

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: P579476

Luminaire Tested: **CTN-CA10-210-740-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579476
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-CA10-210-740-U-T5N-HSS-HM-EX180
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: 23641 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

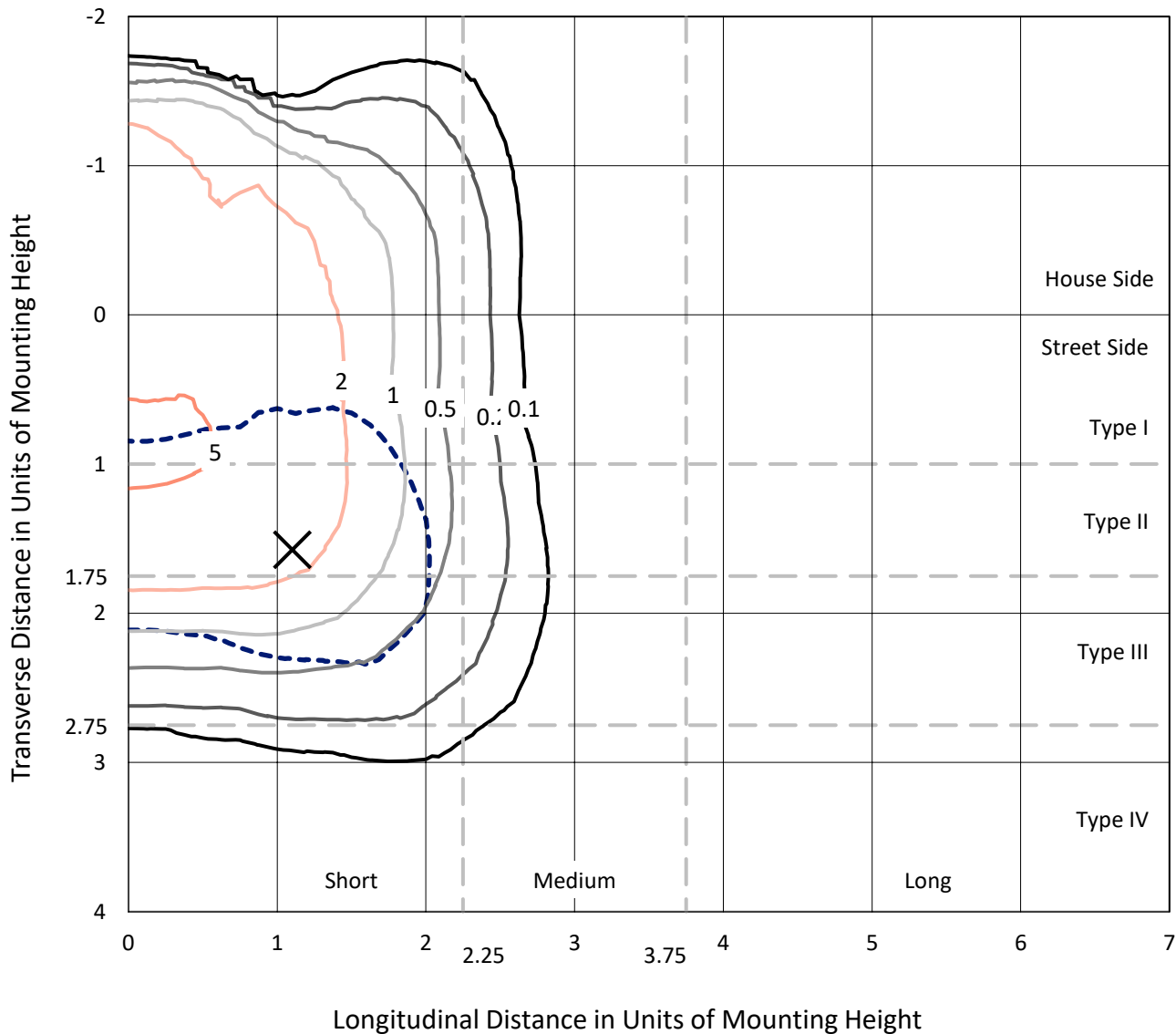
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P579476
 CATALOG NUMBER: CTN-CA10-210-740-U-T5N-HSS-HM-EX180

