

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: P522226

Luminaire Tested: **CST-CA8-330-740-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522226  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-330-740-U-T5R-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32373 lumens  
Efficiency: N/A  
Efficacy: 97.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G4

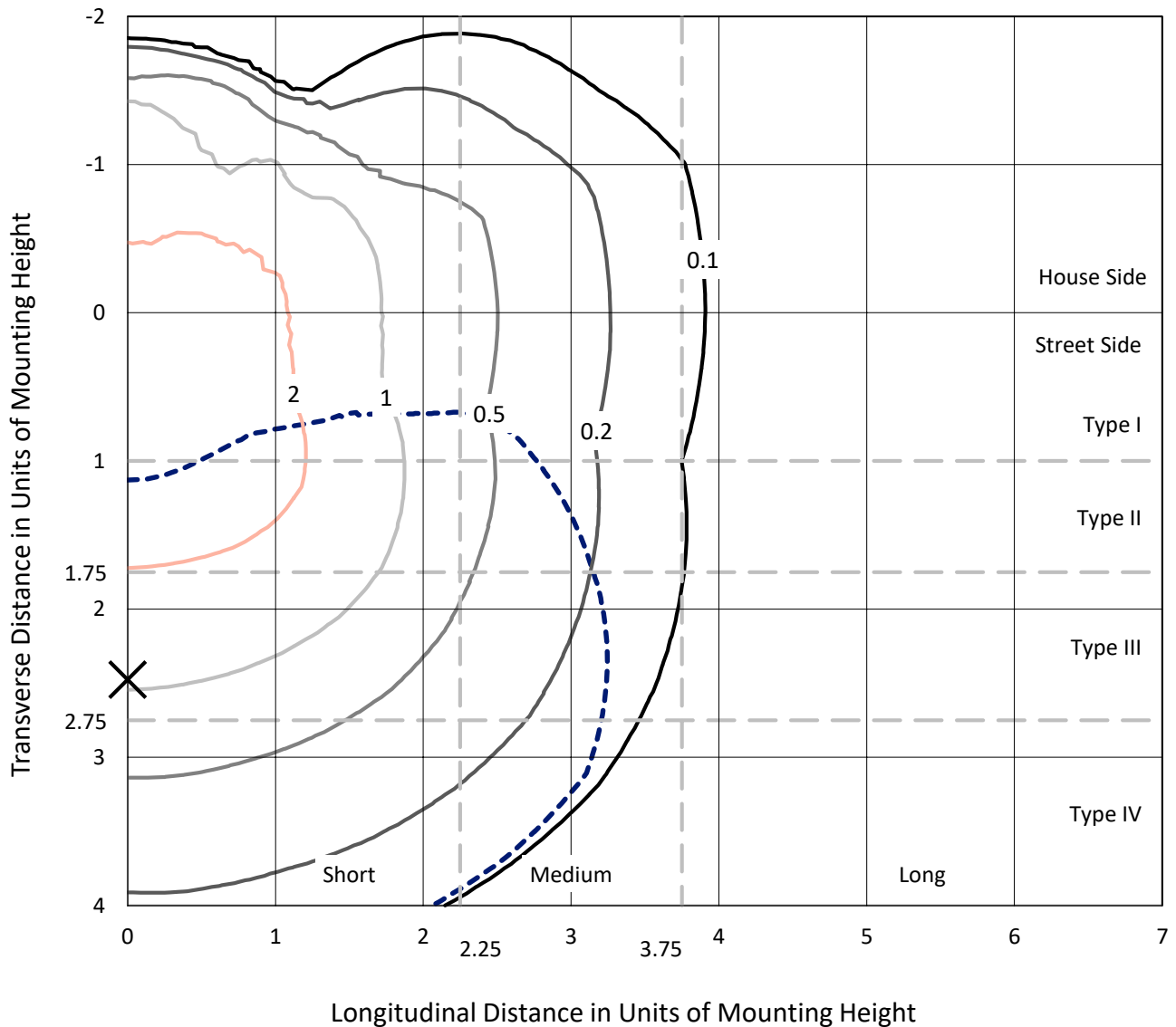
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

