

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: STREETWORKS

Report Number: P579516

Luminaire Tested: **CST-CA8-480-740-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579516  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-740-U-T5-HSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 57374 lumens  
Efficiency: N/A  
Efficacy: 119.3 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

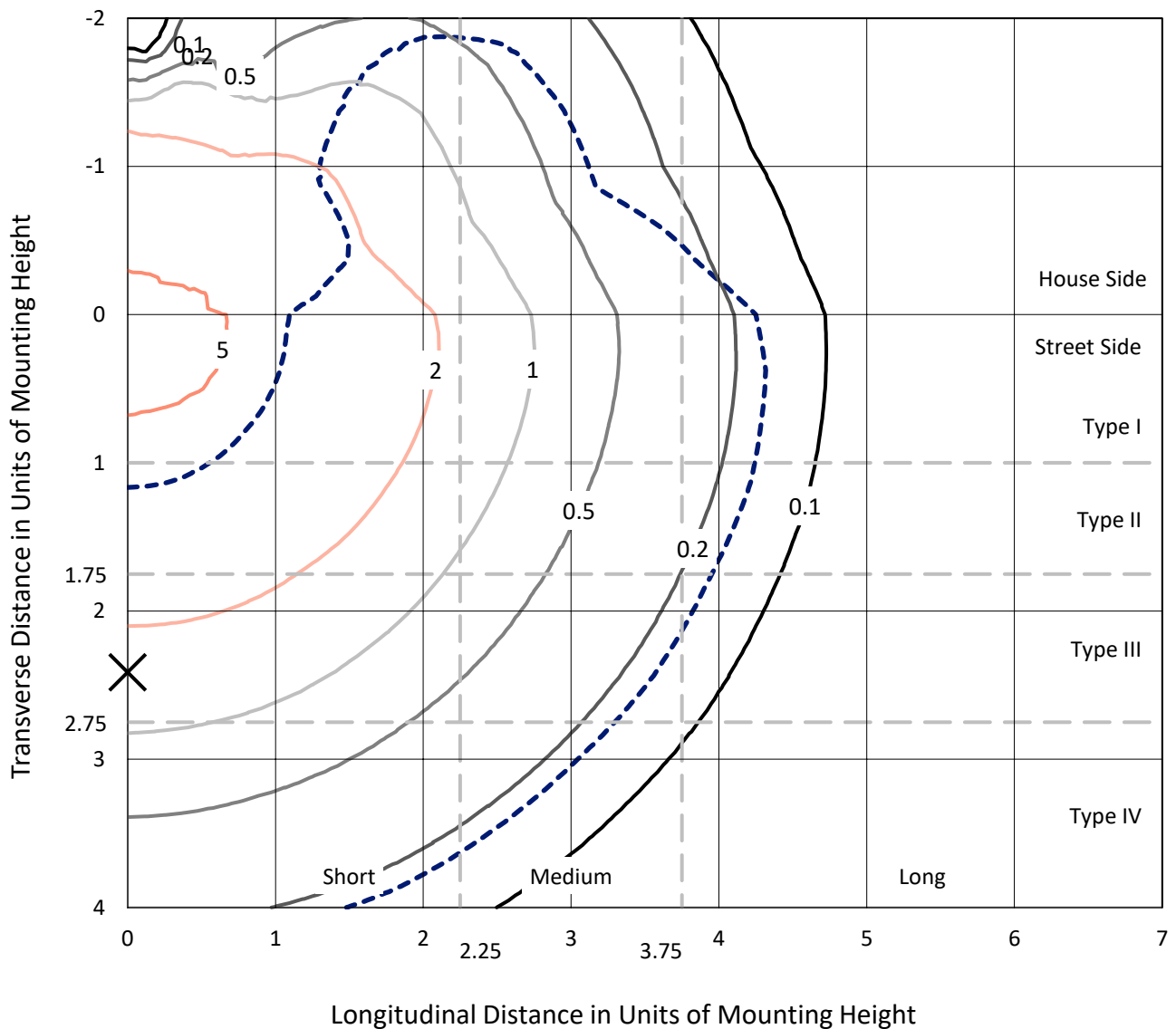




REPORT NUMBER: P579516  
 CATALOG NUMBER: CST-CA8-480-740-U-T5-HSS-HM-EX90

### Iso-Footcandle Lines of Horizontal Illumination

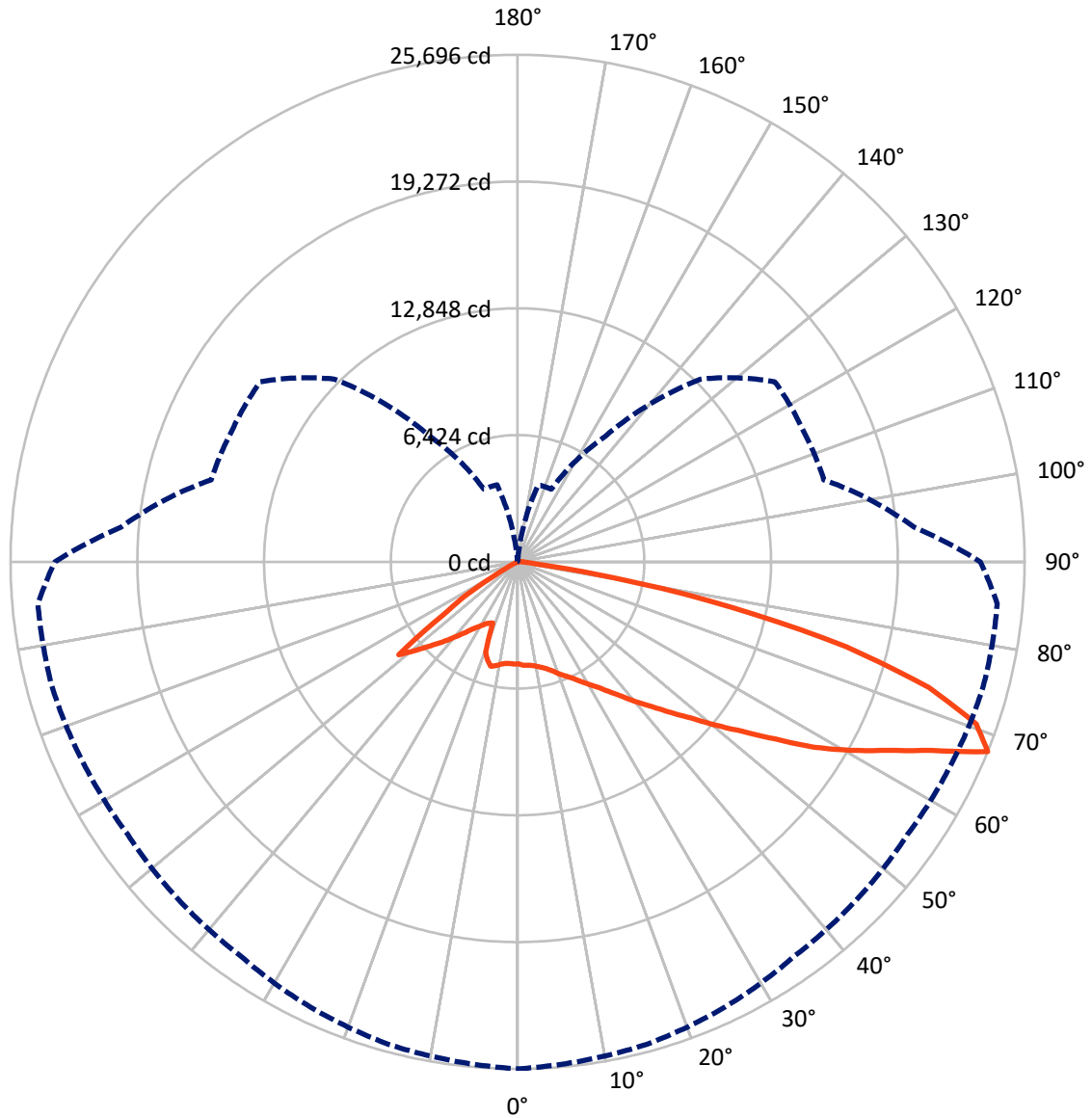
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P579516  
CATALOG NUMBER: CST-CA8-480-740-U-T5-HSS-HM-EX90

