

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: P510735

Luminaire Tested: **CTN-CA8-230-750-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510735
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-CA8-230-750-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37930 lumens
Efficiency: N/A
Efficacy: 166.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

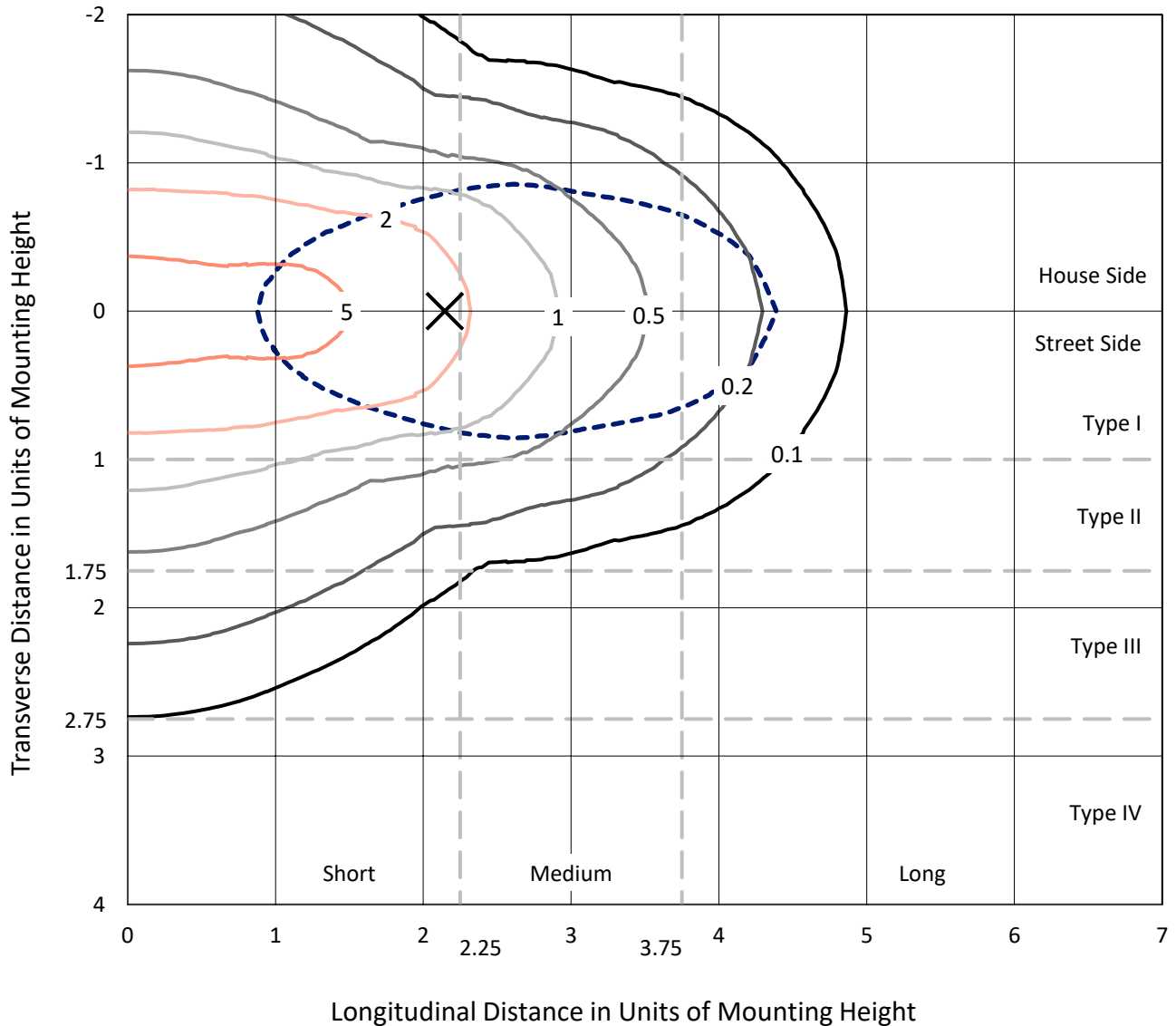
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

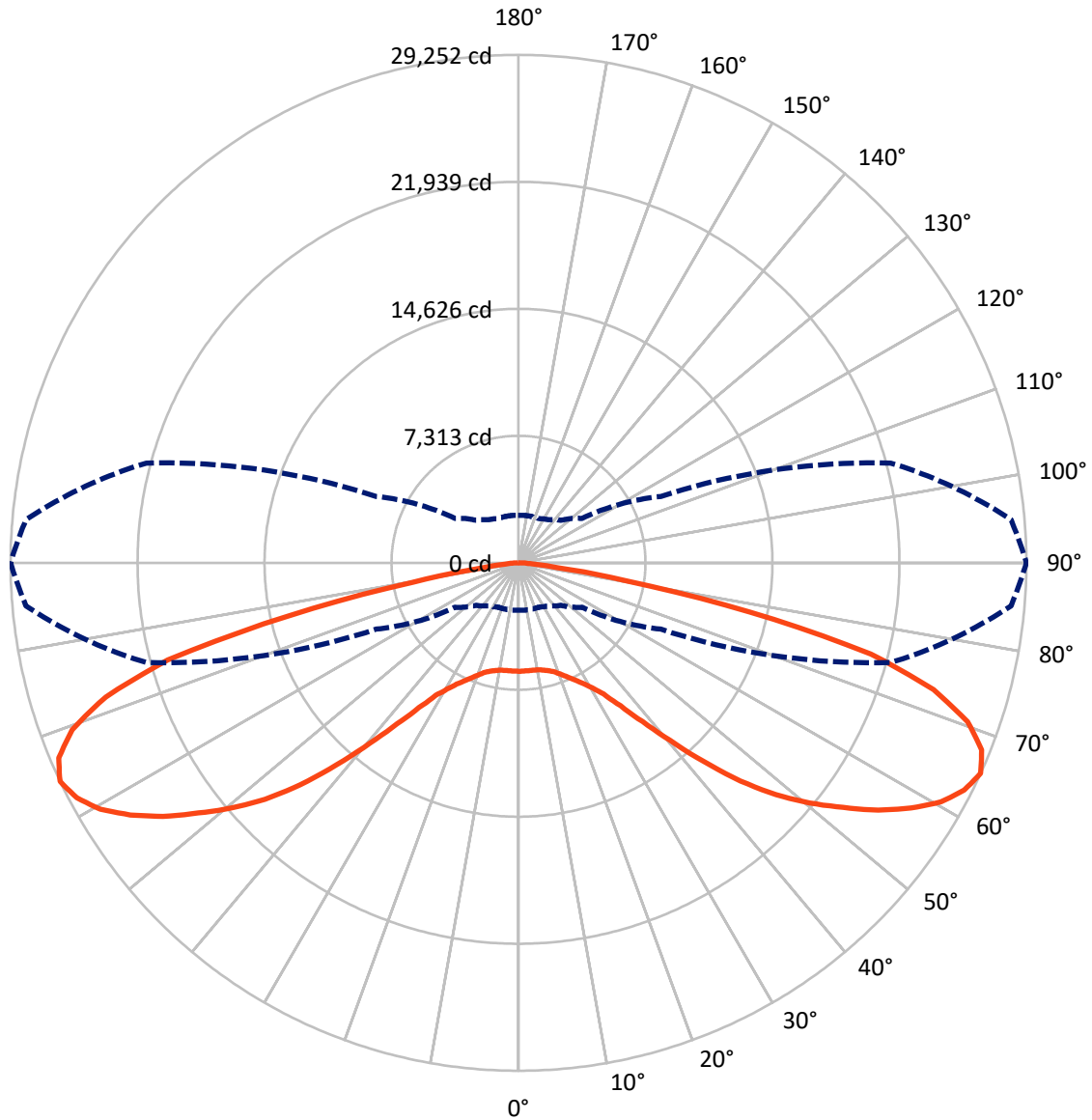
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7 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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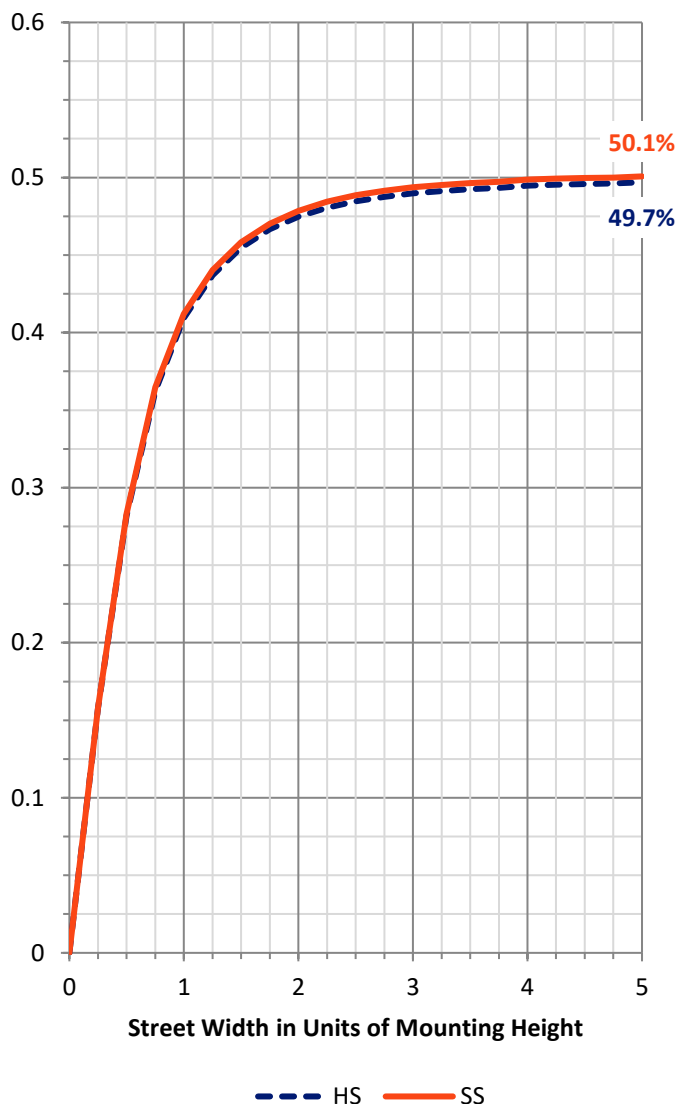
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18965.0	0.0	18965.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18965.0	0.0	18965.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	37930.0	0.0	37930.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	593.0	1.6
10°-20°	1749.9	4.6
20°-30°	2882.6	7.6
30°-40°	4223.3	11.1
40°-50°	6244.7	16.5
50°-60°	8191.4	21.6
60°-70°	8545.9	22.5
70°-80°	4913.4	13.0
