

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: P579531

Luminaire Tested: **CST-CA10-310-750-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579531
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-CA10-310-750-U-T5N-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40681 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G4

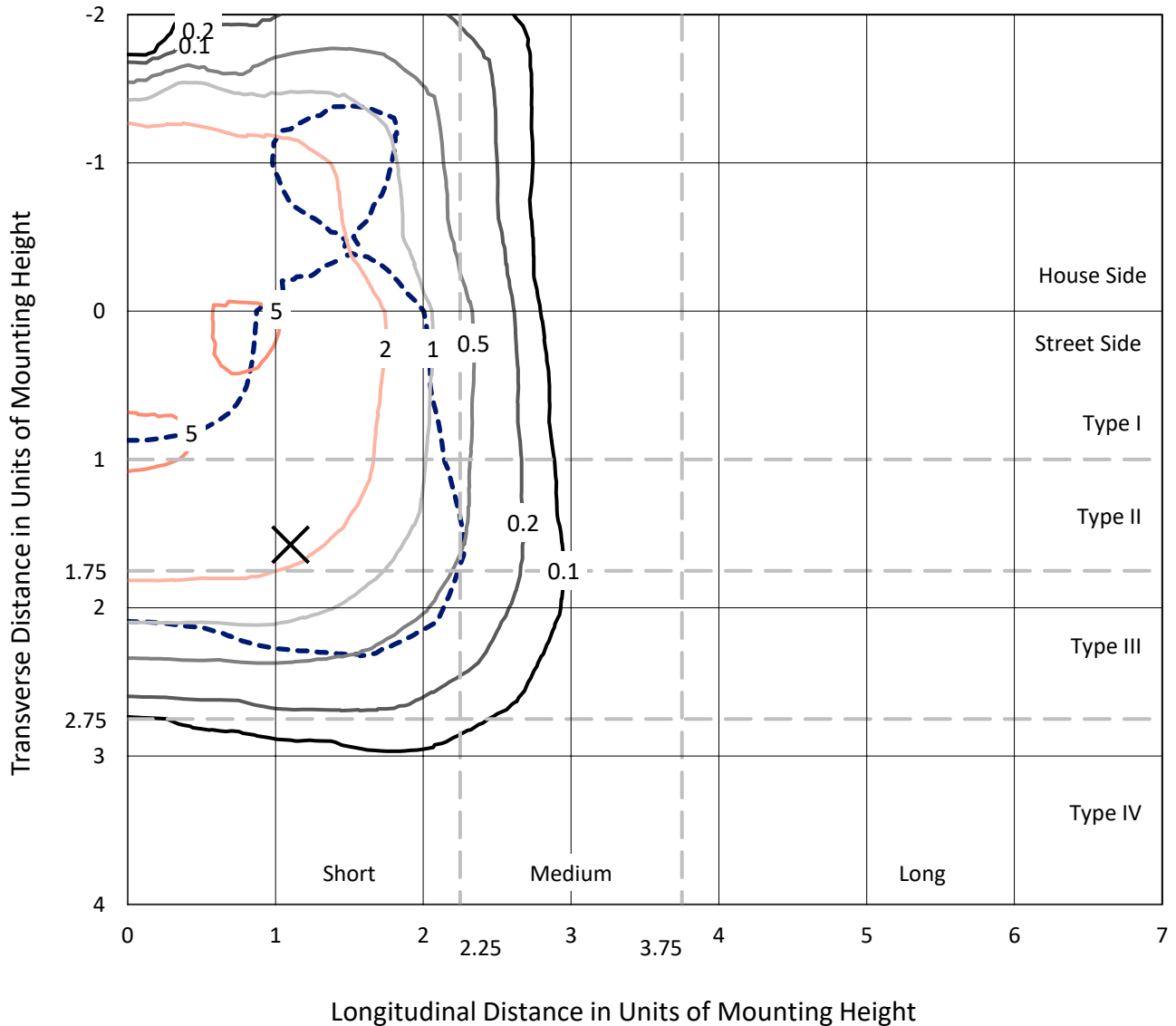
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

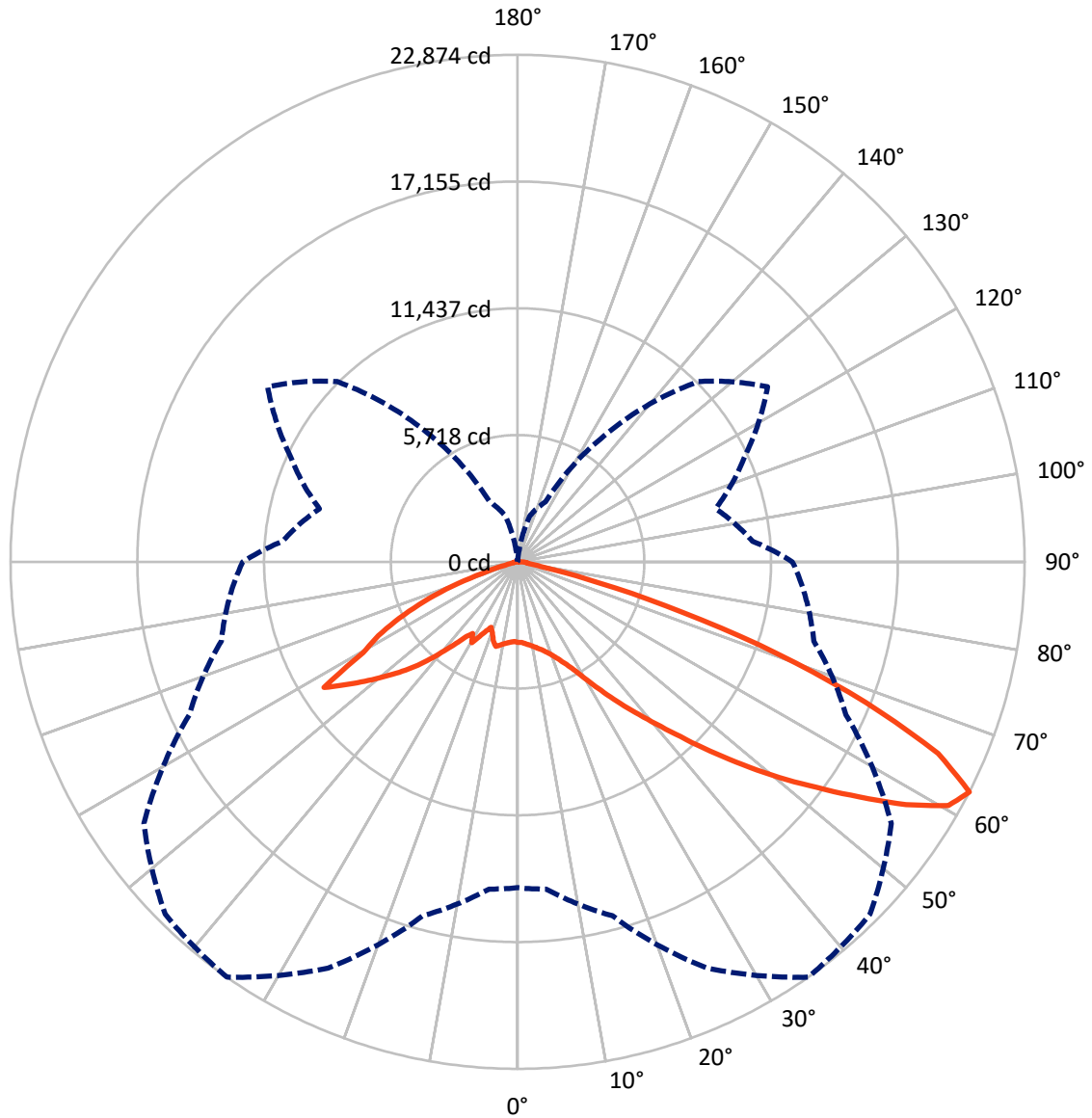
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.5 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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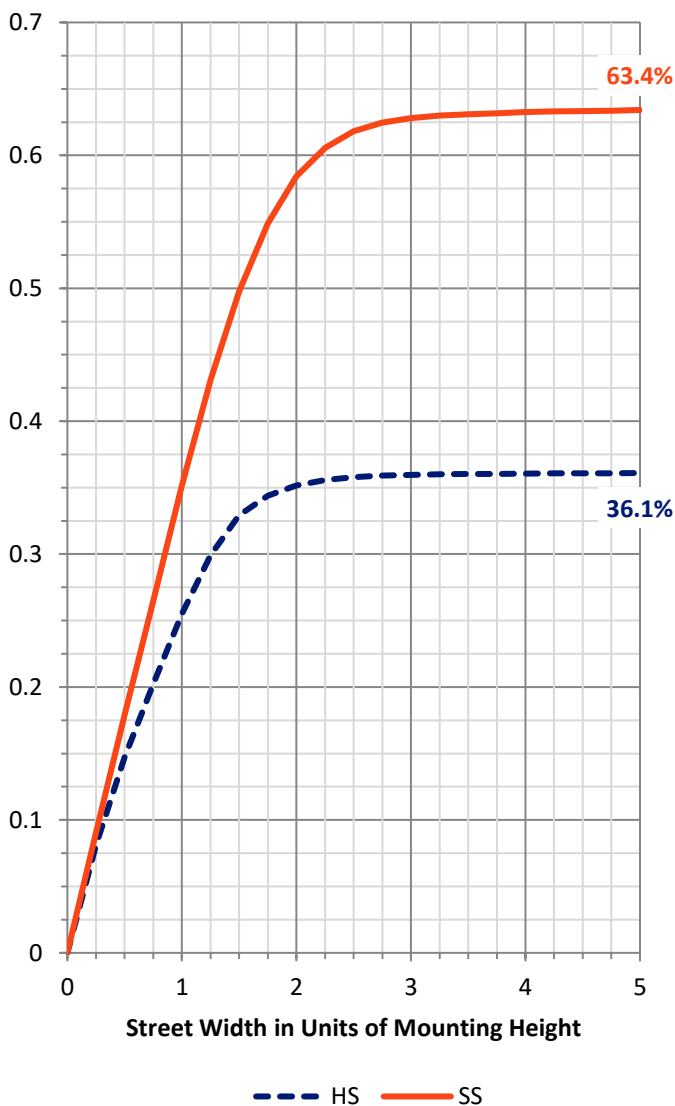
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14766.2	0.0	14766.3
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	25895.5	19.3	25914.7
	% Fixture	63.7	0.0	63.7
Total	Lumens	40661.7	19.3	40681.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.9	0.9
10°-20°	1156.6	2.8
20°-30°	2225.1	5.5
30°-40°	4438.8	10.9
40°-50°	8105.1	19.9
50°-60°	12111.8	29.8
60°-70°	10148.6	24.9
70°-80°	1899.2	4.7
80°-90°	218.6	0.5
90°-100°	17.4	0.0
100°-110°	1.9	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°	40661.7	100.0
0°-180°	40681.0	100.0

Coefficient of Utilization

