

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: P522228

Luminaire Tested: **CST-CA8-330-750-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
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-EX120
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: 38401 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G5

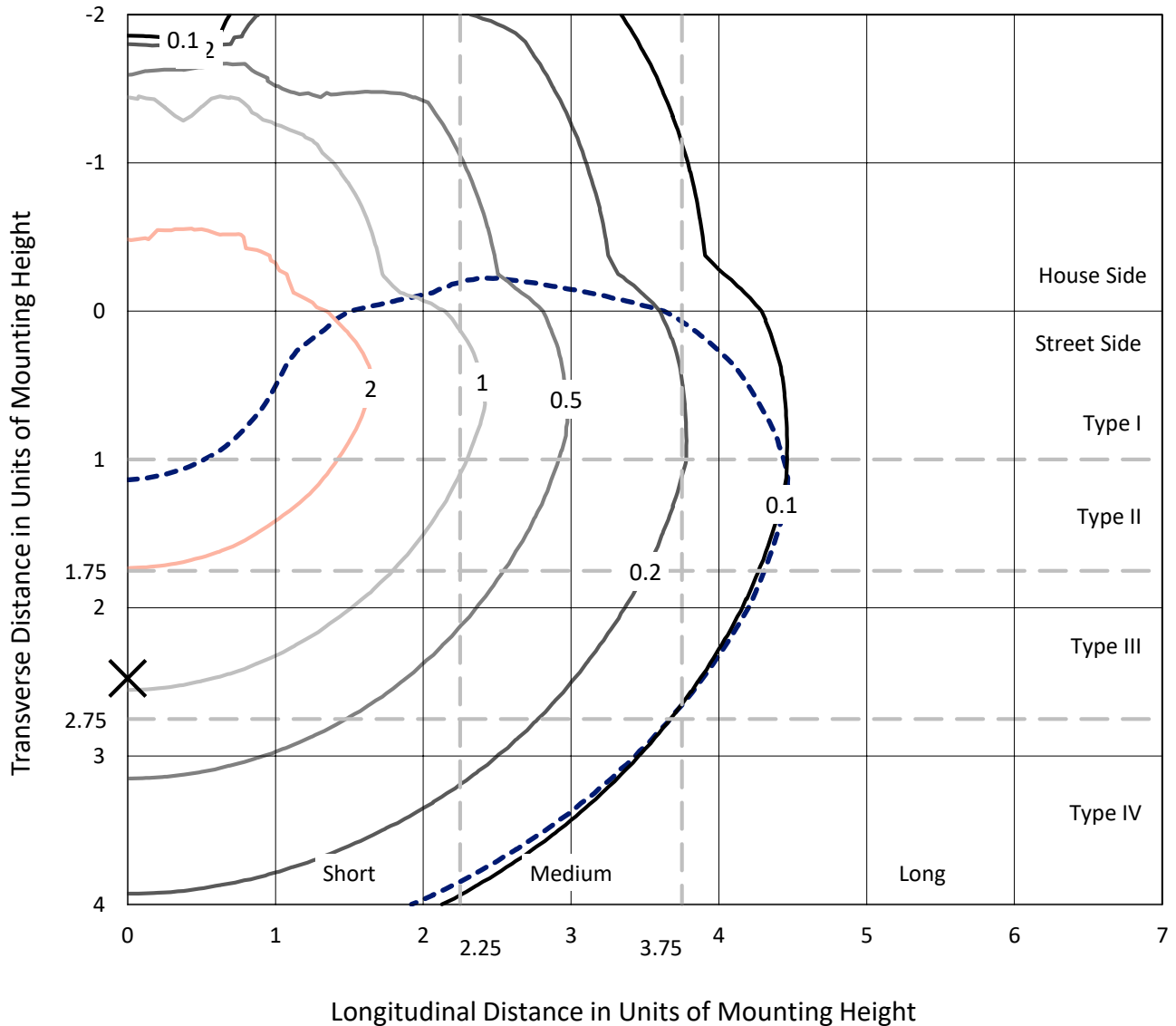
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

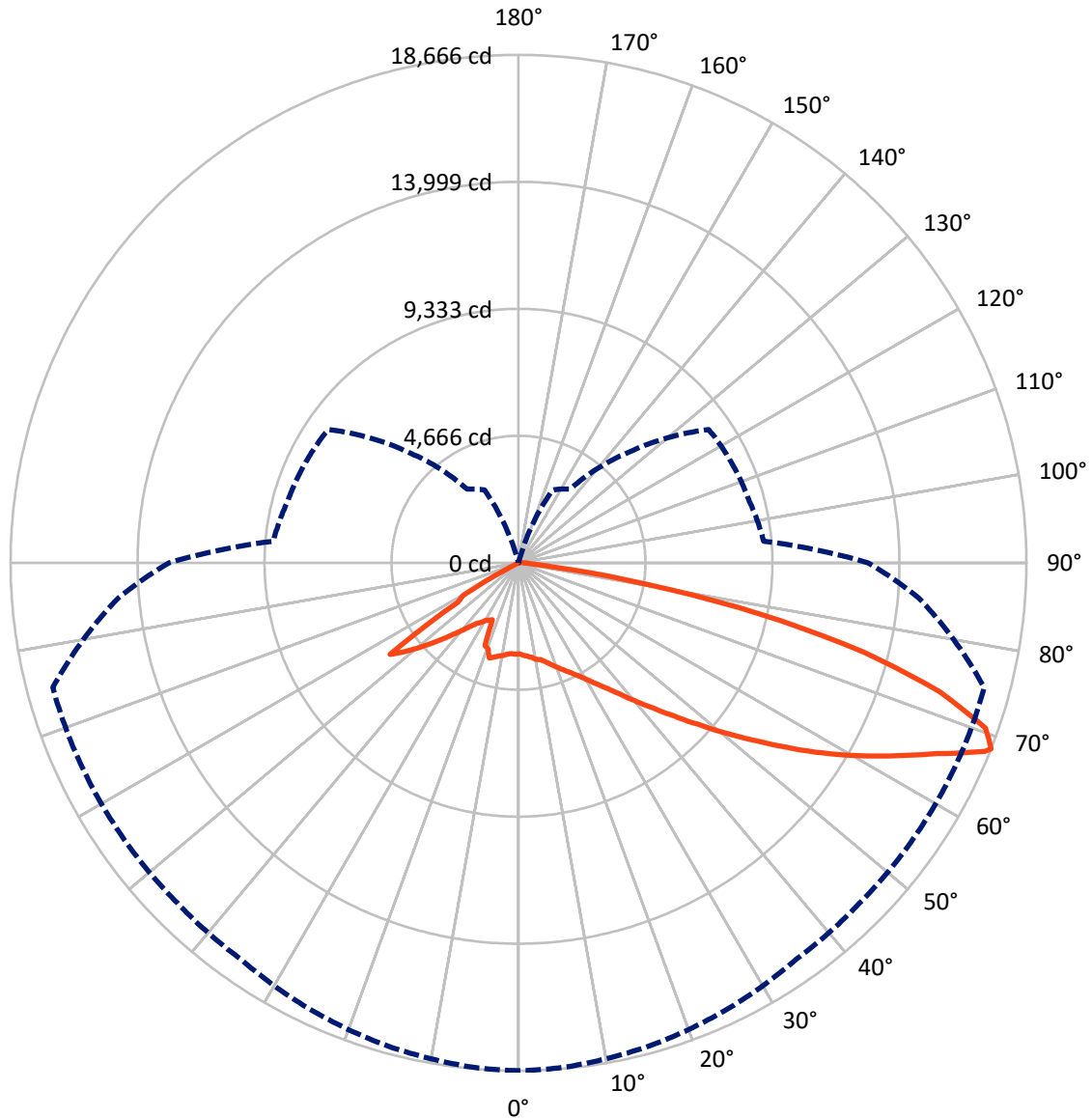
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.8 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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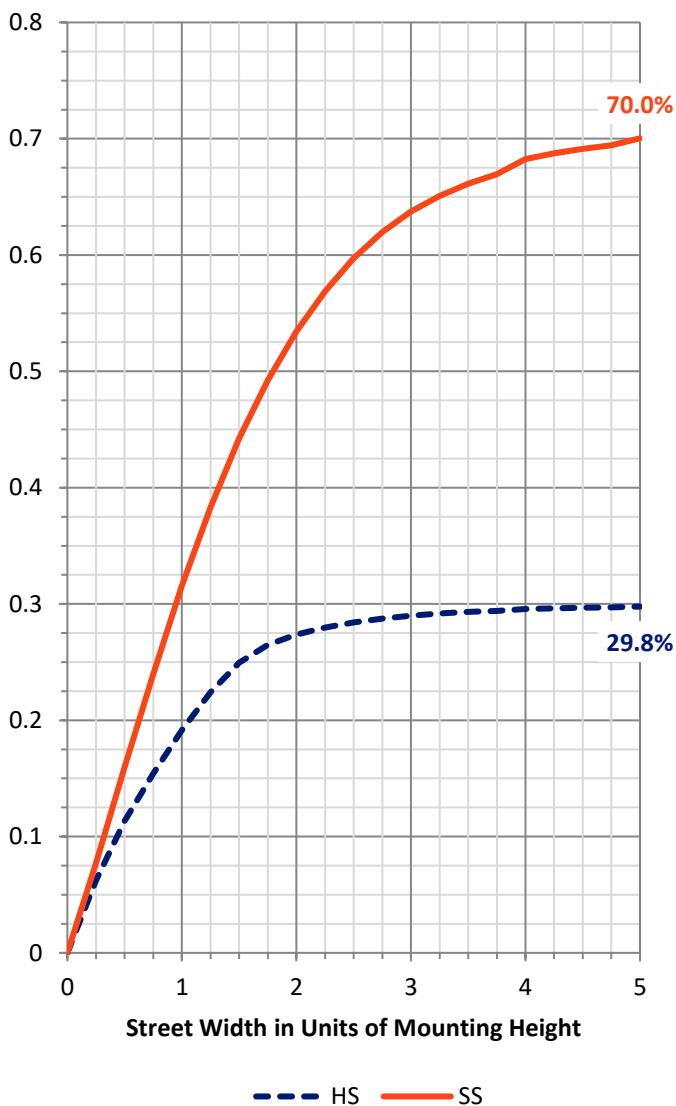
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11446.9	1.8	11448.7
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	26936.6	15.7	26952.3
	% Fixture	70.1	0.0	70.2
Total	Lumens	38383.5	17.5	38401.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.9	0.8
10°-20°	1034.2	2.7
20°-30°	1771.4	4.6
30°-40°	2873.6	7.5
40°-50°	4846.2	12.6
50°-60°	7899.4	20.6
60°-70°	10594.4	27.6
70°-80°	8229.1	21.4
80°-90°	810.4	2.1
90°-100°	15.4	0.0
100°-110°	0.9	0.0
110°-120°	0.2	0.0
120°-130°	0.2	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	38383.5	100.0
0°-180°	38401.0	100.0

Coefficient of Utilization

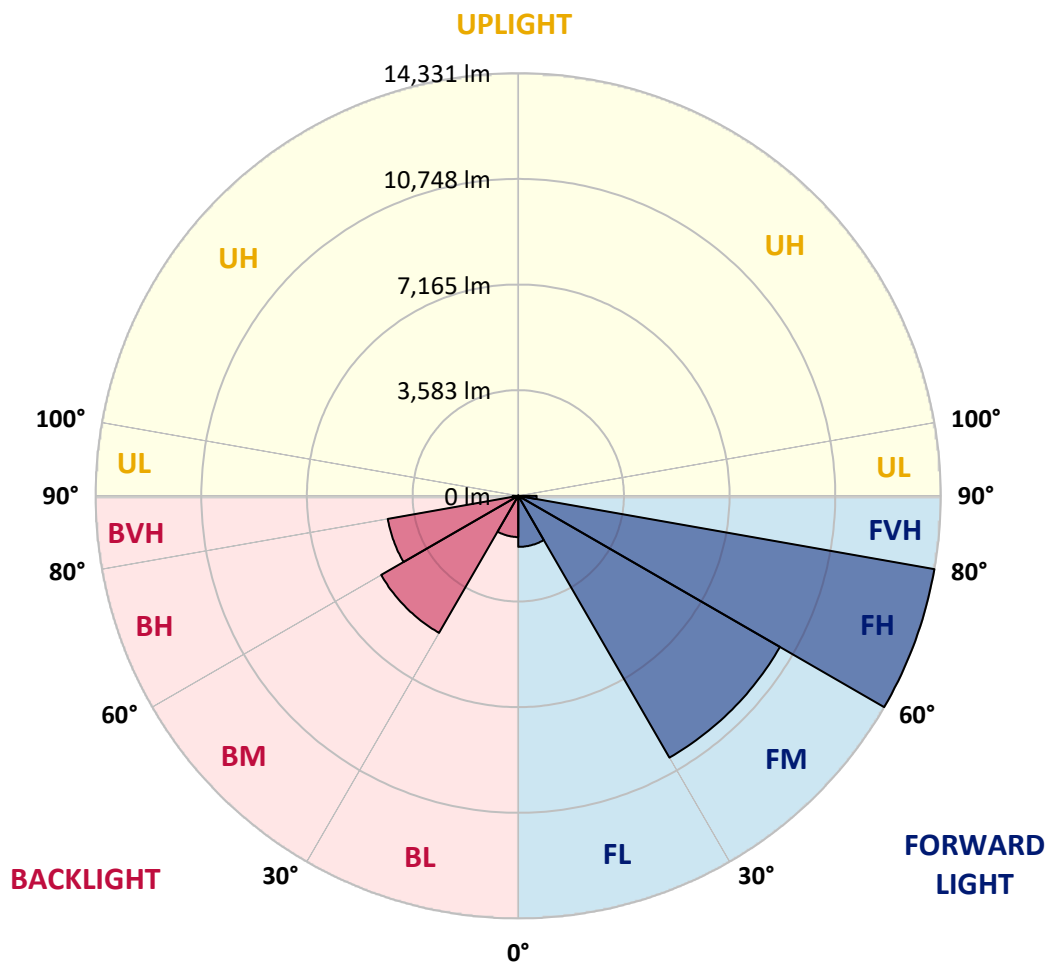


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1732.1	4.5			
FM (30°-60°)	10250.6	26.7			
