

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: P522140

Luminaire Tested: **CST-CA10-310-750-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522140
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-CA10-310-750-U-T5R-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41779 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

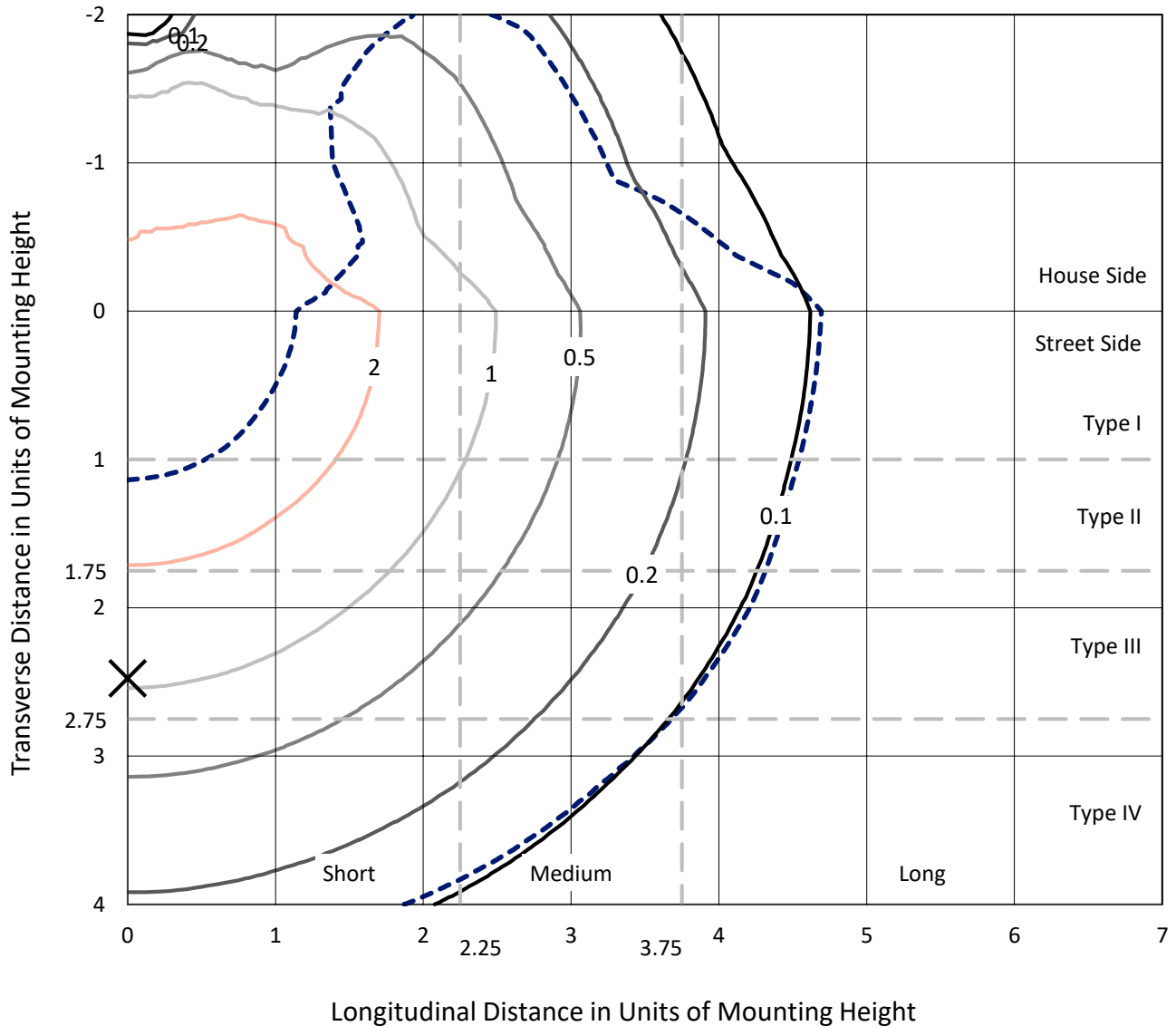
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

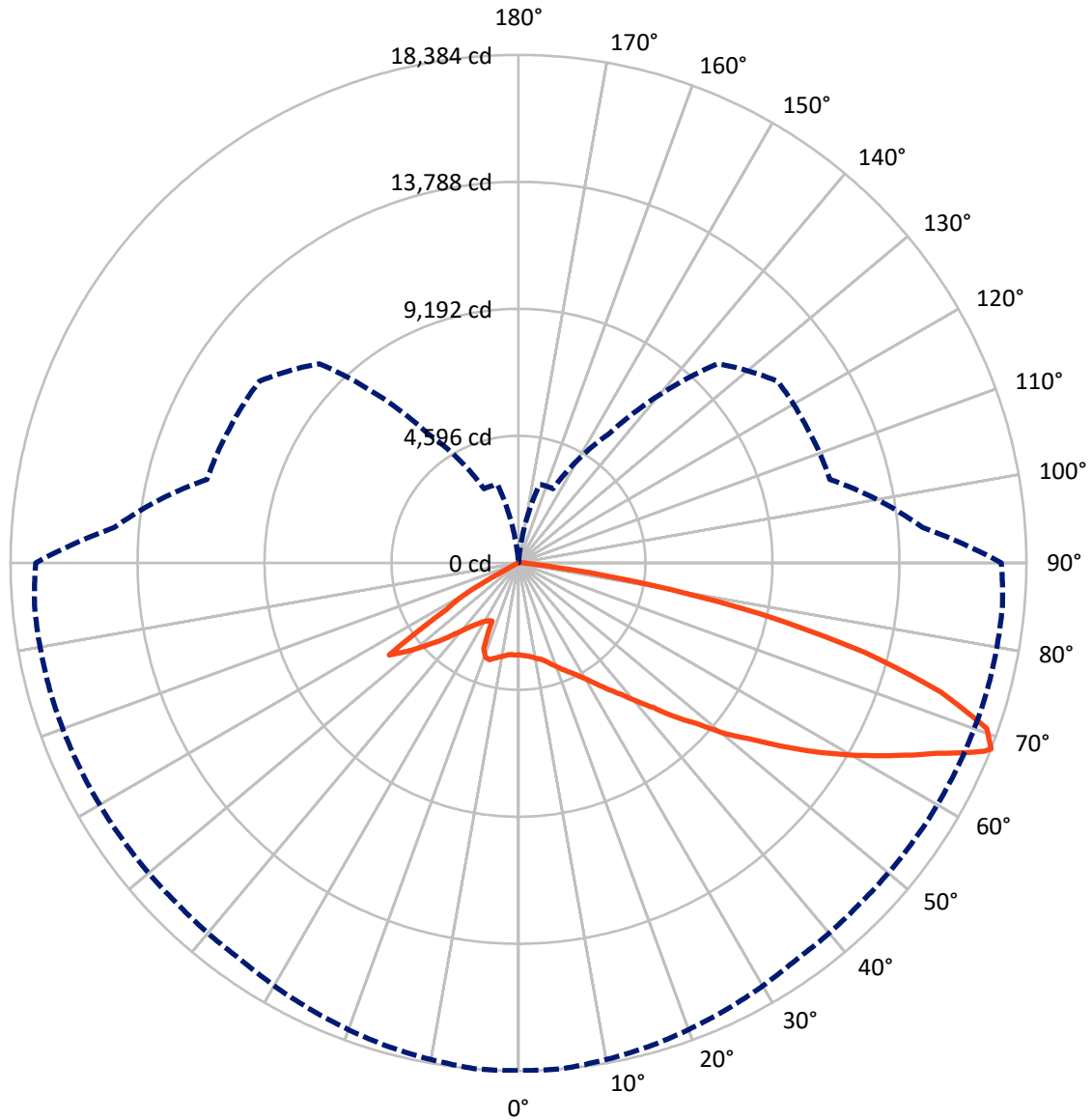
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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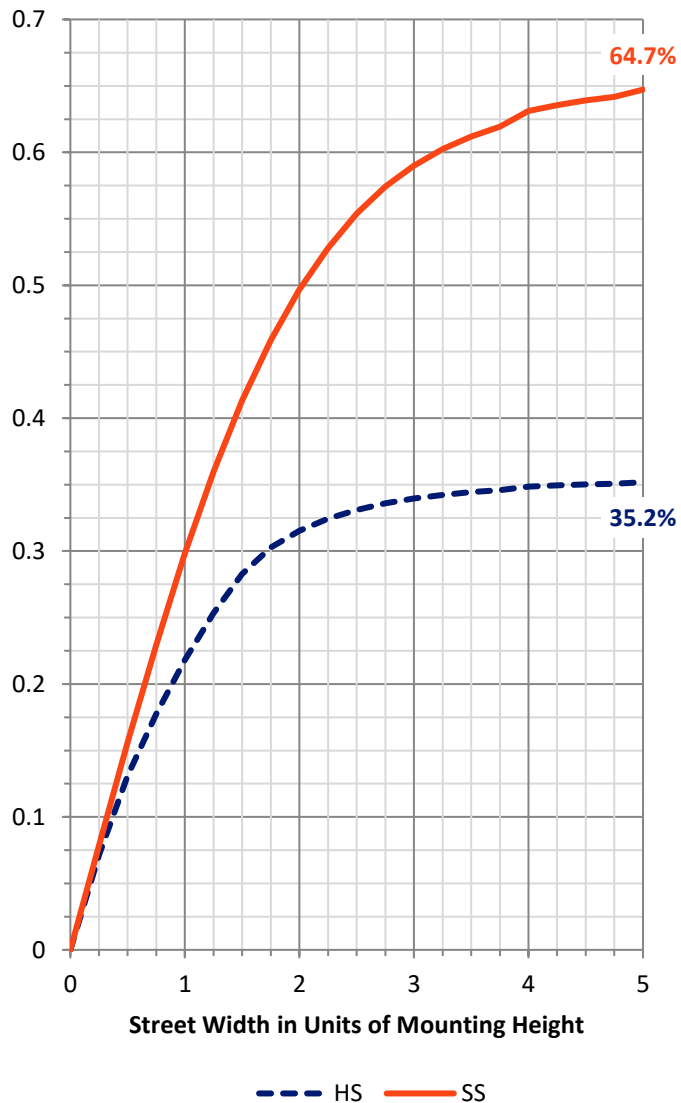
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14703.4	2.6	14705.9
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	27062.1	11.0	27073.1
	% Fixture	64.8	0.0	64.8
Total	Lumens	41765.5	13.6	41779.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.7	0.8
10°-20°	1030.6	2.5
20°-30°	1839.8	4.4
30°-40°	2992.9	7.2
40°-50°	5111.0	12.2
50°-60°	8527.9	20.4
60°-70°	11864.0	28.4
70°-80°	9196.5	22.0
80°-90°	881.3	2.1
90°-100°	10.7	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°	41765.5	100.0
0°-180°	41779.0	100.0

Coefficient of Utilization

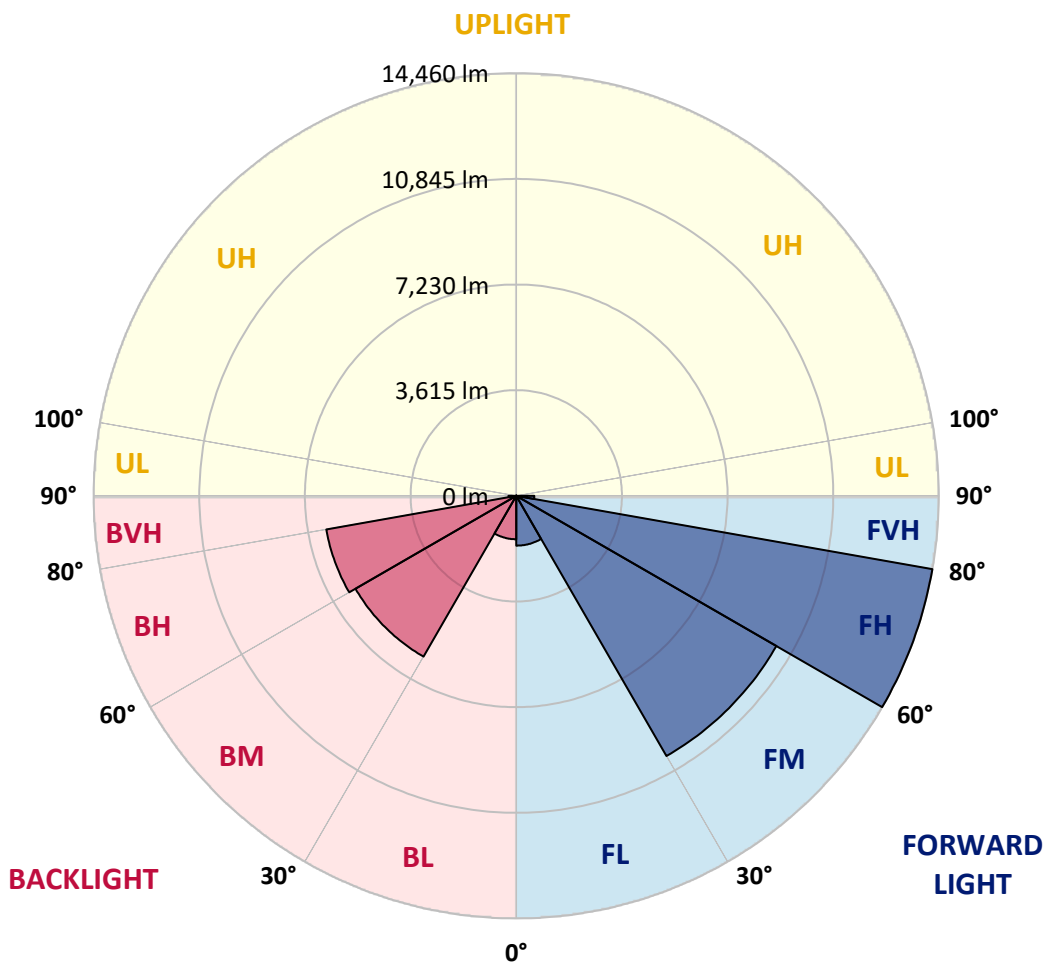


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1705.2	4.1			