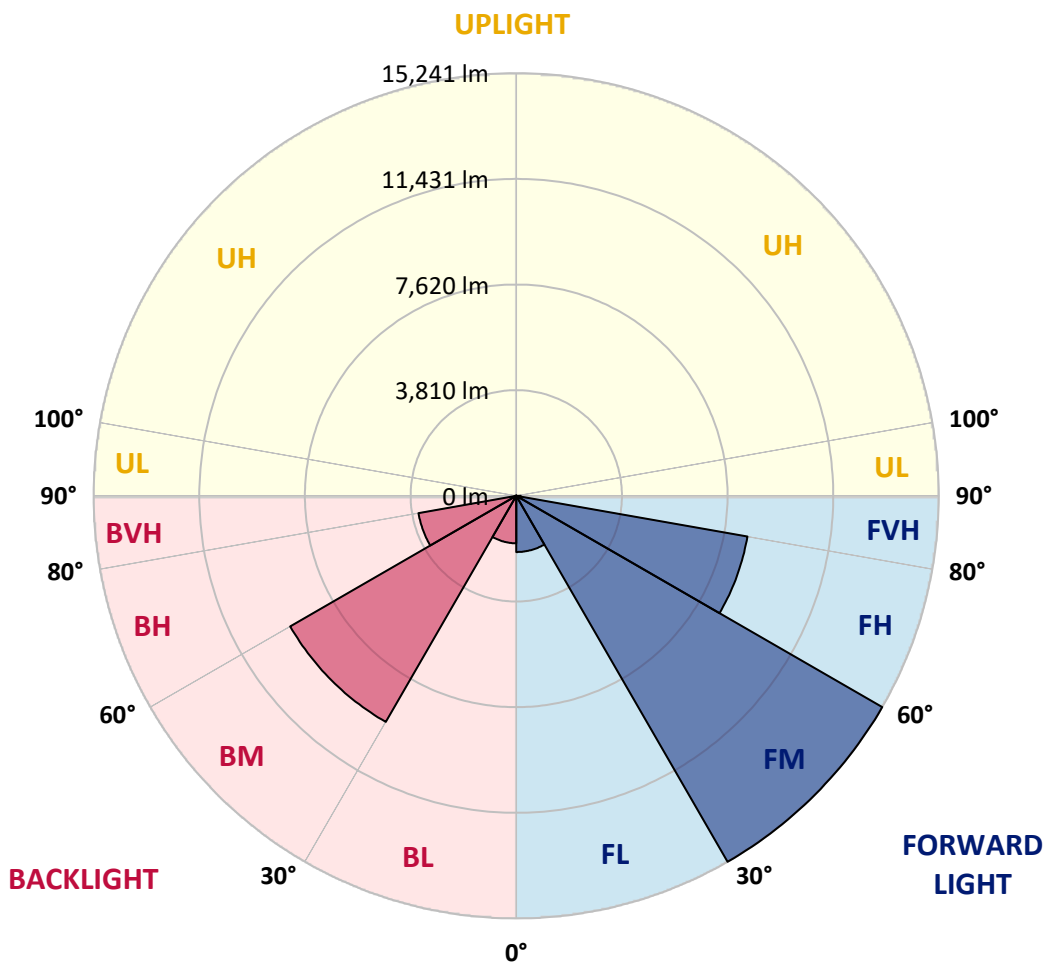


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2028.4	5.0			
FM (30°-60°)	15241.0	37.5			
FH (60°-80°)	8466.9	20.8			G4/12000
FVH (80°-90°)	159.2	0.4			G2/225
BL (0°-30°)	1711.1	4.2	B3/2500		
BM (30°-60°)	9414.8	23.1	B5		
BH (60°-80°)	3580.9	8.8	B4/5000		G4/5000
BVH (80°-90°)	59.4	0.1			G1/100
UL (90°-100°)	17.4	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°	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0
2.5°	3717.8	3687.3	3691.8	3713.2	3646.1	3673.5	3644.6	3672.0	3662.9	3675.1	3684.2
5°	3771.1	3733.0	3736.1	3760.5	3708.6	3731.5	3702.5	3720.8	3705.6	3722.3	3723.9
7.5°	3844.3	3812.3	3807.7	3832.1	3787.9	3807.7	3778.8	3787.9	3772.7	3792.5	3786.4
10°	3941.9	3913.0	3905.3	3922.1	3887.0	3897.7	3867.2	3879.4	3856.5	3879.4	3868.7
12.5°	4050.2	4012.1	4013.6	4031.9	3996.8	4004.5	3980.1	3993.8	3966.3	3990.7	3983.1
15°	4178.3	4123.4	4134.1	4153.9	4120.3	4143.2	4114.2	4134.1	4108.1	4134.1	4124.9
17.5°	4344.5	4282.0	4289.6	4321.6	4294.2	4330.8	4297.2	4321.6	4309.4	4326.2	4323.2
20°	4554.9	4513.8	4506.2	4545.8	4506.2	4551.9	4533.6	4576.3	4579.3	4596.1	4603.7
22.5°	4835.5	4808.1	4789.8	4817.2	4782.2	4814.2	4840.1	4913.3	4940.8	4985.0	4988.0
25°	5209.1	5207.6	5166.4	5168.0	5123.7	5166.4	5239.6	5354.0	5427.2	5483.6	5462.3
