

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: P522229

Luminaire Tested: **CST-CA8-330-750-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522229
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-CA8-330-750-U-T5R-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32967 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G5

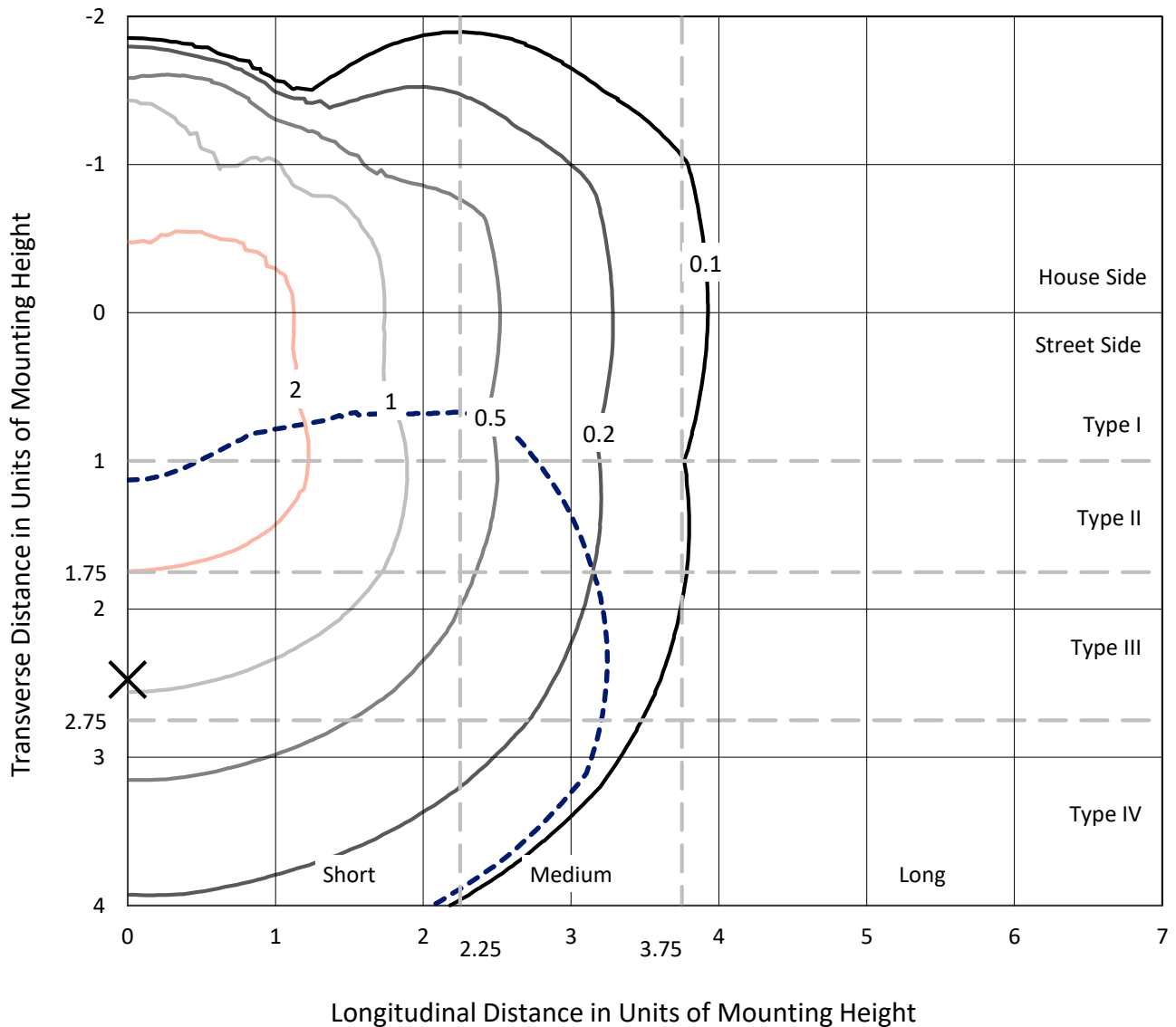
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P522229
 CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX180

