

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: P522227

Luminaire Tested: **CST-CA8-330-740-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522227
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-5)
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-EX90
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: 41447.1 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

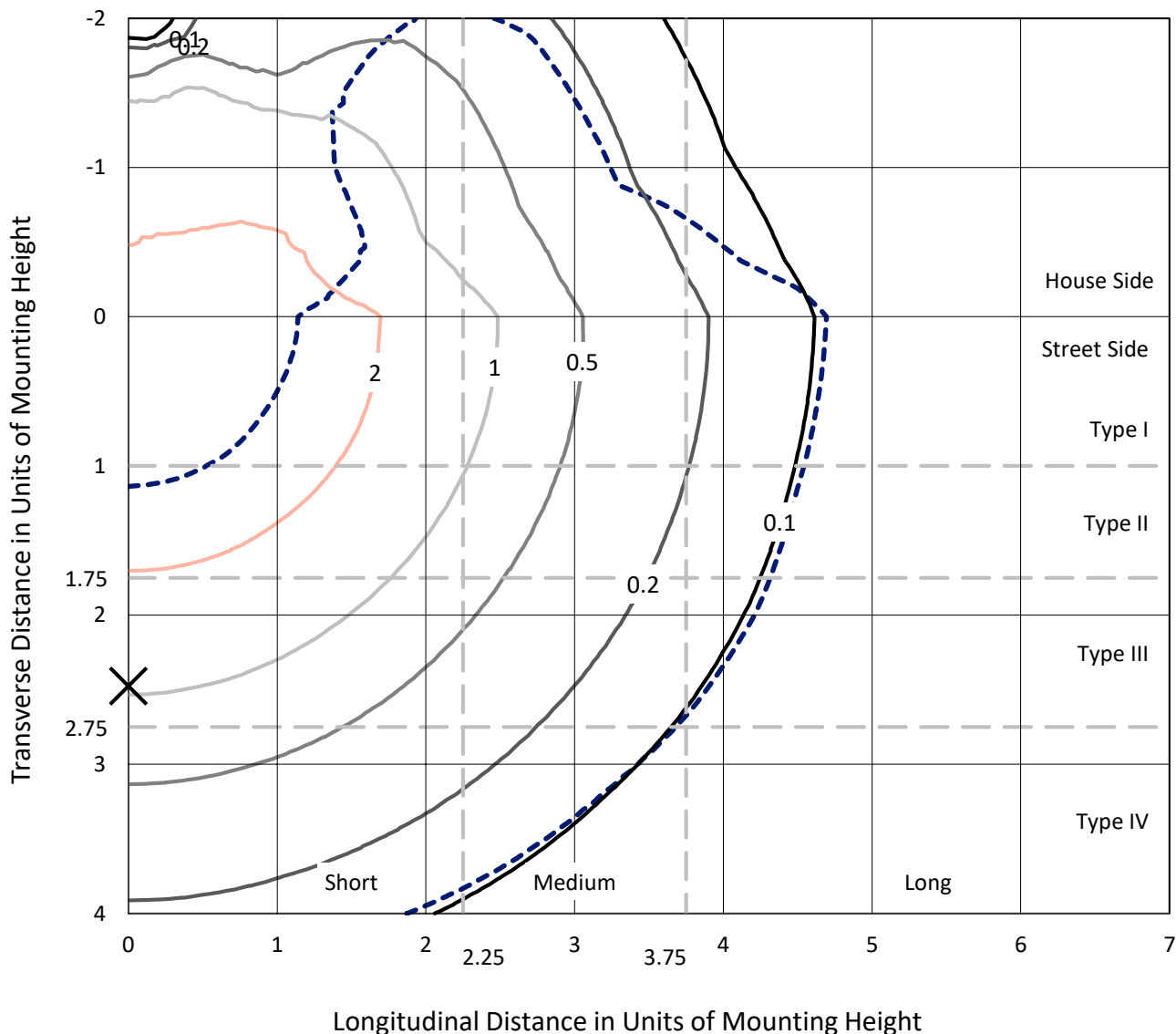
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P522227
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Iso-Footcandle Lines of Horizontal Illumination