Iso-Footcandle Lines of Horizontal Illumination

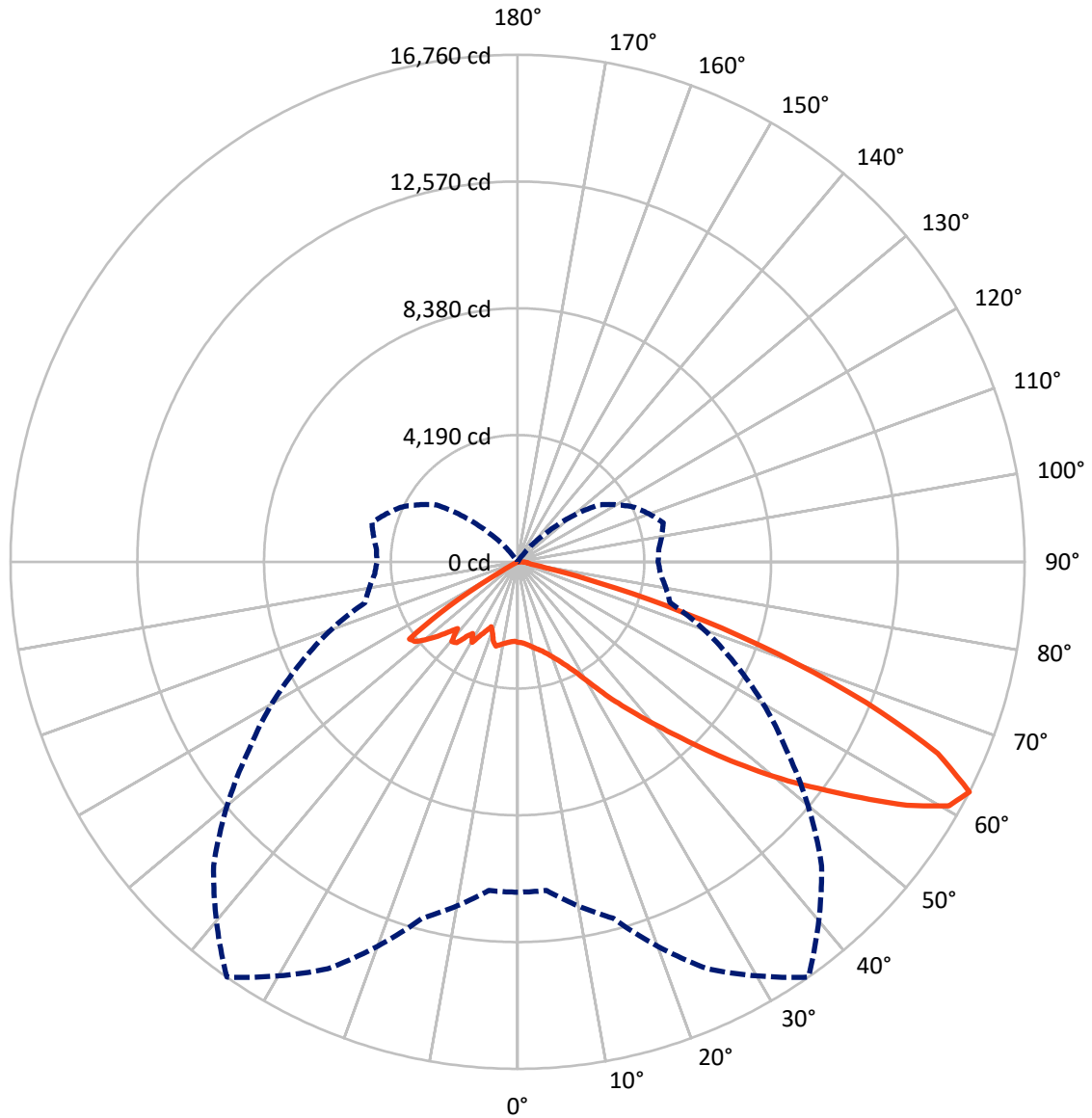
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type III - Short - N/A

