

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: P522240

Luminaire Tested: **CTN-CA8-480-730-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522240
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-730-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53758 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

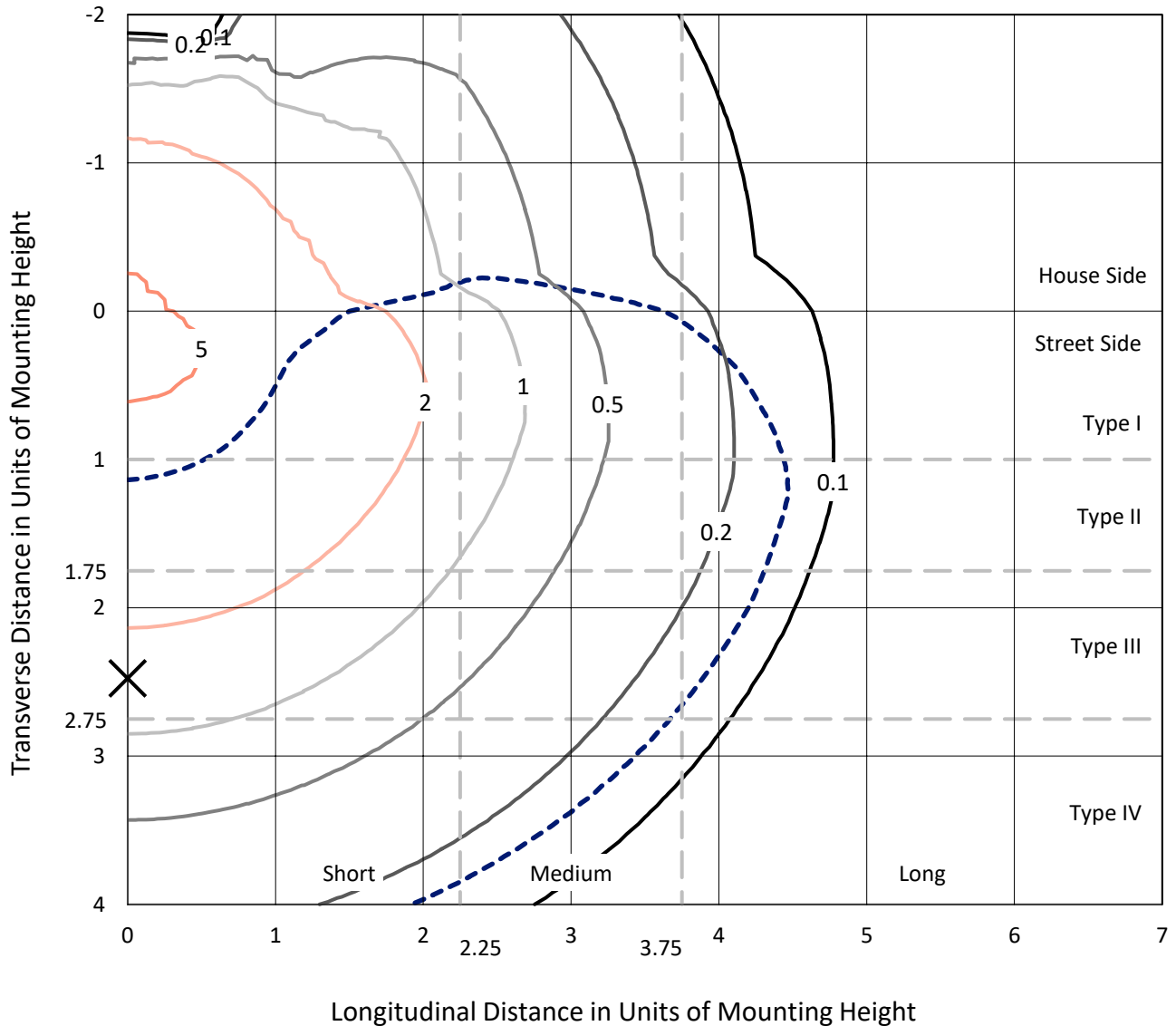
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P522240
 CATALOG NUMBER: CTN-CA8-480-730-U-T5R-HSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

