

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: P579466

Luminaire Tested: **CTN-CA8-480-730-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579466  
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-CA8-480-730-U-T5-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 51300 lumens  
Efficiency: N/A  
Efficacy: 106.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U2 - G5

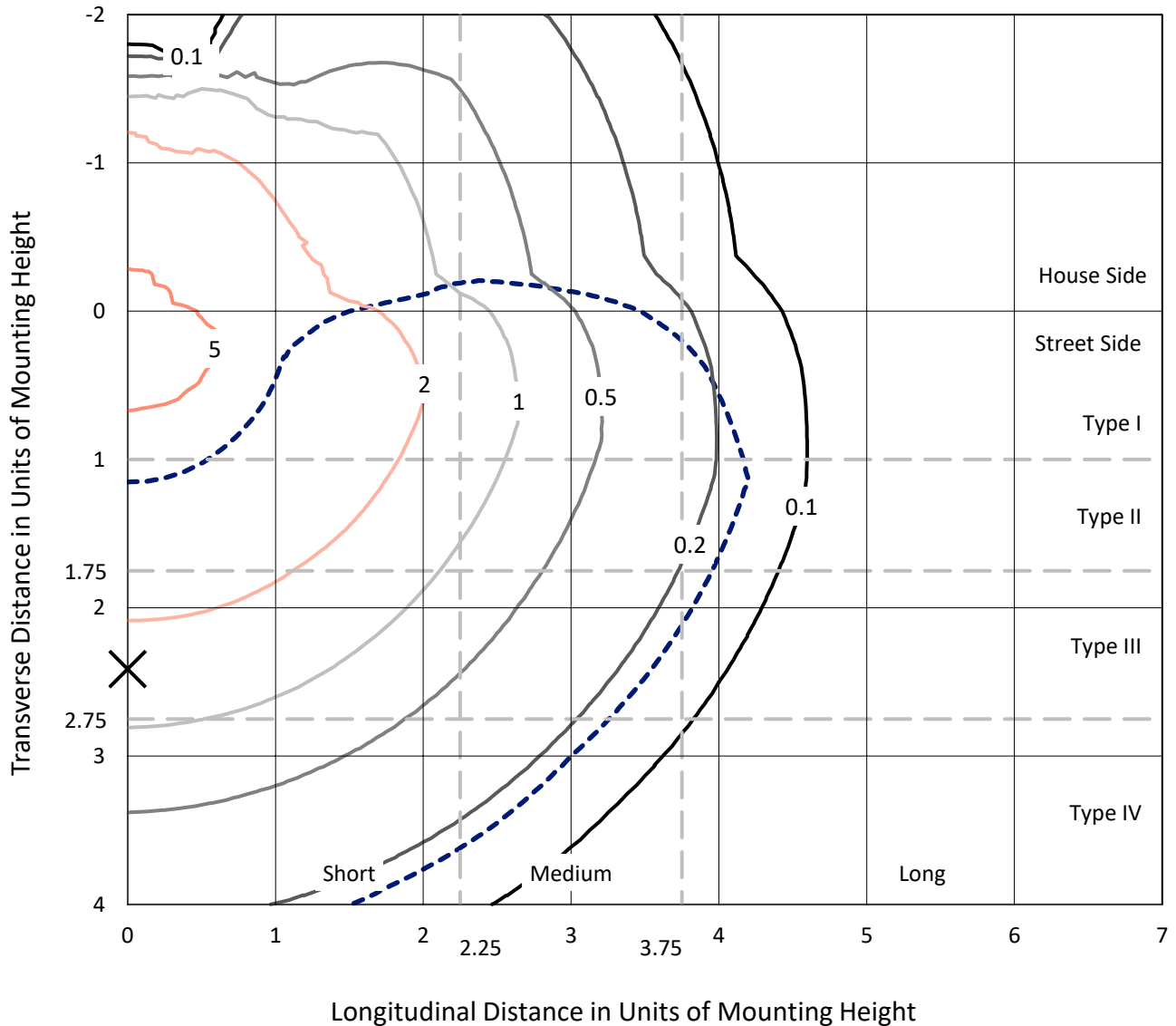
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P579466  
 CATALOG NUMBER: CTN-CA8-480-730-U-T5-HSS-HM-EX120