Iso-Footcandle Lines of Horizontal Illumination

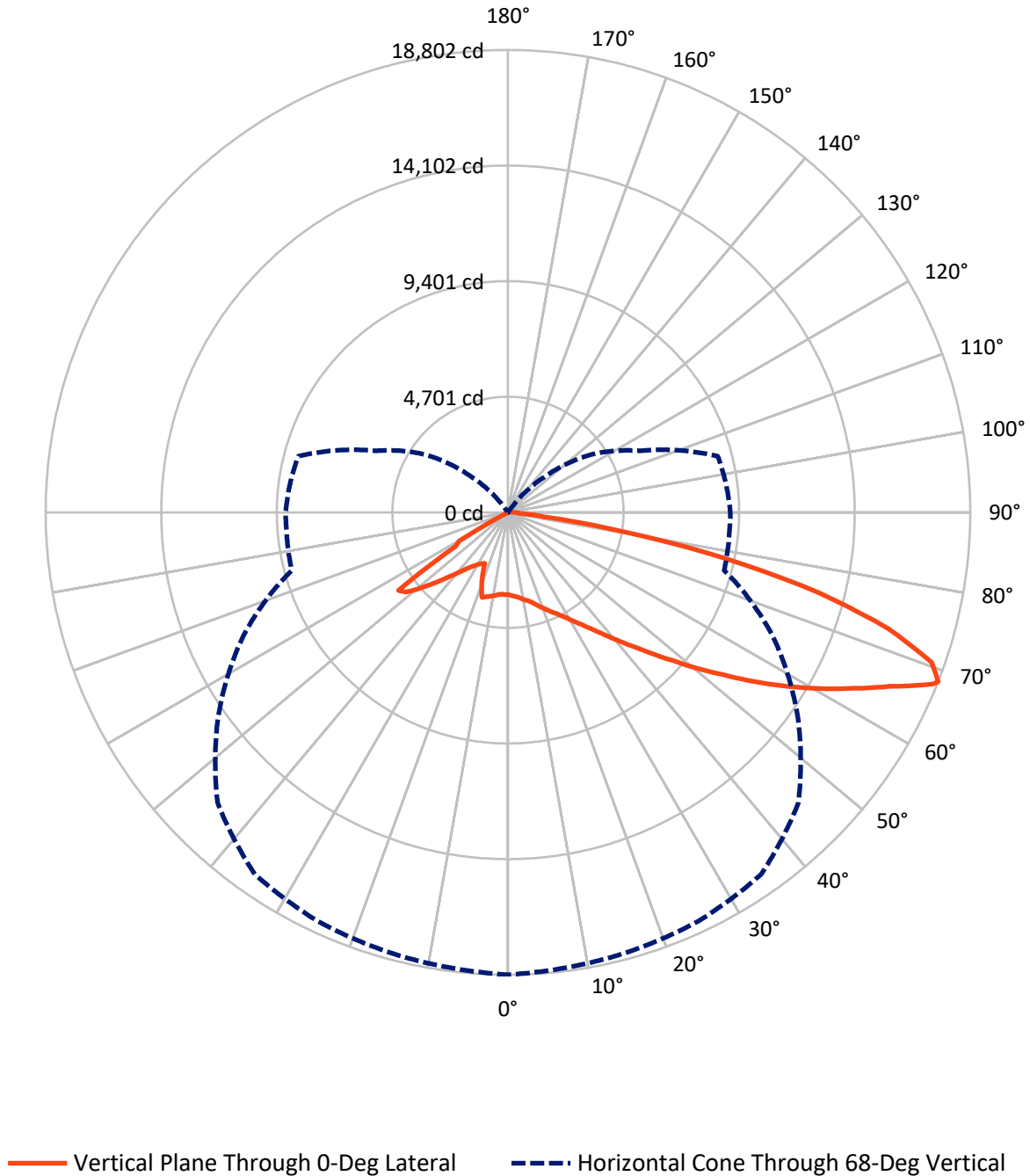
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P522229
CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX180

Luminous Intensity Polar Plot



REPORT NUMBER: P522229
 CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX180

