

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: P522233

Luminaire Tested: **CST-CA8-330-760-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522233
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-CA8-330-760-U-T5R-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41312.1 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

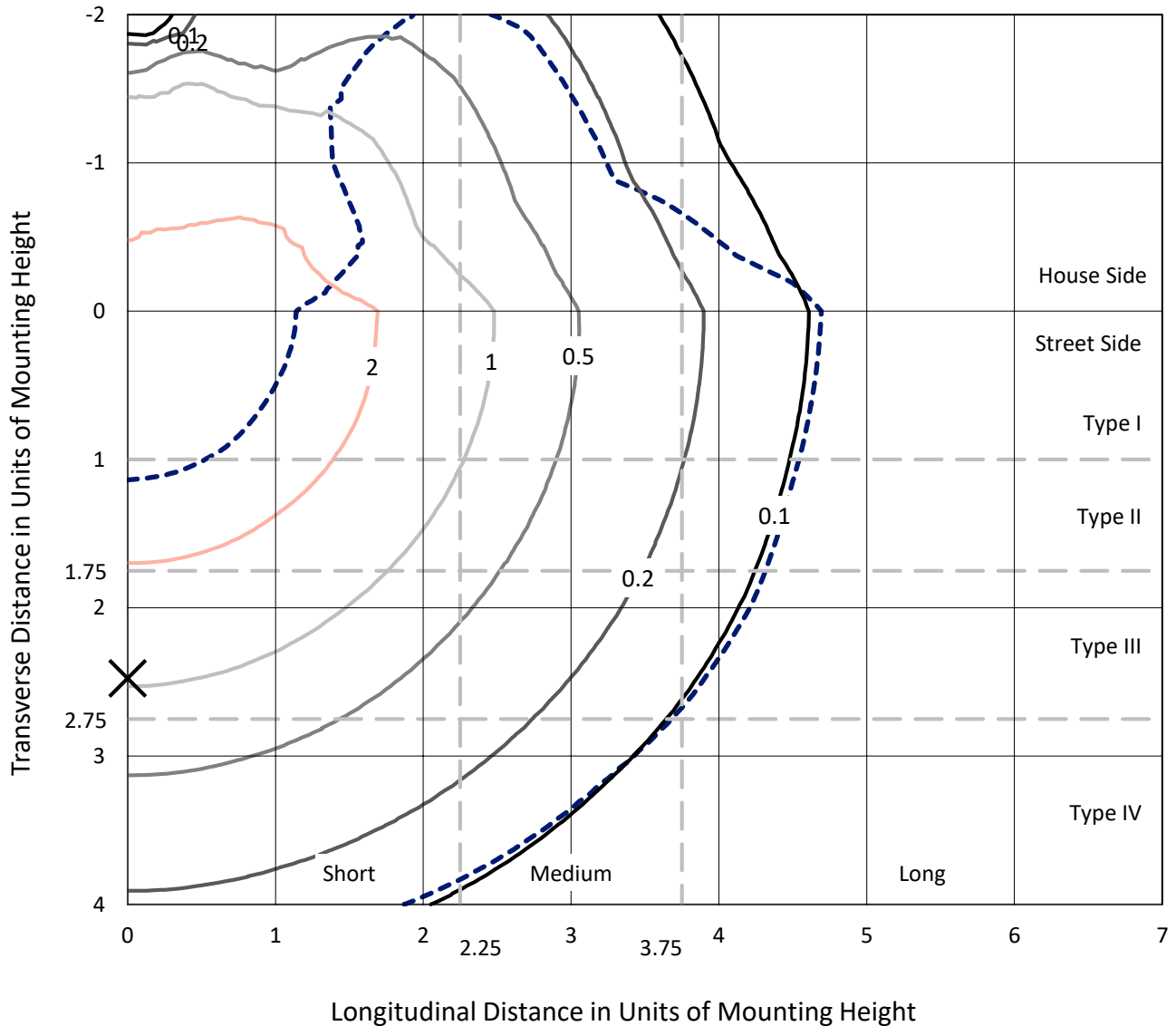
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

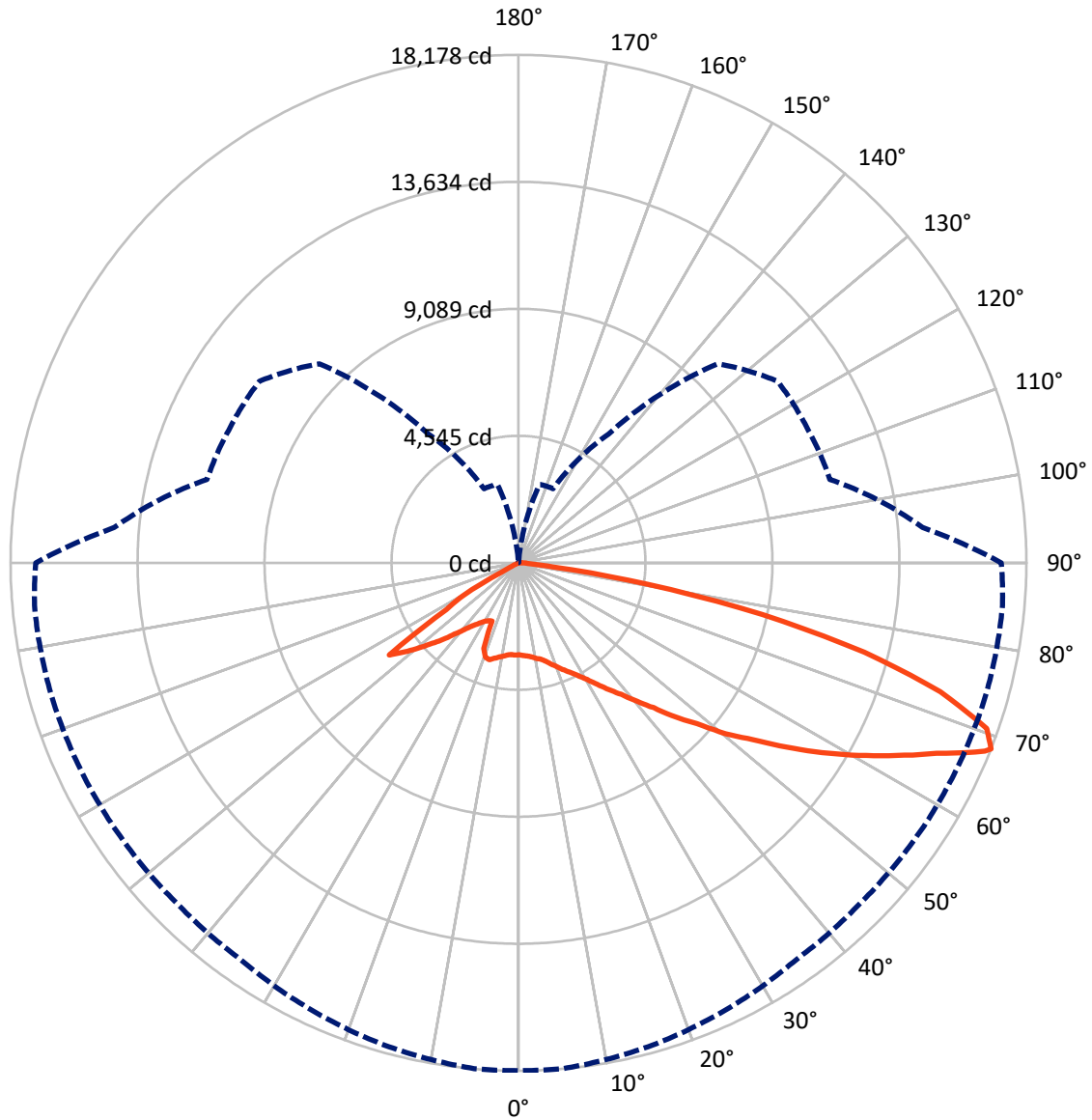
× Max cd
 - - - 1/2 Max cd



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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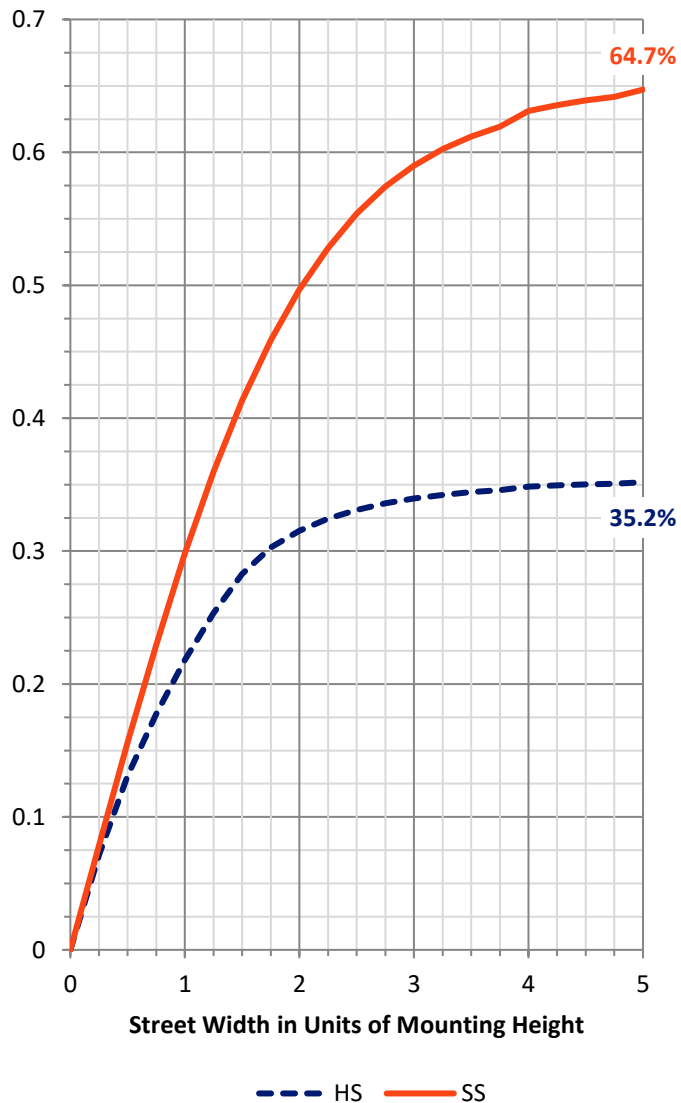
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14539.0	2.5	14541.6
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	26759.6	10.9	26770.5
	% Fixture	64.8	0.0	64.8
Total	Lumens	41298.6	13.5	41312.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.1	0.8
10°-20°	1019.0	2.5
20°-30°	1819.2	4.4
30°-40°	2959.4	7.2
40°-50°	5053.8	12.2
50°-60°	8432.6	20.4
60°-70°	11731.4	28.4
70°-80°	9093.7	22.0
80°-90°	871.4	2.1
90°-100°	10.5	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°	41298.6	100.0
0°-180°	41312.1	100.0

Coefficient of Utilization



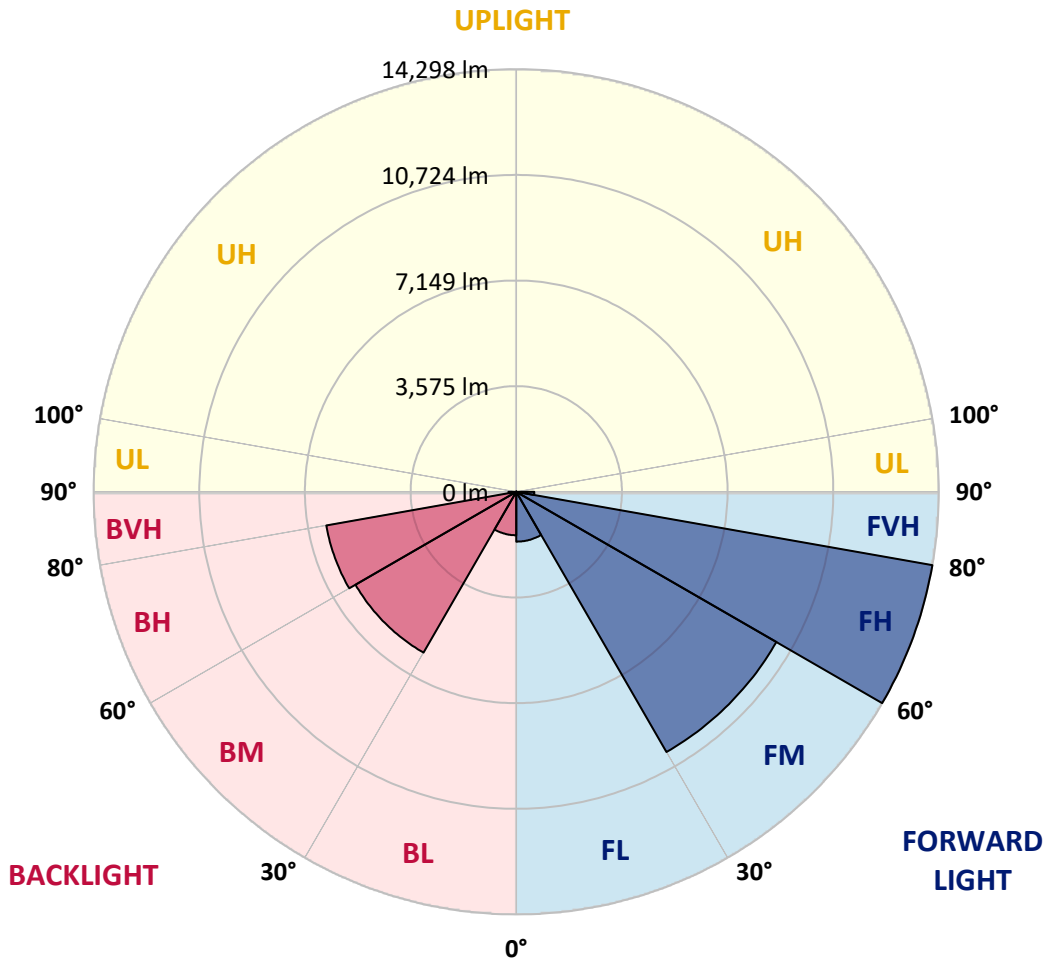