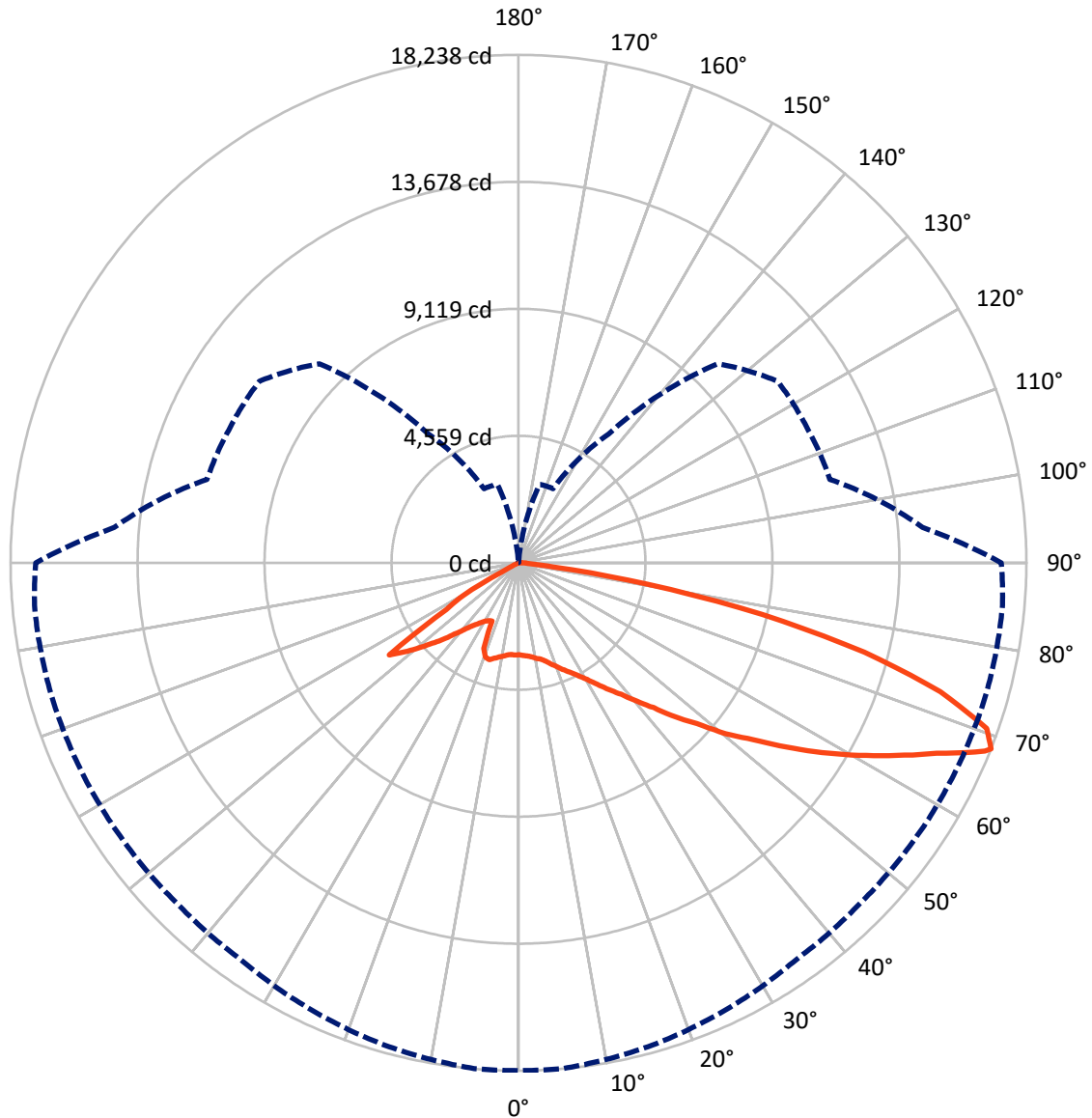
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P522227
CATALOG NUMBER: CST-CA8-330-740-U-T5R-HSS-HM-EX90

