

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: P522183

Luminaire Tested: **CST-CA6-230-727-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522183
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-CA6-230-727-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22477 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U1 - G4

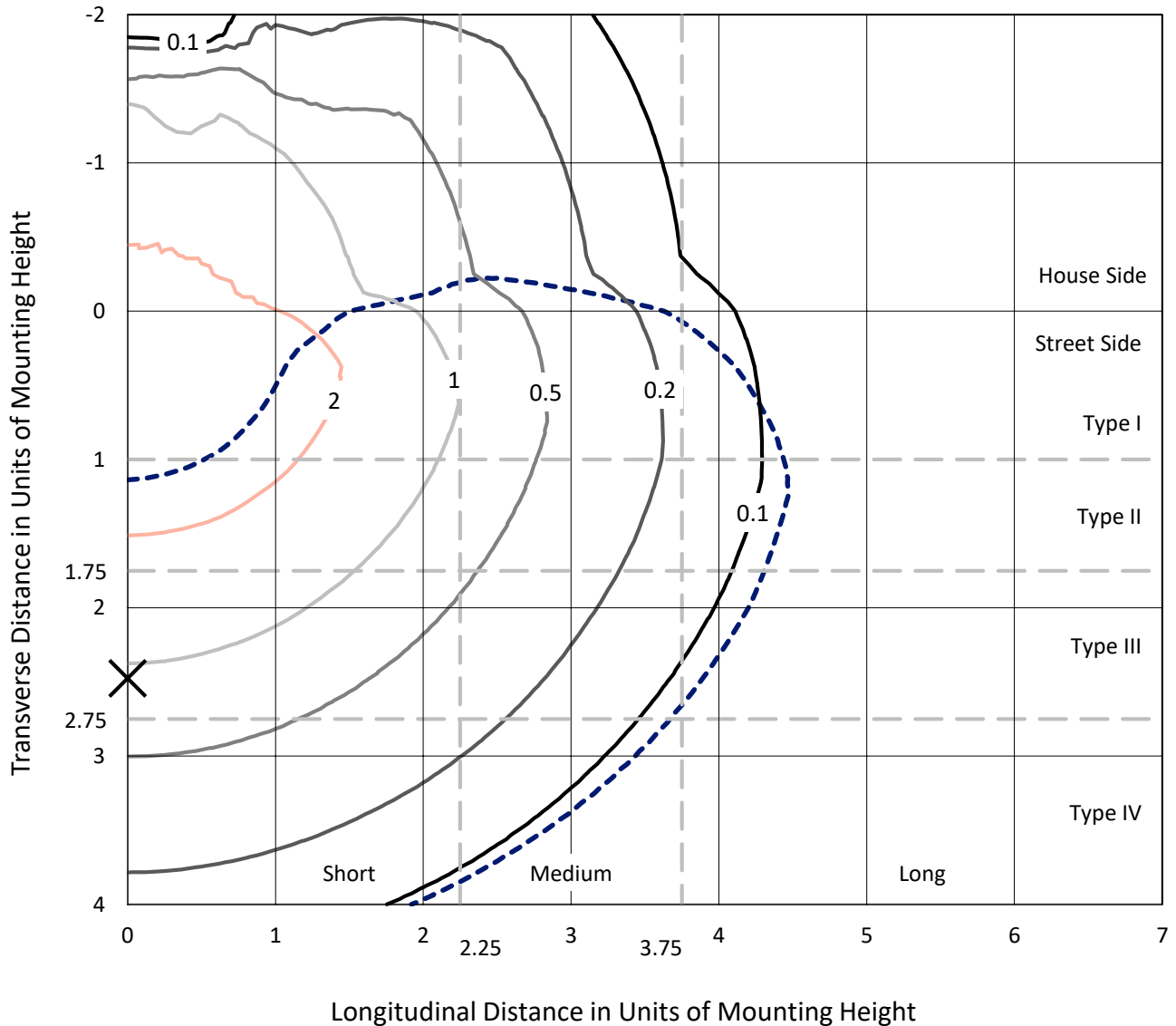
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

