

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: P579418

Luminaire Tested: **CTN-CA8-480-722-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579418
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-722-U-T5-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 2200K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42580 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G5

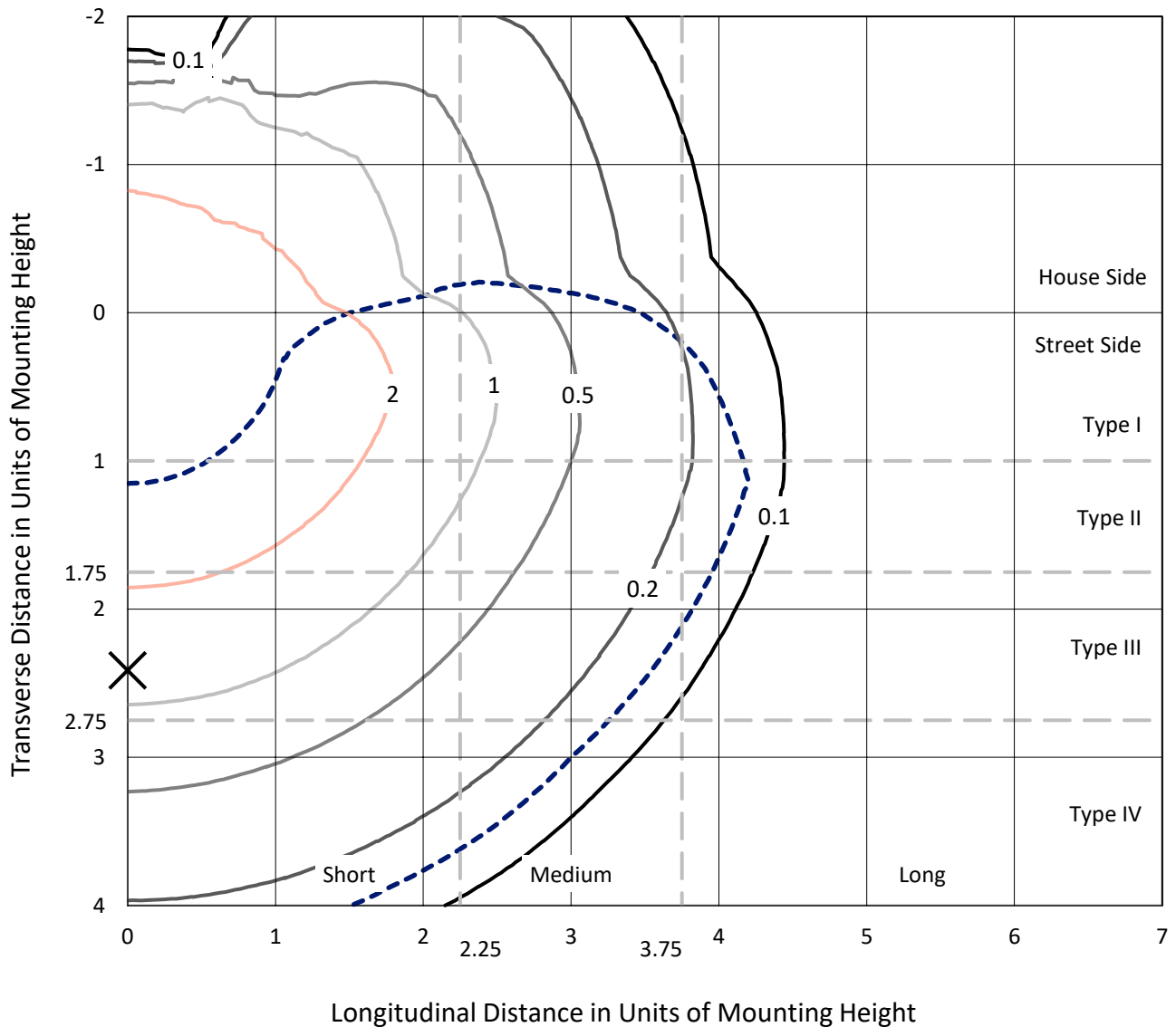
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P579418
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