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P579516  
 CATALOG NUMBER: CST-CA8-480-740-U-T5-HSS-HM-EX90

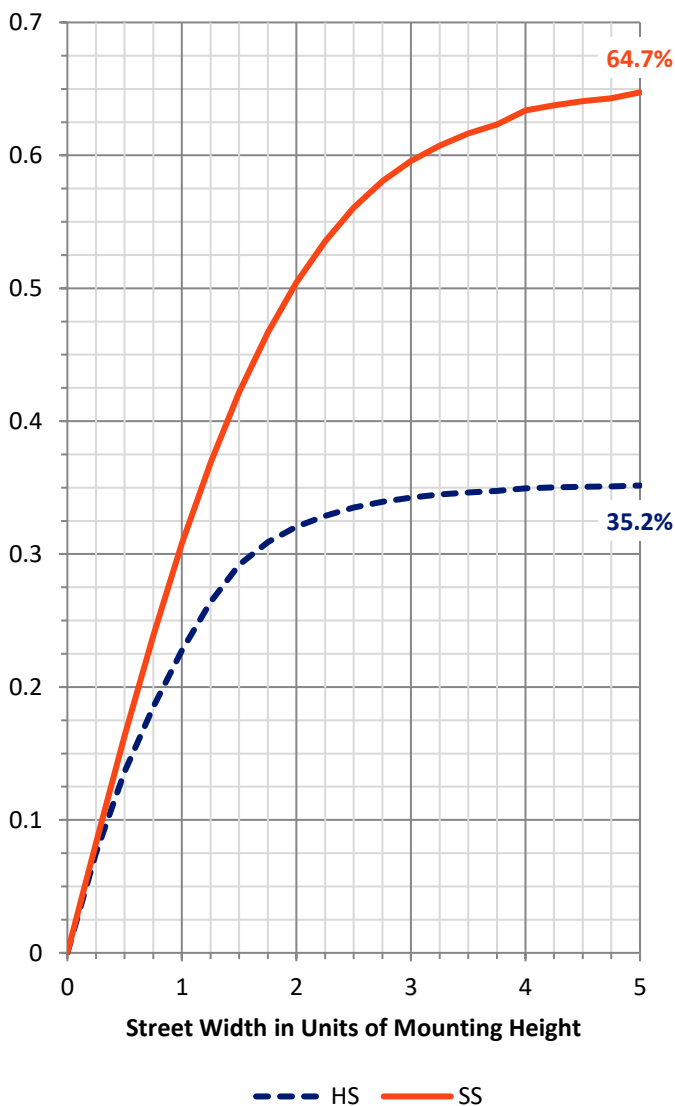
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	20195.6	1.2	20196.8
	% Fixture	35.2	0.0	35.2
<b>Street Side</b>	Lumens	37136.8	40.5	37177.3
	% Fixture	64.7	0.1	64.8
<b>Total</b>	Lumens	57332.3	41.7	57374.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	497.4	0.9
10°-20°	1545.2	2.7
20°-30°	2679.0	4.7
30°-40°	4395.9	7.7
40°-50°	7332.4	12.8
50°-60°	11866.5	20.7
60°-70°	16379.6	28.5
70°-80°	11817.2	20.6
80°-90°	819.1	1.4
90°-100°	35.5	0.1
100°-110°	5.9	0.0
110°-120°	0.2	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°	57332.3	99.9
0°-180°	57374.0	100.0