FM (30°-60°)	10280.6	24.6			
FH (60°-80°)	14459.9	34.6			G5
FVH (80°-90°)	616.5	1.5			G4/750
BL (0°-30°)	1486.8	3.6	B3/2500		
BM (30°-60°)	6351.2	15.2	B4/8500		
BH (60°-80°)	6600.6	15.8	B5		G5
BVH (80°-90°)	264.7	0.6			G3/500
UL (90°-100°)	10.7	0.0		U2/50	
UH (100°-180°)	2.9	0.0		U1/10	

BUG Rating: B5-U2-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9
2.5°	3362.6	3357.9	3354.8	3375.2	3317.0	3340.6	3324.9	3345.3	3340.6	3350.1	3351.6
5°	3386.2	3378.4	3367.4	3389.4	3354.8	3370.5	3353.2	3362.6	3332.8	3357.9	3361.1
7.5°	3439.7	3417.7	3416.1	3422.4	3398.8	3409.8	3379.9	3390.9	3375.2	3365.8	3375.2
10°	3519.8	3501.0	3480.5	3493.1	3453.8	3468.0	3436.5	3446.0	3438.1	3417.7	3436.5
12.5°	3574.9	3581.2	3567.0	3576.4	3541.8	3529.3	3518.3	3516.7	3512.0	3482.1	3477.4
15°	3697.5	3700.6	3675.5	3681.8	3673.9	3667.6	3651.9	3639.3	3614.2	3595.3	3582.7
17.5°	3857.8	3840.5	3817.0	3823.2	3845.3	3817.0	3807.5	3783.9	3747.8	3716.3	3710.1
20°	4026.0	4015.0	3993.0	4005.6	4004.0	3985.2	3989.9	3950.6	3898.7	3872.0	3851.5
22.5°	4213.1	4197.4	4181.7	4205.3	4186.4	4173.8	4169.1	4142.4	4077.9	4048.1	4043.3
25°	4400.2	4392.3	4403.3	4395.5	4368.8	4359.3	4365.6	4356.2	4280.7	4244.6	4222.6
27.5°	4634.4	4615.6	4632.9	4623.4	4595.1	4596.7	4598.3	4599.8	4515.0	4467.8	4436.4