Luminous Intensity Polar Plot



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

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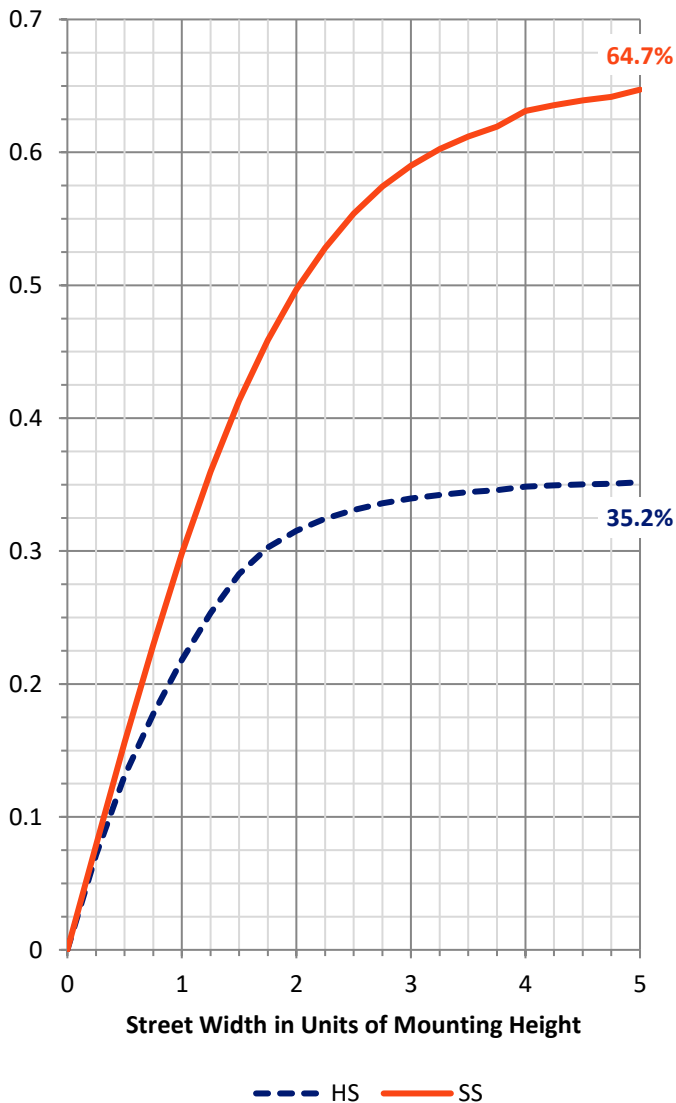
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14586.5	2.6	14589.1
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	26847.0	11.0	26858.0
	% Fixture	64.8	0.0	64.8
Total	Lumens	41433.6	13.5	41447.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.1	0.8
10°-20°	1022.4	2.5
20°-30°	1825.1	4.4
30°-40°	2969.1	7.2
40°-50°	5070.4	12.2
50°-60°	8460.1	20.4
60°-70°	11769.8	28.4
70°-80°	9123.4	22.0
80°-90°	874.2	2.1
90°-100°	10.6	0.0
100°-110°	0.9	0.0
110°-120°	0.5	0.0
120°-130°	0.3	0.0
130°-140°	0.3	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	41433.6	100.0
0°-180°	41447.1	100.0