27.5°	5713.9	5723.0	5660.5	5636.1	5584.3	5648.3	5799.3	5941.1	6073.8	6153.1	6153.1
30°	6372.7	6381.8	6290.3	6241.5	6194.2	6305.6	6485.5	6670.0	6859.1	6973.5	6947.6
32.5°	7244.9	7215.9	7084.8	6996.4	6915.5	7043.6	7251.0	7459.9	7717.6	7882.3	7862.5
35°	8303.2	8198.0	8066.8	7902.2	7728.3	7829.0	8024.2	8286.4	8644.8	8891.8	8829.3
37.5°	9532.3	9428.6	9204.4	8920.8	8617.3	8629.5	8783.6	9238.0	9686.3	9887.6	9844.9
40°	10808.7	10727.8	10522.0	10157.5	9608.5	9482.0	9735.1	10282.6	10711.1	10964.2	10892.5
42.5°	12109.4	12027.1	11871.5	11505.6	10778.2	10473.2	10737.0	11333.2	11790.7	12039.3	11956.9
45°	13407.1	13312.6	13189.1	12865.8	12171.9	11725.1	11873.1	12420.5	12838.3	13120.4	12951.2
47.5°	14547.8	14485.3	14401.4	14270.2	13663.3	13169.2	13158.6	13520.0	13808.2	13994.2	13786.8
50°	15540.5	15496.3	15543.6	15516.1	15295.0	14845.1	14569.1	14544.7	14637.7	14773.5	14477.6
52.5°	16431.1	16353.3	16528.7	16746.7	16909.9	16818.4	15924.8	15423.1	15320.9	15366.7	15031.2
55°	17160.0	17123.4	17417.7	17965.1	18720.0	18921.3	17317.0	16277.0	15900.4	15876.0	15494.8
57.5°	17605.3	17657.1	18245.7	19288.8	20673.4	20737.4	19026.5	17190.5	16464.6	16202.3	15763.1
60°	16896.2	17095.9	18100.9	20252.5	22331.0	22370.6	20281.5	17358.2	15760.1	15173.0	14628.6
62.5°	14703.3	14822.3	16531.7	20220.5	22873.9	22486.5	20580.4	16345.7	13837.2	12900.9	12397.6
