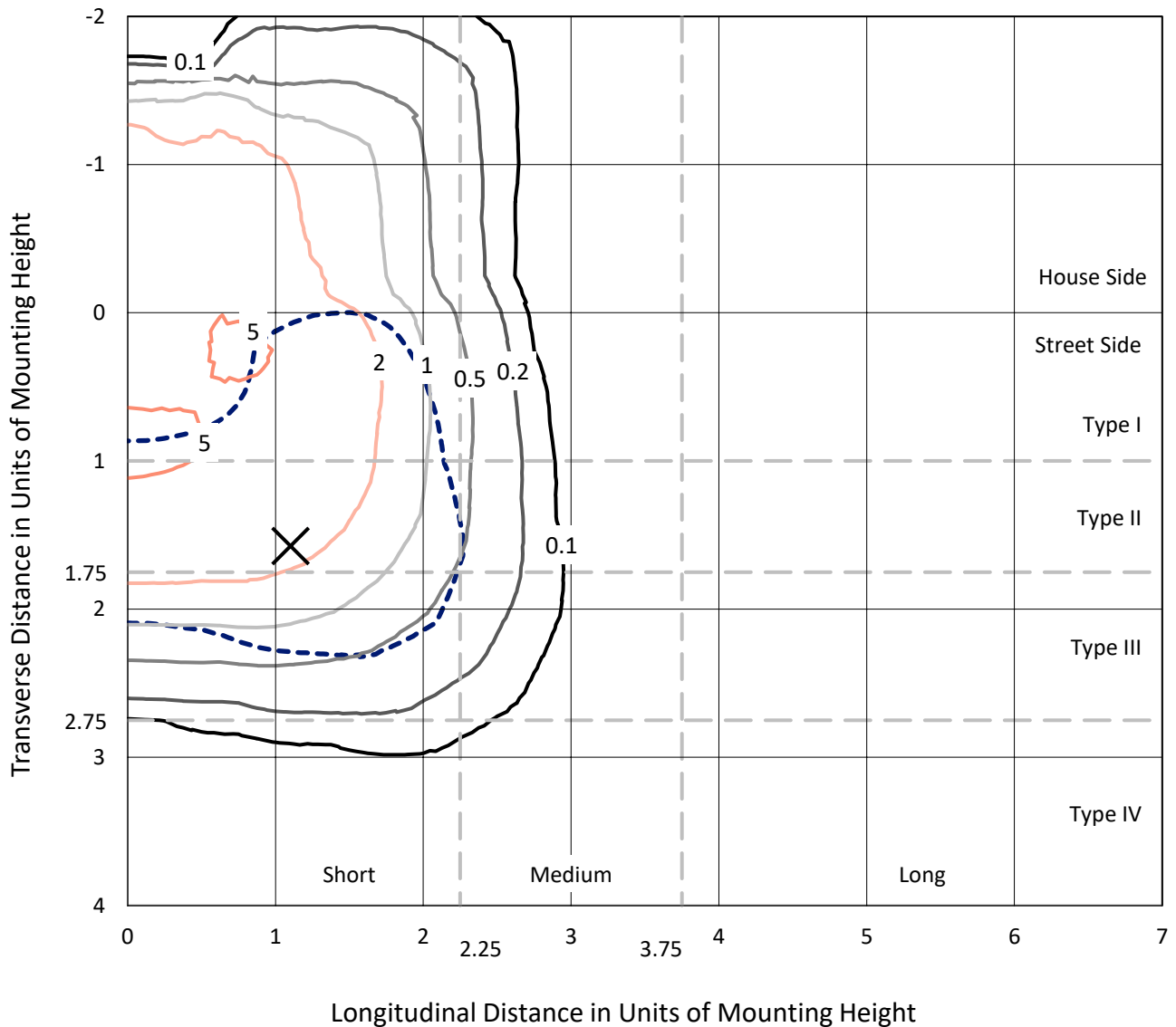
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