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1686.1	4.1			
FM (30°-60°)	10165.6	24.6			
FH (60°-80°)	14298.2	34.6			G5
FVH (80°-90°)	609.6	1.5			G4/750
BL (0°-30°)	1470.2	3.6	B3/2500		
BM (30°-60°)	6280.2	15.2	B4/8500		
BH (60°-80°)	6526.9	15.8	B5		G5
BVH (80°-90°)	261.8	0.6			G3/500
UL (90°-100°)	10.5	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°	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7
2.5°	3325.0	3320.4	3317.3	3337.5	3280.0	3303.3	3287.7	3307.9	3303.3	3312.6	3314.2
5°	3348.4	3340.6	3329.7	3351.5	3317.3	3332.8	3315.7	3325.0	3295.5	3320.4	3323.5
7.5°	3401.2	3379.5	3377.9	3384.1	3360.8	3371.7	3342.1	3353.0	3337.5	3328.2	3337.5
10°	3480.5	3461.8	3441.6	3454.1	3415.2	3429.2	3398.1	3407.4	3399.7	3379.5	3398.1
12.5°	3534.9	3541.1	3527.1	3536.5	3502.3	3489.8	3478.9	3477.4	3472.7	3443.2	3438.5
15°	3656.2	3659.3	3634.4	3640.6	3632.8	3626.6	3611.1	3598.6	3573.8	3555.1	3542.7
17.5°	3814.7	3797.6	3774.3	3780.5	3802.3	3774.3	3765.0	3741.6	3705.9	3674.8	3668.6
20°	3981.0	3970.2	3948.4	3960.8	3959.3	3940.6	3945.3	3906.4	3855.1	3828.7	3808.5
22.5°	4166.0	4150.5	4134.9	4158.3	4139.6	4127.2	4122.5	4096.1	4032.3	4002.8	3998.1
25°	4351.0	4343.2	4354.1	4346.3	4319.9	4310.6	4316.8	4307.5	4232.9	4197.1	4175.4
27.5°	4582.6	4564.0	4581.1	4571.7	4543.8	4545.3	4546.9	4548.4	4464.5	4417.9	4386.8
