

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: P579633

Luminaire Tested: **CTN-CA10-630-727-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579633
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-630-727-U-T5N-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 64421 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G5

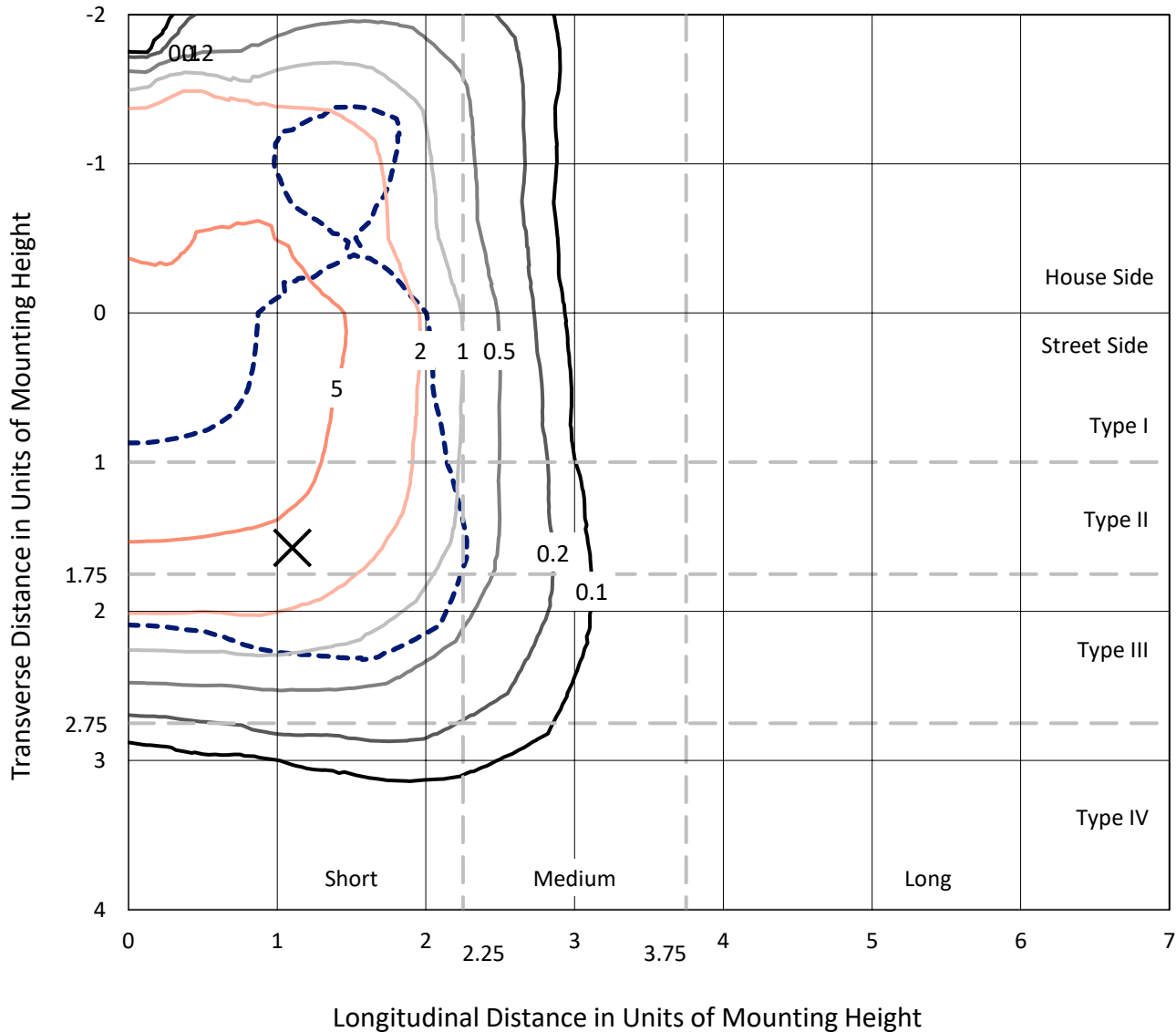
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