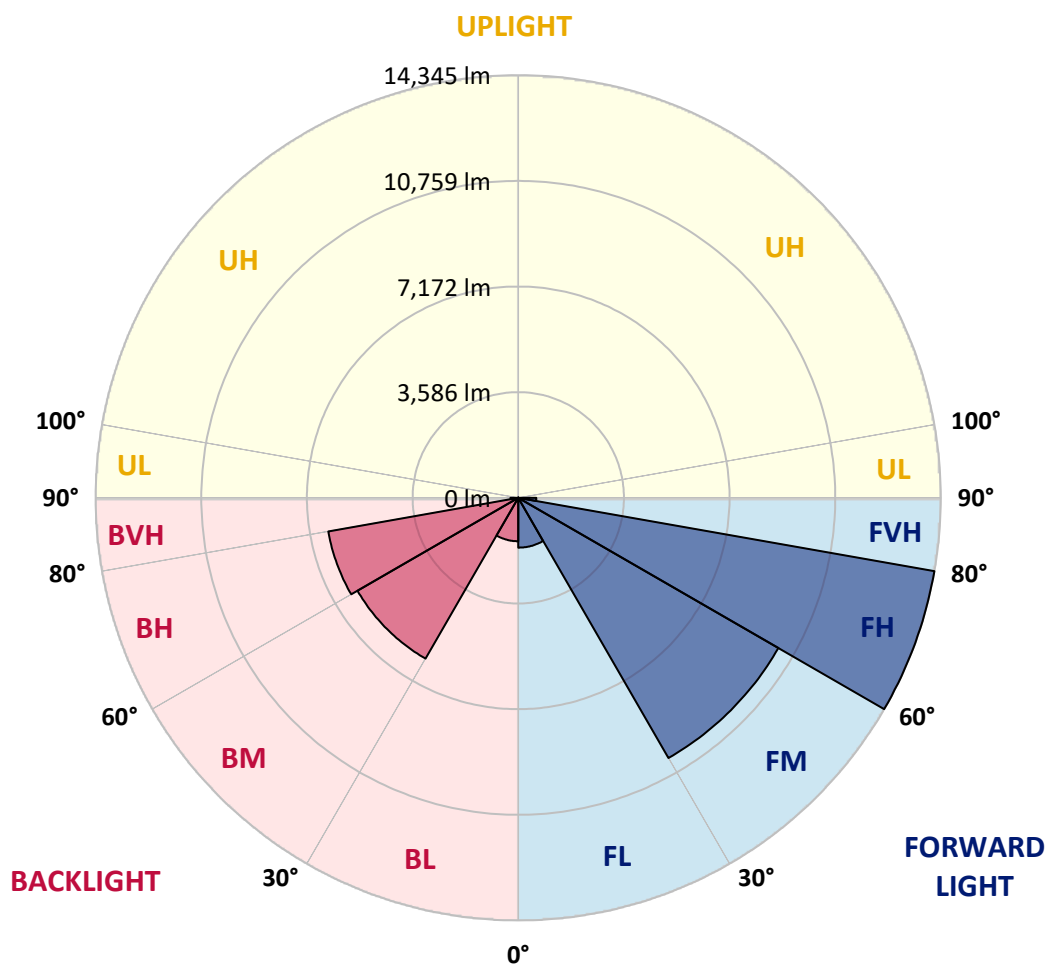


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 CATALOG NUMBER: CST-CA8-330-740-U-T5R-HSS-HM-EX90

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1691.6	4.1			
FM (30°-60°)	10198.9	24.6			
FH (60°-80°)	14345.0	34.6			G5
FVH (80°-90°)	611.6	1.5			G4/750
BL (0°-30°)	1475.0	3.6	B3/2500		
BM (30°-60°)	6300.7	15.2	B4/8500		
BH (60°-80°)	6548.2	15.8	B5		G5
BVH (80°-90°)	262.6	0.6			G3/500
UL (90°-100°)	10.6	0.0		U2/50	
UH (100°-180°)	2.9	0.0		U1/10	