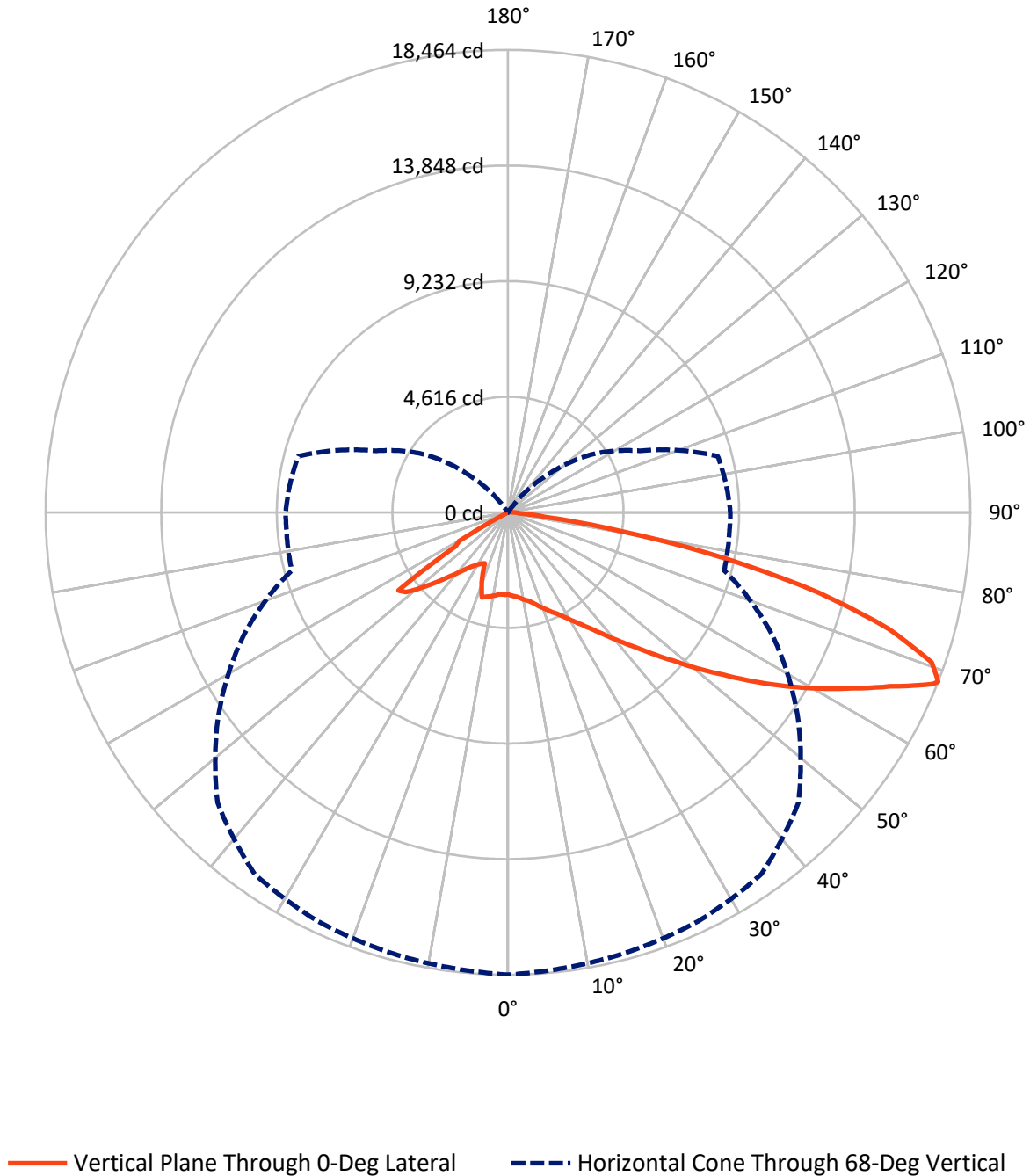
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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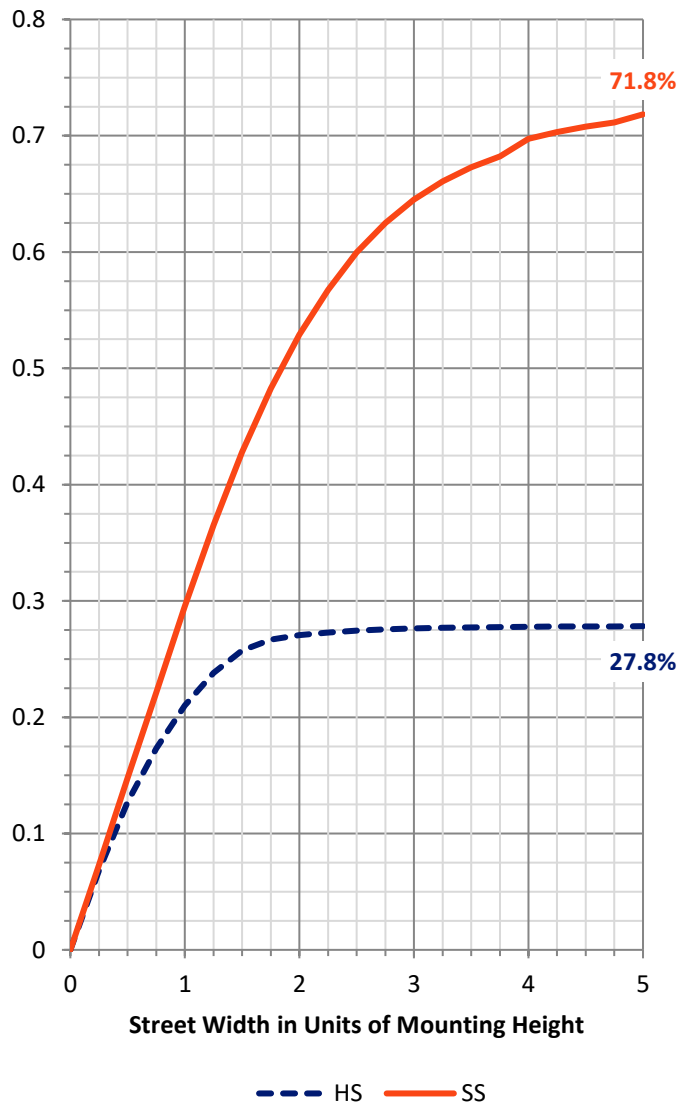
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9041.8	0.2	9042.0
	% Fixture	27.9	0.0	27.9
<b>Street Side</b>	Lumens	23312.4	18.5	23331.0
	% Fixture	72.0	0.1	72.1
<b>Total</b>	Lumens	32354.3	18.7	32373.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	318.3	1.0
10°-20°	1008.7	3.1
20°-30°	1707.6	5.3
30°-40°	2705.3	8.4
40°-50°	4423.0	13.7
50°-60°	6774.9	20.9
60°-70°	8330.3	25.7
70°-80°	6436.7	19.9
80°-90°	649.5	2.0
90°-100°	18.4	0.1
100°-110°	0.3	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°	32354.3	99.9
0°-180°	32373.0	100.0