65°	10357.3	10579.9	12411.4	18192.3	20844.2	20893.0	18880.1	14133.0	11049.6	10014.2	9689.4
67.5°	6255.2	6468.7	8419.1	13132.6	16945.0	17492.4	15749.4	10700.4	7923.5	6615.1	6287.3
70°	2031.2	2263.0	3836.7	7740.5	12464.7	13777.7	11851.7	6964.3	4149.3	2906.5	2554.2
72.5°	771.6	841.8	1248.9	3380.8	7763.4	9198.3	7330.3	3493.6	1285.5	765.5	672.5
75°	501.7	512.4	584.0	1184.9	3743.7	5064.3	3533.2	1023.2	515.4	457.5	423.9
77.5°	431.6	439.2	469.7	590.1	1192.5	1936.7	1014.1	523.0	430.0	381.2	358.4
80°	407.2	410.2	430.0	500.2	558.1	646.6	488.0	437.7	375.1	358.4	341.6
82.5°	385.8	396.5	407.2	454.4	452.9	465.1	391.9	343.1	318.7	335.5	329.4
85°	359.9	366.0	373.6	405.6	369.0	312.6	301.9	236.4	230.3	245.5	230.3
87.5°	253.1	268.4	259.2	273.0	256.2	199.8	169.3	134.2	106.7	88.4	85.4
90°	103.7	105.2	99.1	91.5	80.8	67.1	53.4	33.5	15.2	7.6	3.0
92.5°	80.8	80.8	77.8	70.1	61.0	50.3	38.1	21.3	10.7	4.6	1.5
95°	50.3	51.8	48.8	44.2	38.1	30.5	22.9	12.2	7.6	3.0	1.5
97.5°	32.0	32.0	29.0	25.9	21.3	15.2	10.7	9.1	6.1	3.0	0.0
100°	18.3	18.3	16.8	13.7	10.7	7.6	7.6	6.1	4.6	1.5	0.0
102.5°	10.7	10.7	7.6	6.1	4.6	4.6	4.6	4.6	3.0	1.5	0.0
105°	4.6	4.6	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°	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0	3640.0
