

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: P579579

Luminaire Tested: **CST-CA10-310-760-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579579
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-310-760-U-T5N-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39819 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G4

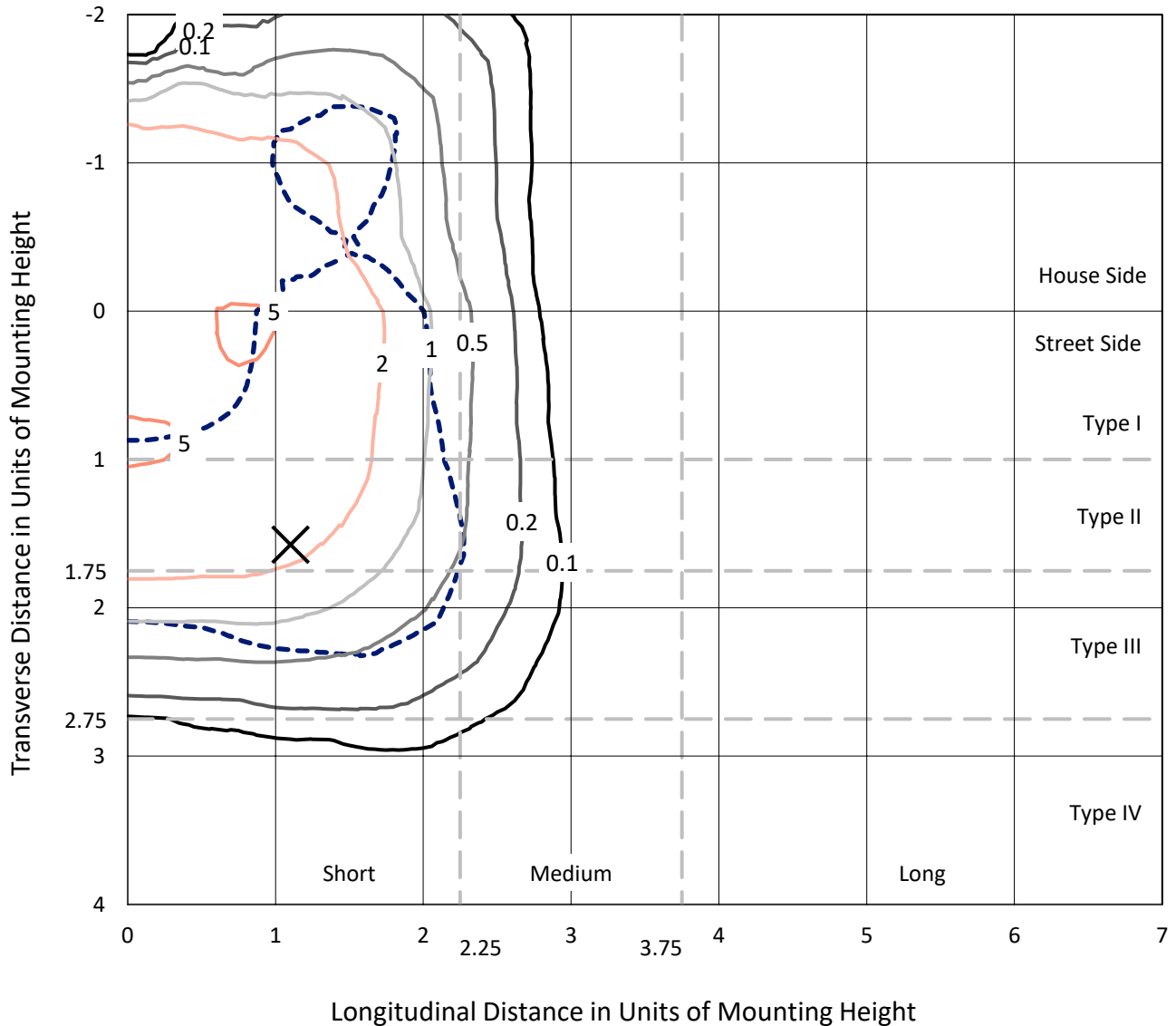
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

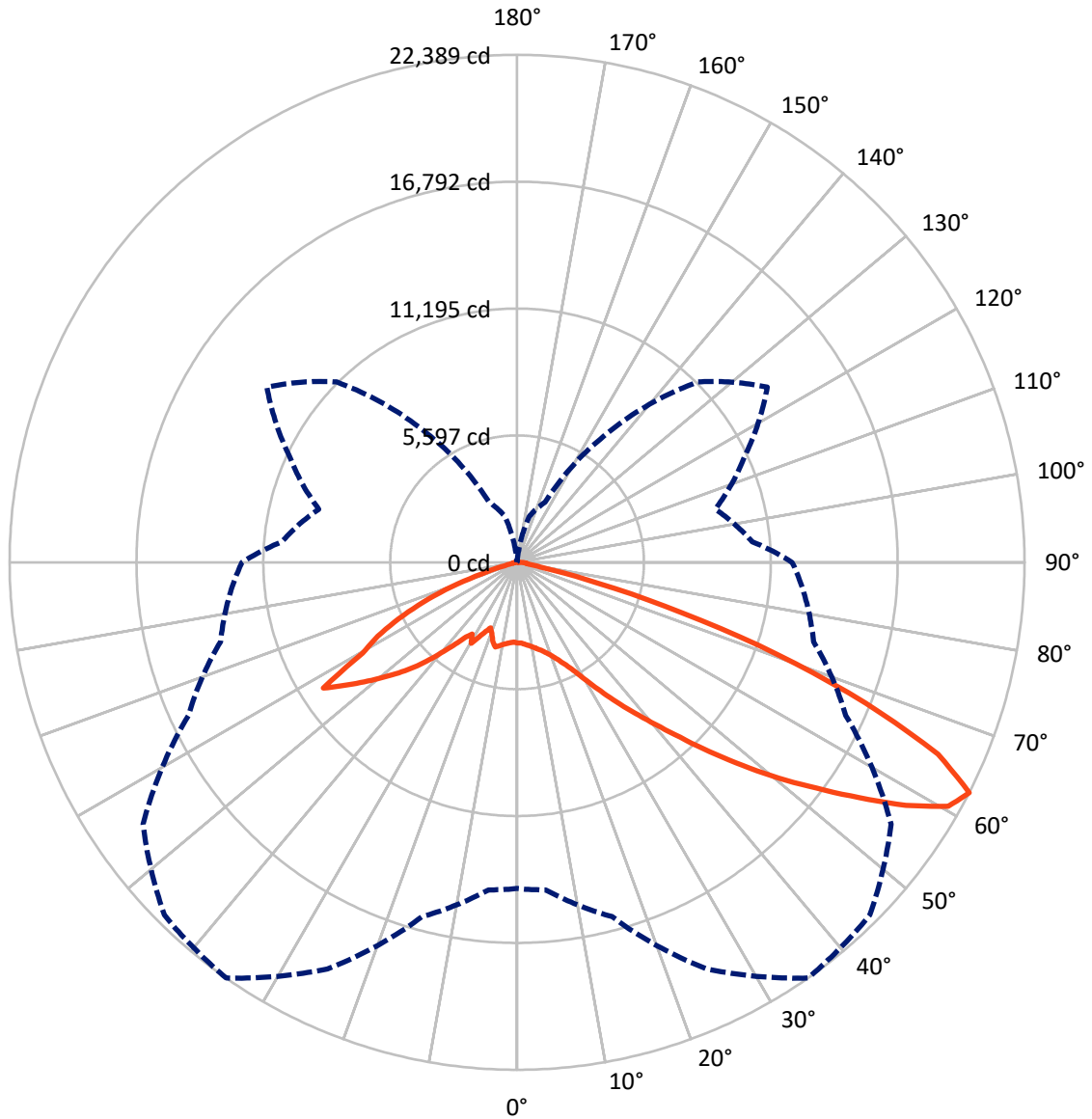
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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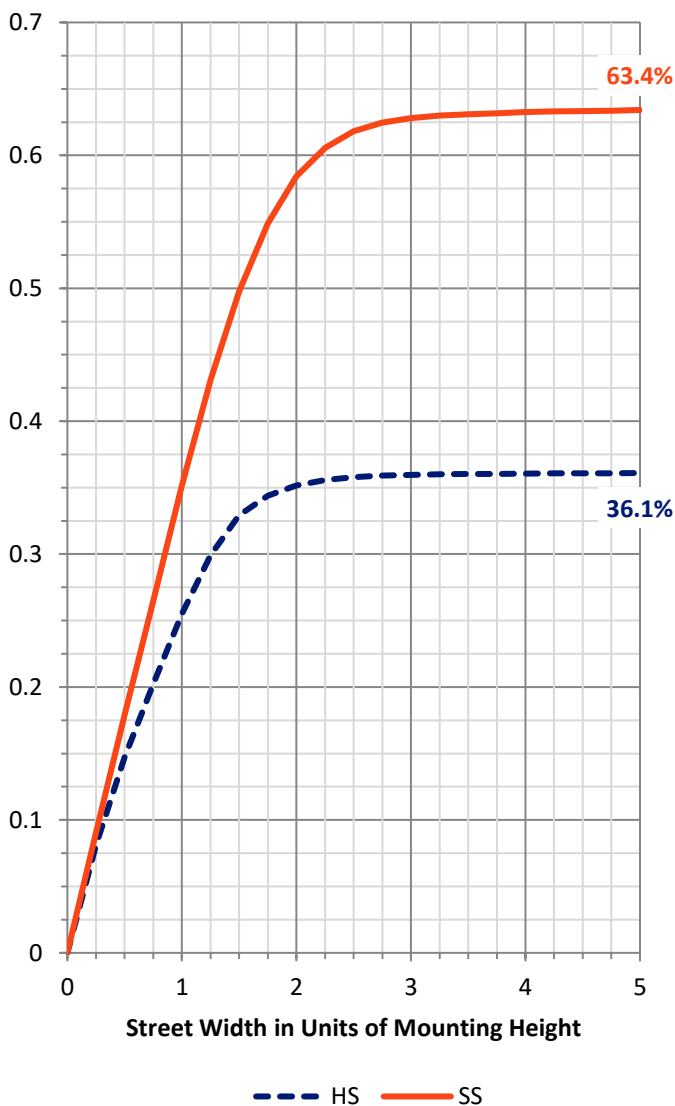
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14453.3	0.0	14453.4
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	25346.8	18.9	25365.6
	% Fixture	63.7	0.0	63.7
Total	Lumens	39800.1	18.9	39819.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.3	0.9
10°-20°	1132.1	2.8
20°-30°	2178.0	5.5
30°-40°	4344.8	10.9
40°-50°	7933.3	19.9
50°-60°	11855.2	29.8
60°-70°	9933.5	24.9
70°-80°	1859.0	4.7
80°-90°	214.0	0.5
90°-100°	17.0	0.0
100°-110°	1.8	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°	39800.1	100.0
0°-180°	39819.0	100.0

Coefficient of Utilization

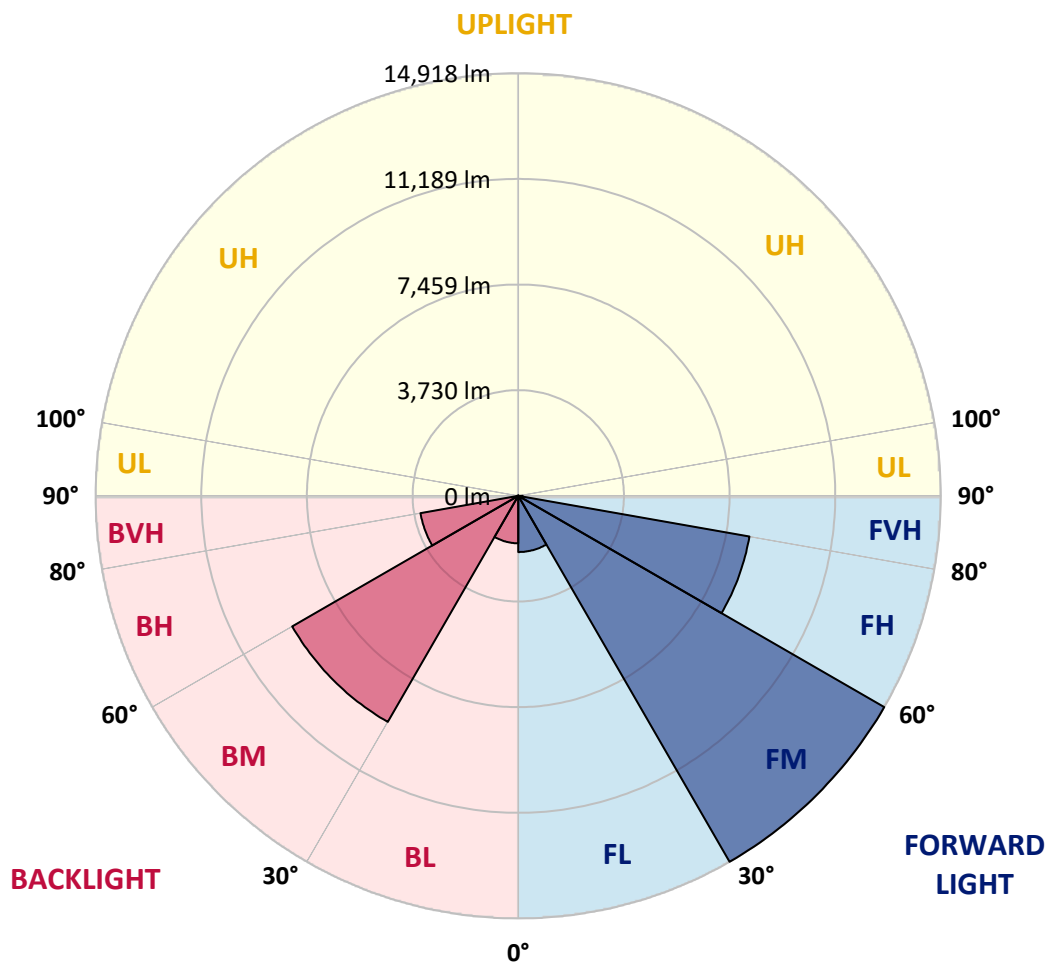


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1985.5	5.0			
FM	(30°-60°)	14918.0	37.5			