### Iso-Footcandle Lines of Horizontal Illumination

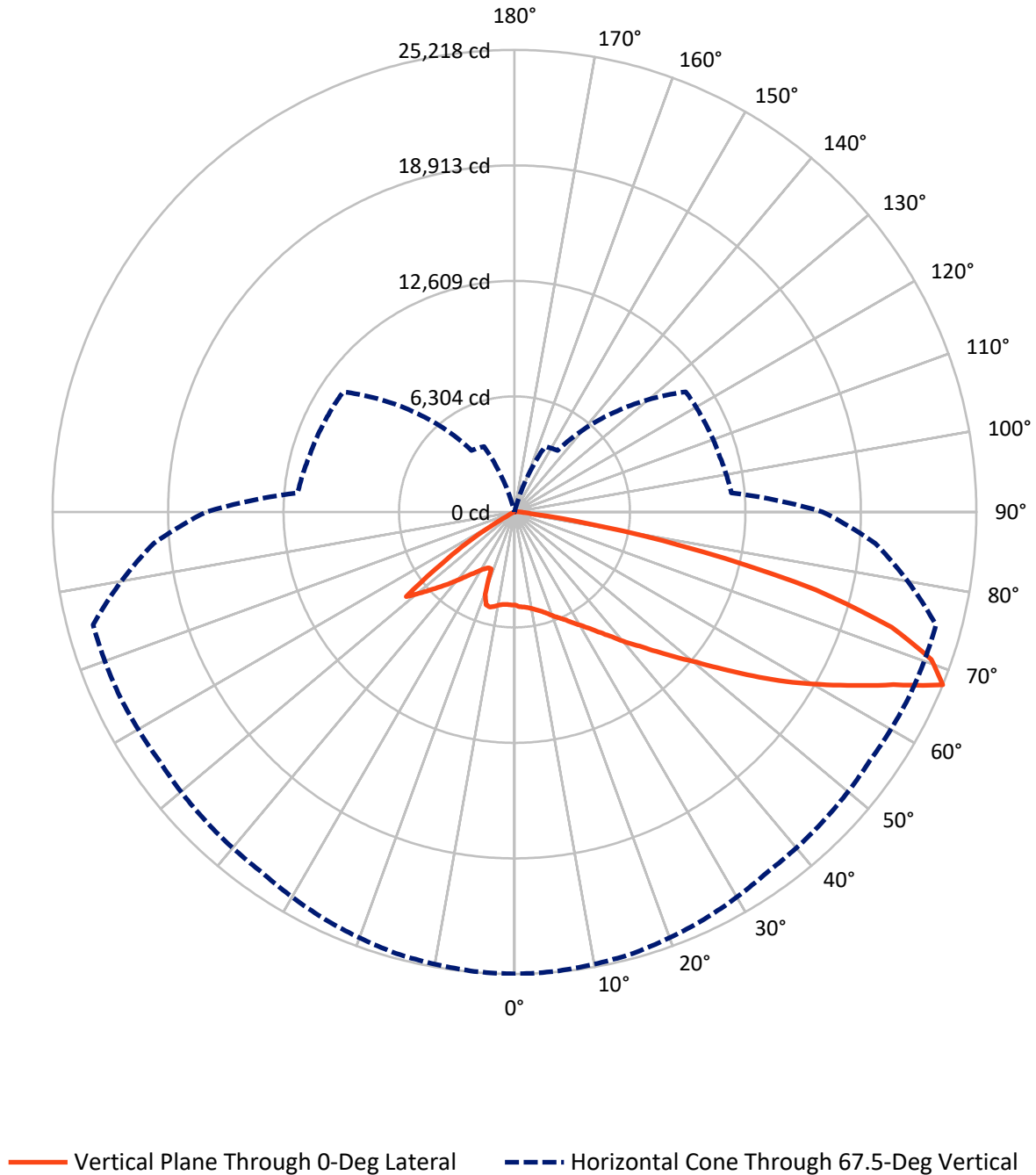
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - N/A