30°	4901.7	4895.4	4917.4	4887.5	4860.8	4878.1	4892.2	4860.8	4786.9	4717.7	4706.7
32.5°	5249.1	5209.8	5235.0	5197.2	5156.4	5197.2	5222.4	5159.5	5099.8	5011.7	5027.4
35°	5634.3	5621.7	5621.7	5572.9	5550.9	5615.4	5640.5	5579.2	5486.5	5409.5	5390.6
37.5°	6043.0	6055.6	6094.9	6074.4	6054.0	6093.3	6149.9	6068.1	5948.7	5866.9	5844.9
40°	6585.4	6616.8	6643.5	6616.8	6593.2	6618.4	6682.8	6575.9	6492.6	6448.6	6401.4
42.5°	7168.6	7222.0	7204.7	7207.9	7228.3	7264.5	7328.9	7231.5	7135.6	7134.0	7064.8
45°	7957.8	7957.8	7921.6	7956.2	7953.0	8042.7	8071.0	8017.5	7937.3	7913.7	7854.0
47.5°	8695.1	8772.1	8757.9	8808.2	8768.9	8844.4	8940.3	8894.7	8802.0	8718.6	8706.1
50°	9723.2	9704.3	9685.5	9760.9	9754.6	9806.5	9894.5	9866.2	9737.3	9643.0	9625.7
52.5°	10627.1	10726.2	10702.6	10815.8	10752.9	10826.8	10932.1	10927.4	10770.2	10677.4	10650.7
55°	11768.4	11834.5	11829.7	11946.1	11859.6	11957.1	12045.1	12054.5	11883.2	11751.1	11792.0
57.5°	12956.9	13011.9	12980.5	13076.4	12991.5	13125.1	13178.6	13144.0	13043.4	12876.7	12938.0
60°	14147.0	14194.1	14230.3	14238.1	14189.4	14268.0	14318.3	14348.2	14189.4	13999.2	14073.1
62.5°	15355.9	15409.3	15377.9	15390.5	15255.3	15362.2	15425.0	15432.9	15250.5	15082.3	15134.2
65°	16629.2	16703.1	16589.9	16514.5	16347.8	16346.3	16429.6	16443.7	16314.8	16195.4	16174.9