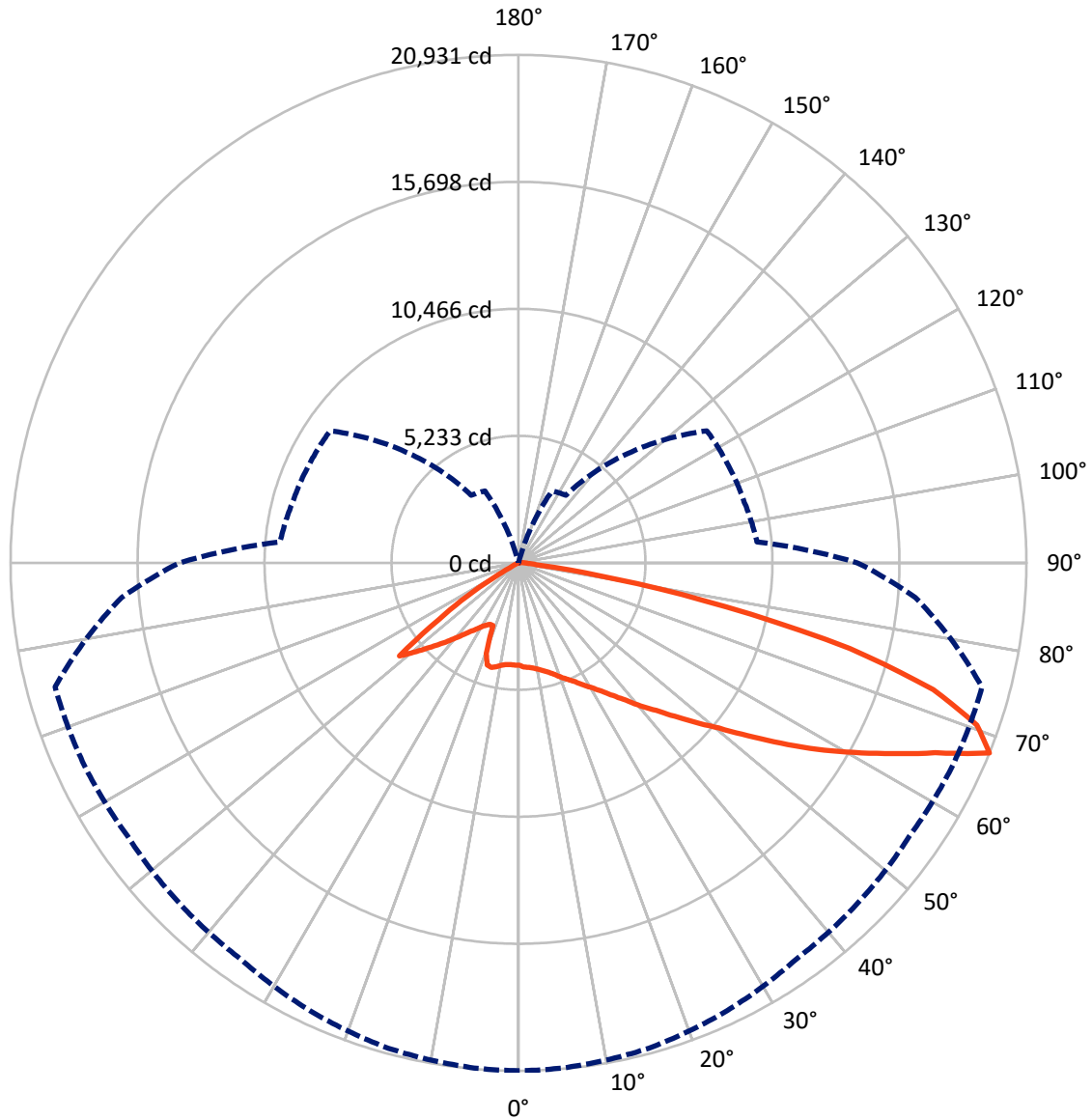
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P579418
CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX120