FH (60°-80°)	14330.8	37.3			G5
FVH (80°-90°)	623.1	1.6			G4/750
BL (0°-30°)	1398.4	3.6	B3/2500		
BM (30°-60°)	5368.6	14.0	B4/8500		
BH (60°-80°)	4492.6	11.7	B4/5000		G4/5000
BVH (80°-90°)	187.3	0.5			G2/225
UL (90°-100°)	15.4	0.0		U2/50	
UH (100°-180°)	2.1	0.0		U1/10	

BUG Rating: B4-U2-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9
2.5°	3403.4	3393.9	3392.3	3411.4	3351.0	3381.2	3354.2	3376.4	3362.2	3373.3	3374.9
5°	3449.5	3432.0	3420.9	3443.1	3405.0	3419.3	3389.1	3398.7	3359.0	3381.2	3384.4
7.5°	3516.2	3487.6	3484.4	3490.8	3457.4	3468.6	3419.3	3430.4	3401.9	3389.1	3400.3
10°	3606.7	3579.7	3559.1	3573.4	3528.9	3535.3	3482.9	3484.4	3463.8	3440.0	3459.0
12.5°	3657.6	3660.7	3651.2	3662.3	3625.8	3605.1	3568.6	3555.9	3535.3	3506.7	3497.1
15°	3784.6	3778.3	3759.2	3776.7	3771.9	3752.8	3708.4	3679.8	3635.3	3619.4	3603.6
17.5°	3940.2	3919.6	3903.7	3926.0	3949.8	3910.1	3867.2	3827.5	3768.7	3737.0	3717.9
20°	4103.8	4089.5	4073.7	4108.6	4116.5	4086.4	4054.6	3995.8	3927.5	3886.2	3846.5
22.5°	4286.5	4257.9	4262.6	4308.7	4294.4	4280.1	4238.8	4191.2	4108.6	4056.2	3941.8
25°	4475.5	4459.6	4481.8	4502.5	4491.3	4461.2	4440.5	4405.6	4313.5	4249.9	4083.2
27.5°	4710.5	4685.1	4713.7	4721.6	4712.1	4704.2	4675.6	4648.6	4548.5	4477.0	4269.0
30°	4986.8	4956.7	5002.7	4991.6	4982.1	4988.4	4971.0	4912.2	4823.3	4726.4	4518.3
32.5°	5315.6	5275.9	5328.3	5304.5	5282.2	5326.7	5285.4	5229.8	5125.0	5012.3	4809.0