REPORT NUMBER: P579476
CATALOG NUMBER: CTN-CA10-210-740-U-T5N-HSS-HM-EX180

Luminous Intensity Polar Plot



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

REPORT NUMBER: P579476
 CATALOG NUMBER: CTN-CA10-210-740-U-T5N-HSS-HM-EX180

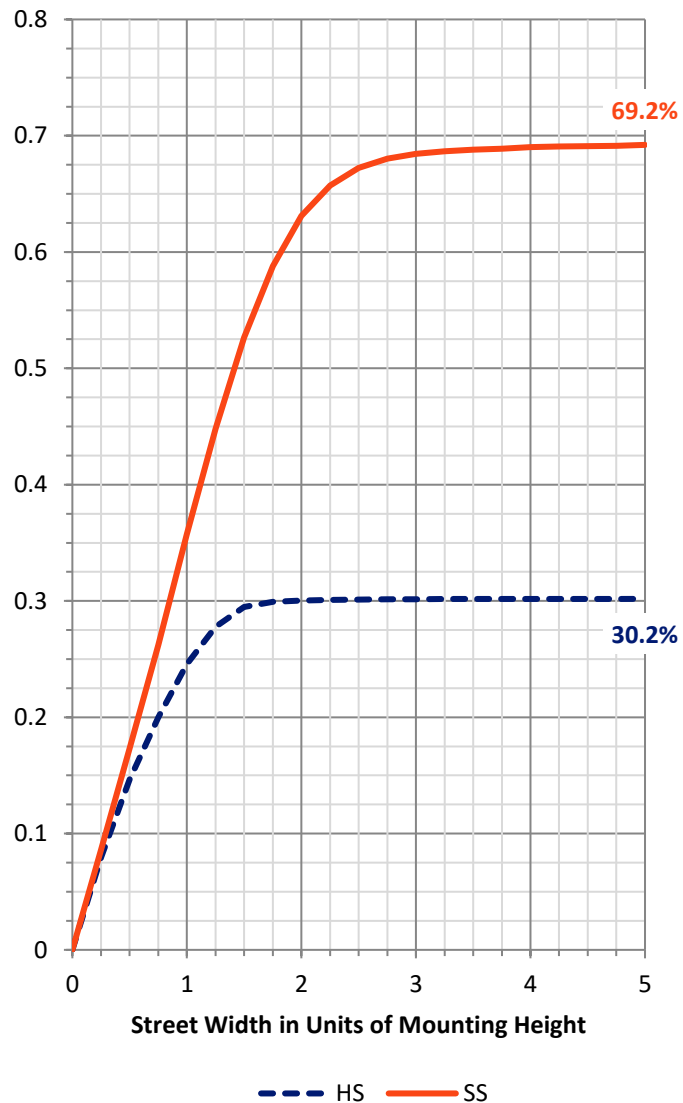
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7175.1	0.0	7175.1
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	16445.4	20.5	16465.9
	% Fixture	69.6	0.1	69.6
Total	Lumens	23620.5	20.5	23641.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.7	1.1
10°-20°	843.0	3.6
20°-30°	1540.9	6.5
30°-40°	2936.4	12.4
40°-50°	5040.0	21.3
50°-60°	6761.3	28.6
60°-70°	5140.0	21.7
70°-80°	973.3	4.1
80°-90°	122.9	0.5
90°-100°	18.1	0.1
100°-110°	2.4	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°	23620.5	99.9
0°-180°	23641.0	100.0