67.5°	18206.0	18239.0	17996.9	17743.8	17462.4	17401.1	17459.3	17492.3	17566.2	17563.0	17470.3
68°	18383.7	18377.4	18132.1	17830.3	17528.5	17457.7	17486.0	17528.5	17577.2	17586.6	17475.0
70°	17979.6	17902.6	17762.7	17382.3	17083.6	16898.1	16799.0	16877.6	16745.6	16747.1	16538.1
72.5°	15970.5	15961.1	15703.3	15514.7	15249.0	14940.8	14799.4	14797.8	14810.4	14719.2	14503.8
75°	12936.5	12949.1	12648.8	12518.3	12436.6	12378.4	12408.3	12501.0	12510.4	12508.9	12433.4
77.5°	9022.0	9073.9	8993.7	8781.5	9009.5	9204.4	9580.1	9771.9	9710.6	9894.5	10010.9
80°	4728.8	4832.5	4835.7	4985.0	5168.9	5346.6	5670.4	5961.2	5747.4	5653.1	5555.7
82.5°	1243.5	1281.2	1337.8	1251.4	1278.1	1304.8	1556.3	1532.8	1414.9	1477.7	1572.1
85°	355.3	366.3	350.6	317.6	290.8	267.3	273.5	231.1	201.2	199.7	193.4
87.5°	250.0	268.8	237.4	204.4	183.9	171.4	165.1	139.9	113.2	99.0	78.6
90°	116.3	114.8	99.0	77.0	67.6	64.5	64.5	50.3	28.3	17.3	15.7
92.5°	48.7	50.3	40.9	33.0	28.3	22.0	17.3	11.0	6.3	3.1	1.6
95°	17.3	18.9	15.7	12.6	11.0	9.4	7.9	6.3	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9	3324.9
2.5°	3348.5	3340.6	3337.5	3298.2	3309.2	3285.6	3340.6	3324.9	3321.8	3343.8
5°	3356.3	3320.2	3342.2	3317.0	3323.3	3288.7	3332.8	3313.9	3315.5	3326.5
7.5°	3361.1	3340.6	3362.6	3318.6	3335.9	3323.3	3354.8	3335.9	3354.8	3364.2