**Coefficient of Utilization**

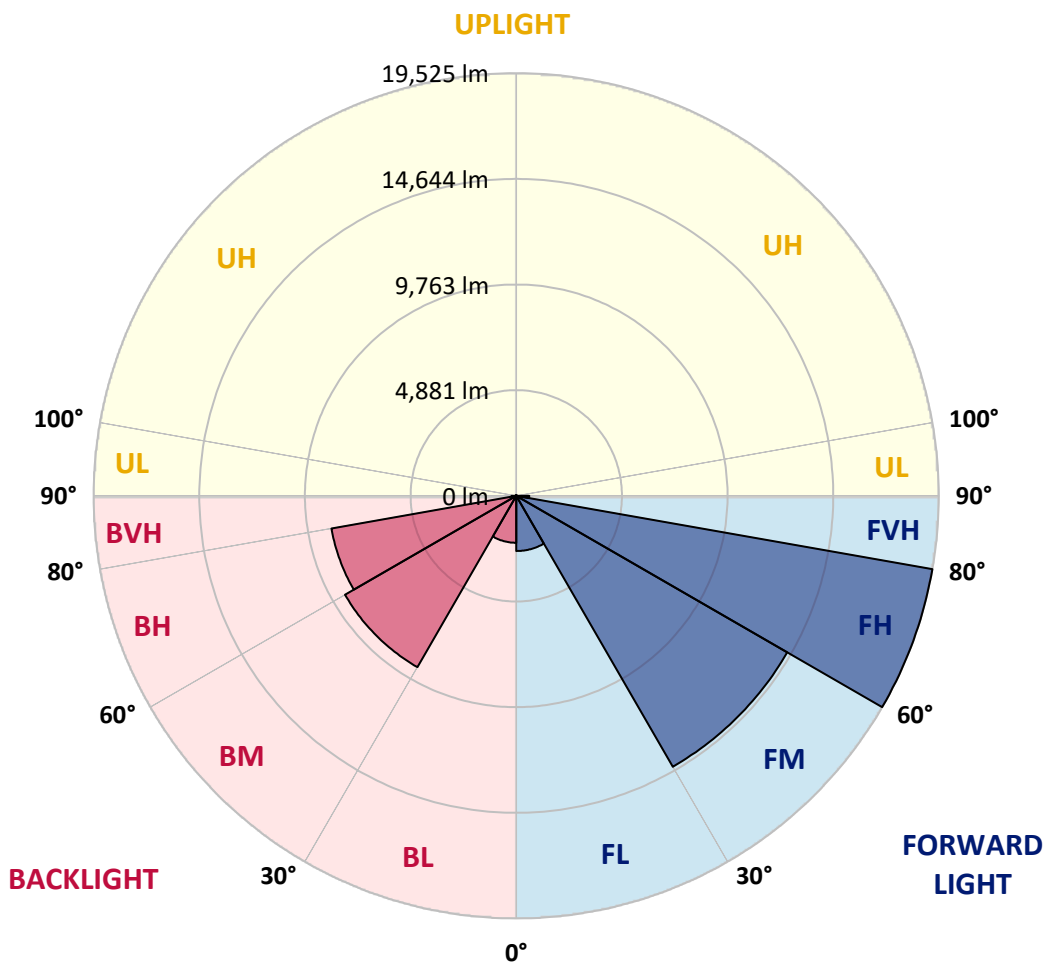


REPORT NUMBER: P579516  
 CATALOG NUMBER: CST-CA8-480-740-U-T5-HSS-HM-EX90

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2551.3	4.4			
FM (30°-60°)	14456.8	25.2			
FH (60°-80°)	19525.1	34.0			G5
FVH (80°-90°)	603.5	1.1			G4/750
BL (0°-30°)	2170.3	3.8	B3/2500		
BM (30°-60°)	9138.0	15.9	B5		
BH (60°-80°)	8671.7	15.1	B5		G5
BVH (80°-90°)	215.6	0.4			G2/225
UL (90°-100°)	35.5	0.1		U2/50	
UH (100°-180°)	6.2	0.0		U1/10	