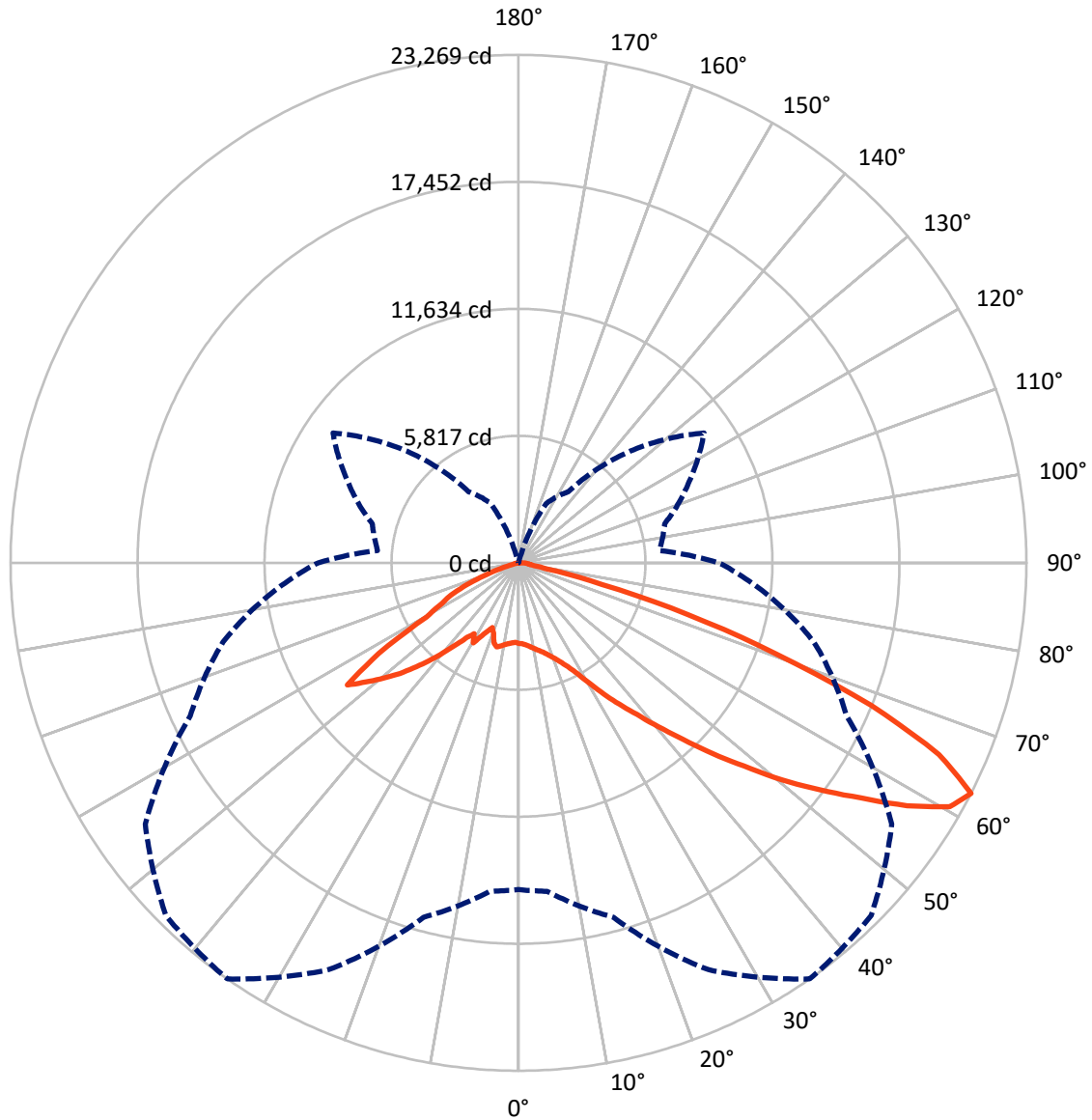
✕ Max cd  
 - - - 1/2 Max cd



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



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

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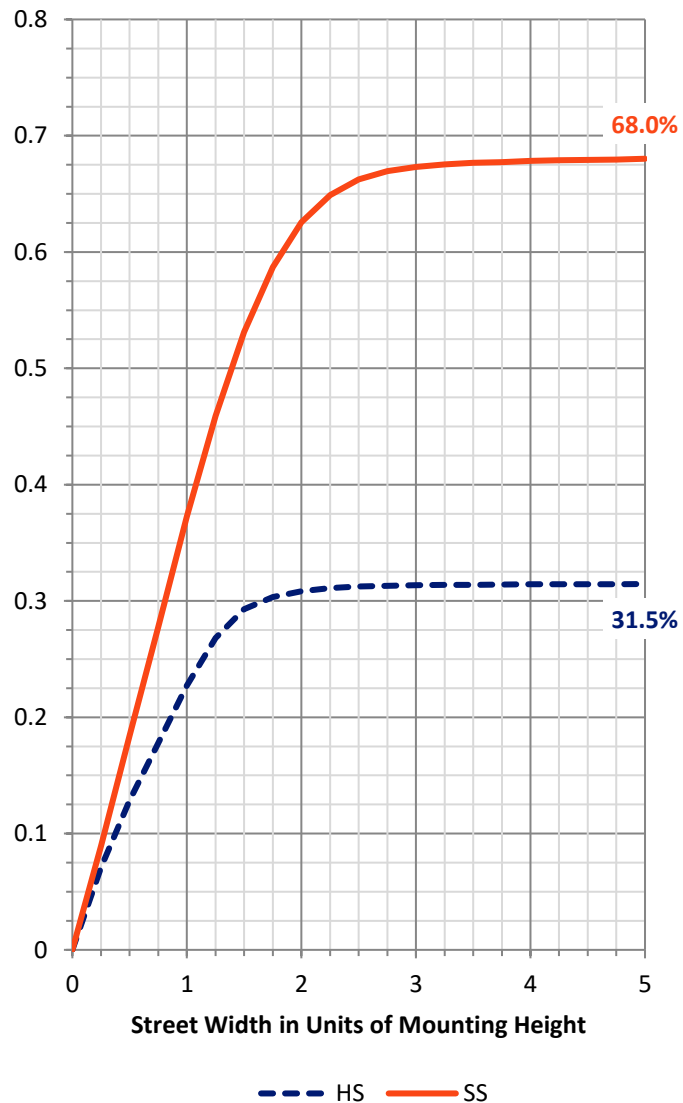
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12040.6	0.0	12040.6
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	25997.7	21.7	26019.4
	% Fixture	68.3	0.1	68.4
<b>Total</b>	Lumens	38038.3	21.7	38060.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	364.3	1.0
10°-20°	1171.3	3.1
20°-30°	2174.9	5.7
30°-40°	4288.0	11.3
40°-50°	7697.5	20.2
50°-60°	11189.2	29.4
60°-70°	9195.7	24.2
70°-80°	1748.0	4.6
80°-90°	209.2	0.5
90°-100°	19.8	0.1
100°-110°	1.9	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°	38038.3	99.9
0°-180°	38060.0	100.0