10°	3408.2	3398.8	3383.1	3370.5	3383.1	3353.2	3392.5	3389.4	3400.4	3428.7
12.5°	3472.7	3461.7	3446.0	3423.9	3433.4	3422.4	3452.2	3455.4	3475.8	3490.0
15°	3568.6	3554.4	3546.6	3524.6	3527.7	3519.8	3537.1	3540.3	3581.2	3576.4
17.5°	3703.8	3688.1	3694.3	3673.9	3666.0	3647.2	3615.7	3604.7	3653.5	3667.6
20°	3851.5	3834.3	3842.1	3824.8	3678.6	3381.5	3581.2	3717.9	3614.2	3606.3
22.5°	4019.8	4000.9	4007.2	3980.5	3799.7	3243.2	2821.8	2787.3	3183.4	3343.8
25°	4205.3	4180.1	4177.0	4142.4	3548.1	2936.6	2889.4	2828.1	2538.9	2309.4
27.5°	4434.8	4397.0	4378.2	3856.3	3523.0	3051.4	2980.6	2762.1	2342.4	2356.5
30°	4683.2	4628.1	4274.4	3930.1	3706.9	3186.6	3092.2	2421.0	2424.1	2417.8
32.5°	4966.1	4843.5	4188.0	4156.5	3927.0	3331.2	2567.2	2538.9	2542.0	2551.5
35°	5337.1	4496.1	4478.8	4480.4	4195.8	3222.7	2719.7	2692.9	2696.1	2702.4
37.5°	5415.7	4846.7	4849.8	4813.6	4481.9	2944.5	2905.2	2903.6	2897.3	2891.0
40°	5478.6	5288.4	5242.8	5184.7	4155.0	3170.8	3158.3	3148.8	3153.6	3166.1
42.5°	5970.7	5827.6	5783.6	5714.4	4261.9	3513.6	3472.7	3461.7	3474.3	3468.0
45°	6624.7	6505.2	6418.7	5283.7	4708.3	3886.1	3853.1	3839.0	3843.7	3883.0
47.5°	7316.4	7245.6	6981.5	5708.1	5228.7	4326.3	4293.3	4271.3	4279.1	4269.7
50°	8069.4	8004.9	6462.7	6348.0	5804.0	4801.1	4752.3	4744.5	4747.6	4746.0
52.5°	8886.8	7539.6	7162.3	7042.8	6410.9	5297.8	5280.5	5238.1	5247.5	5238.1