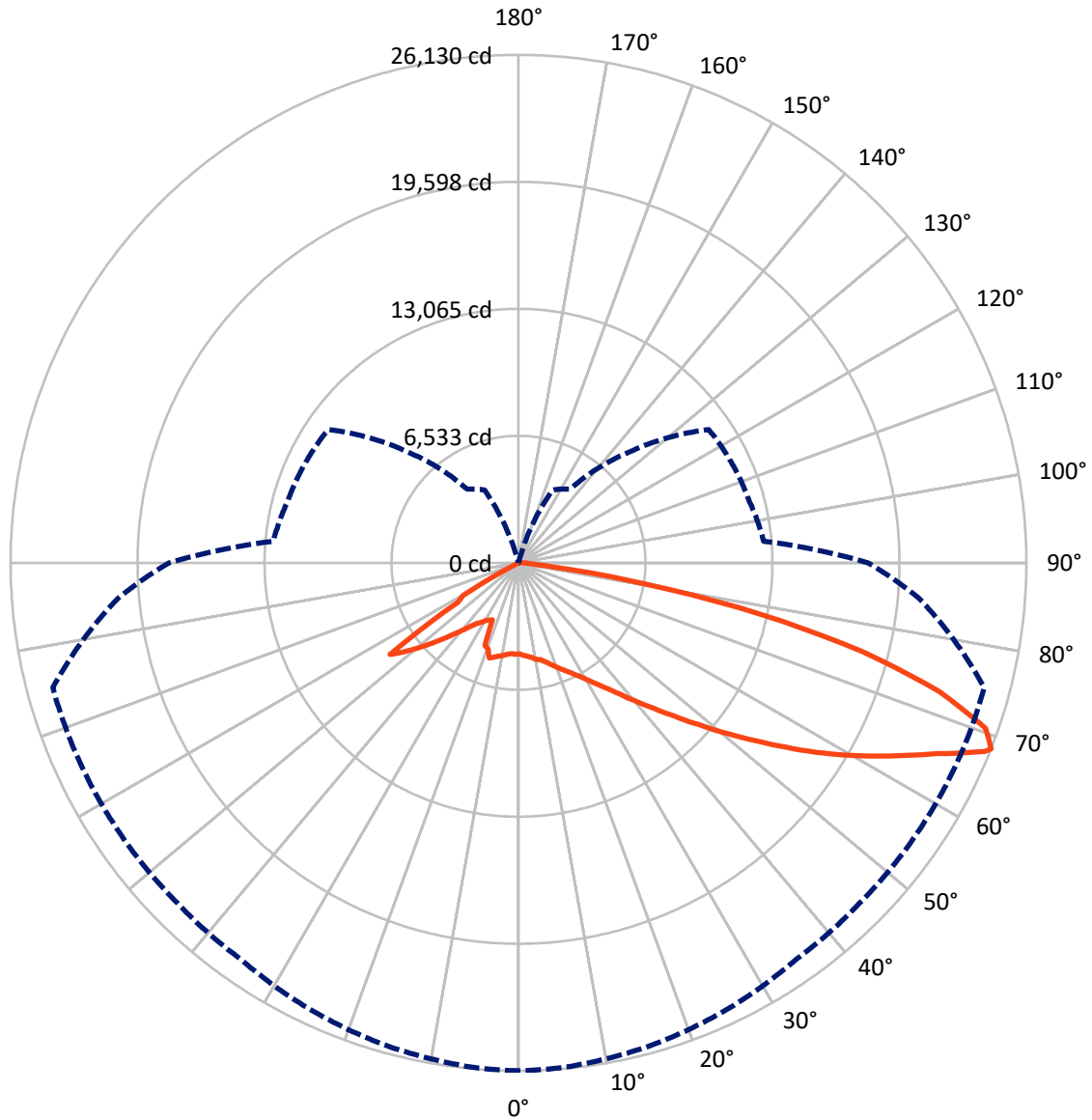
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.3 fc
 Type IV - Short - N/A