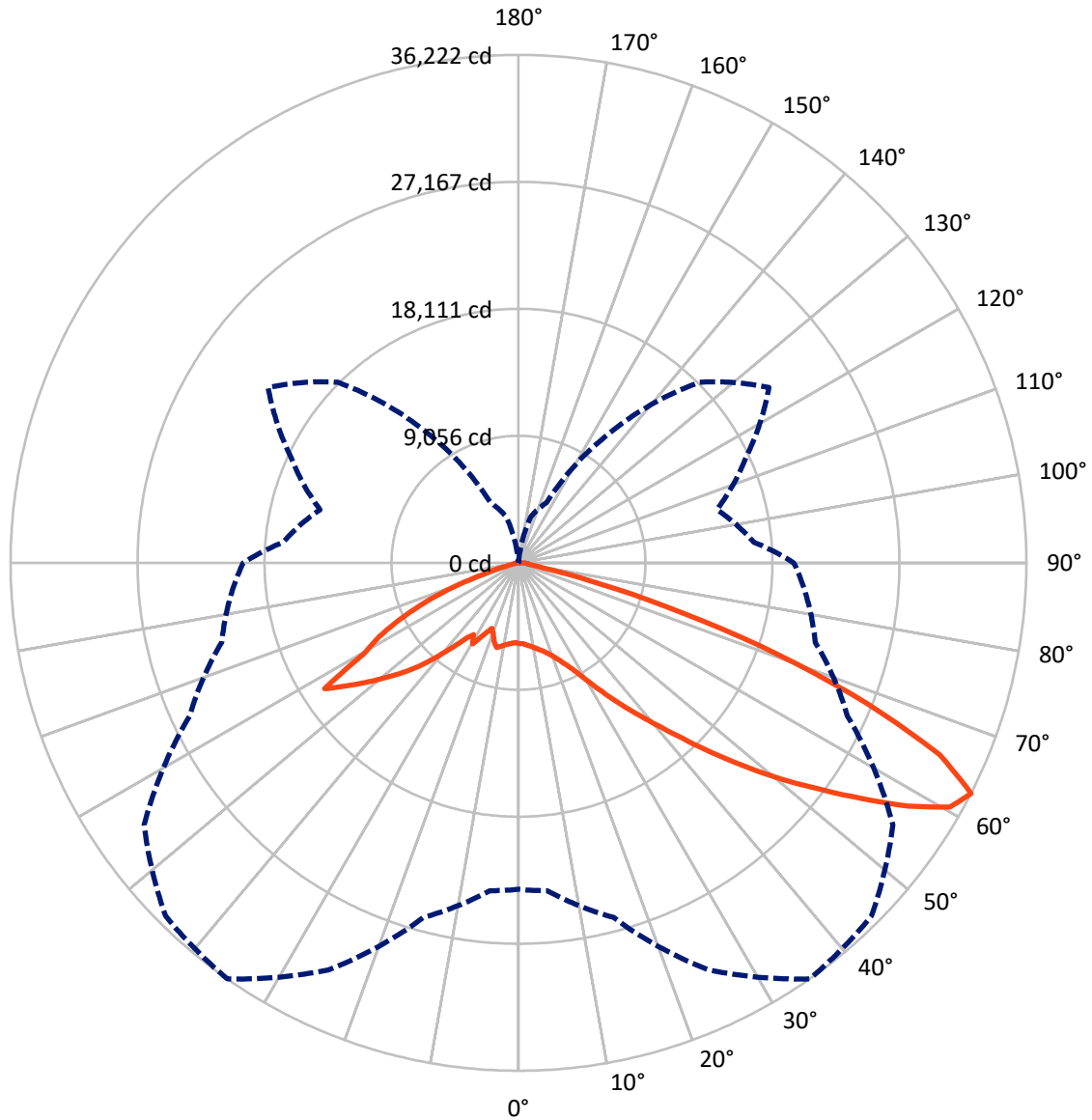
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.6 fc
 Type III - Short - N/A