REPORT NUMBER: P579466  
CATALOG NUMBER: CTN-CA8-480-730-U-T5-HSS-HM-EX120

### Luminous Intensity Polar Plot



REPORT NUMBER: P579466  
 CATALOG NUMBER: CTN-CA8-480-730-U-T5-HSS-HM-EX120

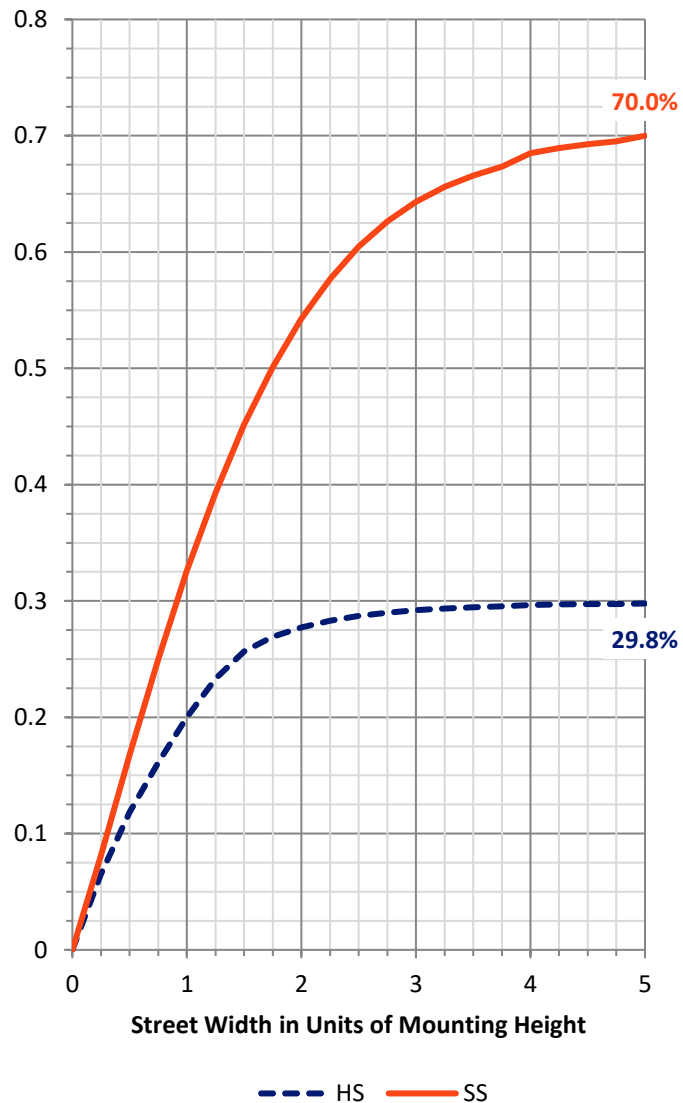
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15313.3	5.1	15318.5
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	35923.8	57.7	35981.5
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	51237.1	62.9	51300.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	490.1	1.0
10°-20°	1517.2	3.0
20°-30°	2546.1	5.0
30°-40°	4128.6	8.0
40°-50°	6746.6	13.2
50°-60°	10573.1	20.6
60°-70°	14160.6	27.6
70°-80°	10321.2	20.1
80°-90°	753.7	1.5
90°-100°	48.2	0.1
100°-110°	13.7	0.0
110°-120°	1.0	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°	51237.1	99.9
0°-180°	51300.0	100.0