BUG Rating: B5-U2-G5
 Type IV Short





REPORT NUMBER: P522227

CATALOG NUMBER: CST-CA8-330-740-U-T5R-HSS-HM-EX90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5
2.5°	3335.9	3331.2	3328.1	3348.4	3290.7	3314.1	3298.5	3318.8	3314.1	3323.4	3325.0
5°	3359.3	3351.5	3340.6	3362.4	3328.1	3343.7	3326.6	3335.9	3306.3	3331.2	3334.4
7.5°	3412.3	3390.5	3388.9	3395.2	3371.8	3382.7	3353.1	3364.0	3348.4	3339.0	3348.4
10°	3491.9	3473.2	3452.9	3465.4	3426.4	3440.4	3409.2	3418.6	3410.8	3390.5	3409.2
12.5°	3546.5	3552.7	3538.7	3548.0	3513.7	3501.2	3490.3	3488.8	3484.1	3454.4	3449.8
15°	3668.1	3671.2	3646.3	3652.5	3644.7	3638.5	3622.9	3610.4	3585.4	3566.7	3554.3
17.5°	3827.2	3810.0	3786.6	3792.9	3814.7	3786.6	3777.3	3753.9	3718.0	3686.8	3680.6
20°	3994.0	3983.1	3961.3	3973.8	3972.2	3953.5	3958.2	3919.2	3867.7	3841.2	3820.9
22.5°	4179.6	4164.0	4148.4	4171.8	4153.1	4140.6	4136.0	4109.5	4045.5	4015.9	4011.2
25°	4365.2	4357.4	4368.3	4360.5	4334.0	4324.7	4330.9	4321.6	4246.7	4210.8	4189.0
27.5°	4597.6	4578.9	4596.0	4586.7	4558.6	4560.2	4561.7	4563.3	4479.1	4432.3	4401.1
30°	4862.7	4856.5	4878.3	4848.7	4822.2	4839.3	4853.4	4822.2	4748.9	4680.3	4669.3
32.5°	5207.4	5168.4	5193.4	5155.9	5115.4	5155.9	5180.9	5118.5	5059.2	4971.9	4987.5
35°	5589.5	5577.0	5577.0	5528.7	5506.8	5570.8	5595.7	5534.9	5442.9	5366.5	5347.8
37.5°	5995.0	6007.5	6046.4	6026.2	6005.9	6044.9	6101.0	6019.9	5901.4	5820.3	5798.5
40°	6533.0	6564.2	6590.7	6564.2	6540.8	6565.8	6629.7	6523.7	6441.0	6397.3	6350.6
42.5°	7111.6	7164.6	7147.5	7150.6	7170.9	7206.8	7270.7	7174.0	7078.9	7077.3	7008.7
45°	7894.5	7894.5	7858.7	7893.0	7889.8	7978.7	8006.8	7953.8	7874.3	7850.9	7791.6
47.5°	8626.0	8702.4	8688.3	8738.3	8699.3	8774.1	8869.3	8824.0	8732.0	8649.4	8636.9
50°	9645.9	9627.2	9608.5	9683.3	9677.1	9728.6	9815.9	9787.8	9660.0	9566.4	9549.2
52.5°	10542.7	10640.9	10617.5	10729.8	10667.4	10740.7	10845.2	10840.5	10684.6	10592.6	10566.1
55°	11674.9	11740.4	11735.7	11851.1	11765.4	11862.1	11949.4	11958.8	11788.8	11657.8	11698.3
57.5°	12853.9	12908.5	12877.3	12972.5	12888.3	13020.8	13073.8	13039.5	12939.7	12774.4	12835.2
60°	14034.5	14081.3	14117.2	14125.0	14076.6	14154.6	14204.5	14234.2	14076.6	13887.9	13961.2
62.5°	15233.8	15286.9	15255.7	15268.2	15134.0	15240.1	15302.5	15310.3	15129.4	14962.5	15013.9
65°	16497.1	16570.4	16458.1	16383.2	16217.9	16216.4	16299.0	16313.1	16185.2	16066.7	16046.4
67.5°	18061.3	18094.1	17853.9	17602.8	17323.7	17262.8	17320.5	17353.3	17426.6	17423.5	17331.5
68°	18237.6	18231.3	17988.0	17688.6	17389.2	17319.0	17347.1	17389.2	17437.5	17446.9	17336.1
70°	17836.8	17760.3	17621.5	17244.1	16947.8	16763.8	16665.5	16743.5	16612.5	16614.1	16406.6
72.5°	15843.6	15834.3	15578.5	15391.4	15127.8	14822.1	14681.8	14680.2	14692.7	14602.2	14388.6
75°	12833.7	12846.1	12548.3	12418.8	12337.7	12280.0	12309.7	12401.7	12411.0	12409.5	12334.6
77.5°	8950.4	9001.8	8922.3	8711.7	8937.9	9131.3	9504.0	9694.3	9633.4	9815.9	9931.3
80°	4691.2	4794.1	4797.2	4945.4	5127.9	5304.1	5625.4	5913.9	5701.8	5608.2	5511.5
82.5°	1233.6	1271.0	1327.2	1241.4	1267.9	1294.4	1544.0	1520.6	1403.6	1466.0	1559.6
85°	352.5	363.4	347.8	315.0	288.5	265.1	271.4	229.3	199.6	198.1	191.8
87.5°	248.0	266.7	235.5	202.7	182.5	170.0	163.8	138.8	112.3	98.3	78.0
90°	115.4	113.8	98.3	76.4	67.1	63.9	63.9	49.9	28.1	17.2	15.6
92.5°	48.3	49.9	40.5	32.8	28.1	21.8	17.2	10.9	6.2	3.1	1.6
95°	17.2	18.7	15.6	12.5	10.9	9.4	7.8	6.2	3.1	1.6	1.6
97.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	3.1	3.1	1.6	1.6
100°	0.0	0.0	0.0	1.6	3.1	3.1	3.1	3.1	1.6	1.6	1.6
102.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
105°	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6



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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	1.6	1.6	1.6	1.6
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
145°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
150°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
160°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
165°	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6
167.5°	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6
170°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
172.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
175°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
177.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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: P522227