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





REPORT NUMBER: P579516

CATALOG NUMBER: CST-CA8-480-740-U-T5-HSS-HM-EX90

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4
2.5°	5249.5	5218.7	5220.9	5251.7	5168.2	5199.0	5163.8	5194.6	5179.2	5190.2	5203.3
5°	5264.8	5227.5	5231.9	5269.2	5203.3	5227.5	5185.8	5203.3	5190.2	5203.3	5205.5
7.5°	5304.4	5267.0	5269.2	5297.8	5229.7	5247.3	5207.7	5216.5	5194.6	5218.7	5212.1
10°	5387.8	5352.7	5339.5	5363.7	5304.4	5306.6	5260.5	5269.2	5236.3	5269.2	5256.1
12.5°	5499.9	5451.5	5455.9	5469.1	5396.6	5401.0	5346.1	5359.3	5304.4	5350.5	5335.1
15°	5636.0	5576.7	5583.3	5605.3	5535.0	5528.4	5477.9	5477.9	5429.6	5464.7	5449.3
17.5°	5824.9	5759.0	5754.7	5770.0	5712.9	5712.9	5655.8	5649.2	5600.9	5629.5	5625.1
20°	6070.9	5996.3	5983.1	6011.6	5939.2	5947.9	5875.5	5868.9	5816.2	5833.7	5835.9
22.5°	6292.8	6233.5	6231.3	6275.2	6189.5	6200.5	6134.6	6117.1	6073.1	6097.3	6103.9
25°	6547.6	6538.8	6532.2	6547.6	6461.9	6461.9	6415.8	6400.4	6371.8	6389.4	6407.0
27.5°	6868.2	6863.8	6846.3	6848.5	6776.0	6787.0	6736.5	6727.7	6714.5	6712.3	6703.5
30°	7221.9	7202.1	7177.9	7193.3	7160.4	7171.4	7127.4	7098.9	7094.5	7096.7	7083.5
32.5°	7615.0	7588.7	7573.3	7599.7	7612.8	7643.6	7641.4	7562.3	7562.3	7595.3	7536.0
35°	8102.6	8060.9	8074.1	8109.2	8135.6	8214.7	8201.5	8146.6	8164.1	8179.5	8109.2
37.5°	8675.9	8647.4	8706.7	8772.5	8774.7	8886.8	8860.4	8873.6	8871.4	8851.6	8805.5
40°	9363.4	9317.3	9378.8	9429.3	9398.5	9532.5	9528.1	9587.4	9627.0	9695.1	9668.7
42.5°	10046.5	10011.3	10070.6	10180.5	10162.9	10316.6	10338.6	10430.9	10485.8	10591.2	10529.7
45°	10887.7	10867.9	10922.9	11008.5	11067.8	11272.1	11353.4	11392.9	11531.3	11658.7	11515.9
47.5°	11830.0	11856.3	11847.6	12003.5	12135.3	12383.5	12416.4	12543.8	12664.6	12805.2	12666.8
50°	13002.9	12958.9	12998.5	13147.8	13363.1	13543.2	13712.3	13894.6	14013.2	14158.2	13903.4