**Coefficient of Utilization**

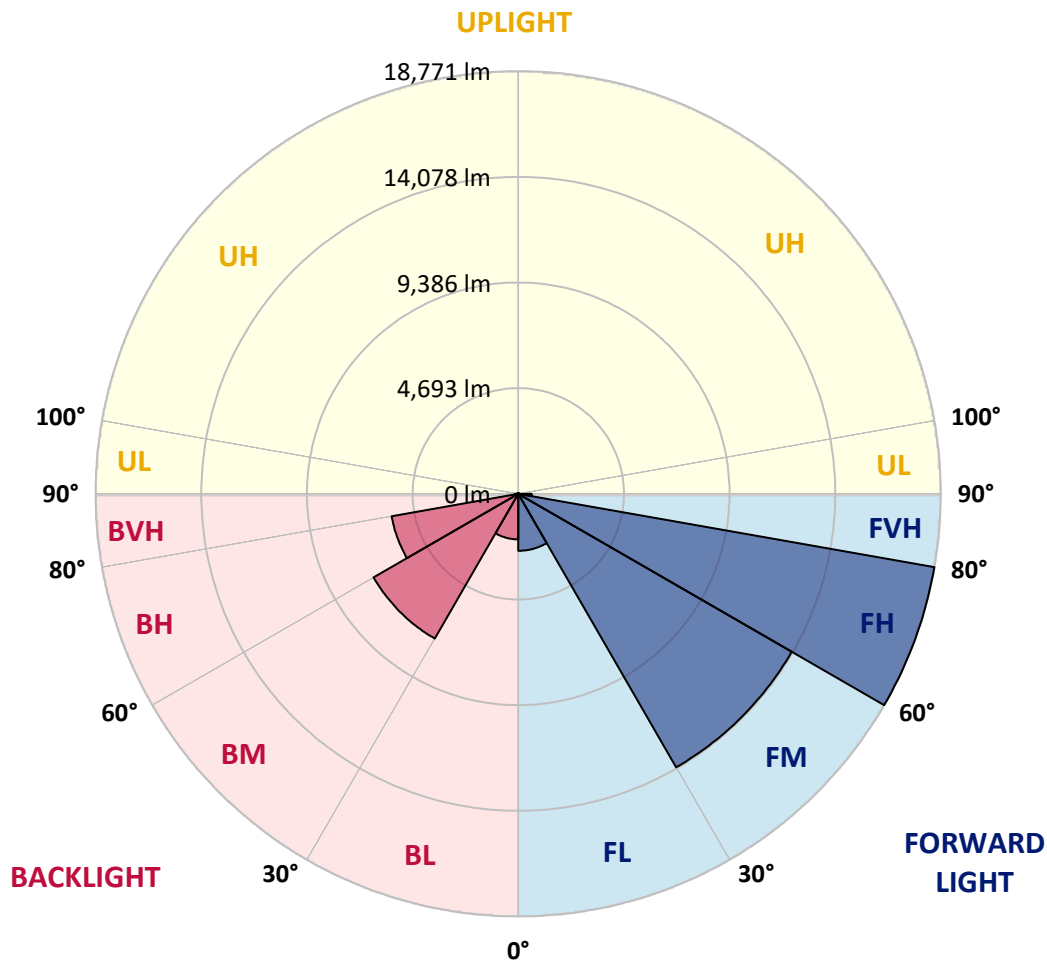


REPORT NUMBER: P579466  
 CATALOG NUMBER: CTN-CA8-480-730-U-T5-HSS-HM-EX120

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2530.4	4.9			
FM (30°-60°)	14026.3	27.3			
FH (60°-80°)	18771.0	36.6			G5
FVH (80°-90°)	596.0	1.2			G4/750
BL (0°-30°)	2022.9	3.9	B3/2500		
BM (30°-60°)	7421.9	14.5	B4/8500		
BH (60°-80°)	5710.8	11.1	B5		G5
BVH (80°-90°)	157.7	0.3			G2/225
UL (90°-100°)	48.2	0.1		U2/50	
UH (100°-180°)	14.7	0.0		U2/50	