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5	3298.5
2.5°	3321.9	3314.1	3311.0	3272.0	3282.9	3259.5	3314.1	3298.5	3295.4	3317.2
5°	3329.7	3293.8	3315.6	3290.7	3296.9	3262.6	3306.3	3287.6	3289.1	3300.0
7.5°	3334.4	3314.1	3335.9	3292.2	3309.4	3296.9	3328.1	3309.4	3328.1	3337.5
10°	3381.1	3371.8	3356.2	3343.7	3356.2	3326.6	3365.5	3362.4	3373.3	3401.4
12.5°	3445.1	3434.2	3418.6	3396.7	3406.1	3395.2	3424.8	3427.9	3448.2	3462.2
15°	3540.2	3526.2	3518.4	3496.5	3499.7	3491.9	3509.0	3512.1	3552.7	3548.0
17.5°	3674.3	3658.7	3665.0	3644.7	3636.9	3618.2	3587.0	3576.1	3624.4	3638.5
20°	3820.9	3803.8	3811.6	3794.4	3649.4	3354.6	3552.7	3688.4	3585.4	3577.6
22.5°	3987.8	3969.1	3975.3	3948.8	3769.5	3217.4	2799.4	2765.1	3158.1	3317.2
25°	4171.8	4146.9	4143.8	4109.5	3519.9	2913.3	2866.5	2805.7	2518.7	2291.0
27.5°	4399.5	4362.1	4343.4	3825.6	3495.0	3027.1	2956.9	2740.2	2323.8	2337.8
30°	4645.9	4591.4	4240.5	3898.9	3677.5	3161.2	3067.7	2401.7	2404.9	2398.6
32.5°	4926.7	4805.0	4154.7	4123.5	3895.8	3304.7	2546.8	2518.7	2521.8	2531.2
35°	5294.7	4460.4	4443.2	4444.8	4162.5	3197.1	2698.1	2671.5	2674.7	2680.9
37.5°	5372.7	4808.1	4811.3	4775.4	4446.3	2921.1	2882.1	2880.5	2874.3	2868.0
40°	5435.1	5246.4	5201.2	5143.5	4121.9	3145.6	3133.2	3123.8	3128.5	3141.0
42.5°	5923.2	5781.3	5737.6	5669.0	4228.0	3485.6	3445.1	3434.2	3446.6	3440.4
45°	6572.0	6453.5	6367.7	5241.7	4670.9	3855.2	3822.5	3808.5	3813.1	3852.1
47.5°	7258.2	7188.0	6926.0	5662.8	5187.1	4291.9	4259.2	4237.3	4245.1	4235.8
50°	8005.3	7941.3	6411.4	6297.5	5757.9	4762.9	4714.6	4706.8	4709.9	4708.3
52.5°	8816.2	7479.7	7105.4	6986.9	6359.9	5255.7	5238.6	5196.5	5205.8	5196.5
55°	9767.6	7878.9	7869.6	7730.8	7036.8	5828.1	5807.8	5748.6	5375.8	5701.8
57.5°	10670.6	8641.6	8641.6	8507.4	7729.2	6397.3	6364.6	6320.9	3820.9	3081.7
60°	11659.3	9405.7	9383.9	9273.2	8396.7	6940.1	5641.0	5628.5	2308.2	2316.0
62.5°	12514.0	10087.3	10126.3	10023.3	9039.2	5196.5	2613.8	2560.8	227.7	350.9
65°	13471.5	10840.5	10887.3	10781.3	9734.8	5511.5	2836.9	2810.3	51.5	46.8
67.5°	14557.0	11592.3	11486.2	11369.2	10141.9	5675.3	2947.6	2924.2	14.0	9.4
68°	14566.4	11576.7	11439.4	11359.9	10102.9	5644.1	2938.2	2916.4	14.0	9.4
70°	13817.8	10993.4	10856.1	10876.4	9619.4	5397.7	2816.6	2776.0	14.0	9.4
72.5°	12122.5	9783.2	9628.8	9519.6	8530.8	4798.8	2524.9	2448.5	14.0	9.4
75°	10372.7	8290.7	8034.9	7794.7	6863.7	3927.0	2071.1	1985.3	14.0	9.4
77.5°	8175.2	6319.4	5956.0	5798.5	5157.5	2900.8	1539.3	1445.7	14.0	7.8
80°	4518.1	3626.0	3317.2	3220.5	2949.1	1704.6	882.7	826.6	12.5	7.8
82.5°	1168.1	876.5	764.2	737.7	692.4	403.9	215.2	204.3	10.9	6.2
85°	166.9	123.2	135.7	160.6	154.4	104.5	74.9	63.9	9.4	4.7
87.5°	87.3	73.3	85.8	96.7	98.3	60.8	31.2	17.2	4.7	0.0
90°	14.0	14.0	15.6	17.2	17.2	7.8	6.2	0.0	0.0	0.0
92.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.6	3.1	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P522227
 CATALOG NUMBER: CST-CA8-330-740-U-T5R-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.6	1.6	1.6	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)