52.5°	14265.8	14303.2	14391.0	14621.6	14779.8	14992.8	15146.6	15364.0	15480.5	15605.6	15274.0
55°	15858.2	15889.0	15985.6	16222.8	16334.9	16576.5	16681.9	16899.3	17011.4	17066.3	16642.4
57.5°	17725.2	17622.0	17701.0	17824.0	17997.6	18258.9	18287.5	18491.8	18491.8	18562.0	18021.7
60°	19392.3	19322.0	19405.5	19581.2	19649.3	19886.5	19862.3	20029.3	20073.2	20020.5	19374.7
62.5°	21035.2	21048.4	21156.0	21213.1	21186.8	21327.4	21384.5	21560.2	21487.7	21505.3	20760.7
65°	23029.6	23060.3	23049.4	22943.9	22706.7	22983.5	22968.1	23247.0	23264.6	23422.8	22557.4
67.5°	25696.1	25559.9	25311.7	24887.8	24417.7	24255.2	24112.4	24250.8	24428.7	24400.2	23451.3
70°	24659.3	24437.5	24307.9	23938.9	23310.7	22985.7	22689.1	22713.3	22972.5	22996.6	22025.8
72.5°	21799.6	21687.6	21189.0	20866.1	20435.6	20185.2	19827.2	19908.5	20246.7	20303.8	19530.7
75°	17195.9	17092.6	16642.4	16536.9	16323.9	16446.9	16359.0	16392.0	16664.3	16413.9	15950.5
77.5°	11129.3	11153.5	11083.2	11322.6	11313.8	11320.4	11641.1	11674.0	11939.8	11786.1	11338.0
80°	4990.3	5062.8	5234.1	5581.1	5370.3	5484.5	5607.5	5570.2	5838.1	5231.9	5449.3
82.5°	1010.4	1045.5	986.2	1030.1	962.0	997.2	1047.7	970.8	962.0	891.8	828.1
85°	520.6	527.1	524.9	514.0	452.5	417.3	401.9	338.3	305.3	298.7	276.8
87.5°	338.3	342.6	331.7	329.5	289.9	265.8	237.2	199.9	166.9	116.4	96.6
90°	206.5	206.5	195.5	184.5	164.7	147.2	118.6	85.7	50.5	19.8	11.0
92.5°	138.4	138.4	134.0	127.4	114.2	98.8	76.9	50.5	24.2	8.8	4.4
95°	87.9	87.9	85.7	83.5	74.7	63.7	48.3	30.8	15.4	6.6	2.2
97.5°	57.1	57.1	57.1	54.9	50.5	43.9	32.9	19.8	11.0	4.4	2.2
100°	35.1	37.3	35.1	35.1	32.9	28.6	22.0	13.2	8.8	4.4	2.2
102.5°	19.8	19.8	22.0	22.0	19.8	17.6	13.2	11.0	6.6	4.4	2.2
105°	8.8	8.8	11.0	11.0	11.0	8.8	8.8	6.6	4.4	4.4	2.2
107.5°	2.2	2.2	2.2	4.4	6.6	6.6	6.6	6.6	4.4	2.2	2.2
110°	0.0	0.0	0.0	2.2	2.2	4.4	4.4	4.4	4.4	2.2	2.2