30°	4846.9	4840.7	4862.4	4832.9	4806.5	4823.6	4837.6	4806.5	4733.4	4665.0	4654.1
32.5°	5190.4	5151.6	5176.4	5139.1	5098.7	5139.1	5164.0	5101.8	5042.8	4955.7	4971.2
35°	5571.3	5558.8	5558.8	5510.7	5488.9	5552.6	5577.5	5516.9	5425.2	5349.0	5330.3
37.5°	5975.4	5987.9	6026.7	6006.5	5986.3	6025.2	6081.2	6000.3	5882.2	5801.3	5779.6
40°	6511.7	6542.8	6569.3	6542.8	6519.5	6544.4	6608.1	6502.4	6420.0	6376.5	6329.9
42.5°	7088.5	7141.3	7124.2	7127.3	7147.5	7183.3	7247.0	7150.6	7055.8	7054.3	6985.9
45°	7868.8	7868.8	7833.1	7867.3	7864.1	7952.8	7980.7	7927.9	7848.6	7825.3	7766.2
47.5°	8597.9	8674.0	8660.0	8709.8	8670.9	8745.5	8840.4	8795.3	8703.6	8621.2	8608.7
50°	9614.5	9595.8	9577.2	9651.8	9645.6	9696.9	9783.9	9756.0	9628.5	9535.2	9518.1
52.5°	10508.3	10606.3	10582.9	10694.9	10632.7	10705.8	10809.9	10805.2	10649.8	10558.1	10531.6
55°	11636.9	11702.2	11697.5	11812.5	11727.0	11823.4	11910.5	11919.8	11750.4	11619.8	11660.2
57.5°	12812.1	12866.5	12835.4	12930.2	12846.3	12978.4	13031.3	12997.1	12897.6	12732.8	12793.4
60°	13988.8	14035.5	14071.2	14079.0	14030.8	14108.5	14158.3	14187.8	14030.8	13842.7	13915.8
62.5°	15184.2	15237.1	15206.0	15218.4	15084.7	15190.4	15252.6	15260.4	15080.1	14913.7	14965.0
65°	16443.4	16516.4	16404.5	16329.9	16165.1	16163.6	16245.9	16259.9	16132.5	16014.3	15994.1