REPORT NUMBER: P579633
CATALOG NUMBER: CTN-CA10-630-727-U-T5N-HSS-HM-EX90

Luminous Intensity Polar Plot



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

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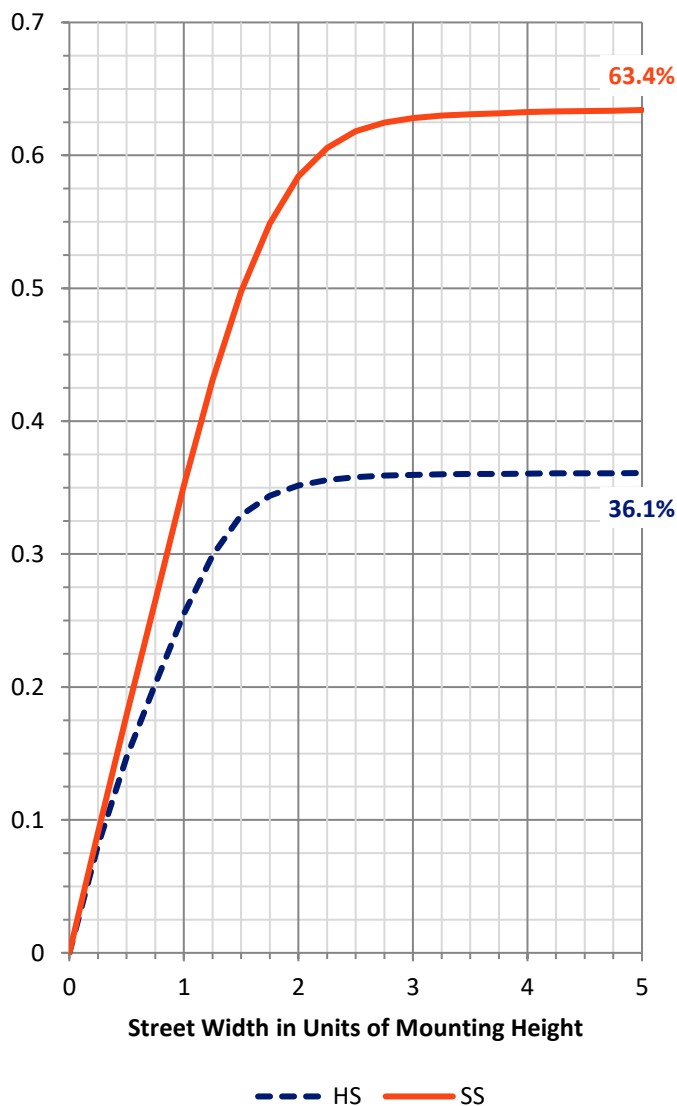
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23383.3	0.0	23383.3
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	41007.1	30.5	41037.7
	% Fixture	63.7	0.0	63.7
Total	Lumens	64390.4	30.6	64421.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	566.7	0.9
10°-20°	1831.5	2.8
20°-30°	3523.6	5.5
30°-40°	7029.2	10.9
40°-50°	12834.9	19.9
50°-60°	19179.9	29.8
60°-70°	16070.9	24.9
70°-80°	3007.5	4.7
80°-90°	346.2	0.5
90°-100°	27.5	0.0
100°-110°	3.0	0.0
110°-120°	0.1	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°	64390.4	100.0
0°-180°	64421.0	100.0