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P579418
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX120

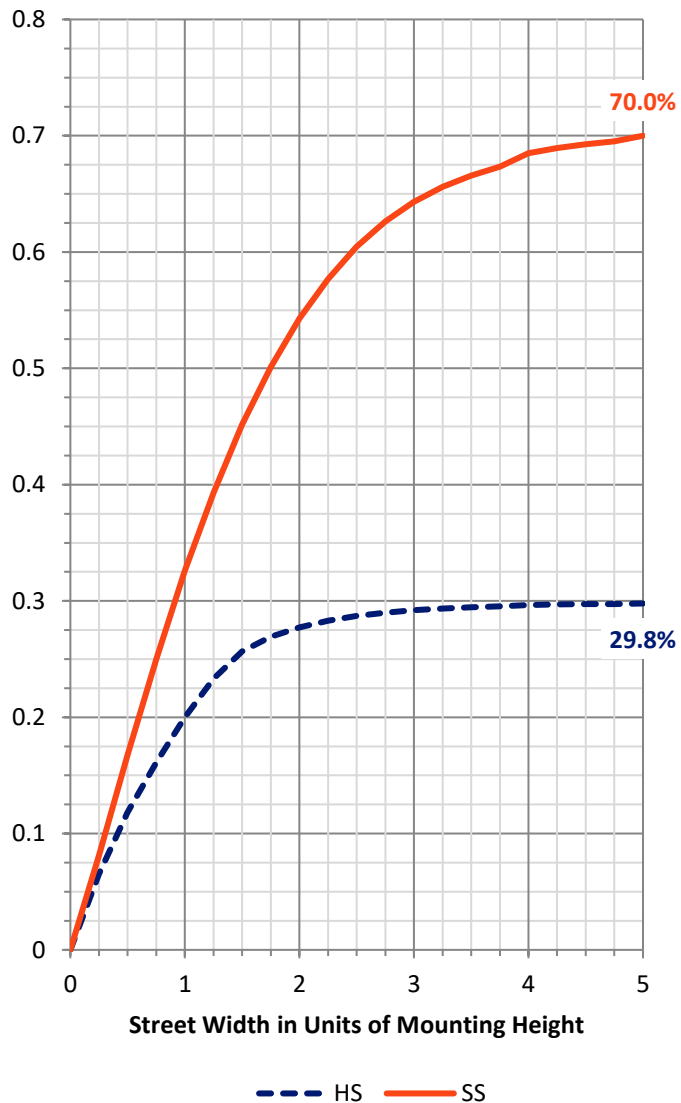
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12710.4	4.3	12714.7
	% Fixture	29.9	0.0	29.9
Street Side	Lumens	29817.4	47.9	29865.4
	% Fixture	70.0	0.1	70.1
Total	Lumens	42527.8	52.2	42580.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	406.8	1.0
10°-20°	1259.3	3.0
20°-30°	2113.3	5.0
30°-40°	3426.8	8.0
40°-50°	5599.8	13.2
50°-60°	8775.9	20.6
60°-70°	11753.6	27.6
70°-80°	8566.8	20.1
80°-90°	625.6	1.5
90°-100°	40.0	0.1
100°-110°	11.4	0.0
110°-120°	0.8	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°	42527.8	99.9
0°-180°	42580.0	100.0