FH	(60°-80°)	8287.5	20.8			G4/12000
FVH	(80°-90°)	155.8	0.4			G2/225
BL	(0°-30°)	1674.9	4.2	B3/2500		
BM	(30°-60°)	9215.3	23.1	B5		
BH	(60°-80°)	3505.0	8.8	B4/5000		G4/5000
BVH	(80°-90°)	58.2	0.1			G1/100
UL	(90°-100°)	17.0	0.0		U2/50	
UH	(100°-180°)	1.9	0.0		U1/10	

BUG Rating: B5-U2-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9
2.5°	3639.0	3609.1	3613.6	3634.5	3568.8	3595.7	3567.3	3594.2	3585.3	3597.2	3606.2
5°	3691.2	3653.9	3656.9	3680.8	3630.0	3652.4	3624.1	3642.0	3627.0	3643.5	3645.0
7.5°	3762.9	3731.5	3727.1	3750.9	3707.6	3727.1	3698.7	3707.6	3692.7	3712.1	3706.2
10°	3858.4	3830.0	3822.6	3839.0	3804.7	3815.1	3785.3	3797.2	3774.8	3797.2	3786.8
12.5°	3964.4	3927.1	3928.6	3946.5	3912.1	3919.6	3895.7	3909.2	3882.3	3906.2	3898.7
15°	4089.8	4036.0	4046.5	4065.9	4033.0	4055.4	4027.1	4046.5	4021.1	4046.5	4037.5
17.5°	4252.5	4191.3	4198.7	4230.1	4203.2	4239.0	4206.2	4230.1	4218.1	4234.5	4231.6
20°	4458.4	4418.1	4410.7	4449.5	4410.7	4455.4	4437.5	4479.3	4482.3	4498.7	4506.2
22.5°	4733.1	4706.2	4688.3	4715.2	4680.8	4712.2	4737.6	4809.2	4836.1	4879.3	4882.3
25°	5098.8	5097.3	5057.0	5058.5	5015.2	5057.0	5128.6	5240.6	5312.2	5367.4	5346.5
27.5°	5592.8	5601.8	5540.6	5516.7	5465.9	5528.6	5676.4	5815.2	5945.1	6022.7	6022.7
30°	6237.6	6246.6	6157.0	6109.3	6063.0	6172.0	6348.1	6528.7	6713.8	6825.7	6800.3