REPORT NUMBER: P522240
CATALOG NUMBER: CTN-CA8-480-730-U-T5R-HSS-HM-EX120

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P522240
 CATALOG NUMBER: CTN-CA8-480-730-U-T5R-HSS-HM-EX120

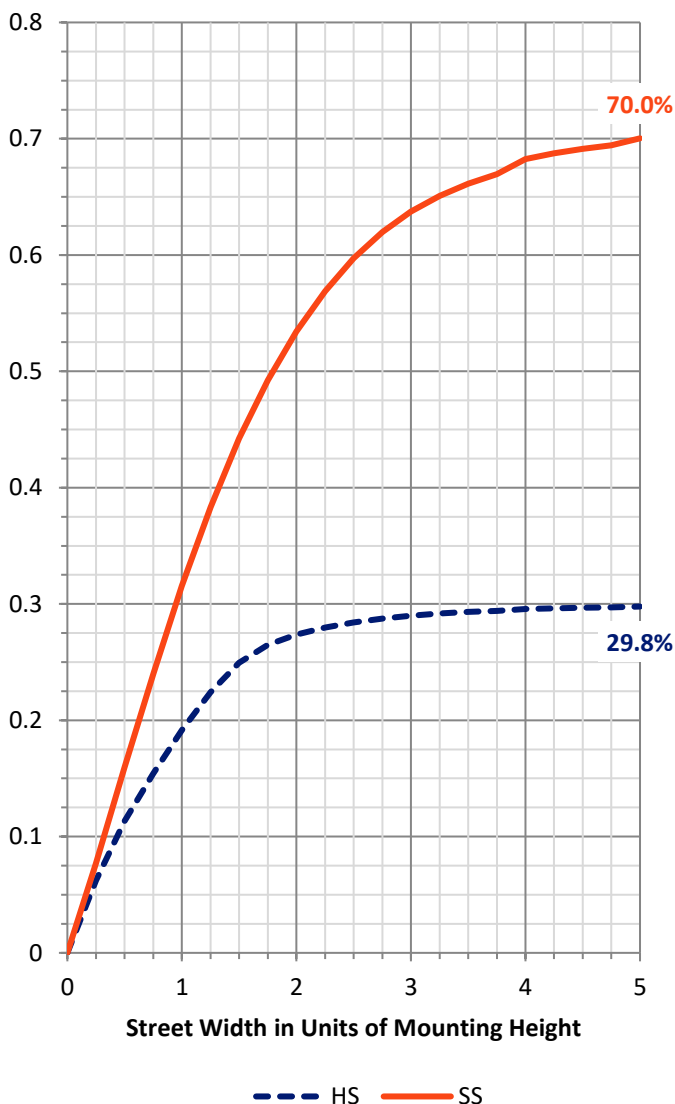
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16024.7	2.5	16027.1
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	37708.8	22.0	37730.8
	% Fixture	70.1	0.0	70.2
Total	Lumens	53733.5	24.5	53758.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	454.9	0.8
10°-20°	1447.7	2.7
20°-30°	2479.8	4.6
30°-40°	4022.8	7.5
40°-50°	6784.2	12.6
50°-60°	11058.4	20.6
60°-70°	14831.2	27.6
70°-80°	11520.0	21.4
80°-90°	1134.5	2.1
90°-100°	21.5	0.0
100°-110°	1.2	0.0
110°-120°	0.3	0.0
120°-130°	0.2	0.0
130°-140°	0.3	0.0
140°-150°	0.3	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	53733.5	100.0
0°-180°	53758.0	100.0