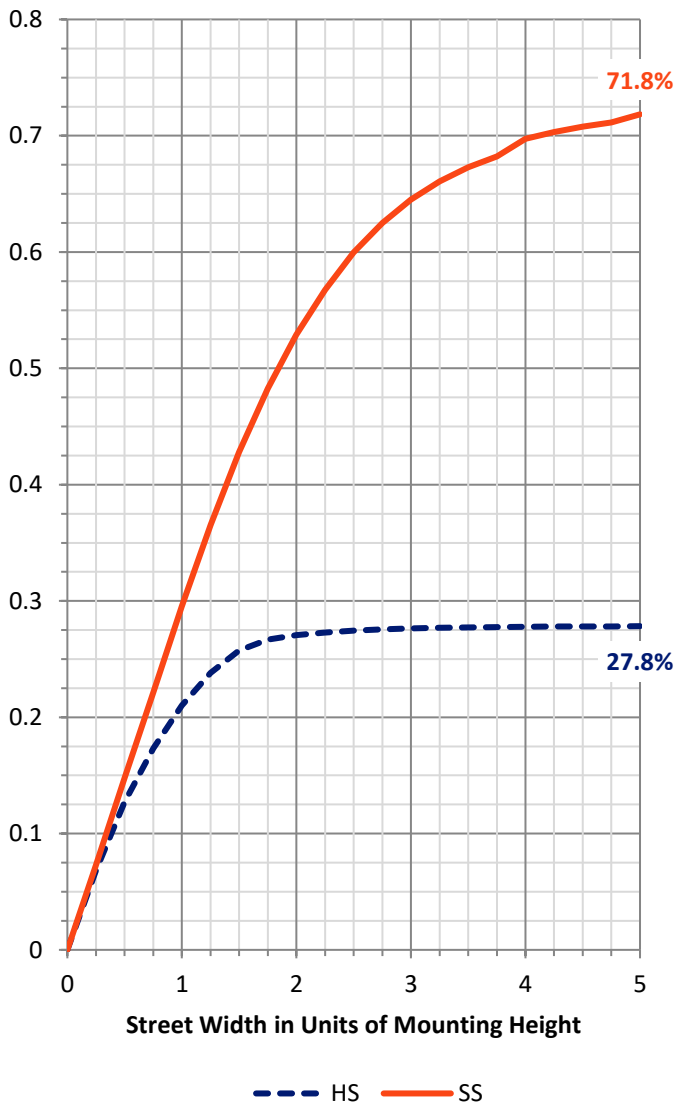
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9207.7	0.2	9207.9
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	23740.2	18.9	23759.1
	% Fixture	72.0	0.1	72.1
Total	Lumens	32947.9	19.1	32967.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.2	1.0
10°-20°	1027.2	3.1
20°-30°	1739.0	5.3
30°-40°	2754.9	8.4
40°-50°	4504.2	13.7
50°-60°	6899.2	20.9
60°-70°	8483.1	25.7
70°-80°	6554.8	19.9
80°-90°	661.4	2.0
90°-100°	18.8	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°	32947.9	99.9
0°-180°	32967.0	100.0