80°-90°	585.7	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°	37930.0	100.0
0°-180°	37930.0	100.0

Coefficient of Utilization



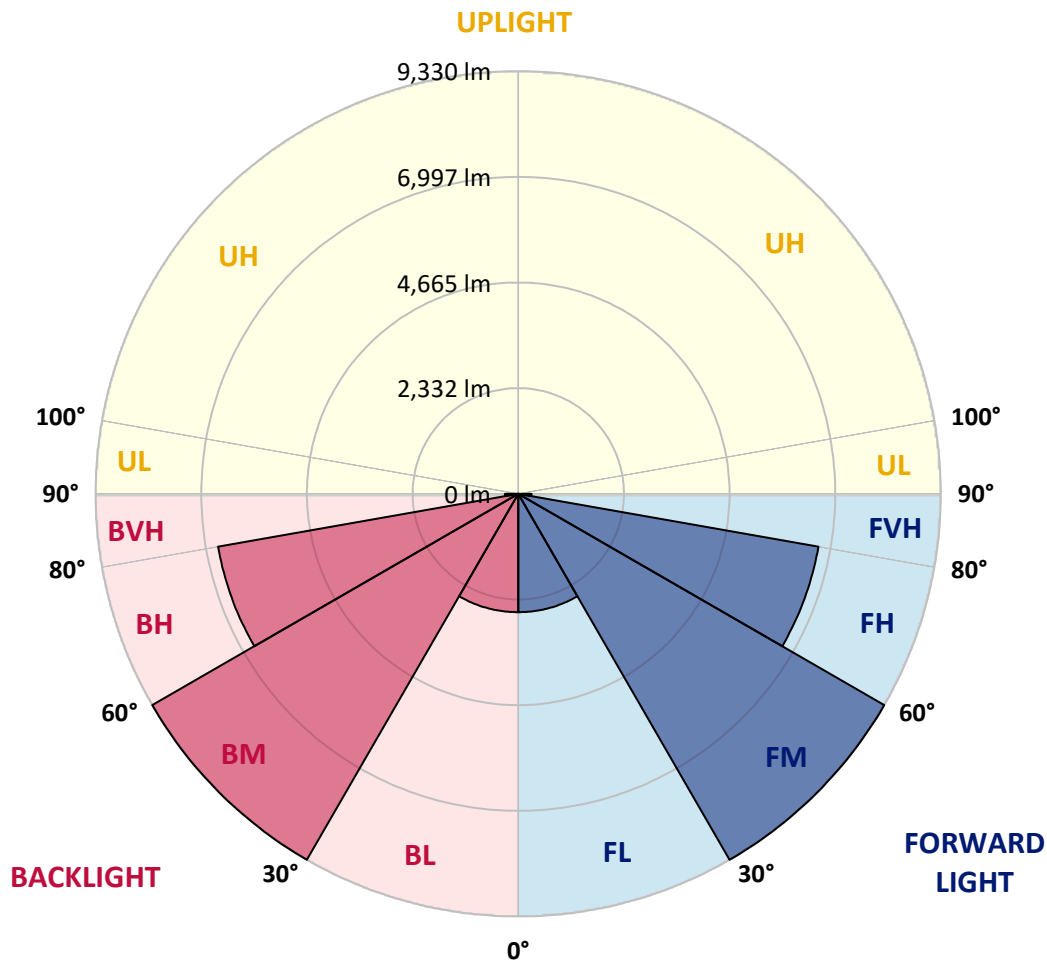
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2612.8	6.9			
FM (30°-60°)	9329.7	24.6			
FH (60°-80°)	6729.7	17.7			G3/7500
FVH (80°-90°)	292.9	0.8			G3/500
BL (0°-30°)	2612.8	6.9	B4/5000		
BM (30°-60°)	9329.7	24.6	B5		
BH (60°-80°)	6729.7	17.7	B5		G5
BVH (80°-90°)	292.9	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°	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9
2.5°	6247.4	6242.9	6241.4	6239.2	6242.9	6245.9	6253.3	6260.0	6258.5	6257.0	6258.5
5°	6212.5	6214.8	6215.5	6216.2	6219.2	6221.4	6231.8	6242.2	6240.7	6239.2	6246.6
7.5°	6163.6	6163.6	6162.1	6160.6	6166.6	6171.8	6182.1	6192.5	6200.7	6208.1	6219.9
10°	6092.4	6089.5	6088.7	6088.0	6094.7	6100.6	6119.9	6139.1	6155.4	6171.0	6191.0
12.5°	6005.7	6005.0	6006.4	6007.9	6022.0	6036.1	6068.7	6101.3	6133.9	6166.6	6195.5
15°	5902.6	5893.7	5901.2	5907.8	5930.8	5953.1	6016.1	6079.1	6128.8	6177.7	6234.0
17.5°	5745.5	5736.6	5747.7	5758.1	5804.0	5850.0	5939.0	6027.2	6120.6	6214.0	6294.8
20°	5507.5	5507.5	5535.7	5563.8	5641.7	5719.5	5841.9	5963.4	6089.5	6215.5	6332.6