Coefficient of Utilization

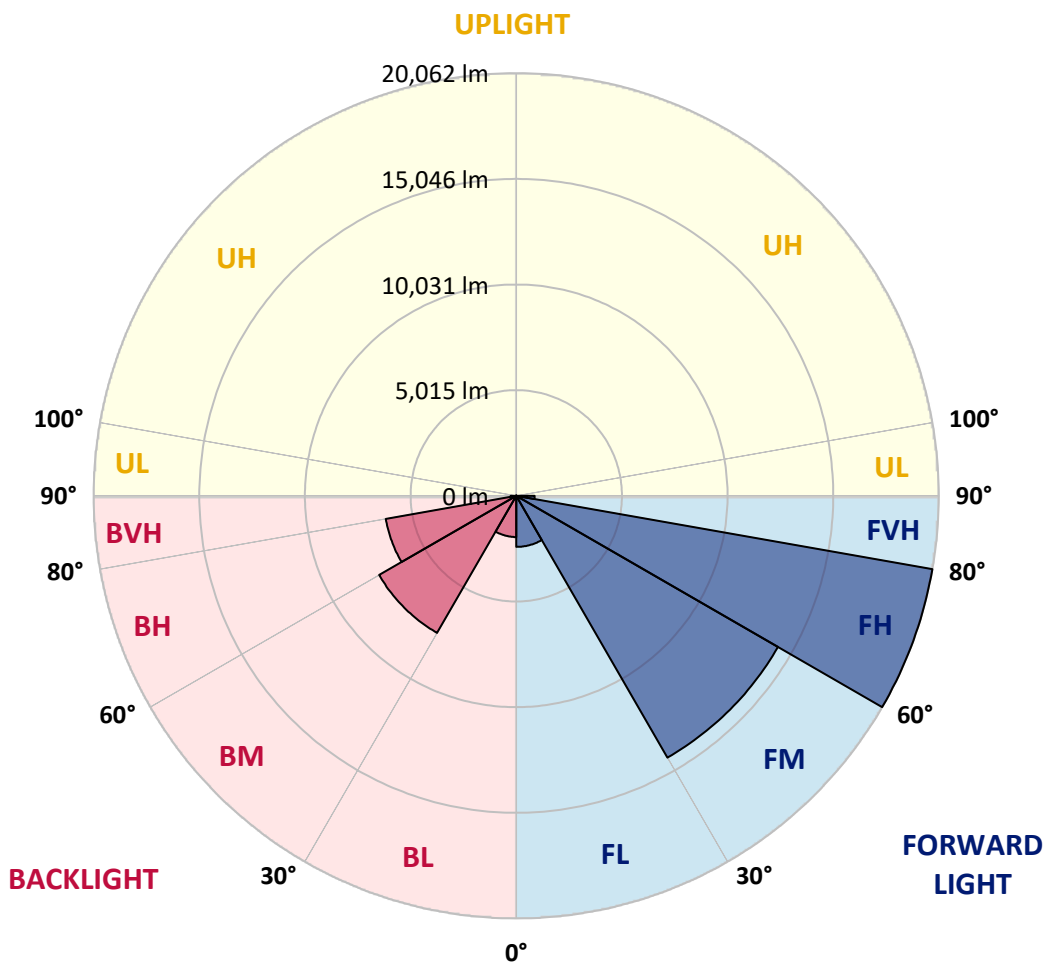


REPORT NUMBER: P522240
 CATALOG NUMBER: CTN-CA8-480-730-U-T5R-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2424.8	4.5			
FM (30°-60°)	14349.9	26.7			
FH (60°-80°)	20061.9	37.3			G5
FVH (80°-90°)	872.3	1.6			G5
BL (0°-30°)	1957.6	3.6	B3/2500		
BM (30°-60°)	7515.5	14.0	B4/8500		
BH (60°-80°)	6289.3	11.7	B5		G5
BVH (80°-90°)	262.2	0.5			G3/500
UL (90°-100°)	21.5	0.0		U2/50	
UH (100°-180°)	2.9	0.0		U1/10	