Coefficient of Utilization



REPORT NUMBER: P522229

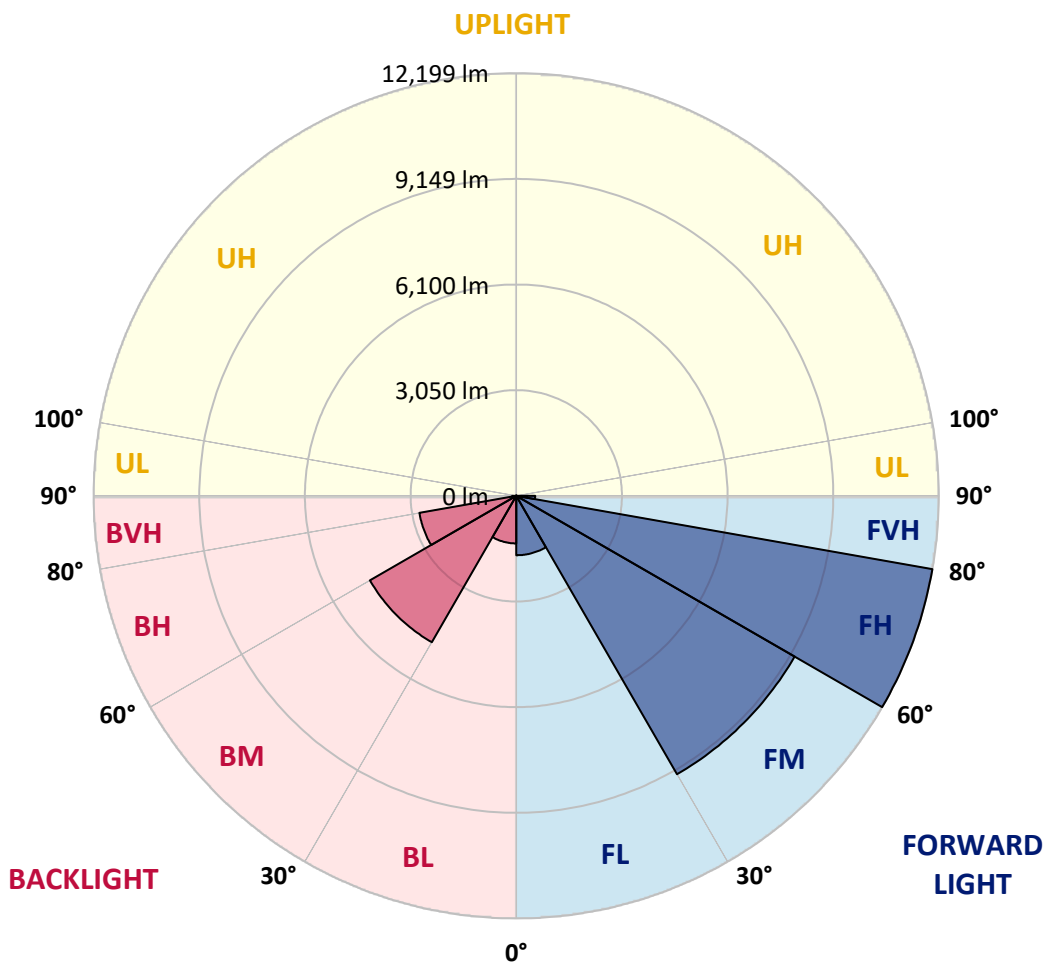
CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1716.0	5.2			
FM (30°-60°)	9279.6	28.1			
FH (60°-80°)	12199.2	37.0			G5
FVH (80°-90°)	545.4	1.7			G4/750
BL (0°-30°)	1374.3	4.2	B3/2500		
BM (30°-60°)	4878.7	14.8	B3/5000		
BH (60°-80°)	2838.8	8.6	B4/5000		G4/5000
BVH (80°-90°)	115.9	0.4			G2/225
UL (90°-100°)	18.8	0.1		U2/50	
UH (100°-180°)	0.3	0.0		U1/10	