22.5°	5254.0	5246.5	5306.6	5366.6	5460.1	5552.7	5706.9	5861.1	6027.9	6194.0	6354.9
25°	4967.8	4980.4	5056.0	5130.9	5262.1	5392.6	5582.4	5771.4	5981.2	6191.0	6414.2
27.5°	4726.1	4728.3	4819.5	4910.7	5075.3	5239.1	5469.7	5700.3	5956.0	6211.8	6492.8
30°	4476.3	4517.1	4613.4	4709.1	4892.9	5076.8	5355.5	5633.5	5936.7	6240.0	6582.5
32.5°	4284.3	4293.9	4402.9	4511.1	4703.1	4895.1	5219.1	5543.1	5907.1	6271.1	6687.7
35°	4103.4	4119.0	4220.5	4322.1	4522.2	4721.7	5076.8	5431.1	5866.3	6300.7	6801.9
37.5°	3942.5	3961.8	4058.2	4154.5	4347.3	4540.0	4916.6	5293.3	5803.3	6313.4	6927.2
40°	3824.6	3840.9	3922.5	4004.0	4178.3	4351.7	4746.1	5139.8	5715.1	6290.4	7025.8
42.5°	3739.4	3746.8	3812.8	3878.8	4034.4	4190.1	4580.8	4970.8	5600.2	6229.6	7102.2
45°	3623.7	3640.0	3705.3	3769.8	3909.9	4049.3	4406.6	4763.9	5429.7	6094.7	7102.9
47.5°	3537.7	3548.1	3609.6	3670.4	3800.9	3931.4	4252.4	4573.4	5236.9	5899.7	7022.8
50°	3474.7	3469.5	3526.6	3583.0	3693.4	3803.1	4089.3	4374.7	4998.2	5621.7	6822.7
52.5°	3385.0	3390.9	3436.9	3482.9	3578.5	3673.4	3929.9	4185.7	4733.5	5280.6	6497.9
55°	3264.9	3292.3	3330.9	3368.7	3452.5	3536.2	3766.8	3997.4	4468.9	4939.6	6079.8