67.5°	18002.5	18035.2	17795.8	17545.5	17267.2	17206.6	17264.1	17296.8	17369.8	17366.7	17275.0
68°	18178.2	18172.0	17929.5	17631.0	17332.5	17262.6	17290.6	17332.5	17380.7	17390.0	17279.7
70°	17778.7	17702.5	17564.1	17188.0	16892.6	16709.2	16611.2	16689.0	16558.4	16559.9	16353.2
72.5°	15792.0	15782.7	15527.8	15341.2	15078.5	14773.8	14633.9	14632.4	14644.8	14554.7	14341.7
75°	12791.9	12804.3	12507.4	12378.4	12297.5	12240.0	12269.6	12361.3	12370.6	12369.1	12294.4
77.5°	8921.2	8972.5	8893.2	8683.4	8908.8	9101.5	9473.0	9662.7	9602.1	9783.9	9899.0
80°	4675.9	4778.5	4781.6	4929.3	5111.2	5286.8	5607.0	5894.6	5683.2	5589.9	5493.6
82.5°	1229.6	1266.9	1322.9	1237.4	1263.8	1290.2	1538.9	1515.6	1399.0	1461.2	1554.5
85°	351.3	362.2	346.7	314.0	287.6	264.3	270.5	228.5	199.0	197.4	191.2
87.5°	247.2	265.8	234.7	202.1	181.9	169.4	163.2	138.3	111.9	97.9	77.7
90°	115.0	113.5	97.9	76.2	66.8	63.7	63.7	49.7	28.0	17.1	15.5
92.5°	48.2	49.7	40.4	32.6	28.0	21.8	17.1	10.9	6.2	3.1	1.6
95°	17.1	18.7	15.5	12.4	10.9	9.3	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7	3287.7
2.5°	3311.1	3303.3	3300.2	3261.3	3272.2	3248.9	3303.3	3287.7	3284.6	3306.4
5°	3318.8	3283.1	3304.8	3280.0	3286.2	3252.0	3295.5	3276.9	3278.4	3289.3
7.5°	3323.5	3303.3	3325.0	3281.5	3298.6	3286.2	3317.3	3298.6	3317.3	3326.6