35°	5696.8	5698.3	5725.3	5685.6	5677.7	5725.3	5698.3	5630.1	5533.2	5415.7	5126.6
37.5°	6158.9	6146.2	6214.5	6195.4	6166.9	6230.4	6238.3	6152.6	5977.9	5861.9	5520.5
40°	6721.1	6717.9	6740.2	6743.4	6735.4	6765.6	6779.9	6665.5	6552.8	6378.1	5209.2
42.5°	7321.5	7334.2	7373.9	7345.3	7383.4	7423.1	7427.9	7332.6	7170.6	6119.2	5533.2
45°	8042.5	8082.2	8109.2	8102.8	8120.3	8177.5	8182.2	8131.4	7972.6	6629.0	6120.8
47.5°	8869.9	8908.0	8916.0	8966.8	8950.9	9031.9	9020.8	9022.4	8852.4	7338.9	6760.8
50°	9821.2	9838.7	9903.8	9932.4	9892.7	10002.3	9973.7	10008.6	9799.0	8152.1	7448.5
52.5°	10831.3	10861.5	10888.5	10996.5	10945.7	11040.9	11002.8	11083.8	10840.8	8979.5	8212.4
55°	11979.5	11984.3	12030.4	12140.0	12073.3	12187.6	12132.0	12162.2	11968.4	9894.3	9008.1
57.5°	13196.1	13180.2	13197.7	13285.0	13224.7	13310.4	13288.2	13316.8	13135.7	10856.7	9589.4
60°	14399.9	14376.1	14401.5	14460.3	14377.7	14525.4	14446.0	14473.0	14277.6	11839.8	10418.4
62.5°	15610.1	15592.6	15564.0	15622.8	15502.1	15578.3	15611.7	15567.2	15395.7	12729.2	11139.4
65°	16909.2	16891.8	16786.9	16823.5	16607.5	16570.9	16583.6	16597.9	16483.6	13610.6	11930.3
67.5°	18487.9	18462.4	18265.5	18017.8	17706.5	17638.2	17644.5	17682.7	17698.5	14744.5	12856.2
68°	18665.7	18619.7	18400.5	18113.1	17787.5	17708.1	17700.1	17708.1	17716.0	14754.1	12846.7
70°	18211.5	18194.0	18027.3	17679.5	17346.0	17155.4	16990.2	16983.9	16907.6	13999.7	12136.8