57.5°	3147.0	3167.1	3199.7	3232.3	3298.3	3363.5	3580.7	3797.9	4190.1	4582.3	5552.0
60°	3050.7	3055.9	3076.6	3096.6	3147.0	3197.5	3376.9	3556.3	3898.8	4240.5	5025.6
62.5°	2926.1	2927.6	2941.7	2955.8	2986.9	3017.3	3158.2	3298.3	3590.4	3882.5	4502.2
65°	2731.1	2743.0	2756.3	2768.9	2789.7	2809.7	2917.2	3024.7	3243.4	3462.1	3961.8
67.5°	2533.9	2523.6	2539.1	2554.7	2557.7	2560.6	2642.2	2723.7	2903.1	3082.5	3484.4
70°	2212.9	2221.1	2219.6	2217.4	2204.8	2191.4	2248.5	2305.6	2400.5	2494.6	2785.3
72.5°	1697.0	1685.8	1657.7	1628.8	1615.4	1602.1	1668.8	1734.8	1804.5	1874.1	2083.9
75°	1037.2	1069.0	1127.6	1185.4	1207.7	1229.9	1226.2	1221.7	1215.8	1209.9	1471.6
77.5°	702.8	719.9	733.2	745.8	778.4	810.3	847.4	884.4	883.7	883.0	1047.5
80°	447.0	433.7	439.6	445.6	464.1	482.6	539.0	594.6	610.1	625.0	738.4
82.5°	280.2	282.5	289.9	296.5	275.8	255.0	298.8	341.8	378.8	415.2	467.8
85°	181.6	206.1	202.4	198.7	174.2	149.8	188.3	226.9	244.6	261.7	281.7
87.5°	58.6	68.2	70.4	71.9	71.9	71.2	79.3	87.5	90.4	92.7	100.1
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°	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9	6248.9