32.5°	7091.4	7063.0	6934.7	6848.1	6769.0	6894.4	7097.4	7301.9	7554.1	7715.3	7695.9
35°	8127.3	8024.3	7895.9	7734.7	7564.6	7663.1	7854.1	8110.9	8461.6	8703.4	8642.2
37.5°	9330.3	9228.8	9009.4	8731.8	8434.8	8446.7	8597.4	9042.2	9481.1	9678.1	9636.3
40°	10579.6	10500.5	10299.0	9942.3	9404.9	9281.1	9528.8	10064.7	10484.1	10731.9	10661.7
42.5°	11852.8	11772.2	11620.0	11261.8	10549.8	10251.3	10509.5	11093.1	11540.9	11784.2	11703.6
45°	13123.0	13030.5	12909.6	12593.2	11914.0	11476.7	11621.5	12157.3	12566.3	12842.4	12676.8
47.5°	14239.5	14178.3	14096.2	13967.9	13373.8	12890.2	12879.8	13233.5	13515.6	13697.7	13494.7
50°	15211.2	15167.9	15214.2	15187.3	14970.9	14530.6	14260.4	14236.5	14327.6	14460.4	14170.9
52.5°	16082.9	16006.8	16178.4	16391.9	16551.6	16462.0	15587.3	15096.3	14996.3	15041.1	14712.7
55°	16796.4	16760.5	17048.6	17584.5	18323.3	18520.3	16950.1	15932.1	15563.5	15539.6	15166.4
57.5°	17232.2	17283.0	17859.1	18880.1	20235.3	20298.0	18623.3	16826.2	16115.7	15859.0	15429.1
60°	16538.1	16733.7	17717.3	19823.4	21857.8	21896.6	19851.7	16990.4	15426.1	14851.5	14318.6
62.5°	14391.8	14508.2	16181.4	19792.0	22389.2	22010.1	20144.3	15999.3	13544.0	12627.5	12134.9
65°	10137.8	10355.7	12148.4	17806.9	20402.5	20450.3	18480.0	13833.5	10815.5	9802.0	9484.1
67.5°	6122.7	6331.7	8240.7	12854.4	16585.9	17121.8	15415.7	10473.7	7755.6	6475.0	6154.0