BUG Rating: B5-U2-G5
 Type IV Short





REPORT NUMBER: P522240

CATALOG NUMBER: CTN-CA8-480-730-U-T5R-HSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7
2.5°	4764.5	4751.2	4749.0	4775.6	4691.2	4733.4	4695.6	4726.7	4706.7	4722.3	4724.5
5°	4829.0	4804.5	4789.0	4820.1	4766.7	4786.8	4744.5	4757.8	4702.3	4733.4	4737.8
7.5°	4922.4	4882.4	4877.9	4886.8	4840.1	4855.7	4786.8	4802.3	4762.3	4744.5	4760.1
10°	5049.1	5011.3	4982.4	5002.4	4940.2	4949.1	4875.7	4877.9	4849.0	4815.7	4842.3
12.5°	5120.2	5124.7	5111.4	5126.9	5075.8	5046.9	4995.7	4978.0	4949.1	4909.0	4895.7
15°	5298.1	5289.2	5262.5	5287.0	5280.3	5253.6	5191.4	5151.4	5089.1	5066.9	5044.7
17.5°	5516.0	5487.1	5464.9	5496.0	5529.3	5473.8	5413.7	5358.1	5275.9	5231.4	5204.7
20°	5745.0	5725.0	5702.7	5751.7	5762.8	5720.5	5676.1	5593.8	5498.2	5440.4	5384.8
22.5°	6000.7	5960.7	5967.3	6031.8	6011.8	5991.8	5934.0	5867.3	5751.7	5678.3	5518.2
25°	6265.2	6243.0	6274.1	6303.0	6287.5	6245.2	6216.3	6167.4	6038.5	5949.5	5716.1
27.5°	6594.3	6558.7	6598.7	6609.9	6596.5	6585.4	6545.4	6507.6	6367.5	6267.5	5976.2
30°	6981.1	6938.9	7003.4	6987.8	6974.5	6983.4	6958.9	6876.6	6752.1	6616.5	6325.3
32.5°	7441.4	7385.8	7459.2	7425.8	7394.7	7456.9	7399.1	7321.3	7174.6	7016.7	6732.1
35°	7975.0	7977.2	8015.0	7959.4	7948.3	8015.0	7977.2	7881.6	7746.0	7581.4	7176.8
37.5°	8621.9	8604.1	8699.7	8673.1	8633.1	8722.0	8733.1	8613.0	8368.5	8206.2	7728.2
40°	9409.0	9404.5	9435.7	9440.1	9429.0	9471.2	9491.2	9331.2	9173.3	8928.7	7292.4
42.5°	10249.4	10267.2	10322.8	10282.7	10336.1	10391.7	10398.3	10264.9	10038.2	8566.4	7746.0
45°	11258.8	11314.3	11352.1	11343.2	11367.7	11447.7	11454.4	11383.3	11160.9	9280.0	8568.6
47.5°	12417.1	12470.5	12481.6	12552.7	12530.5	12643.9	12628.3	12630.5	12392.6	10273.8	9464.6
50°	13748.9	13773.3	13864.5	13904.5	13848.9	14002.3	13962.3	14011.2	13717.7	11412.2	10427.2