Coefficient of Utilization

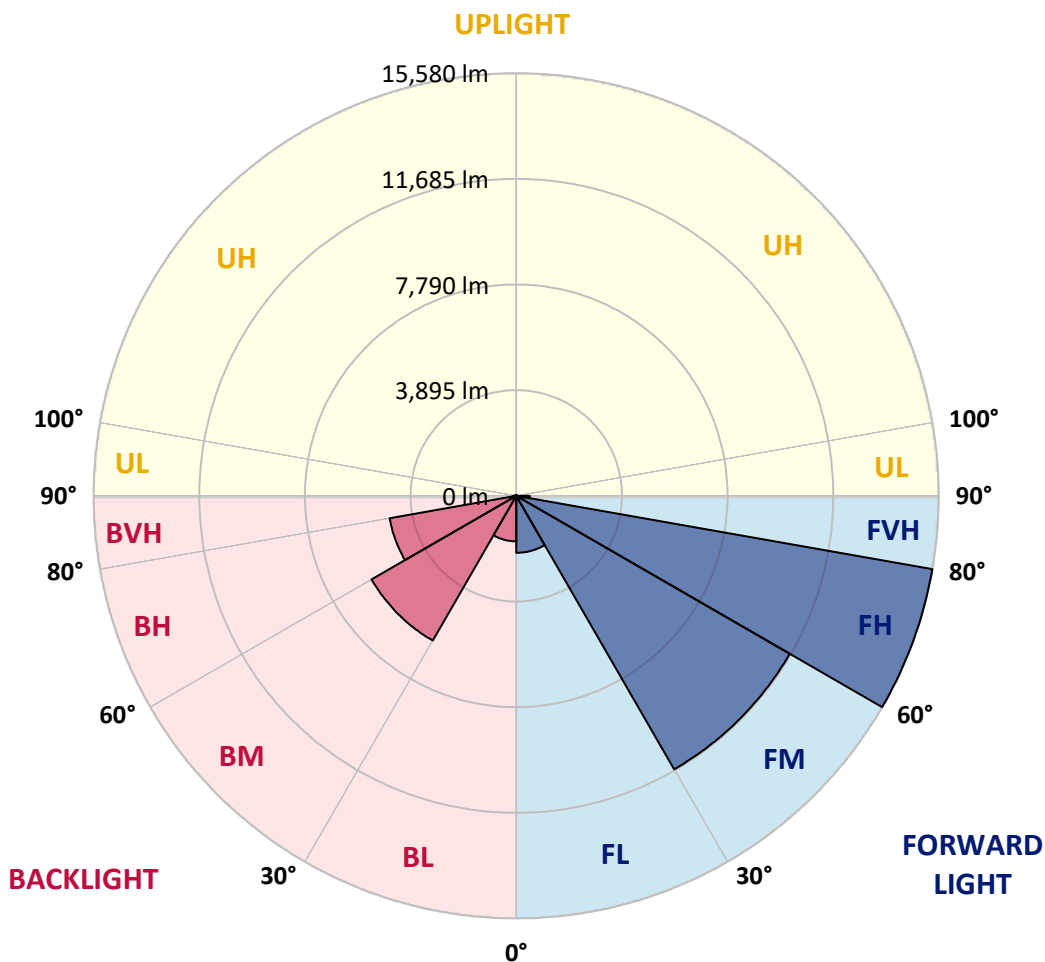


REPORT NUMBER: P579418
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2100.3	4.9			
FM (30°-60°)	11642.1	27.3			
FH (60°-80°)	15580.3	36.6			G5
FVH (80°-90°)	494.7	1.2			G3/500
BL (0°-30°)	1679.1	3.9	B3/2500		
BM (30°-60°)	6160.4	14.5	B4/8500		
BH (60°-80°)	4740.1	11.1	B4/5000		G4/5000
BVH (80°-90°)	130.9	0.3			G2/225
UL (90°-100°)	40.0	0.1		U2/50	
UH (100°-180°)	12.2	0.0		U2/50	