10°	3370.1	3360.8	3345.3	3332.8	3345.3	3315.7	3354.6	3351.5	3362.4	3390.3
12.5°	3433.9	3423.0	3407.4	3385.7	3395.0	3384.1	3413.7	3416.8	3437.0	3451.0
15°	3528.7	3514.7	3506.9	3485.2	3488.3	3480.5	3497.6	3500.7	3541.1	3536.5
17.5°	3662.4	3646.8	3653.0	3632.8	3625.1	3606.4	3575.3	3564.4	3612.6	3626.6
20°	3808.5	3791.4	3799.2	3782.1	3637.5	3343.7	3541.1	3676.4	3573.8	3566.0
22.5°	3974.8	3956.2	3962.4	3936.0	3757.2	3206.9	2790.3	2756.1	3147.8	3306.4
25°	4158.3	4133.4	4130.3	4096.1	3508.5	2903.8	2857.1	2796.5	2510.5	2283.5
27.5°	4385.2	4347.9	4329.2	3813.2	3483.6	3017.3	2947.3	2731.2	2316.2	2330.2
30°	4630.8	4576.4	4226.6	3886.2	3665.5	3150.9	3057.7	2393.9	2397.0	2390.8
32.5°	4910.6	4789.4	4141.2	4110.1	3883.1	3294.0	2538.5	2510.5	2513.6	2522.9
35°	5277.5	4445.8	4428.7	4430.3	4148.9	3186.7	2689.3	2662.8	2665.9	2672.2
37.5°	5355.2	4792.5	4795.6	4759.8	4431.8	2911.6	2872.7	2871.1	2864.9	2858.7
40°	5417.4	5229.3	5184.2	5126.7	4108.5	3135.4	3123.0	3113.6	3118.3	3130.7
42.5°	5903.9	5762.5	5719.0	5650.6	4214.2	3474.3	3433.9	3423.0	3435.4	3429.2
45°	6550.6	6432.5	6347.0	5224.6	4655.7	3842.7	3810.0	3796.1	3800.7	3839.6
47.5°	7234.6	7164.6	6903.5	5644.3	5170.2	4277.9	4245.3	4223.5	4231.3	4222.0
50°	7979.2	7915.4	6390.5	6277.0	5739.2	4747.4	4699.2	4691.4	4694.5	4693.0