**Coefficient of Utilization**



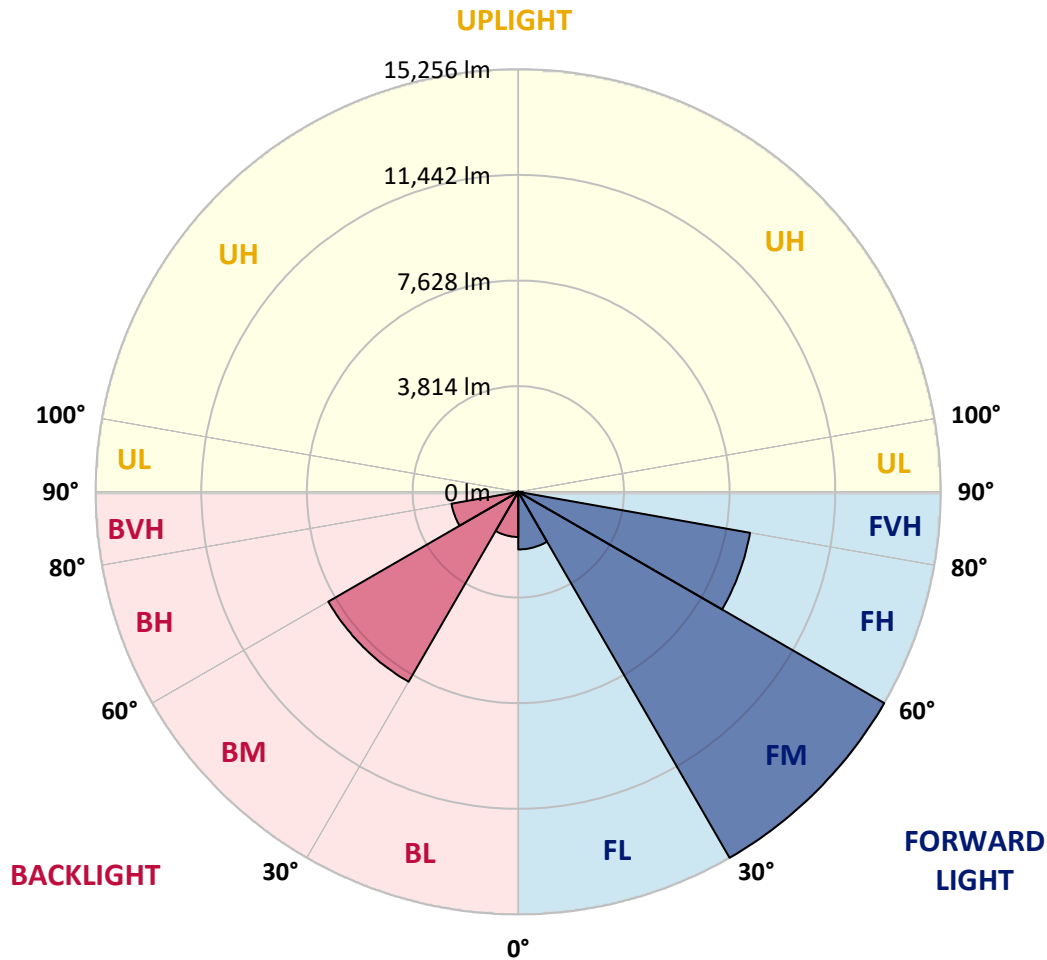
REPORT NUMBER: P579481  
 CATALOG NUMBER: CTN-CA10-310-740-U-T5N-HSS-HM-EX120

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2080.2	5.5			
FM (30°-60°)	15256.2	40.1			
FH (60°-80°)	8495.9	22.3			G4/12000
FVH (80°-90°)	165.4	0.4			G2/225
BL (0°-30°)	1630.3	4.3	B3/2500		
BM (30°-60°)	7918.6	20.8	B4/8500		
BH (60°-80°)	2447.8	6.4	B3/2500		G3/2500
BVH (80°-90°)	43.8	0.1			G1/100
UL (90°-100°)	19.8	0.1		U2/50	
UH (100°-180°)	1.9	0.0		U1/10	