Coefficient of Utilization

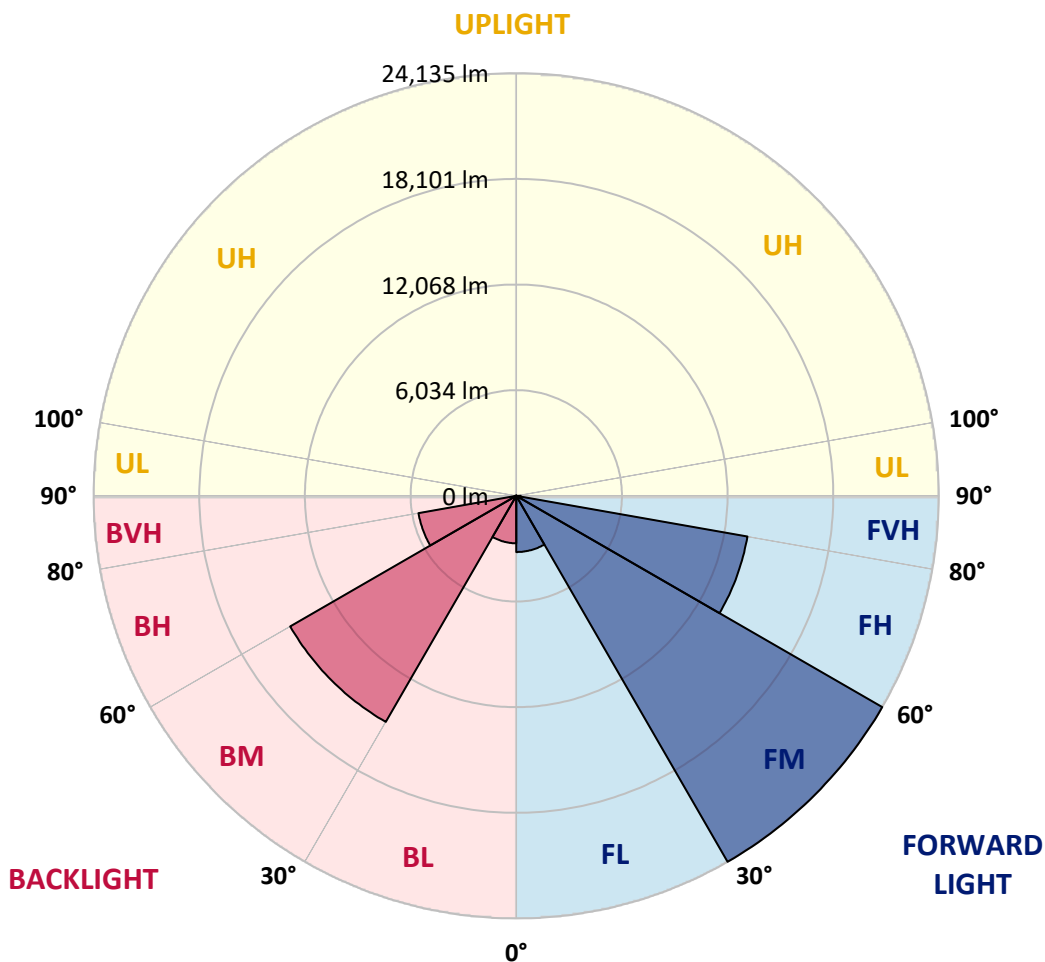


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 CATALOG NUMBER: CTN-CA10-630-727-U-T5N-HSS-HM-EX90

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3212.2	5.0			
FM (30°-60°)	24135.1	37.5			
FH (60°-80°)	13407.8	20.8			G5
FVH (80°-90°)	252.1	0.4			G3/500
BL (0°-30°)	2709.7	4.2	B4/5000		
BM (30°-60°)	14908.9	23.1	B5		
BH (60°-80°)	5670.6	8.8	B5		G5
BVH (80°-90°)	94.1	0.1			G1/100
UL (90°-100°)	27.5	0.0		U2/50	
UH (100°-180°)	3.0	0.0		U1/10	