52.5°	8787.5	7455.3	7082.2	6964.1	6339.2	5238.6	5221.5	5179.5	5188.9	5179.5
55°	9735.8	7853.3	7843.9	7705.6	7013.8	5809.1	5788.9	5729.8	5358.3	5683.2
57.5°	10635.8	8613.4	8613.4	8479.7	7704.0	6376.5	6343.9	6300.3	3808.5	3071.7
60°	11621.3	9375.1	9353.3	9243.0	8369.4	6917.5	5622.6	5610.1	2300.6	2308.4
62.5°	12473.2	10054.4	10093.3	9990.7	9009.8	5179.5	2605.3	2552.5	227.0	349.8
65°	13427.7	10805.2	10851.9	10746.2	9703.1	5493.6	2827.6	2801.2	51.3	46.6
67.5°	14509.6	11554.5	11448.8	11332.2	10108.8	5656.8	2938.0	2914.7	14.0	9.3
68°	14518.9	11539.0	11402.2	11322.9	10070.0	5625.7	2928.7	2906.9	14.0	9.3
70°	13772.8	10957.6	10820.8	10841.0	9588.1	5380.1	2807.4	2767.0	14.0	9.3
72.5°	12083.0	9751.3	9597.4	9488.6	8503.0	4783.2	2516.7	2440.5	14.0	9.3
75°	10338.9	8263.7	8008.7	7769.3	6841.3	3914.2	2064.4	1978.9	14.0	9.3
77.5°	8148.6	6298.8	5936.6	5779.6	5140.7	2891.3	1534.3	1441.0	14.0	7.8
80°	4503.3	3614.2	3306.4	3210.0	2939.5	1699.1	879.8	823.9	12.4	7.8
82.5°	1164.3	873.6	761.7	735.3	690.2	402.6	214.5	203.6	10.9	6.2
85°	166.3	122.8	135.2	160.1	153.9	104.2	74.6	63.7	9.3	4.7
87.5°	87.1	73.1	85.5	96.4	97.9	60.6	31.1	17.1	4.7	0.0
90°	14.0	14.0	15.5	17.1	17.1	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



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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)