**Coefficient of Utilization**



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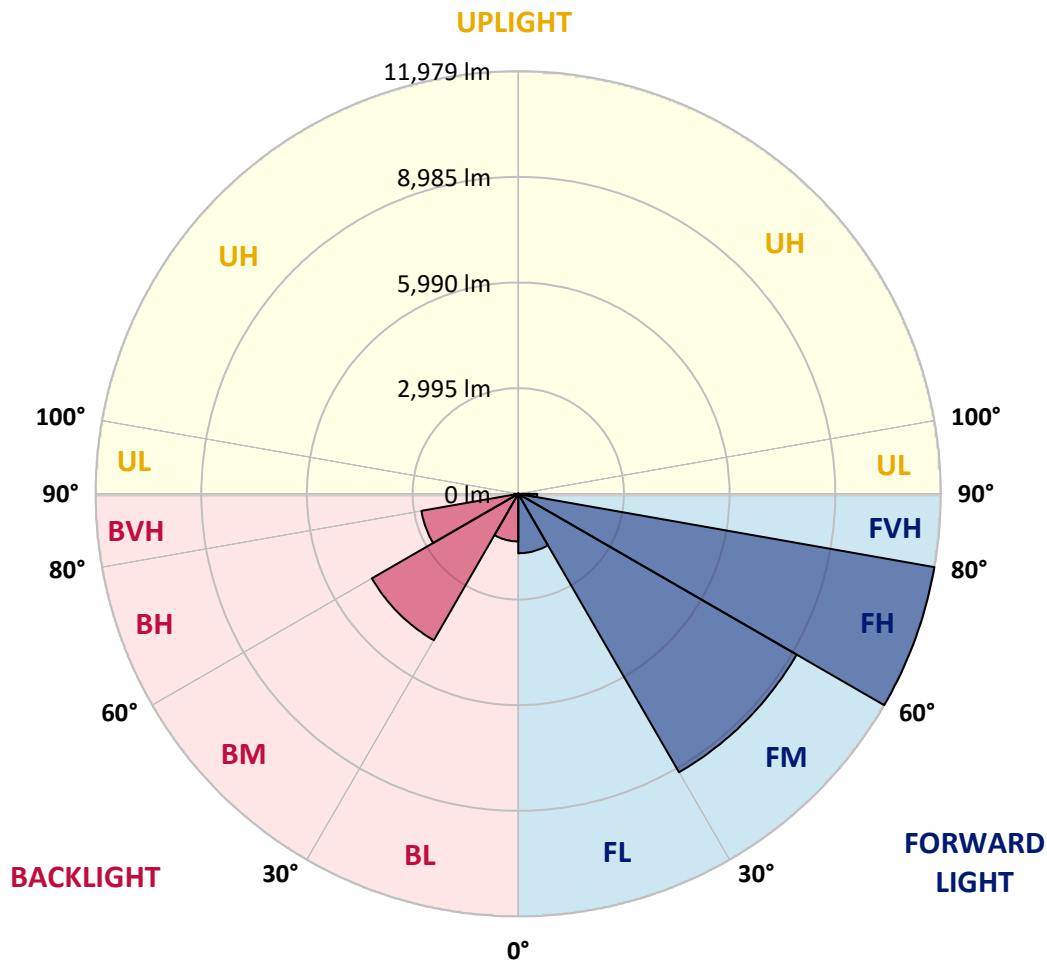
CATALOG NUMBER: CST-CA8-330-740-U-T5R-HSS-HM-EX180