72.5°	16161.2	16139.0	15940.4	15694.3	15487.8	15189.2	14974.8	14987.5	14862.1	12373.4	10623.3
75°	13078.6	13077.0	12838.7	12632.3	12635.5	12613.2	12541.8	12667.2	12537.0	10494.6	9060.5
77.5°	9114.5	9146.3	9130.4	9009.7	9179.6	9414.7	9670.4	9911.8	9837.1	8290.2	7224.6
80°	4761.3	4850.3	5164.7	5179.0	5298.1	5526.8	5701.5	5863.5	5874.6	4704.2	4173.7
82.5°	1265.8	1292.8	1399.2	1369.0	1359.5	1405.5	1443.6	1448.4	1451.6	1226.1	1145.1
85°	393.9	405.0	392.3	374.8	347.8	317.6	309.7	252.5	200.1	165.2	144.5
87.5°	279.5	298.6	270.0	254.1	225.5	214.4	192.2	150.9	117.5	82.6	55.6
90°	144.5	147.7	131.8	112.8	104.8	98.5	84.2	60.4	30.2	15.9	14.3
92.5°	73.1	74.6	65.1	55.6	47.6	41.3	31.8	17.5	9.5	4.8	1.6
95°	28.6	30.2	27.0	23.8	19.1	14.3	12.7	9.5	6.4	3.2	1.6
97.5°	9.5	9.5	9.5	7.9	7.9	7.9	7.9	6.4	4.8	3.2	1.6
100°	0.0	0.0	0.0	1.6	3.2	4.8	4.8	4.8	3.2	1.6	1.6
102.5°	0.0	0.0	0.0	0.0	0.0	1.6	3.2	3.2	3.2	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	0.0	1.6	1.6	1.6
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
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	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	1.6	1.6	1.6
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	1.6	1.6	1.6	1.6
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	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°	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9	3347.9