**BUG Rating: B5-U2-G5**  
 Type IV Short





REPORT NUMBER: P579466

CATALOG NUMBER: CTN-CA8-480-730-U-T5-HSS-HM-EX120

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2
2.5°	5180.3	5150.1	5152.3	5180.3	5096.2	5124.2	5087.6	5115.6	5096.2	5102.7	5115.6
5°	5212.6	5180.3	5182.5	5217.0	5141.5	5165.2	5115.6	5130.7	5113.4	5122.1	5122.1
7.5°	5277.3	5240.7	5238.5	5260.1	5182.5	5191.1	5145.8	5147.9	5122.1	5139.3	5130.7
10°	5374.4	5344.2	5322.6	5335.6	5266.6	5262.2	5204.0	5206.2	5173.8	5193.2	5178.1
12.5°	5493.0	5452.0	5447.7	5452.0	5376.5	5359.3	5298.9	5303.2	5245.0	5275.2	5257.9
15°	5644.0	5579.3	5579.3	5603.0	5505.9	5493.0	5419.7	5424.0	5363.6	5387.3	5370.1
17.5°	5829.4	5766.9	5756.1	5773.4	5689.3	5672.0	5596.5	5592.2	5525.4	5531.8	5516.7
20°	6068.8	6006.3	5980.4	6023.5	5917.9	5904.9	5814.4	5805.7	5734.6	5715.1	5706.5
22.5°	6291.0	6241.4	6228.4	6275.9	6165.9	6155.1	6068.8	6058.1	5991.2	5963.2	5792.8
25°	6541.1	6530.4	6526.0	6541.1	6437.6	6416.1	6349.2	6334.1	6278.0	6243.5	6036.5
27.5°	6864.6	6860.3	6847.4	6849.5	6754.7	6735.2	6672.7	6661.9	6603.7	6564.9	6299.6
30°	7203.2	7203.2	7175.2	7190.3	7142.9	7112.7	7063.1	7024.2	6987.6	6946.6	6612.3
32.5°	7593.6	7591.4	7565.6	7610.8	7576.3	7576.3	7546.1	7505.2	7440.5	7421.1	7015.6
35°	8096.1	8063.7	8053.0	8126.3	8115.5	8134.9	8124.1	8081.0	8027.1	7981.8	7490.1
37.5°	8652.5	8643.9	8676.2	8721.5	8745.3	8797.0	8764.7	8762.5	8753.9	8639.6	7362.8
40°	9338.3	9301.7	9347.0	9370.7	9353.4	9437.5	9409.5	9433.2	9497.9	8579.2	7354.2
42.5°	10022.0	9989.6	10022.0	10138.5	10112.6	10213.9	10201.0	10293.7	10330.4	8706.4	7951.6
45°	10863.1	10826.4	10852.3	10990.3	11003.3	11126.2	11193.1	11281.5	11298.7	9530.3	8671.9
47.5°	11829.3	11768.9	11818.5	11883.2	12079.4	12195.9	12260.6	12368.4	12478.4	10522.3	9491.5
50°	12894.7	12890.3	12944.3	13056.4	13280.7	13397.2	13509.3	13621.5	13802.6	11628.7	10410.2