BUG Rating: B4-U2-G5

Type IV Short





REPORT NUMBER: P522229

CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX180

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9
2.5°	3400.3	3393.9	3387.6	3401.8	3346.3	3370.1	3351.0	3368.5	3355.8	3370.1	3365.3
5°	3444.7	3438.4	3419.3	3435.2	3398.7	3408.2	3384.4	3390.7	3347.8	3373.3	3371.7
7.5°	3517.8	3500.3	3487.6	3487.6	3455.8	3454.3	3416.1	3417.7	3384.4	3381.2	3387.6
10°	3616.2	3603.5	3568.6	3571.8	3527.3	3521.0	3473.3	3471.7	3444.7	3428.8	3443.1
12.5°	3689.3	3702.0	3670.2	3670.2	3625.8	3594.0	3560.7	3538.4	3517.8	3494.0	3482.8
15°	3822.7	3835.4	3792.5	3790.9	3773.5	3735.4	3698.8	3651.2	3614.7	3603.5	3586.1
17.5°	3995.8	3987.9	3951.4	3952.9	3956.1	3894.2	3857.6	3795.7	3743.3	3705.2	3695.7
20°	4172.1	4172.1	4132.4	4145.1	4129.2	4072.1	4048.2	3962.5	3889.4	3848.1	3814.8
22.5°	4369.0	4361.1	4334.1	4361.1	4329.3	4272.2	4232.5	4146.7	4053.0	3819.5	3724.2
25°	4556.4	4551.7	4562.8	4570.7	4531.0	4459.6	4432.6	4342.0	4081.6	3775.1	3582.9
27.5°	4793.1	4777.2	4802.6	4818.5	4778.8	4716.8	4659.7	4558.0	4006.9	3765.5	3744.9
30°	5096.4	5061.5	5098.0	5105.9	5064.7	5026.5	4940.8	4432.6	4032.3	3962.5	3956.1
32.5°	5420.4	5379.1	5426.8	5433.1	5379.1	5347.3	5131.4	4367.5	4281.7	4200.7	4208.6
35°	5804.7	5804.7	5828.6	5831.7	5792.0	5738.0	4915.4	4685.1	4608.9	4534.2	4532.6
37.5°	6273.2	6259.0	6322.5	6360.6	6317.7	6163.7	5229.8	5121.8	5004.3	4909.0	4712.1
40°	6838.6	6864.0	6881.5	6919.6	6878.3	6532.1	5688.8	5566.5	5474.4	5155.2	4658.1
42.5°	7448.5	7454.8	7493.0	7540.6	7540.6	7175.3	6225.6	6120.8	6001.7	5040.8	4816.9
45°	8177.5	8163.2	8236.2	8312.4	8291.8	7913.8	6849.8	6771.9	6214.5	5372.8	5374.3
47.5°	9004.9	8987.4	9092.2	9192.3	9089.1	8733.3	7535.8	7475.5	5998.5	5935.0	5922.3
50°	9961.0	9918.1	10038.8	10172.2	10088.0	9648.1	8369.6	7210.3	6600.4	6549.6	6541.6
52.5°	10982.2	10948.8	11021.9	11249.0	11137.8	10605.8	9158.9	7439.0	7297.6	7240.4	7226.1
55°	12135.2	12070.0	12227.3	12400.4	12271.7	11665.1	9937.1	8198.1	8052.0	7953.5	7810.6
57.5°	13346.9	13253.2	13334.2	13551.8	13427.9	12749.8	10940.9	8979.5	8806.4	7288.1	6708.4
60°	14553.9	14511.1	14542.8	14735.0	14582.5	13804.3	11881.1	9762.4	7453.3	7208.7	7237.3
62.5°	15767.3	15673.6	15702.2	15899.1	15703.8	14808.0	12772.0	10473.9	7843.9	7758.2	7788.4
65°	17068.0	16956.8	16982.2	17039.4	16798.0	15708.5	13559.7	11145.7	8431.6	8341.0	8374.4
67.5°	18635.5	18533.9	18395.7	18225.8	17892.3	16664.6	14342.7	11852.5	9092.2	9041.4	9052.5
68°	18802.3	18703.8	18537.0	18335.4	17960.5	16704.3	14376.1	11873.1	9101.8	9038.2	9041.4
70°	18282.9	18341.7	18152.7	17814.4	17501.6	16123.0	13831.3	11415.7	8696.8	8603.1	8579.3
72.5°	16191.3	16320.0	16059.5	16002.3	15618.0	14363.4	12103.4	9905.4	7564.4	7594.6	7508.8
75°	13072.2	13261.2	12945.1	12962.6	12743.4	11981.1	10143.6	8247.3	6211.3	6349.5	6374.9
77.5°	9090.6	9362.2	9224.1	9362.2	9254.2	8979.5	7850.3	6351.1	4739.1	4897.9	4959.8
80°	4740.7	5063.1	5245.7	5302.9	5337.8	5326.7	4780.4	3811.6	2739.6	2798.3	2795.2
82.5°	1499.2	1421.4	1467.5	1454.8	1415.1	1430.9	1289.6	1008.5	698.8	770.3	736.9
85°	452.6	455.8	443.1	439.9	406.6	357.3	292.2	168.3	82.6	96.9	90.5
87.5°	333.5	336.7	311.3	295.4	276.3	239.8	185.8	104.8	39.7	38.1	30.2
90°	184.2	177.9	165.2	152.5	144.5	123.9	93.7	39.7	14.3	11.1	9.5
92.5°	100.1	95.3	88.9	84.2	73.1	58.8	38.1	12.7	6.4	1.6	0.0
95°	46.1	42.9	41.3	36.5	31.8	22.2	12.7	7.9	4.8	1.6	0.0
97.5°	20.6	19.1	17.5	14.3	11.1	6.4	6.4	4.8	3.2	1.6	0.0
100°	4.8	4.8	3.2	3.2	3.2	3.2	3.2	3.2	3.2	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



REPORT NUMBER: P522229
 CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX180