2.5°	3366.9	3357.4	3362.2	3322.4	3332.0	3306.6	3360.6	3346.3	3339.9	3362.2
5°	3374.9	3339.9	3368.5	3341.5	3346.3	3309.7	3354.2	3336.7	3335.2	3347.9
7.5°	3378.0	3360.6	3387.6	3343.1	3357.4	3343.1	3376.4	3359.0	3374.9	3386.0
10°	3422.5	3413.0	3409.8	3393.9	3405.0	3373.3	3414.6	3414.6	3422.5	3452.7
12.5°	3487.6	3474.9	3467.0	3438.4	3449.5	3440.0	3473.3	3479.7	3494.0	3506.7
15°	3576.6	3554.3	3546.4	3521.0	3528.9	3527.3	3551.1	3552.7	3584.5	3582.9
17.5°	3690.9	3659.1	3668.7	3649.6	3651.2	3638.5	3625.8	3625.8	3654.4	3660.7
20°	3827.5	3646.4	3408.2	3274.8	3251.0	3268.4	3336.7	3449.5	3308.2	3347.9
22.5°	3581.3	3417.7	3406.6	3376.4	3357.4	2931.8	2822.2	2787.2	2969.9	3284.3
25°	3613.1	3543.2	3522.6	3484.4	2922.2	2917.5	2885.7	2833.3	2315.5	2304.4
27.5°	3781.4	3713.1	3679.8	3052.5	3039.8	3038.2	2990.5	2464.8	2345.7	2361.6
30°	3978.4	3899.0	3301.8	3206.5	3195.4	3170.0	2896.8	2434.7	2433.1	2434.7
32.5°	4205.5	3941.8	3397.1	3392.3	3398.7	3320.9	2566.5	2556.9	2555.4	2571.2
35°	4516.7	3657.6	3635.3	3659.1	3625.8	2871.4	2720.5	2715.8	2717.4	2709.4
37.5°	4310.3	3943.4	3938.7	3938.7	3860.8	2938.1	2907.9	2930.2	2927.0	2915.9
40°	4397.6	4289.6	4261.1	4251.5	3263.7	3170.0	3152.5	3181.1	3185.9	3193.8
42.5°	4821.7	4723.2	4708.9	4596.2	3551.1	3521.0	3467.0	3497.1	3494.0	3503.5
45°	5342.6	5275.9	5214.0	3984.7	3938.7	3900.5	3845.0	3879.9	3889.4	3883.1
47.5°	5949.3	5876.2	5428.4	4381.8	4380.2	4350.0	4288.1	4316.6	4311.9	4311.9