BUG Rating: B4-U2-G5
 Type IV Short





REPORT NUMBER: P579418

CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2
2.5°	4299.7	4274.7	4276.5	4299.7	4229.9	4253.2	4222.8	4246.0	4229.9	4235.3	4246.0
5°	4326.6	4299.7	4301.5	4330.2	4267.5	4287.2	4246.0	4258.6	4244.3	4251.4	4251.4
7.5°	4380.3	4349.9	4348.1	4366.0	4301.5	4308.7	4271.1	4272.9	4251.4	4265.7	4258.6
10°	4460.9	4435.8	4417.9	4428.6	4371.3	4367.8	4319.4	4321.2	4294.4	4310.5	4298.0
12.5°	4559.3	4525.3	4521.7	4525.3	4462.6	4448.3	4398.2	4401.8	4353.4	4378.5	4364.2
15°	4684.6	4630.9	4630.9	4650.6	4570.0	4559.3	4498.4	4502.0	4451.9	4471.6	4457.3
17.5°	4838.6	4786.6	4777.7	4792.0	4722.2	4707.9	4645.2	4641.6	4586.2	4591.5	4579.0
20°	5037.3	4985.3	4963.9	4999.7	4911.9	4901.2	4826.0	4818.9	4759.8	4743.7	4736.5
22.5°	5221.6	5180.5	5169.7	5209.1	5117.8	5108.9	5037.3	5028.3	4972.8	4949.5	4808.1
25°	5429.3	5420.3	5416.7	5429.3	5343.4	5325.5	5270.0	5257.4	5210.9	5182.2	5010.4
27.5°	5697.8	5694.2	5683.5	5685.3	5606.5	5590.4	5538.5	5529.5	5481.2	5449.0	5228.8
30°	5978.8	5978.8	5955.6	5968.1	5928.7	5903.6	5862.5	5830.3	5799.8	5765.8	5488.4
32.5°	6302.8	6301.0	6279.6	6317.2	6288.5	6288.5	6263.5	6229.4	6175.7	6159.6	5823.1
35°	6719.9	6693.1	6684.1	6745.0	6736.0	6752.1	6743.2	6707.4	6662.6	6625.0	6216.9
37.5°	7181.8	7174.6	7201.4	7239.0	7258.7	7301.7	7274.8	7273.0	7265.9	7171.0	6111.3
40°	7751.0	7720.6	7758.2	7777.8	7763.5	7833.3	7810.1	7829.8	7883.5	7120.9	6104.1
42.5°	8318.4	8291.6	8318.4	8415.1	8393.6	8477.8	8467.0	8544.0	8574.4	7226.5	6600.0
45°	9016.6	8986.1	9007.6	9122.2	9132.9	9235.0	9290.5	9363.8	9378.2	7910.3	7197.9
47.5°	9818.5	9768.4	9809.6	9863.3	10026.2	10122.8	10176.5	10266.0	10357.3	8733.7	7878.1
50°	10702.8	10699.2	10744.0	10837.1	11023.2	11119.9	11213.0	11306.1	11456.4	9652.1	8640.7