2.5°	6259.2	6251.8	6244.4	6242.2	6240.0	6238.5	6237.0	6235.5
5°	6253.3	6251.8	6250.3	6244.4	6238.5	6237.7	6237.0	6239.2
7.5°	6231.8	6231.8	6231.8	6238.5	6245.1	6242.2	6238.5	6242.9
10°	6210.3	6228.1	6245.9	6251.1	6256.3	6260.0	6263.7	6267.4
12.5°	6224.4	6254.8	6284.4	6301.5	6318.5	6327.4	6335.6	6337.8
15°	6290.4	6328.9	6367.5	6390.5	6412.7	6427.5	6442.3	6446.1
17.5°	6375.6	6434.9	6493.5	6526.9	6560.2	6577.3	6593.6	6588.4
20°	6449.0	6530.6	6612.1	6683.3	6754.5	6793.7	6832.3	6836.7
22.5°	6515.0	6652.2	6789.3	6881.2	6972.4	7042.1	7111.8	7119.2
25°	6636.6	6816.0	6995.4	7142.2	7289.0	7352.7	7415.7	7452.8
27.5°	6773.0	7013.2	7253.4	7449.8	7646.3	7743.4	7839.8	7845.0
30°	6924.2	7228.9	7532.9	7796.8	8060.0	8178.6	8296.5	8358.7
32.5°	7103.6	7490.6	7876.9	8223.8	8570.8	8750.9	8931.1	8994.1
35°	7302.3	7804.2	8305.4	8783.5	9261.0	9605.7	9950.4	10116.5
37.5°	7541.0	8180.1	8819.1	9537.5	10255.9	10843.8	11430.9	11598.4
40°	7761.2	8583.4	9404.8	10402.6	11400.5	12333.1	13265.0	13446.6
42.5°	7974.7	8969.6	9964.5	11325.6	12686.8	13935.2	15183.6	15655.9
45°	8110.4	9313.6	10516.1	12310.9	14105.7	15819.7	17533.0	17929.6
47.5°	8145.2	9559.0	10972.7	13196.1	15419.4	17436.6	19453.1	19962.4