50°	6559.1	6479.7	4931.3	4886.8	4870.9	4823.3	4772.4	4777.2	4778.8	4794.7
52.5°	7240.5	5787.3	5458.5	5369.6	5382.3	5350.5	5301.3	4013.3	5277.5	5291.8
55°	6767.2	6057.3	6038.2	5920.7	5950.9	5909.6	5877.8	3959.3	5248.9	5800.0
57.5°	6691.0	6640.1	6624.2	6503.5	6541.7	6149.4	6443.2	4332.5	3630.6	2652.2
60°	7273.8	7219.8	7210.3	7103.9	7100.7	4886.8	5857.2	2971.5	2321.9	2337.8
62.5°	7839.2	7751.8	7775.7	7650.2	5393.4	2977.8	2625.2	66.7	106.4	112.8
65°	8469.7	8323.6	8347.4	8231.5	5563.4	3139.8	2838.1	34.9	30.2	28.6
67.5°	9076.4	8820.7	8698.4	8576.1	5777.8	3306.6	2957.2	9.5	0.0	0.0
68°	9046.2	8776.2	8650.7	8534.8	5755.5	3301.8	2950.8	9.5	0.0	0.0
70°	8536.4	8293.4	8174.3	8085.4	5495.1	3189.0	2831.7	9.5	0.0	0.0
72.5°	7462.8	7327.8	7251.6	7173.8	4882.0	2852.3	2539.5	9.5	0.0	0.0
75°	6341.6	6303.4	6255.8	6084.3	4068.9	2334.6	2086.9	9.5	0.0	0.0
77.5°	5025.0	5023.4	4907.4	4705.7	3063.6	1713.6	1538.9	7.9	0.0	0.0
80°	2717.4	2961.9	2873.0	2769.8	1737.5	932.3	887.8	6.4	0.0	0.0
82.5°	763.9	722.6	694.0	649.6	365.3	203.3	198.5	6.4	0.0	0.0
85°	106.4	117.5	130.2	147.7	84.2	54.0	47.6	3.2	0.0	0.0
87.5°	60.4	68.3	84.2	87.3	31.8	25.4	7.9	0.0	0.0	0.0
90°	12.7	14.3	15.9	15.9	6.4	6.4	0.0	0.0	0.0	0.0
92.5°	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.6	1.6	1.6	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°
110°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.6	1.6	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)