70°	1988.2	2215.0	3755.4	7576.5	12200.6	13485.8	11600.6	6816.8	4061.4	2844.9	2500.1
72.5°	755.3	823.9	1222.4	3309.1	7598.9	9003.4	7175.0	3419.6	1258.3	749.3	658.2
75°	491.1	501.5	571.7	1159.8	3664.4	4957.0	3458.4	1001.5	504.5	447.8	414.9
77.5°	422.4	429.9	459.7	577.6	1167.2	1895.6	992.6	512.0	420.9	373.2	350.8
80°	398.5	401.5	420.9	489.6	546.3	632.9	477.6	428.4	367.2	350.8	334.3
82.5°	377.6	388.1	398.5	444.8	443.3	455.2	383.6	335.8	312.0	328.4	322.4
85°	352.3	358.2	365.7	397.0	361.2	306.0	295.5	231.4	225.4	240.3	225.4
87.5°	247.8	262.7	253.7	267.2	250.8	195.5	165.7	131.3	104.5	86.6	83.6
90°	101.5	103.0	97.0	89.6	79.1	65.7	52.2	32.8	14.9	7.5	3.0
92.5°	79.1	79.1	76.1	68.7	59.7	49.3	37.3	20.9	10.4	4.5	1.5
95°	49.3	50.7	47.8	43.3	37.3	29.9	22.4	11.9	7.5	3.0	1.5
97.5°	31.3	31.3	28.4	25.4	20.9	14.9	10.4	9.0	6.0	3.0	0.0
100°	17.9	17.9	16.4	13.4	10.4	7.5	7.5	6.0	4.5	1.5	0.0
102.5°	10.4	10.4	7.5	6.0	4.5	4.5	4.5	4.5	3.0	1.5	0.0
105°	4.5	4.5	3.0	3.0	1.5	1.5	3.0	3.0	3.0	1.5	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.0	3.0	1.5	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.0	1.5	1.5



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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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9	3562.9
2.5°	3600.2	3573.3	3577.8	3552.4	3547.9	3522.6	3573.3	3579.3	3564.4	3577.8