52.5°	14249.0	14221.0	14313.7	14419.4	14617.8	14796.8	14930.5	15047.0	15241.1	12748.0	11404.4
55°	15797.5	15700.5	15877.3	16056.3	16140.4	16351.8	16444.5	16541.6	16727.0	13925.5	11984.6
57.5°	17468.9	17445.2	17568.1	17632.8	17814.0	17945.6	17995.2	18100.8	18098.7	15150.5	12972.3
60°	19114.5	19088.6	19233.1	19271.9	19416.4	19535.0	19517.8	19612.7	19647.2	16300.0	13940.6
62.5°	20846.3	20803.1	20936.8	20945.5	20859.2	21051.1	21031.7	21111.5	21081.3	17423.6	14893.9
65°	22739.8	22772.2	22815.3	22638.4	22431.4	22597.5	22593.2	22744.1	22852.0	18993.7	16170.6
67.5°	25217.8	25176.8	24954.7	24527.7	24025.2	23857.0	23678.0	23787.9	23818.1	19774.4	16824.1
70°	24148.1	24057.5	23958.3	23522.7	22916.7	22489.6	22211.4	22327.9	22450.8	18687.4	15801.8
72.5°	21540.7	21316.4	20854.9	20471.0	20121.6	19705.4	19366.8	19569.5	19839.1	16576.1	13992.4
75°	16994.5	16785.3	16448.8	16187.9	16000.3	15995.9	15980.8	16138.3	16099.5	13459.7	11376.4
77.5°	10524.5	10962.3	11272.9	11050.7	11128.4	10968.8	11320.3	11527.3	11715.0	9648.9	8104.7
80°	4859.0	4971.1	5521.0	5378.7	5264.4	5232.1	5253.6	5613.8	5719.5	4330.6	3627.5
82.5°	1108.5	1063.2	1102.1	1022.3	1017.9	970.5	977.0	977.0	942.5	798.0	668.6
85°	560.7	573.7	578.0	554.3	489.6	440.0	407.6	345.1	297.6	254.5	215.7
87.5°	375.3	386.0	392.5	360.2	323.5	282.5	256.6	209.2	166.1	103.5	79.8
90°	256.6	254.5	248.0	230.8	207.0	176.8	142.3	99.2	58.2	21.6	15.1
92.5°	183.3	179.0	176.8	161.7	144.5	120.8	92.7	62.5	32.3	15.1	8.6
95°	120.8	118.6	118.6	110.0	97.0	79.8	62.5	41.0	23.7	12.9	8.6
97.5°	84.1	82.0	82.0	77.6	69.0	58.2	43.1	28.0	19.4	12.9	8.6
100°	58.2	58.2	58.2	53.9	49.6	41.0	32.3	21.6	17.3	12.9	8.6
102.5°	38.8	38.8	41.0	38.8	34.5	28.0	21.6	17.3	15.1	10.8	8.6
105°	25.9	25.9	25.9	25.9	23.7	19.4	17.3	15.1	12.9	10.8	8.6
107.5°	17.3	17.3	17.3	17.3	15.1	12.9	12.9	12.9	10.8	10.8	8.6
110°	10.8	10.8	10.8	12.9	10.8	10.8	10.8	10.8	10.8	8.6	8.6