Coefficient of Utilization

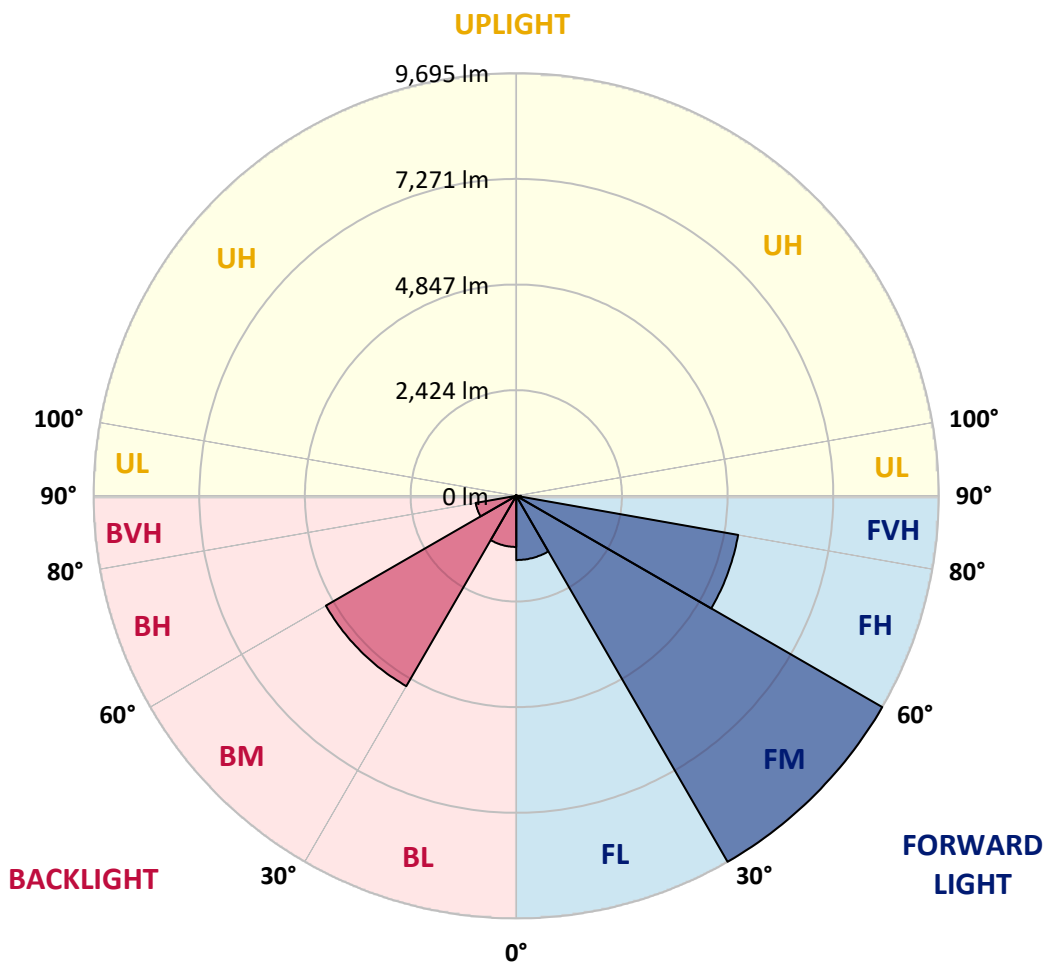


REPORT NUMBER: P579476
 CATALOG NUMBER: CTN-CA10-210-740-U-T5N-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1473.7	6.2			
FM	(30°-60°)	9694.8	41.0			
FH	(60°-80°)	5168.4	21.9			G3/7500
FVH	(80°-90°)	108.5	0.5			G2/225
BL	(0°-30°)	1172.9	5.0	B3/2500		
BM	(30°-60°)	5043.0	21.3	B4/8500		
BH	(60°-80°)	944.9	4.0	B2/1000		G2/1000
BVH	(80°-90°)	14.4	0.1			G1/100
UL	(90°-100°)	18.1	0.1		U2/50	
UH	(100°-180°)	2.5	0.0		U1/10	