2.5°	3678.1	3650.7	3655.2	3629.3	3624.7	3598.8	3650.7	3656.8	3641.5	3655.2
5°	3720.8	3687.3	3697.9	3669.0	3664.4	3629.3	3675.1	3672.0	3659.8	3673.5
7.5°	3784.9	3749.8	3755.9	3723.9	3717.8	3679.6	3722.3	3708.6	3696.4	3713.2
10°	3874.8	3835.2	3838.2	3797.1	3801.6	3751.3	3803.2	3778.8	3763.5	3786.4
12.5°	3983.1	3938.9	3940.4	3897.7	3896.2	3847.4	3893.1	3879.4	3856.5	3891.6
15°	4123.4	4073.1	4068.5	4012.1	3996.8	3941.9	3984.6	3958.7	3943.5	3993.8
17.5°	4320.1	4263.7	4246.9	4178.3	3893.1	3728.4	3957.2	4034.9	3940.4	3925.2
20°	4582.4	4535.1	4497.0	4393.3	3914.5	3400.6	3020.9	3023.9	3423.5	3608.0
22.5°	4937.7	4881.3	4809.6	4661.7	3591.2	3185.6	3187.1	3182.5	2731.1	2540.5
25°	5424.2	5355.5	5209.1	4373.5	3812.3	3437.2	3428.0	2981.2	2732.7	2746.4
27.5°	6081.4	5941.1	5084.1	4737.9	4205.7	3763.5	3543.9	3001.1	3031.5	3052.9
30°	6917.1	6352.8	5494.3	5288.4	4678.5	4196.6	3277.1	3351.8	3412.8	3426.5
32.5°	7774.1	6371.1	6150.0	5932.0	5261.0	3818.4	3693.4	3835.2	3899.2	3906.9
35°	7766.4	7151.9	6866.7	6621.2	5800.8	4085.3	4164.6	4382.6	4545.8	4538.2
37.5°	8219.3	8013.5	7673.4	7362.3	5221.3	4602.2	4744.0	4991.1	5189.3	5183.2
40°	9166.3	8928.4	8568.5	7915.9	5781.0	5193.9	5392.1	5657.5	5797.8	5805.4
42.5°	10061.5	9864.7	9497.2	7395.9	6480.9	5906.0	6086.0	6264.4	6351.3	6378.8