**BUG Rating: B4-U2-G4**

Type III Short





REPORT NUMBER: P579481

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3
2.5°	3788.7	3757.7	3760.8	3784.0	3714.4	3737.6	3705.1	3733.0	3720.6	3733.0	3740.7
5°	3864.5	3825.8	3824.3	3847.5	3791.8	3805.7	3768.6	3787.1	3770.1	3785.6	3785.6
7.5°	3957.3	3924.8	3917.1	3935.6	3886.1	3892.3	3855.2	3862.9	3842.8	3862.9	3847.5
10°	4073.3	4043.9	4031.6	4040.8	3996.0	3999.1	3958.9	3961.9	3932.6	3949.6	3937.2
12.5°	4195.5	4155.3	4149.1	4164.6	4118.2	4112.0	4078.0	4081.1	4048.6	4064.1	4054.8
15°	4322.4	4280.6	4282.2	4297.7	4251.2	4254.3	4218.8	4224.9	4192.5	4207.9	4195.5
17.5°	4491.0	4449.3	4446.2	4474.0	4435.3	4447.7	4410.6	4418.3	4395.1	4398.2	4384.3
20°	4732.4	4678.2	4667.4	4707.6	4656.6	4672.0	4651.9	4678.2	4668.9	4661.2	4650.4
22.5°	5020.1	4978.3	4956.7	4987.6	4927.3	4956.7	4967.5	5021.7	5035.6	5026.3	4856.1
25°	5405.3	5383.7	5362.0	5348.1	5275.4	5321.8	5377.5	5467.2	5526.0	5549.2	5312.5
27.5°	5925.1	5936.0	5841.6	5826.1	5744.1	5816.8	5917.4	6062.8	6181.9	6225.3	5906.6
30°	6593.4	6607.4	6479.0	6441.8	6392.3	6454.2	6641.4	6800.8	6977.1	7049.8	6624.4
32.5°	7481.4	7469.1	7280.3	7209.2	7164.3	7189.1	7385.5	7603.7	7801.7	7965.7	7442.8
35°	8565.9	8527.2	8326.1	8129.7	7951.7	8027.5	8171.4	8436.0	8736.1	8977.4	8250.3
37.5°	9825.2	9788.1	9481.8	9161.5	8810.3	8842.8	8971.2	9402.9	9789.6	9853.0	8112.6
40°	11126.2	11110.8	10821.5	10414.6	9868.5	9715.4	9885.5	10411.5	10819.9	9713.8	8432.9
42.5°	12425.8	12351.5	12189.1	11782.2	11055.1	10717.8	10946.8	11472.8	11912.1	10184.1	9175.4
45°	13736.1	13660.3	13522.6	13224.0	12467.5	11977.1	12043.6	12626.9	13024.5	11065.9	9949.0
47.5°	14899.5	14843.8	14744.8	14577.7	13903.2	13459.2	13330.8	13739.2	14009.9	11782.2	10543.0
50°	15901.9	15854.0	15892.7	15837.0	15638.9	15173.3	14749.4	14723.1	14853.0	12419.6	11089.1
52.5°	16783.7	16718.8	16884.3	17080.8	17263.3	17159.7	16134.0	15656.0	15538.4	12897.6	11455.8
55°	17512.4	17489.2	17773.8	18304.5	18999.1	19271.4	17614.5	16517.7	16151.0	13302.9	11489.8
57.5°	17948.7	18004.4	18606.1	19633.4	20991.7	21120.1	19347.2	17433.5	16690.9	13548.9	11652.2
60°	17203.0	17391.7	18474.6	20629.7	22687.2	22742.9	20592.5	17616.0	15983.9	12664.0	10784.4
62.5°	14969.1	15105.2	16808.5	20566.2	23268.9	22845.0	20871.0	16585.7	14008.4	10742.6	9172.3
65°	10577.1	10734.9	12787.8	18545.8	21169.6	21185.0	19118.2	14342.5	11197.4	8316.8	7082.3
67.5°	6380.0	6635.2	8579.8	13463.8	17430.4	17747.5	15949.9	10858.6	8013.6	5430.1	4583.9
70°	2093.1	2326.7	3917.1	7968.8	12565.0	13923.3	11978.7	7056.0	4184.7	2295.8	1848.7
72.5°	829.2	936.0	1380.0	3524.1	8097.2	9296.1	7380.9	3409.7	1404.7	609.5	530.6
75°	553.8	564.7	637.4	1200.5	3961.9	5083.5	3558.2	991.6	521.3	380.6	334.2
77.5°	482.7	484.2	516.7	632.7	1290.2	1949.3	1024.1	532.2	431.6	312.5	276.9
80°	442.5	448.6	468.8	539.9	591.0	662.1	505.9	444.0	374.4	287.7	261.4
82.5°	423.9	428.5	440.9	488.9	478.0	496.6	408.4	352.7	315.6	264.5	250.6
85°	386.8	394.5	402.2	431.6	392.9	340.3	315.6	236.7	225.9	199.6	184.1
87.5°	292.4	290.8	283.1	287.7	263.0	215.0	177.9	133.0	108.3	89.7	74.3
90°	122.2	123.8	119.1	112.9	99.0	82.0	61.9	37.1	18.6	6.2	3.1
92.5°	92.8	94.4	91.3	82.0	71.2	57.2	41.8	21.7	12.4	4.6	1.5