BUG Rating: B5-U2-G5
 Type III Short





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CATALOG NUMBER: CTN-CA10-630-727-U-T5N-HSS-HM-EX90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2
2.5°	5887.3	5839.0	5846.3	5880.1	5773.8	5817.3	5771.4	5814.9	5800.4	5819.7	5834.2
5°	5971.8	5911.5	5916.3	5954.9	5872.8	5909.1	5863.2	5892.2	5868.0	5894.6	5897.0
7.5°	6087.8	6037.0	6029.8	6068.4	5998.4	6029.8	5983.9	5998.4	5974.3	6005.6	5996.0
10°	6242.3	6196.4	6184.3	6210.9	6155.4	6172.3	6124.0	6143.3	6107.1	6143.3	6126.4
12.5°	6413.8	6353.4	6355.8	6384.8	6329.2	6341.3	6302.7	6324.4	6280.9	6319.6	6307.5
15°	6616.6	6529.7	6546.6	6578.0	6524.8	6561.1	6515.2	6546.6	6505.5	6546.6	6532.1
17.5°	6879.8	6780.8	6792.9	6843.6	6800.1	6858.1	6805.0	6843.6	6824.3	6850.8	6846.0
20°	7213.1	7147.9	7135.8	7198.6	7135.8	7208.2	7179.2	7246.9	7251.7	7278.3	7290.3
22.5°	7657.4	7613.9	7584.9	7628.4	7572.9	7623.6	7664.6	7780.5	7824.0	7894.0	7898.9
25°	8249.0	8246.6	8181.4	8183.8	8113.8	8181.4	8297.3	8478.4	8594.3	8683.7	8649.9
27.5°	9048.3	9062.8	8963.8	8925.2	8843.1	8944.5	9183.5	9408.1	9618.2	9743.8	9743.8
30°	10091.5	10106.0	9961.1	9883.8	9809.0	9985.3	10270.2	10562.4	10861.8	11043.0	11001.9
32.5°	11472.8	11426.9	11219.2	11079.2	10951.2	11154.0	11482.5	11813.3	12221.4	12482.2	12450.8
35°	13148.7	12982.1	12774.4	12513.6	12238.3	12397.7	12706.8	13122.1	13689.6	14080.8	13981.8
37.5°	15095.0	14930.8	14575.8	14126.7	13646.1	13665.4	13909.3	14629.0	15338.9	15657.7	15590.1
40°	17116.2	16988.2	16662.2	16085.1	15215.8	15015.3	15416.2	16283.1	16961.7	17362.5	17249.0
42.5°	19176.1	19045.7	18799.3	18219.8	17067.9	16585.0	17002.7	17946.9	18671.4	19065.0	18934.6
45°	21231.1	21081.3	20885.7	20373.8	19275.1	18567.5	18801.8	19668.7	20330.3	20777.1	20509.0
47.5°	23037.3	22938.3	22805.5	22597.9	21636.8	20854.4	20837.5	21409.8	21866.2	22160.8	21832.4
50°	24609.4	24539.4	24614.2	24570.8	24220.6	23508.2	23071.2	23032.5	23179.8	23394.7	22926.3
52.5°	26019.6	25896.5	26174.2	26519.5	26777.9	26633.0	25217.9	24423.5	24261.7	24334.1	23802.8
55°	27173.9	27116.0	27582.0	28449.0	29644.3	29963.0	27422.7	25775.8	25179.3	25140.7	24536.9
57.5°	27879.1	27961.2	28893.3	30545.0	32737.7	32839.1	30129.7	27222.2	26072.8	25657.4	24962.0
60°	26756.2	27072.5	28663.9	32071.2	35362.6	35425.4	32117.1	27487.9	24957.1	24027.4	23165.3
62.5°	23283.7	23472.0	26179.0	32020.5	36222.2	35608.9	32590.4	25884.4	21912.0	20429.3	19632.5
65°	16401.4	16754.0	19654.2	28808.8	33008.1	33085.4	29897.8	22380.5	17497.8	15858.1	15343.7
67.5°	9905.6	10243.7	13332.2	20796.4	26833.4	27700.4	24940.2	16944.8	12547.4	10475.5	9956.3
70°	3216.5	3583.6	6075.7	12257.6	19738.7	21817.9	18768.0	11028.5	6570.7	4602.6	4044.8
72.5°	1221.9	1333.0	1977.7	5353.6	12293.8	14566.2	11608.0	5532.3	2035.7	1212.2	1064.9
75°	794.5	811.4	924.9	1876.3	5928.4	8019.6	5595.1	1620.3	816.2	724.4	671.3
77.5°	683.4	695.5	743.8	934.5	1888.4	3066.8	1605.9	828.3	681.0	603.7	567.5
80°	644.8	649.6	681.0	792.1	883.8	1023.9	772.7	693.1	594.0	567.5	540.9
82.5°	610.9	627.9	644.8	719.6	717.2	736.5	620.6	543.3	504.7	531.3	521.6
85°	569.9	579.6	591.6	642.3	584.4	495.0	478.1	374.3	364.6	388.8	364.6
87.5°	400.9	425.0	410.5	432.3	405.7	316.3	268.0	212.5	169.0	140.1	135.2
90°	164.2	166.6	157.0	144.9	128.0	106.3	84.5	53.1	24.1	12.1	4.8
92.5°	128.0	128.0	123.2	111.1	96.6	79.7	60.4	33.8	16.9	7.2	2.4
95°	79.7	82.1	77.3	70.0	60.4	48.3	36.2	19.3	12.1	4.8	2.4
97.5°	50.7	50.7	45.9	41.1	33.8	24.1	16.9	14.5	9.7	4.8	0.0
100°	29.0	29.0	26.6	21.7	16.9	12.1	12.1	9.7	7.2	2.4	0.0
102.5°	16.9	16.9	12.1	9.7	7.2	7.2	7.2	7.2	4.8	2.4	0.0
105°	7.2	7.2	4.8	4.8	2.4	2.4	4.8	4.8	4.8	2.4	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.4	4.8	4.8	2.4	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	4.8	2.4	2.4



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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