52.5°	11827.0	11803.7	11880.7	11968.4	12133.1	12281.7	12392.6	12489.3	12650.4	10581.1	9465.9
55°	13112.3	13031.7	13178.5	13327.1	13396.9	13572.3	13649.3	13729.8	13883.8	11558.5	9947.4
57.5°	14499.6	14479.9	14581.9	14635.6	14786.0	14895.2	14936.3	15024.0	15022.3	12575.2	10767.3
60°	15865.4	15843.9	15963.8	15996.1	16116.0	16214.4	16200.1	16278.9	16307.5	13529.3	11571.0
62.5°	17302.8	17267.0	17378.0	17385.1	17313.5	17472.9	17456.7	17523.0	17497.9	14462.0	12362.2
65°	18874.5	18901.3	18937.1	18790.4	18618.5	18756.3	18752.8	18878.1	18967.6	15765.1	13421.9
67.5°	20931.3	20897.3	20712.9	20358.5	19941.4	19801.7	19653.2	19744.5	19769.5	16413.1	13964.3
70°	20043.4	19968.2	19885.9	19524.3	19021.3	18666.8	18435.9	18532.6	18634.6	15510.9	13115.8
72.5°	17879.2	17693.0	17310.0	16991.3	16701.3	16355.9	16074.8	16243.1	16466.8	13758.5	11614.0
75°	14105.7	13932.1	13652.9	13436.3	13280.5	13276.9	13264.4	13395.1	13362.9	11171.8	9442.6
77.5°	8735.5	9098.9	9356.7	9172.3	9236.8	9104.3	9396.1	9567.9	9723.7	8008.8	6727.1
80°	4033.0	4126.1	4582.6	4464.4	4369.6	4342.7	4360.6	4659.5	4747.3	3594.5	3010.9
82.5°	920.1	882.5	914.7	848.5	844.9	805.5	810.9	810.9	782.3	662.3	554.9
85°	465.4	476.2	479.7	460.0	406.3	365.2	338.3	286.4	247.0	211.2	179.0
87.5°	311.5	320.4	325.8	298.9	268.5	234.5	213.0	173.6	137.8	85.9	66.2
90°	213.0	211.2	205.9	191.5	171.8	146.8	118.1	82.3	48.3	17.9	12.5
92.5°	152.2	148.6	146.8	134.3	119.9	100.2	77.0	51.9	26.9	12.5	7.2
95°	100.2	98.5	98.5	91.3	80.6	66.2	51.9	34.0	19.7	10.7	7.2
97.5°	69.8	68.0	68.0	64.4	57.3	48.3	35.8	23.3	16.1	10.7	7.2
100°	48.3	48.3	48.3	44.8	41.2	34.0	26.9	17.9	14.3	10.7	7.2
102.5°	32.2	32.2	34.0	32.2	28.6	23.3	17.9	14.3	12.5	9.0	7.2
105°	21.5	21.5	21.5	21.5	19.7	16.1	14.3	12.5	10.7	9.0	7.2
107.5°	14.3	14.3	14.3	14.3	12.5	10.7	10.7	10.7	9.0	9.0	7.2
110°	9.0	9.0	9.0	10.7	9.0	9.0	9.0	9.0	9.0	7.2	7.2