5°	3642.0	3609.1	3619.6	3591.2	3586.7	3552.4	3597.2	3594.2	3582.3	3595.7
7.5°	3704.7	3670.3	3676.3	3645.0	3639.0	3601.7	3643.5	3630.0	3618.1	3634.5
10°	3792.7	3753.9	3756.9	3716.6	3721.1	3671.8	3722.6	3698.7	3683.8	3706.2
12.5°	3898.7	3855.4	3856.9	3815.1	3813.6	3765.9	3810.6	3797.2	3774.8	3809.1
15°	4036.0	3986.8	3982.3	3927.1	3912.1	3858.4	3900.2	3874.8	3859.9	3909.2
17.5°	4228.6	4173.3	4156.9	4089.8	3810.6	3649.4	3873.3	3949.5	3856.9	3842.0
20°	4485.3	4439.0	4401.7	4300.2	3831.5	3328.5	2956.9	2959.9	3350.9	3531.5
22.5°	4833.1	4777.9	4707.7	4562.9	3515.1	3118.1	3119.6	3115.1	2673.3	2486.7
25°	5309.2	5242.1	5098.8	4280.8	3731.5	3364.3	3355.4	2918.1	2674.8	2688.2
27.5°	5952.5	5815.2	4976.4	4637.5	4116.6	3683.8	3468.8	2937.5	2967.3	2988.2
30°	6770.5	6218.2	5377.9	5176.4	4579.3	4107.7	3207.6	3280.8	3340.5	3353.9
32.5°	7609.3	6236.1	6019.7	5806.3	5149.5	3737.5	3615.1	3753.9	3816.6	3824.1
35°	7601.9	7000.4	6721.2	6480.9	5677.9	3998.7	4076.3	4289.8	4449.5	4442.0
37.5°	8045.2	7843.7	7510.8	7206.3	5110.7	4504.7	4643.5	4885.3	5079.4	5073.4
40°	8972.1	8739.2	8387.0	7748.2	5658.5	5083.8	5277.9	5537.6	5674.9	5682.4
42.5°	9848.3	9655.7	9296.0	7239.2	6343.6	5780.9	5957.0	6131.7	6216.7	6243.6
45°	10719.9	10582.6	9385.5	8000.4	7172.0	6482.4	6598.8	6631.7	6721.2	6710.8