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1685.0	5.2			
FM	(30°-60°)	9112.4	28.1			
FH	(60°-80°)	11979.4	37.0			G4/12000
FVH	(80°-90°)	535.6	1.7			G4/750
BL	(0°-30°)	1349.6	4.2	B3/2500		
BM	(30°-60°)	4790.8	14.8	B3/5000		
BH	(60°-80°)	2787.6	8.6	B4/5000		G4/5000
BVH	(80°-90°)	113.9	0.4			G2/225
UL	(90°-100°)	18.4	0.1		U2/50	
UH	(100°-180°)	0.3	0.0		U1/10	

**BUG Rating: B4-U2-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7
2.5°	3339.0	3332.8	3326.5	3340.6	3286.0	3309.4	3290.6	3307.8	3295.3	3309.4	3304.7
5°	3382.7	3376.4	3357.7	3373.3	3337.4	3346.8	3323.4	3329.6	3287.5	3312.5	3310.9
7.5°	3454.4	3437.2	3424.8	3424.8	3393.6	3392.0	3354.6	3356.1	3323.4	3320.3	3326.5
10°	3551.1	3538.6	3504.3	3507.4	3463.8	3457.5	3410.7	3409.2	3382.7	3367.1	3381.1
12.5°	3622.8	3635.3	3604.1	3604.1	3560.4	3529.3	3496.5	3474.7	3454.4	3431.0	3420.1
15°	3753.8	3766.3	3724.2	3722.6	3705.5	3668.1	3632.2	3585.4	3549.5	3538.6	3521.5
17.5°	3923.8	3916.0	3880.2	3881.7	3884.8	3824.0	3788.1	3727.3	3675.9	3638.4	3629.1
20°	4096.9	4096.9	4057.9	4070.4	4054.8	3998.7	3975.3	3891.1	3819.3	3778.8	3746.0
22.5°	4290.3	4282.5	4256.0	4282.5	4251.3	4195.2	4156.2	4072.0	3980.0	3750.7	3657.1
25°	4474.3	4469.7	4480.6	4488.4	4449.4	4379.2	4352.7	4263.8	4008.0	3707.0	3518.3
27.5°	4706.7	4691.1	4716.1	4731.7	4692.7	4631.9	4575.7	4475.9	3934.7	3697.7	3677.4
30°	5004.6	4970.3	5006.1	5013.9	4973.4	4936.0	4851.8	4352.7	3959.7	3891.1	3884.8
32.5°	5322.7	5282.2	5329.0	5335.2	5282.2	5251.0	5038.9	4288.8	4204.5	4125.0	4132.8
35°	5700.1	5700.1	5723.5	5726.7	5687.7	5634.6	4826.8	4600.7	4525.8	4452.5	4451.0
37.5°	6160.2	6146.2	6208.6	6246.0	6203.9	6052.6	5135.6	5029.5	4914.1	4820.6	4627.2
40°	6715.4	6740.4	6757.5	6795.0	6754.4	6414.4	5586.3	5466.2	5375.8	5062.3	4574.2
42.5°	7314.3	7320.5	7357.9	7404.7	7404.7	7046.0	6113.4	6010.5	5893.5	4950.0	4730.1
45°	8030.1	8016.1	8087.8	8162.7	8142.4	7771.2	6726.3	6649.9	6102.5	5276.0	5277.5
47.5°	8842.6	8825.5	8928.4	9026.7	8925.3	8576.0	7400.1	7340.8	5890.4	5828.0	5815.6
50°	9781.5	9739.4	9857.9	9988.9	9906.3	9474.3	8218.8	7080.3	6481.5	6431.6	6423.8
52.5°	10784.3	10751.5	10823.3	11046.3	10937.1	10414.7	8993.9	7304.9	7166.1	7110.0	7095.9
55°	11916.5	11852.6	12007.0	12177.0	12050.6	11454.9	9758.1	8050.4	7906.9	7810.2	7669.9
57.5°	13106.4	13014.4	13094.0	13307.6	13186.0	12520.1	10743.7	8817.7	8647.7	7156.8	6587.5
60°	14291.7	14249.6	14280.8	14469.5	14319.8	13555.6	11667.0	9586.5	7319.0	7078.8	7106.9
62.5°	15483.2	15391.2	15419.3	15612.6	15420.8	14541.2	12541.9	10285.2	7702.6	7618.4	7648.0
65°	16760.5	16651.3	16676.2	16732.4	16495.3	15425.5	13315.4	10944.9	8279.6	8190.7	8223.5
67.5°	18299.7	18199.9	18064.2	17897.4	17569.9	16364.3	14084.3	11638.9	8928.4	8878.5	8889.4
68°	18463.5	18366.8	18203.0	18005.0	17636.9	16403.3	14117.0	11659.2	8937.8	8875.4	8878.5
70°	17953.5	18011.2	17825.6	17493.5	17186.2	15832.5	13582.1	11210.0	8540.1	8448.1	8424.7
72.5°	15899.6	16025.9	15770.2	15714.0	15336.6	14104.6	11885.3	9726.9	7428.1	7457.8	7373.5
75°	12836.6	13022.2	12711.9	12729.0	12513.8	11765.2	9960.8	8098.7	6099.4	6235.1	6260.0
77.5°	8926.9	9193.5	9057.9	9193.5	9087.5	8817.7	7708.8	6236.6	4653.7	4809.6	4870.5
80°	4655.3	4971.8	5151.2	5207.3	5241.6	5230.7	4694.2	3742.9	2690.2	2747.9	2744.8
82.5°	1472.2	1395.8	1441.0	1428.5	1389.6	1405.2	1266.4	990.3	686.2	756.4	723.6
85°	444.5	447.6	435.1	432.0	399.2	350.9	287.0	165.3	81.1	95.1	88.9
87.5°	327.5	330.6	305.7	290.1	271.4	235.5	182.5	102.9	39.0	37.4	29.6
90°	180.9	174.7	162.2	149.7	141.9	121.6	92.0	39.0	14.0	10.9	9.4
92.5°	98.3	93.6	87.3	82.7	71.7	57.7	37.4	12.5	6.2	1.6	0.0
95°	45.2	42.1	40.5	35.9	31.2	21.8	12.5	7.8	4.7	1.6	0.0
97.5°	20.3	18.7	17.2	14.0	10.9	6.2	6.2	4.7	3.1	1.6	0.0
100°	4.7	4.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.6	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0