BUG Rating: B4-U2-G3
 Type III Short





REPORT NUMBER: P579476

CATALOG NUMBER: CTN-CA10-210-740-U-T5N-HSS-HM-EX180

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3
2.5°	2728.0	2708.0	2709.1	2726.9	2675.6	2694.6	2672.3	2694.6	2682.3	2691.2	2695.7
5°	2775.9	2755.9	2753.6	2772.6	2729.1	2742.5	2720.2	2735.8	2719.1	2730.2	2730.2
7.5°	2848.4	2828.3	2821.6	2836.1	2796.0	2806.0	2782.6	2791.5	2772.6	2787.1	2779.3
10°	2934.2	2911.9	2904.1	2911.9	2877.3	2882.9	2855.1	2865.1	2837.2	2853.9	2842.8
12.5°	3025.6	2996.6	2996.6	3003.3	2966.5	2967.6	2942.0	2947.5	2919.7	2937.5	2924.1
15°	3124.7	3092.4	3096.9	3103.6	3064.6	3071.2	3044.5	3053.4	3024.4	3042.3	3028.9
17.5°	3256.2	3221.7	3217.2	3237.3	3200.5	3212.8	3182.7	3193.8	3168.2	3173.8	3167.1
20°	3437.9	3394.4	3384.4	3411.1	3369.9	3378.8	3356.5	3378.8	3352.1	3312.0	3199.4
22.5°	3655.2	3617.3	3600.6	3618.4	3569.4	3585.0	3583.9	3619.5	3546.0	3293.0	3180.5
25°	3941.6	3916.0	3883.6	3885.9	3826.8	3850.2	3892.5	3920.4	3607.3	3385.5	3387.7
27.5°	4323.8	4298.2	4253.6	4236.9	4151.1	4207.9	4273.7	4001.8	3755.5	3812.3	3781.1
30°	4811.9	4807.5	4717.2	4688.2	4594.6	4665.9	4609.1	4143.3	4228.0	4307.1	4259.2
32.5°	5461.6	5430.4	5300.0	5247.6	5149.6	5190.8	4689.3	4622.5	4748.4	4855.4	4805.2
35°	6247.2	6152.5	6019.9	5916.3	5745.8	5516.2	4994.7	5125.1	5313.4	5460.5	5217.6
37.5°	7159.9	7057.4	6850.1	6664.0	6395.5	5680.0	5454.9	5715.7	5951.9	5792.6	5232.0
40°	8099.4	8008.0	7813.0	7573.4	7119.8	6188.2	6013.2	6325.3	6593.8	5681.1	5402.5
42.5°	9032.1	8954.1	8797.0	8560.7	7976.8	6793.3	6625.0	6960.5	6707.5	5898.4	5889.5
45°	9972.6	9933.6	9755.3	9553.6	8992.0	7567.8	7310.4	7572.2	6454.5	6418.9	6397.7
47.5°	10734.9	10741.6	10679.2	10574.4	10075.2	8418.1	8082.6	7305.9	6762.1	6801.1	6811.1
50°	11520.5	11470.4	11467.0	11473.7	11265.3	9513.5	8608.6	7185.6	7164.4	7161.0	7152.1
52.5°	12150.1	12086.6	12218.1	12322.9	12446.6	10736.0	8529.5	7593.4	7472.0	7429.6	7170.0
55°	12662.8	12638.2	12852.2	13206.6	13757.1	12030.9	9229.3	7991.3	7748.3	6758.7	6096.8
57.5°	12973.7	13009.3	13450.6	14147.1	15177.9	13104.1	10044.0	8394.7	6633.9	5953.0	5910.7
60°	12378.6	12566.9	13318.0	14847.0	16379.2	14113.7	10650.2	8476.0	5969.8	5605.4	5520.7
62.5°	10922.1	10904.3	12194.7	14847.0	16760.4	14214.0	10841.9	7899.9	5215.3	4740.6	4645.9
65°	7730.5	7777.3	9155.8	13379.3	15268.2	13221.1	10000.5	6716.4	4160.0	3724.3	3596.1
67.5°	4784.1	4780.7	6130.2	9853.4	12428.7	11069.2	8419.2	5148.5	2887.4	2476.2	2336.9
70°	1652.6	1699.4	2757.0	5765.8	9149.1	8672.1	6300.7	3250.7	1522.3	1085.4	916.0
72.5°	657.5	673.1	989.6	2570.9	5715.7	5793.7	3829.0	1579.1	455.8	289.7	271.9
75°	430.2	432.4	474.7	928.3	2773.7	3116.9	1778.6	453.6	211.7	193.9	189.4
77.5°	371.1	372.2	394.5	470.3	903.8	1212.5	505.9	268.6	177.2	159.4	154.9
80°	344.3	345.5	356.6	404.5	435.7	413.4	269.7	216.2	149.3	141.5	140.4
82.5°	325.4	329.9	335.4	364.4	352.1	310.9	224.0	175.0	114.8	122.6	125.9
85°	299.8	304.2	307.6	324.3	294.2	227.3	173.8	131.5	73.5	80.2	79.1
87.5°	225.1	227.3	222.9	220.6	205.0	159.4	114.8	83.6	29.0	26.7	24.5
90°	108.1	107.0	102.5	94.7	82.5	64.6	47.9	26.7	12.3	5.6	2.2
92.5°	85.8	84.7	82.5	74.7	64.6	47.9	34.5	18.9	11.1	4.5	1.1
95°	57.9	55.7	53.5	47.9	40.1	29.0	20.1	13.4	8.9	3.3	1.1
97.5°	37.9	36.8	33.4	29.0	22.3	15.6	12.3	10.0	7.8	3.3	1.1
100°	23.4	23.4	21.2	16.7	11.1	8.9	7.8	7.8	5.6	2.2	0.0
102.5°	14.5	13.4	12.3	7.8	5.6	5.6	5.6	5.6	4.5	2.2	0.0
105°	7.8	7.8	5.6	4.5	3.3	2.2	3.3	4.5	3.3	1.1	0.0
107.5°	2.2	2.2	2.2	1.1	1.1	0.0	1.1	2.2	2.2	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	1.1	0.0