47.5°	11427.4	11275.2	9024.3	8955.7	8176.5	7148.1	7139.2	7095.9	7128.7	7136.2
50°	12073.7	10239.3	9749.7	9978.1	9230.3	7827.3	7657.1	7569.0	7524.3	7504.9
52.5°	12584.2	10242.3	10427.4	11034.9	10419.9	8564.6	8198.9	7951.1	6961.5	7736.2
55°	13018.6	10664.7	11069.2	12164.8	11445.4	9336.3	8688.5	8246.7	4646.5	3725.6
57.5°	13267.8	10985.6	11705.1	13223.1	12340.9	10194.5	7998.9	6916.8	2627.0	2624.0
60°	12305.1	10409.5	11687.2	13778.3	12082.7	7907.9	3256.9	2725.5	497.0	510.5
62.5°	10416.9	9055.7	11084.1	13473.8	11252.8	6957.1	2921.0	2098.6	16.4	13.4
65°	8070.6	7224.2	9333.3	11851.3	10237.8	5804.8	2177.7	1512.0	4.5	0.0
67.5°	5279.4	5091.3	6886.9	9827.4	8349.7	4497.2	1461.3	723.9	3.0	0.0
70°	2250.9	2607.6	4362.9	7125.7	6391.4	3094.2	704.5	261.2	1.5	0.0
72.5°	629.9	834.4	1941.9	4174.8	4019.6	1626.9	274.6	110.5	1.5	0.0
75°	373.2	320.9	556.7	1665.8	1956.8	571.7	126.9	85.1	1.5	0.0
77.5°	310.5	250.8	319.4	425.4	592.6	206.0	107.5	76.1	0.0	0.0
80°	291.1	222.4	276.1	297.0	292.6	171.7	106.0	76.1	0.0	0.0
82.5°	276.1	194.0	228.4	228.4	244.8	158.2	100.0	74.6	0.0	0.0
85°	207.5	135.8	152.2	197.0	176.1	111.9	73.1	59.7	0.0	0.0
87.5°	79.1	49.3	59.7	62.7	50.7	25.4	6.0	6.0	0.0	0.0
90°	1.5	0.0	0.0	0.0	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
110°	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°
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)