REPORT NUMBER: P579418
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX120

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: P579418

CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2	4219.2
2.5°	4237.1	4212.0	4224.6	4199.5	4188.8	4165.5	4210.2	4213.8	4210.2	4217.4
5°	4242.5	4213.8	4228.1	4199.5	4194.1	4167.3	4212.0	4212.0	4201.3	4206.7
7.5°	4255.0	4224.6	4235.3	4201.3	4201.3	4169.1	4222.8	4219.2	4210.2	4222.8
10°	4298.0	4262.2	4262.2	4229.9	4233.5	4199.5	4265.7	4265.7	4258.6	4280.1
12.5°	4364.2	4319.4	4321.2	4276.5	4283.6	4256.8	4337.3	4340.9	4340.9	4376.7
15°	4450.1	4382.1	4389.2	4340.9	4355.2	4323.0	4394.6	4391.0	4400.0	4451.9
17.5°	4555.7	4480.5	4417.9	4260.4	4167.3	4170.9	4383.9	4482.3	4367.8	4401.8
20°	4600.5	4235.3	4036.6	3979.3	3966.8	3768.1	3361.7	3424.4	3807.5	3974.0
22.5°	4299.7	4183.4	4163.7	4090.3	3547.9	3397.6	3422.6	3386.8	3010.9	2797.9
25°	4446.5	4369.6	4324.8	3678.6	3556.9	3530.0	3512.1	3172.0	2763.9	2783.6
27.5°	4654.2	4553.9	4016.9	3694.7	3718.0	3676.8	3573.0	2853.4	2840.8	2873.1
30°	4899.4	4647.0	3914.9	3884.4	3911.3	3857.6	3003.7	2975.1	2975.1	3007.3
32.5°	5200.1	4215.6	4154.7	4158.3	4140.4	3531.8	3161.3	3154.1	3175.6	3202.4
35°	5116.0	4496.7	4502.0	4532.5	4491.3	3454.8	3408.3	3381.4	3399.3	3410.1
37.5°	4951.3	4919.1	4919.1	4885.1	3834.3	3725.1	3675.0	3671.4	3669.6	3669.6
40°	5366.6	5336.2	5298.6	5239.5	4011.5	4040.2	3965.0	3956.1	3961.4	3981.1
42.5°	5839.2	5826.7	5823.1	4496.7	4380.3	4401.8	4321.2	4298.0	4298.0	4342.7
45°	6395.9	6379.8	5984.2	4806.3	4786.6	4811.7	4722.2	4666.7	4697.1	4729.4
47.5°	7035.0	7035.0	5298.6	5270.0	5270.0	5284.3	5194.8	5119.6	5150.0	5160.8
50°	7734.9	6641.2	5830.3	5803.4	5828.5	5821.3	5728.2	5030.1	5676.3	5681.7
52.5°	7930.0	6458.6	6413.8	6383.4	6413.8	6408.4	6311.8	4195.9	6139.9	6227.6
55°	7029.6	7035.0	7026.0	6981.3	7013.5	7001.0	6906.1	4580.8	4527.1	4034.8
57.5°	7600.6	7607.8	7604.2	7597.1	7625.7	5540.3	7153.1	4138.6	2527.6	2529.4
60°	8221.8	8186.0	8175.2	8159.1	6915.0	3927.4	2980.5	288.2	988.1	973.8
62.5°	8785.7	8773.1	8735.5	8726.6	5867.8	3093.2	3021.6	66.2	51.9	50.1
65°	9569.7	9458.7	9428.3	9333.4	6254.5	3293.7	3225.7	19.7	1.8	0.0
67.5°	9861.5	9635.9	9526.7	9476.6	6363.7	3397.6	3266.9	19.7	1.8	0.0
70°	9310.1	9030.9	8893.1	8837.6	5946.6	3175.6	3046.7	19.7	1.8	0.0
72.5°	8255.8	8049.9	7994.4	7817.2	5243.1	2787.1	2674.4	19.7	0.0	0.0
75°	6771.8	6696.6	6628.6	6440.7	4262.2	2214.3	2114.1	17.9	0.0	0.0
77.5°	4928.1	4817.1	4691.8	4487.7	2876.6	1446.4	1394.5	16.1	0.0	0.0
80°	2221.5	2130.2	2099.8	1781.1	1020.3	470.8	415.3	14.3	0.0	0.0
82.5°	431.4	388.4	368.8	354.4	229.1	127.1	111.0	10.7	0.0	0.0
85°	146.8	162.9	189.7	209.4	128.9	77.0	64.4	7.2	0.0	0.0
87.5°	57.3	77.0	93.1	96.7	48.3	32.2	17.9	3.6	0.0	0.0
90°	10.7	14.3	12.5	9.0	5.4	1.8	0.0	0.0	0.0	0.0
92.5°	5.4	7.2	5.4	5.4	3.6	1.8	0.0	0.0	0.0	0.0
95°	7.2	7.2	7.2	5.4	3.6	1.8	0.0	0.0	0.0	0.0
97.5°	7.2	7.2	7.2	5.4	3.6	1.8	0.0	0.0	0.0	0.0
100°	7.2	7.2	7.2	5.4	3.6	1.8	0.0	0.0	0.0	0.0
102.5°	7.2	7.2	7.2	5.4	3.6	1.8	0.0	0.0	0.0	0.0
105°	7.2	9.0	7.2	5.4	3.6	1.8	0.0	0.0	0.0	0.0
107.5°	7.2	9.0	7.2	5.4	3.6	1.8	0.0	0.0	0.0	0.0
110°	7.2	9.0	7.2	5.4	3.6	1.8	0.0	0.0	0.0	0.0



REPORT NUMBER: P579418
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-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)