REPORT NUMBER: P579476
 CATALOG NUMBER: CTN-CA10-210-740-U-T5N-HSS-HM-EX180

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



REPORT NUMBER: P579476

CATALOG NUMBER: CTN-CA10-210-740-U-T5N-HSS-HM-EX180

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3	2662.3
2.5°	2690.1	2669.0	2674.5	2653.4	2650.0	2627.7	2665.6	2667.8	2657.8	2669.0
5°	2724.7	2699.0	2709.1	2683.4	2679.0	2650.0	2680.1	2676.8	2669.0	2677.9
7.5°	2773.7	2748.1	2753.6	2723.6	2718.0	2685.7	2714.6	2703.5	2693.5	2705.7
10°	2841.7	2812.7	2817.2	2781.5	2777.0	2739.2	2772.6	2755.9	2741.4	2758.1
12.5°	2925.3	2887.4	2882.9	2845.0	2841.7	2806.0	2840.6	2823.9	2809.4	2836.1
15°	3021.1	2971.0	2964.3	2916.3	2910.8	2874.0	2907.4	2882.9	2871.8	2906.3
17.5°	3149.3	2972.1	2872.9	2802.7	2762.6	2742.5	2802.7	2884.0	2859.5	2860.6
20°	3096.9	2906.3	2773.7	2713.5	2670.1	2476.2	2208.7	2285.6	2441.6	2518.5
22.5°	3081.3	3014.4	2959.8	2858.4	2427.1	2317.9	2333.5	2315.7	2021.5	1908.9
25°	3379.9	3303.0	3184.9	2653.4	2528.5	2504.0	2512.9	2205.4	1983.6	2015.9
27.5°	3762.2	3683.0	3100.2	2802.7	2778.2	2745.8	2569.8	2185.3	2215.4	2246.6
30°	4243.6	3827.9	3232.8	3141.5	3095.8	3062.3	2409.3	2440.5	2490.7	2529.7
32.5°	4712.7	3815.7	3612.8	3499.2	3442.3	2793.8	2722.4	2794.9	2846.1	2876.2
35°	4718.3	4252.5	4038.5	3892.5	3531.5	3003.3	3069.0	3190.5	3316.4	3339.8
37.5°	4846.5	4747.3	4502.1	4318.2	2626.6	3352.1	3496.9	3636.2	3762.2	3770.0
40°	5356.9	5249.9	5020.3	4615.8	2900.7	3418.9	3968.3	4125.5	4231.3	4225.7
42.5°	5866.1	5792.6	5554.1	4102.1	3268.5	2962.0	4463.1	4566.8	4633.6	4680.4
45°	6378.7	6305.2	5499.5	4504.3	3706.4	3244.0	4342.8	4930.0	5003.6	5027.0
47.5°	6778.8	6597.2	5039.3	5038.1	4253.6	3605.0	3586.1	5257.7	5322.3	5305.6
50°	7148.8	5889.5	5447.1	5213.1	4819.7	3944.9	3813.4	4424.1	5610.9	5586.4
52.5°	6504.7	5715.7	5797.0	4741.7	5274.4	4282.6	4069.7	3967.2	5098.3	5754.7
55°	5817.1	5928.5	6154.8	5209.8	3826.8	4391.8	4287.0	4083.1	3440.1	2895.2
57.5°	5936.3	6102.4	6113.5	5643.2	3960.5	2743.6	3513.7	3075.7	1943.5	1947.9
60°	5538.5	5754.7	4468.7	3762.2	2129.6	571.7	55.7	49.0	338.8	412.3
62.5°	4682.6	4983.5	4265.9	3277.4	1366.2	21.2	5.6	1.1	0.0	0.0
65°	3626.2	3988.4	3605.0	2828.3	1212.5	6.7	0.0	0.0	0.0	0.0
67.5°	2391.5	2718.0	2739.2	2365.8	1010.7	3.3	0.0	0.0	0.0	0.0
70°	1001.8	1410.8	1705.0	1758.5	794.6	1.1	0.0	0.0	0.0	0.0
72.5°	289.7	448.0	820.2	1056.4	504.8	0.0	0.0	0.0	0.0	0.0
75°	192.8	206.2	237.4	475.8	251.9	0.0	0.0	0.0	0.0	0.0
77.5°	159.4	162.7	136.0	130.4	72.4	0.0	0.0	0.0	0.0	0.0
80°	144.9	142.6	109.2	76.9	26.7	0.0	0.0	0.0	0.0	0.0
82.5°	133.7	127.0	79.1	40.1	17.8	0.0	0.0	0.0	0.0	0.0
85°	90.3	89.2	35.7	24.5	3.3	0.0	0.0	0.0	0.0	0.0
87.5°	24.5	31.2	7.8	3.3	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: P579476
 CATALOG NUMBER: CTN-CA10-210-740-U-T5N-HSS-HM-EX180

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)