55°	9845.8	7942.0	7932.6	7792.7	7093.1	5874.8	5854.3	5794.6	5418.9	5747.4
57.5°	10756.0	8710.8	8710.8	8575.6	7791.1	6448.6	6415.6	6371.6	3851.5	3106.4
60°	11752.7	9481.1	9459.1	9347.5	8464.0	6995.7	5686.1	5673.6	2326.6	2334.5
62.5°	12614.2	10168.1	10207.4	10103.6	9111.7	5238.1	2634.8	2581.3	229.5	353.7
65°	13579.4	10927.4	10974.5	10867.6	9812.8	5555.7	2859.6	2832.9	51.9	47.2
67.5°	14673.6	11685.1	11578.2	11460.3	10223.1	5720.7	2971.2	2947.6	14.1	9.4
68°	14683.0	11669.4	11531.1	11450.9	10183.8	5689.3	2961.8	2939.8	14.1	9.4
70°	13928.4	11081.4	10943.1	10963.5	9696.5	5440.9	2839.1	2798.3	14.1	9.4
72.5°	12219.6	9861.5	9705.9	9595.8	8599.2	4837.2	2545.2	2468.1	14.1	9.4
75°	10455.8	8357.1	8099.2	7857.2	6918.6	3958.4	2087.7	2001.2	14.1	9.4
77.5°	8240.7	6370.0	6003.7	5844.9	5198.8	2924.0	1551.6	1457.3	14.1	7.9
80°	4554.3	3655.0	3343.8	3246.3	2972.8	1718.3	889.8	833.2	12.6	7.9
82.5°	1177.5	883.5	770.3	743.6	698.0	407.2	216.9	205.9	11.0	6.3
85°	168.2	124.2	136.8	161.9	155.6	105.3	75.5	64.5	9.4	4.7
87.5°	88.0	73.9	86.5	97.5	99.0	61.3	31.4	17.3	4.7	0.0
90°	14.1	14.1	15.7	17.3	17.3	7.9	6.3	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



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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)