REPORT NUMBER: P579466  
 CATALOG NUMBER: CTN-CA8-480-730-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: P579466

CATALOG NUMBER: CTN-CA8-480-730-U-T5-HSS-HM-EX120

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2	5083.2
2.5°	5104.8	5074.6	5089.7	5059.5	5046.6	5018.5	5072.5	5076.8	5072.5	5081.1
5°	5111.3	5076.8	5094.0	5059.5	5053.1	5020.7	5074.6	5074.6	5061.7	5068.1
7.5°	5126.4	5089.7	5102.7	5061.7	5061.7	5022.9	5087.6	5083.2	5072.5	5087.6
10°	5178.1	5135.0	5135.0	5096.2	5100.5	5059.5	5139.3	5139.3	5130.7	5156.6
12.5°	5257.9	5204.0	5206.2	5152.3	5160.9	5128.5	5225.6	5229.9	5229.9	5273.0
15°	5361.5	5279.5	5288.1	5229.9	5247.2	5208.3	5294.6	5290.3	5301.1	5363.6
17.5°	5488.7	5398.1	5322.6	5132.8	5020.7	5025.0	5281.7	5400.3	5262.2	5303.2
20°	5542.6	5102.7	4863.3	4794.3	4779.2	4539.8	4050.2	4125.7	4587.2	4787.8
22.5°	5180.3	5040.1	5016.4	4928.0	4274.5	4093.3	4123.5	4080.4	3627.5	3370.9
25°	5357.1	5264.4	5210.5	4431.9	4285.3	4252.9	4231.4	3821.6	3329.9	3353.6
27.5°	5607.3	5486.5	4839.5	4451.3	4479.4	4429.8	4304.7	3437.7	3422.6	3461.4
30°	5902.8	5598.7	4716.6	4679.9	4712.3	4647.6	3618.9	3584.4	3584.4	3623.2
32.5°	6265.1	5078.9	5005.6	5009.9	4988.4	4255.1	3808.7	3800.0	3825.9	3858.3
35°	6163.7	5417.5	5424.0	5460.7	5411.1	4162.4	4106.3	4073.9	4095.5	4108.4
37.5°	5965.3	5926.5	5926.5	5885.5	4619.6	4488.0	4427.6	4423.3	4421.2	4421.2
40°	6465.7	6429.0	6383.7	6312.5	4833.1	4867.6	4777.0	4766.2	4772.7	4796.4
42.5°	7035.0	7019.9	7015.6	5417.5	5277.3	5303.2	5206.2	5178.1	5178.1	5232.1
45°	7705.7	7686.3	7209.7	5790.6	5766.9	5797.1	5689.3	5622.4	5659.1	5697.9
47.5°	8475.7	8475.7	6383.7	6349.2	6349.2	6366.5	6258.6	6168.0	6204.7	6217.6
50°	9318.9	8001.2	7024.2	6991.9	7022.1	7013.5	6901.3	6060.2	6838.8	6845.2
52.5°	9554.0	7781.2	7727.3	7690.6	7727.3	7720.8	7604.4	5055.2	7397.3	7503.0
55°	8469.2	8475.7	8464.9	8411.0	8449.8	8434.7	8320.4	5518.9	5454.2	4861.1
57.5°	9157.2	9165.8	9161.5	9152.9	9187.4	6674.9	8618.0	4986.2	3045.2	3047.4
60°	9905.5	9862.4	9849.5	9830.0	8331.2	4731.7	3590.8	347.2	1190.5	1173.2
62.5°	10584.9	10569.8	10524.5	10513.7	7069.5	3726.7	3640.4	79.8	62.5	60.4
65°	11529.5	11395.8	11359.1	11244.8	7535.4	3968.3	3886.3	23.7	2.2	0.0
67.5°	11881.0	11609.3	11477.7	11417.4	7666.9	4093.3	3935.9	23.7	2.2	0.0
70°	11216.8	10880.3	10714.3	10647.4	7164.4	3825.9	3670.6	23.7	2.2	0.0
72.5°	9946.5	9698.5	9631.6	9418.1	6316.9	3357.9	3222.0	23.7	0.0	0.0
75°	8158.6	8068.1	7986.1	7759.7	5135.0	2667.8	2547.0	21.6	0.0	0.0
77.5°	5937.3	5803.6	5652.6	5406.7	3465.8	1742.6	1680.0	19.4	0.0	0.0
80°	2676.4	2566.4	2529.8	2145.9	1229.3	567.2	500.3	17.3	0.0	0.0
82.5°	519.8	468.0	444.3	427.0	276.1	153.1	133.7	12.9	0.0	0.0
85°	176.8	196.3	228.6	252.3	155.3	92.7	77.6	8.6	0.0	0.0
87.5°	69.0	92.7	112.1	116.5	58.2	38.8	21.6	4.3	0.0	0.0
90°	12.9	17.3	15.1	10.8	6.5	2.2	0.0	0.0	0.0	0.0
92.5°	6.5	8.6	6.5	6.5	4.3	2.2	0.0	0.0	0.0	0.0
95°	8.6	8.6	8.6	6.5	4.3	2.2	0.0	0.0	0.0	0.0
97.5°	8.6	8.6	8.6	6.5	4.3	2.2	0.0	0.0	0.0	0.0
100°	8.6	8.6	8.6	6.5	4.3	2.2	0.0	0.0	0.0	0.0
102.5°	8.6	8.6	8.6	6.5	4.3	2.2	0.0	0.0	0.0	0.0
105°	8.6	10.8	8.6	6.5	4.3	2.2	0.0	0.0	0.0	0.0
107.5°	8.6	10.8	8.6	6.5	4.3	2.2	0.0	0.0	0.0	0.0
110°	8.6	10.8	8.6	6.5	4.3	2.2	0.0	0.0	0.0	0.0



REPORT NUMBER: P579466  
 CATALOG NUMBER: CTN-CA8-480-730-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)