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



REPORT NUMBER: P522229

CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX180

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9	3339.9
2.5°	3360.6	3351.0	3346.3	3316.1	3325.6	3298.6	3351.0	3338.3	3330.4	3352.6
5°	3363.7	3330.4	3351.0	3333.6	3339.9	3301.8	3343.1	3325.6	3324.0	3333.6
7.5°	3371.7	3349.4	3370.1	3335.1	3351.0	3335.1	3365.3	3347.8	3362.1	3371.7
10°	3414.6	3401.8	3392.3	3384.4	3395.5	3363.7	3401.8	3403.4	3408.2	3436.8
12.5°	3474.9	3462.2	3446.3	3425.7	3436.8	3424.1	3452.7	3460.6	3478.1	3492.4
15°	3559.1	3535.3	3528.9	3509.8	3521.0	3514.6	3521.0	3516.2	3549.5	3544.8
17.5°	3675.0	3648.0	3557.5	3465.4	3406.6	3424.1	3497.1	3592.4	3616.2	3619.4
20°	3717.9	3527.3	3517.8	3413.0	3365.3	3362.1	3211.3	2985.7	3054.0	3214.4
22.5°	3667.1	3406.6	3379.6	3359.0	3155.7	2822.2	2790.4	2757.1	2749.1	2772.9
25°	3552.7	3522.5	3498.7	3228.7	2907.9	2909.5	2863.5	2644.3	2302.8	2274.3
27.5°	3727.4	3686.1	3455.8	3039.7	3033.4	3030.2	2961.9	2399.7	2326.7	2344.1
30°	3925.9	3857.6	3255.7	3201.7	3200.2	3171.6	2655.4	2420.4	2420.4	2423.5
32.5°	4154.6	3730.6	3370.1	3395.5	3393.9	3258.9	2564.9	2549.0	2542.7	2558.5
35°	4329.3	3629.0	3616.2	3662.3	3630.5	2765.0	2725.3	2711.0	2704.6	2696.7
37.5°	4275.3	3921.2	3921.2	3949.8	3694.1	2944.5	2925.4	2925.4	2912.7	2906.3
40°	4357.9	4284.9	4248.3	4259.5	2684.0	3162.0	3176.3	3173.2	3171.6	3182.7
42.5°	4793.1	4728.0	4694.6	4300.7	3004.8	3143.0	3492.4	3490.8	3495.5	3490.8
45°	5347.3	5287.0	5199.6	4024.4	3411.4	2755.5	3849.7	3867.2	3868.8	3867.2
47.5°	5928.6	5890.5	4996.4	4454.8	3852.9	2957.2	3679.8	4297.6	4289.6	4299.2
50°	6543.2	6371.7	4971.0	4964.6	4323.0	3290.7	3292.3	4674.0	4755.0	4780.4
52.5°	7227.7	5776.2	5509.3	5026.5	4799.4	3633.7	3598.8	4141.9	5247.3	5272.7
55°	6713.2	6101.7	6097.0	4473.9	4993.2	3964.1	3968.8	3930.7	4812.1	5469.6
57.5°	6679.8	6694.1	6683.0	4991.6	3643.2	3716.3	4324.6	4291.2	3116.0	2525.2
60°	7256.3	7277.0	6492.4	5390.2	3938.6	2285.4	2663.4	2263.1	2293.3	2317.1
62.5°	7807.4	7813.8	5280.6	3533.7	1951.9	92.1	44.5	36.5	34.9	34.9
65°	8417.3	8417.3	5660.2	3854.5	1885.2	34.9	6.4	4.8	17.5	17.5
67.5°	9006.5	8876.2	5938.1	4092.7	1918.5	4.8	0.0	0.0	0.0	0.0
68°	8973.1	8830.2	5912.7	4086.3	1913.7	3.2	0.0	0.0	0.0	0.0
70°	8474.4	8336.3	5609.4	3900.5	1842.3	3.2	0.0	0.0	0.0	0.0
72.5°	7480.3	7353.2	4967.8	3438.4	1661.2	1.6	0.0	0.0	0.0	0.0
75°	6332.0	6314.5	4291.2	2901.6	1424.6	1.6	0.0	0.0	0.0	0.0
77.5°	5094.8	5015.4	3354.2	2274.3	1148.2	0.0	0.0	0.0	0.0	0.0
80°	2838.0	2955.6	1963.0	1337.2	722.6	0.0	0.0	0.0	0.0	0.0
82.5°	767.1	717.9	428.8	290.6	138.2	0.0	0.0	0.0	0.0	0.0
85°	98.5	108.0	49.2	39.7	9.5	0.0	0.0	0.0	0.0	0.0
87.5°	50.8	60.4	15.9	12.7	3.2	0.0	0.0	0.0	0.0	0.0
90°	9.5	11.1	4.8	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: P522229
 CATALOG NUMBER: CST-CA8-330-750-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)