95°	57.2	58.8	55.7	49.5	43.3	32.5	21.7	13.9	7.7	3.1	0.0
97.5°	34.0	35.6	32.5	29.4	23.2	15.5	12.4	9.3	6.2	3.1	0.0
100°	20.1	20.1	18.6	15.5	10.8	9.3	7.7	6.2	4.6	1.5	0.0
102.5°	9.3	9.3	9.3	6.2	4.6	4.6	4.6	4.6	4.6	1.5	0.0
105°	3.1	3.1	1.5	1.5	1.5	3.1	3.1	3.1	3.1	1.5	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	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	1.5	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°	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3	3694.3
2.5°	3733.0	3703.6	3708.2	3681.9	3675.7	3647.9	3697.4	3702.0	3688.1	3702.0
5°	3779.4	3743.8	3753.1	3723.7	3716.0	3677.3	3717.5	3714.4	3703.6	3717.5
7.5°	3847.5	3807.2	3811.9	3777.9	3770.1	3726.8	3763.9	3753.1	3740.7	3757.7
10°	3934.1	3895.4	3897.0	3850.6	3845.9	3796.4	3844.4	3824.3	3805.7	3830.4
12.5°	4054.8	4000.6	3996.0	3944.9	3943.4	3892.3	3941.8	3924.8	3900.1	3938.7
15°	4194.0	4121.3	4102.7	4037.8	4036.2	3982.1	4031.6	4005.3	3992.9	4039.3
17.5°	4375.0	4283.7	4143.0	3921.7	3821.2	3838.2	4013.0	4076.4	3910.9	3935.6
20°	4484.8	4042.4	3836.6	3745.4	3697.4	3422.0	3049.2	3080.1	3446.8	3621.6
22.5°	4299.2	4167.7	4091.9	3963.5	3295.2	3200.8	3222.5	3216.3	2742.9	2602.1
25°	4686.0	4562.2	4424.5	3632.4	3494.7	3454.5	3465.4	3021.4	2763.0	2773.8
27.5°	5242.9	5083.5	4211.0	3867.6	3839.7	3780.9	3567.5	3033.7	3066.2	3087.9
30°	5946.8	5380.6	4484.8	4334.8	4279.1	4215.7	3310.6	3389.5	3449.9	3516.4
32.5°	6627.5	5233.6	5009.3	4853.0	4766.4	3827.4	3734.5	3880.0	3940.3	3997.5
35°	6565.6	5863.2	5572.4	5374.4	5211.9	4130.6	4212.6	4433.8	4593.1	4591.6
37.5°	6735.8	6548.6	6212.9	5962.3	4523.5	4627.2	4798.9	5051.1	5244.4	5242.9
40°	7445.9	7243.2	6927.6	6389.2	5012.4	5253.7	5488.9	5725.6	5864.8	5875.6
42.5°	8151.3	7995.1	7710.4	5643.6	5611.1	5945.2	6191.2	6341.3	6426.4	6455.8
45°	8853.7	8706.7	7575.8	6242.3	6341.3	6672.3	6822.4	6851.8	6943.1	6940.0
47.5°	9412.1	9286.8	6969.4	6953.9	7199.9	7428.8	7380.9	7343.8	7367.0	7379.3
50°	9927.3	8084.8	7513.9	7739.8	8114.2	8142.0	7942.5	6291.8	7789.3	7763.0
52.5°	9221.9	7889.9	8021.4	8550.4	9187.8	8864.5	8474.6	5515.2	7305.1	7999.7
55°	8069.3	8202.4	8499.4	9387.4	10017.0	9633.4	8982.1	5679.2	4848.4	3946.5
57.5°	8230.2	8440.6	9005.3	10232.1	10781.3	7630.0	8383.4	4003.7	2710.4	2708.9
60°	7664.0	7982.7	8994.4	10611.1	8726.8	4888.6	3358.6	91.3	526.0	521.3
62.5°	6479.0	6932.2	8581.4	10371.3	7229.3	3972.8	2992.0	7.7	3.1	3.1
65°	5010.8	5544.6	7155.0	8980.5	6404.7	3422.0	2221.5	0.0	0.0	0.0
67.5°	3285.9	3780.9	5372.8	7459.8	5317.1	2586.6	1492.9	0.0	0.0	0.0
70°	1369.1	1980.2	3338.5	5391.4	3910.9	1694.0	708.5	0.0	0.0	0.0
72.5°	396.0	603.3	1503.7	3219.4	2427.3	886.4	263.0	0.0	0.0	0.0
75°	261.4	275.4	454.8	1294.9	1180.4	324.9	106.7	0.0	0.0	0.0
77.5°	219.7	225.9	289.3	362.0	379.0	128.4	86.6	0.0	0.0	0.0
80°	202.7	204.2	259.9	269.2	202.7	106.7	85.1	0.0	0.0	0.0
82.5°	188.7	184.1	221.2	213.5	168.6	92.8	78.9	0.0	0.0	0.0
85°	130.0	133.0	150.1	190.3	102.1	46.4	55.7	0.0	0.0	0.0
87.5°	40.2	46.4	58.8	60.3	18.6	6.2	0.0	0.0	0.0	0.0
90°	1.5	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: P579481  
 CATALOG NUMBER: CTN-CA10-310-740-U-T5N-HSS-HM-EX120

**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)