52.5°	15162.9	15205.1	15242.9	15394.1	15322.9	15456.3	15403.0	15516.4	15176.2	12570.5	11496.7
55°	16770.3	16777.0	16841.5	16994.9	16901.5	17061.6	16983.7	17026.0	16754.7	13851.1	12610.5
57.5°	18473.4	18451.1	18475.6	18597.9	18513.4	18633.4	18602.3	18642.3	18388.9	15198.4	13424.3
60°	20158.6	20125.3	20160.8	20243.1	20127.5	20334.2	20223.1	20260.9	19987.4	16574.7	14584.8
62.5°	21852.8	21828.3	21788.3	21870.5	21701.6	21808.3	21855.0	21792.7	21552.6	17819.7	15594.2
65°	23671.4	23647.0	23500.2	23551.4	23249.0	23197.9	23215.6	23235.6	23075.6	19053.6	16701.4
67.5°	25881.4	25845.8	25570.1	25223.3	24787.5	24691.9	24700.8	24754.2	24776.4	20641.1	17997.6
68°	26130.4	26065.9	25759.1	25356.7	24900.9	24789.7	24778.6	24789.7	24800.8	20654.4	17984.2
70°	25494.5	25470.1	25236.6	24749.7	24282.8	24016.0	23784.8	23775.9	23669.2	19598.3	16990.4
72.5°	22624.2	22593.1	22315.2	21970.6	21681.6	21263.6	20963.4	20981.2	20805.6	17321.7	14871.6
75°	18308.8	18306.6	17973.1	17684.1	17688.5	17657.4	17557.4	17733.0	17550.7	14691.5	12683.9
77.5°	12759.5	12804.0	12781.7	12612.7	12850.6	13179.7	13537.6	13875.6	13771.1	11605.6	10113.8
80°	6665.4	6789.9	7230.2	7250.2	7416.9	7737.1	7981.6	8208.4	8224.0	6585.4	5842.8
82.5°	1772.0	1809.8	1958.7	1916.5	1903.1	1967.6	2021.0	2027.6	2032.1	1716.4	1603.0
85°	551.4	566.9	549.2	524.7	486.9	444.7	433.5	353.5	280.1	231.2	202.3
87.5°	391.3	418.0	378.0	355.7	315.7	300.1	269.0	211.2	164.5	115.6	77.8
90°	202.3	206.8	184.5	157.9	146.7	137.8	117.8	84.5	42.2	22.2	20.0
92.5°	102.3	104.5	91.2	77.8	66.7	57.8	44.5	24.5	13.3	6.7	2.2
95°	40.0	42.2	37.8	33.3	26.7	20.0	17.8	13.3	8.9	4.4	2.2
97.5°	13.3	13.3	13.3	11.1	11.1	11.1	11.1	8.9	6.7	4.4	2.2
100°	0.0	0.0	0.0	2.2	4.4	6.7	6.7	6.7	4.4	2.2	2.2
102.5°	0.0	0.0	0.0	0.0	0.0	2.2	4.4	4.4	4.4	2.2	2.2
105°	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2	2.2
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2