45°	10952.0	10811.7	9588.7	8173.6	7327.3	6622.7	6741.7	6775.2	6866.7	6856.1
47.5°	11674.8	11519.3	9219.7	9149.5	8353.5	7302.9	7293.7	7249.5	7283.0	7290.7
50°	12335.1	10461.0	9960.8	10194.1	9430.1	7996.7	7822.9	7732.9	7687.1	7667.3
52.5°	12856.6	10464.0	10653.1	11273.8	10645.5	8750.0	8376.4	8123.3	7112.2	7903.7
55°	13300.4	10895.6	11308.8	12428.1	11693.1	9538.4	8876.6	8425.2	4747.1	3806.2
57.5°	13555.1	11223.4	11958.5	13509.3	12608.1	10415.2	8172.1	7066.5	2683.9	2680.8
60°	12571.5	10634.8	11940.2	14076.6	12344.3	8079.0	3327.4	2784.5	507.8	521.5
62.5°	10642.4	9251.7	11324.1	13765.5	11496.4	7107.7	2984.3	2144.0	16.8	13.7
65°	8245.3	7380.6	9535.4	12107.9	10459.5	5930.4	2224.9	1544.7	4.6	0.0
67.5°	5393.7	5201.5	7036.0	10040.1	8530.4	4594.6	1492.9	739.6	3.0	0.0
70°	2299.6	2664.0	4457.4	7280.0	6529.7	3161.2	719.8	266.9	1.5	0.0
72.5°	643.5	852.4	1983.9	4265.2	4106.6	1662.2	280.6	112.8	1.5	0.0
75°	381.2	327.9	568.8	1701.8	1999.2	584.0	129.6	86.9	1.5	0.0
77.5°	317.2	256.2	326.3	434.6	605.4	210.4	109.8	77.8	0.0	0.0
80°	297.4	227.2	282.1	303.5	298.9	175.4	108.3	77.8	0.0	0.0
82.5°	282.1	198.2	233.3	233.3	250.1	161.6	102.2	76.2	0.0	0.0
85°	212.0	138.8	155.5	201.3	179.9	114.4	74.7	61.0	0.0	0.0
87.5°	80.8	50.3	61.0	64.0	51.8	25.9	6.1	6.1	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)