REPORT NUMBER: P579633

CATALOG NUMBER: CTN-CA10-630-727-U-T5N-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2	5764.2
2.5°	5824.5	5781.1	5788.3	5747.3	5740.0	5699.0	5781.1	5790.7	5766.6	5788.3
5°	5892.2	5839.0	5855.9	5810.0	5802.8	5747.3	5819.7	5814.9	5795.6	5817.3
7.5°	5993.6	5938.0	5947.7	5897.0	5887.3	5827.0	5894.6	5872.8	5853.5	5880.1
10°	6136.0	6073.3	6078.1	6012.9	6020.1	5940.4	6022.6	5983.9	5959.8	5996.0
12.5°	6307.5	6237.5	6239.9	6172.3	6169.9	6092.6	6165.0	6143.3	6107.1	6162.6
15°	6529.7	6450.0	6442.7	6353.4	6329.2	6242.3	6309.9	6268.9	6244.7	6324.4
17.5°	6841.2	6751.8	6725.3	6616.6	6165.0	5904.2	6266.4	6389.6	6239.9	6215.7
20°	7256.5	7181.7	7121.3	6957.1	6198.8	5385.0	4783.8	4788.6	5421.3	5713.5
22.5°	7819.2	7729.8	7616.3	7382.1	5686.9	5044.6	5047.0	5039.7	4324.9	4023.1
25°	8589.5	8480.8	8249.0	6925.7	6037.0	5443.0	5428.5	4721.0	4327.4	4349.1
27.5°	9630.3	9408.1	8051.0	7502.8	6660.1	5959.8	5612.0	4752.4	4800.7	4834.5
30°	10953.6	10060.1	8700.6	8374.6	7408.7	6645.6	5189.4	5307.8	5404.4	5426.1
32.5°	12310.7	10089.1	9739.0	9393.6	8331.1	6046.7	5848.7	6073.3	6174.7	6186.8
35°	12298.7	11325.5	10873.9	10485.1	9186.0	6469.3	6594.9	6940.2	7198.6	7186.5
37.5°	13015.9	12689.9	12151.4	11658.7	8268.3	7287.9	7512.5	7903.7	8217.6	8208.0
40°	14515.5	14138.8	13568.9	12535.3	9154.6	8224.9	8538.8	8959.0	9181.1	9193.2
42.5°	15933.0	15621.4	15039.5	11711.9	10263.0	9352.6	9637.5	9920.1	10057.7	10101.2
45°	17343.2	17121.0	15184.4	12943.4	11603.2	10487.5	10675.9	10729.0	10873.9	10857.0
47.5°	18487.8	18241.5	14600.0	14488.9	13228.4	11564.6	11550.1	11480.0	11533.2	11545.2
50°	19533.5	16565.6	15773.6	16143.0	14933.2	12663.3	12388.0	12245.5	12173.1	12141.7
52.5°	20359.3	16570.5	16869.9	17852.7	16857.8	13856.2	13264.6	12863.7	11262.7	12516.0
55°	21062.0	17253.9	17908.3	19680.8	18516.8	15104.7	14056.6	13341.9	7517.3	6027.4
57.5°	21465.3	17773.0	18937.0	21392.9	19965.7	16493.2	12941.0	11190.3	4250.1	4245.2
60°	19907.7	16840.9	18908.0	22291.2	19547.9	12793.7	5269.1	4409.5	804.1	825.9
62.5°	16853.0	14650.7	17932.4	21798.5	18205.3	11255.5	4725.8	3395.2	26.6	21.7
65°	13056.9	11687.7	15099.8	19173.6	16563.2	9391.2	3523.2	2446.2	7.2	0.0
67.5°	8541.2	8236.9	11142.0	15899.2	13508.5	7275.8	2364.1	1171.2	4.8	0.0
70°	3641.5	4218.7	7058.5	11528.3	10340.2	5005.9	1139.8	422.6	2.4	0.0
72.5°	1019.1	1349.9	3141.7	6754.2	6503.1	2632.1	444.3	178.7	2.4	0.0
75°	603.7	519.2	900.7	2694.9	3165.8	924.9	205.3	137.6	2.4	0.0
77.5°	502.3	405.7	516.8	688.2	958.7	333.2	173.9	123.2	0.0	0.0
80°	470.9	359.8	446.7	480.5	473.3	277.7	171.5	123.2	0.0	0.0
82.5°	446.7	313.9	369.5	369.5	396.0	256.0	161.8	120.7	0.0	0.0
85°	335.7	219.7	246.3	318.8	284.9	181.1	118.3	96.6	0.0	0.0
87.5°	128.0	79.7	96.6	101.4	82.1	41.1	9.7	9.7	0.0	0.0
90°	2.4	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: P579633
 CATALOG NUMBER: CTN-CA10-630-727-U-T5N-HSS-HM-EX90

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)