REPORT NUMBER: P522240
 CATALOG NUMBER: CTN-CA8-480-730-U-T5R-HSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
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	2.2
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2
165°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2
170°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2
175°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2
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: P522240

CATALOG NUMBER: CTN-CA8-480-730-U-T5R-HSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7	4686.7
2.5°	4713.4	4700.0	4706.7	4651.1	4664.5	4628.9	4704.5	4684.5	4675.6	4706.7
5°	4724.5	4675.6	4715.6	4677.8	4684.5	4633.3	4695.6	4671.1	4668.9	4686.7
7.5°	4728.9	4704.5	4742.3	4680.0	4700.0	4680.0	4726.7	4702.3	4724.5	4740.1
10°	4791.2	4777.9	4773.4	4751.2	4766.7	4722.3	4780.1	4780.1	4791.2	4833.4
12.5°	4882.4	4864.6	4853.5	4813.4	4829.0	4815.7	4862.3	4871.2	4891.2	4909.0
15°	5006.9	4975.7	4964.6	4929.0	4940.2	4937.9	4971.3	4973.5	5018.0	5015.8
17.5°	5166.9	5122.5	5135.8	5109.1	5111.4	5093.6	5075.8	5075.8	5115.8	5124.7
20°	5358.1	5104.7	4771.2	4584.4	4551.1	4575.5	4671.1	4829.0	4631.1	4686.7
22.5°	5013.5	4784.5	4769.0	4726.7	4700.0	4104.2	3950.8	3901.9	4157.6	4597.8
25°	5058.0	4960.2	4931.3	4877.9	4090.9	4084.2	4039.7	3966.4	3241.6	3226.0
27.5°	5293.7	5198.1	5151.4	4273.2	4255.4	4253.2	4186.5	3450.6	3283.8	3306.0
30°	5569.4	5458.2	4622.2	4488.8	4473.3	4437.7	4055.3	3408.3	3406.1	3408.3
32.5°	5887.3	5518.2	4755.6	4749.0	4757.8	4648.9	3592.8	3579.5	3577.3	3599.5
35°	6323.0	5120.2	5089.1	5122.5	5075.8	4019.7	3808.5	3801.8	3804.1	3792.9
37.5°	6034.0	5520.4	5513.8	5513.8	5404.8	4113.1	4070.9	4102.0	4097.5	4082.0
40°	6156.3	6005.1	5965.1	5951.8	4568.9	4437.7	4413.2	4453.3	4459.9	4471.0
42.5°	6749.9	6612.1	6592.1	6434.2	4971.3	4929.0	4853.5	4895.7	4891.2	4904.6
45°	7479.2	7385.8	7299.1	5578.2	5513.8	5460.4	5382.6	5431.5	5444.8	5436.0
47.5°	8328.5	8226.2	7599.2	6134.1	6131.8	6089.6	6002.9	6042.9	6036.2	6036.2
50°	9182.2	9071.0	6903.3	6841.1	6818.8	6752.1	6681.0	6687.7	6689.9	6712.1
52.5°	10136.0	8101.7	7641.5	7517.0	7534.7	7490.3	7421.4	5618.3	7388.0	7408.0
55°	9473.5	8479.6	8453.0	8288.4	8330.7	8272.9	8228.4	5542.7	7348.0	8119.5
57.5°	9366.7	9295.6	9273.4	9104.4	9157.7	8608.6	9019.9	6065.1	5082.5	3712.9
60°	10182.7	10107.1	10093.8	9944.8	9940.3	6841.1	8199.5	4159.8	3250.5	3272.7
62.5°	10974.2	10851.9	10885.2	10709.6	7550.3	4168.7	3675.1	93.4	149.0	157.9
65°	11856.8	11652.3	11685.6	11523.3	7788.2	4395.5	3973.0	48.9	42.2	40.0
67.5°	12706.1	12348.2	12177.0	12005.8	8088.3	4628.9	4139.8	13.3	0.0	0.0
68°	12663.9	12285.9	12110.3	11948.0	8057.2	4622.2	4130.9	13.3	0.0	0.0
70°	11950.2	11610.0	11443.3	11318.8	7692.6	4464.4	3964.1	13.3	0.0	0.0
72.5°	10447.3	10258.3	10151.6	10042.6	6834.4	3993.0	3555.0	13.3	0.0	0.0
75°	8877.6	8824.3	8757.6	8517.4	5696.1	3268.2	2921.4	13.3	0.0	0.0
77.5°	7034.5	7032.3	6870.0	6587.6	4288.7	2398.9	2154.4	11.1	0.0	0.0
80°	3804.1	4146.4	4021.9	3877.4	2432.3	1305.1	1242.8	8.9	0.0	0.0
82.5°	1069.4	1011.6	971.6	909.3	511.4	284.6	277.9	8.9	0.0	0.0
85°	149.0	164.5	182.3	206.8	117.8	75.6	66.7	4.4	0.0	0.0
87.5°	84.5	95.6	117.8	122.3	44.5	35.6	11.1	0.0	0.0	0.0
90°	17.8	20.0	22.2	22.2	8.9	8.9	0.0	0.0	0.0	0.0
92.5°	0.0	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P522240
 CATALOG NUMBER: CTN-CA8-480-730-U-T5R-HSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.2	2.2	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)