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**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	0.0	0.0	0.0
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7
2.5°	3300.0	3290.6	3286.0	3256.3	3265.7	3239.2	3290.6	3278.2	3270.4	3292.2
5°	3303.1	3270.4	3290.6	3273.5	3279.7	3242.3	3282.8	3265.7	3264.1	3273.5
7.5°	3310.9	3289.1	3309.4	3275.1	3290.6	3275.1	3304.7	3287.5	3301.6	3310.9
10°	3353.0	3340.6	3331.2	3323.4	3334.3	3303.1	3340.6	3342.1	3346.8	3374.9
12.5°	3412.3	3399.8	3384.2	3363.9	3374.9	3362.4	3390.5	3398.3	3415.4	3429.4
15°	3494.9	3471.6	3465.3	3446.6	3457.5	3451.3	3457.5	3452.8	3485.6	3480.9
17.5°	3608.8	3582.3	3493.4	3402.9	3345.2	3362.4	3434.1	3527.7	3551.1	3554.2
20°	3650.9	3463.8	3454.4	3351.5	3304.7	3301.6	3153.4	2932.0	2999.0	3156.5
22.5°	3601.0	3345.2	3318.7	3298.4	3098.8	2771.3	2740.1	2707.4	2699.6	2723.0
25°	3488.7	3459.1	3435.7	3170.6	2855.5	2857.1	2811.9	2596.6	2261.3	2233.3
27.5°	3660.3	3619.7	3393.6	2985.0	2978.7	2975.6	2908.6	2356.5	2284.7	2301.9
30°	3855.2	3788.1	3197.1	3144.0	3142.5	3114.4	2607.6	2376.8	2376.8	2379.9
32.5°	4079.8	3663.4	3309.4	3334.3	3332.8	3200.2	2518.7	2503.1	2496.8	2512.4
35°	4251.3	3563.6	3551.1	3596.3	3565.1	2715.2	2676.2	2662.1	2655.9	2648.1
37.5°	4198.3	3850.5	3850.5	3878.6	3627.5	2891.4	2872.7	2872.7	2860.2	2854.0
40°	4279.4	4207.7	4171.8	4182.7	2635.6	3105.1	3119.1	3116.0	3114.4	3125.3
42.5°	4706.7	4642.8	4610.0	4223.3	2950.7	3086.3	3429.4	3427.9	3432.6	3427.9
45°	5251.0	5191.7	5106.0	3951.9	3349.9	2705.8	3780.3	3797.5	3799.1	3797.5
47.5°	5821.8	5784.4	4906.3	4374.5	3783.5	2903.9	3613.5	4220.1	4212.3	4221.7
50°	6425.3	6256.9	4881.4	4875.1	4245.1	3231.4	3232.9	4589.8	4669.3	4694.2
52.5°	7097.5	5672.1	5410.1	4936.0	4713.0	3568.2	3533.9	4067.3	5152.7	5177.7
55°	6592.2	5991.8	5987.1	4393.2	4903.2	3892.6	3897.3	3859.9	4725.4	5371.1
57.5°	6559.5	6573.5	6562.6	4901.7	3577.6	3649.3	4246.6	4213.9	3059.8	2479.7
60°	7125.6	7145.9	6375.4	5293.1	3867.7	2244.2	2615.4	2222.4	2252.0	2275.4
62.5°	7666.7	7673.0	5185.5	3470.0	1916.7	90.5	43.7	35.9	34.3	34.3
65°	8265.6	8265.6	5558.2	3785.0	1851.2	34.3	6.2	4.7	17.2	17.2
67.5°	8844.2	8716.3	5831.2	4019.0	1883.9	4.7	0.0	0.0	0.0	0.0
68°	8811.4	8671.1	5806.2	4012.7	1879.3	3.1	0.0	0.0	0.0	0.0
70°	8321.7	8186.1	5508.3	3830.3	1809.1	3.1	0.0	0.0	0.0	0.0
72.5°	7345.5	7220.7	4878.3	3376.4	1631.3	1.6	0.0	0.0	0.0	0.0
75°	6217.9	6200.8	4213.9	2849.3	1398.9	1.6	0.0	0.0	0.0	0.0
77.5°	5003.0	4925.1	3293.8	2233.3	1127.6	0.0	0.0	0.0	0.0	0.0
80°	2786.9	2902.3	1927.6	1313.1	709.6	0.0	0.0	0.0	0.0	0.0
82.5°	753.3	704.9	421.1	285.4	135.7	0.0	0.0	0.0	0.0	0.0
85°	96.7	106.0	48.3	39.0	9.4	0.0	0.0	0.0	0.0	0.0
87.5°	49.9	59.3	15.6	12.5	3.1	0.0	0.0	0.0	0.0	0.0
90°	9.4	10.9	4.7	1.6	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
95°	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
100°	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
105°	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



REPORT NUMBER: P522226  
 CATALOG NUMBER: CST-CA8-330-740-U-T5R-HSS-HM-EX180

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)