REPORT NUMBER: P579516  
 CATALOG NUMBER: CST-CA8-480-740-U-T5-HSS-HM-EX90

**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: P579516

CATALOG NUMBER: CST-CA8-480-740-U-T5-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4	5170.4
2.5°	5190.2	5163.8	5183.6	5150.6	5141.8	5113.3	5168.2	5177.0	5172.6	5181.4
5°	5194.6	5161.6	5185.8	5152.8	5150.6	5119.9	5177.0	5179.2	5163.8	5170.4
7.5°	5207.7	5177.0	5194.6	5157.2	5161.6	5124.3	5190.2	5188.0	5179.2	5194.6
10°	5256.1	5220.9	5227.5	5188.0	5199.0	5159.4	5240.7	5245.1	5236.3	5264.8
12.5°	5339.5	5291.2	5306.6	5260.5	5269.2	5229.7	5328.5	5335.1	5335.1	5381.3
15°	5453.7	5403.2	5436.2	5376.9	5379.1	5319.8	5394.4	5394.4	5403.2	5466.9
17.5°	5620.7	5559.2	5603.1	5548.2	5205.5	5076.0	5330.7	5486.7	5227.5	5205.5
20°	5827.1	5798.6	5822.7	5732.7	5177.0	4584.0	4122.7	4098.5	4610.3	4865.1
22.5°	6079.7	6051.2	6062.2	5947.9	4621.3	4204.0	4197.4	4153.5	3514.3	3338.6
25°	6376.2	6360.9	6336.7	5379.1	4777.2	4377.5	4324.8	3751.5	3384.7	3417.6
27.5°	6694.7	6648.6	5833.7	5587.7	5016.7	4551.0	4252.3	3503.3	3490.1	3520.9
30°	7050.5	6806.7	5972.1	5888.6	5295.6	4766.3	3701.0	3657.1	3657.1	3705.4
32.5°	7503.0	6356.5	6356.5	6312.5	5640.4	4184.2	3896.5	3870.1	3900.9	3920.6
35°	7434.9	6837.5	6907.8	6888.0	6108.3	4261.1	4210.6	4166.6	4173.2	4173.2
37.5°	7456.9	7481.0	7564.5	7478.9	5328.5	4594.9	4513.7	4504.9	4511.5	4526.8
40°	8146.6	8159.7	8190.5	8001.6	5726.1	4983.7	4871.7	4849.7	4871.7	4904.6
42.5°	8889.0	8926.3	8961.4	7276.8	6281.8	5425.2	5313.2	5271.4	5311.0	5346.1
45°	9767.5	9824.6	9286.5	7920.3	6910.0	5928.2	5809.6	5759.0	5783.2	5814.0
47.5°	10755.9	10846.0	8757.2	8739.6	7648.0	6523.4	6387.2	6290.6	6327.9	6325.7
50°	11871.7	10365.0	9675.3	9664.3	8471.6	7186.7	7046.2	6958.3	6986.9	6964.9
52.5°	13077.6	10648.3	10670.3	10668.1	9332.6	7900.6	7771.0	7661.2	7434.9	7643.6
55°	14312.0	11627.9	11711.4	11698.2	10235.4	8638.6	8500.2	8397.0	5486.7	4634.5
57.5°	15539.8	12651.4	12677.8	12708.6	11171.1	9350.2	8741.8	8030.2	3129.9	3114.5
60°	16752.2	13626.7	13679.4	13696.9	11676.2	7740.2	3573.6	3639.5	946.7	1131.2
62.5°	18008.5	14588.7	14637.0	14621.6	12179.2	7197.7	3753.7	3679.0	87.9	81.3
65°	19611.9	15794.5	15726.5	15675.9	12972.1	7680.9	4032.6	4012.9	28.6	19.8
67.5°	20174.2	16069.1	15930.7	15913.1	13086.3	7784.2	4054.6	4039.2	28.6	19.8
70°	18900.3	15025.8	14788.6	14795.2	12177.0	7281.2	3782.3	3760.3	26.4	19.8
72.5°	16552.3	13270.8	13172.0	12649.3	10545.1	6404.8	3354.0	3270.5	26.4	17.6
75°	13589.3	10720.8	10501.1	9914.7	8392.6	5091.3	2633.5	2525.9	24.2	15.4
77.5°	9433.7	7518.4	7098.9	6501.4	5614.1	3375.9	1770.3	1631.9	22.0	15.4
80°	4276.5	3086.0	3101.4	2376.5	1904.3	1144.3	562.3	509.6	19.8	13.2
82.5°	744.6	549.1	516.2	498.6	415.1	281.1	171.3	147.2	17.6	8.8
85°	259.2	208.7	230.6	272.4	241.6	169.1	105.4	101.0	11.0	4.4
87.5°	87.9	92.3	107.6	129.6	114.2	65.9	39.5	28.6	2.2	0.0
90°	8.8	11.0	11.0	11.0	6.6	0.0	0.0	0.0	0.0	0.0
92.5°	2.2	2.2	0.0	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	2.2	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	2.2	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
110°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579516  
 CATALOG NUMBER: CST-CA8-480-740-U-T5-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)