50°	8023.7	9686.5	11349.4	14283.6	17217.2	19271.4	21325.0	21743.1
52.5°	7715.2	9645.7	11576.2	15126.5	18676.9	20851.3	23025.6	23405.2
55°	7220.0	9398.1	11576.2	15820.4	20063.9	22319.1	24573.6	25150.4
57.5°	6521.7	8925.1	11328.6	16283.8	21239.0	23688.4	26137.8	26656.0
60°	5810.7	8362.4	10913.4	16539.6	22165.7	24760.4	27355.1	27960.1
62.5°	5121.3	7598.1	10074.2	16271.2	22468.2	25207.4	27946.0	28816.3
65°	4461.5	6749.3	9037.1	15616.6	22195.3	25334.2	28472.4	29252.3
67.5°	3886.2	6039.8	8193.4	14519.4	20845.3	24319.3	27792.5	28764.5
70°	3075.9	5057.5	7039.1	12574.1	18109.0	22177.5	26246.1	27445.6
72.5°	2293.7	3974.4	5654.3	9891.1	14127.9	18806.6	23484.5	24993.9
75°	1732.5	3174.5	4616.4	7818.3	11020.2	14981.2	18942.3	20962.5
77.5°	1212.1	2293.7	3374.6	5763.3	8151.9	10344.8	12537.7	13614.2
80°	851.1	1450.8	2049.8	3198.9	4347.3	5319.9	6291.9	6214.8
82.5°	519.7	771.7	1023.1	1387.8	1752.6	1987.6	2222.6	2212.2
85°	301.7	367.0	431.5	534.5	637.6	754.0	870.3	774.0
87.5°	106.8	106.8	106.8	122.3	137.9	189.8	241.7	255.0
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-CA8-230-750-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)