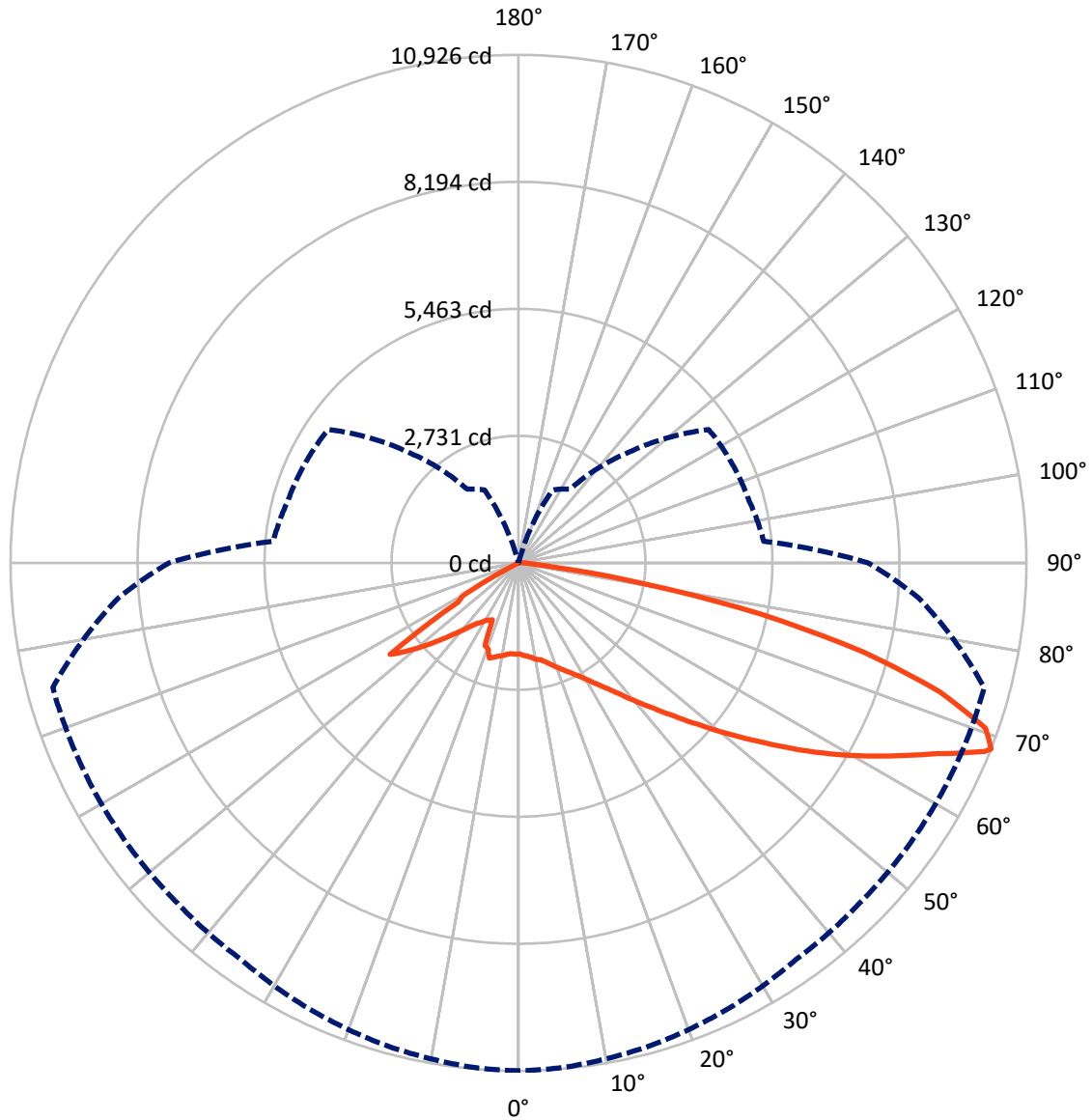
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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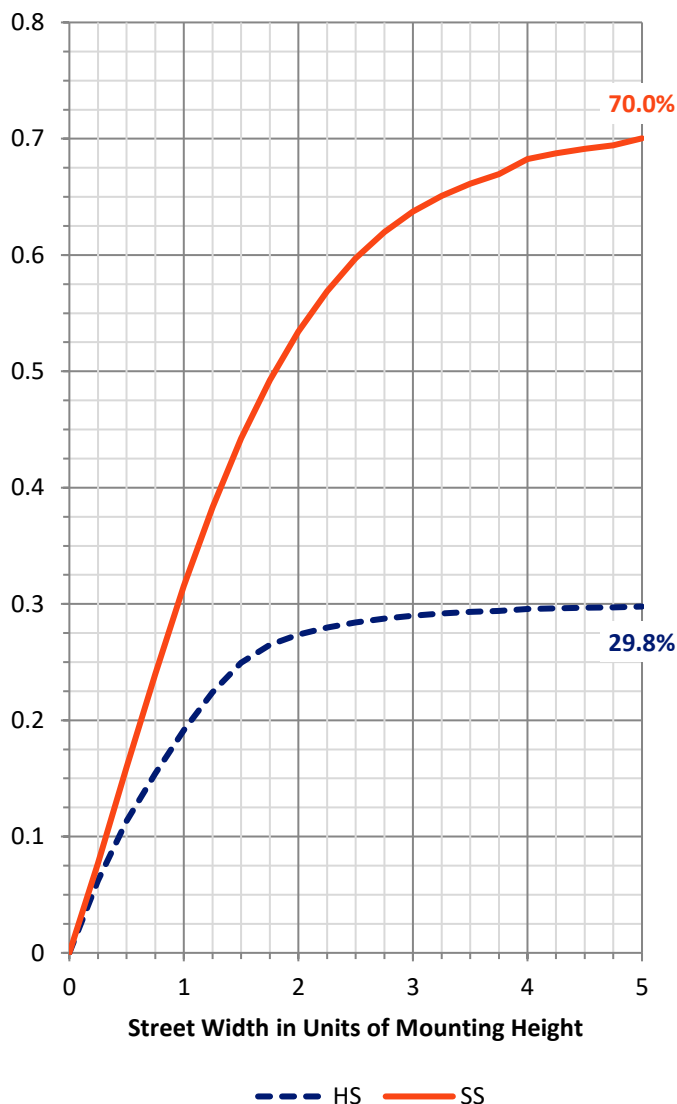
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6700.1	1.0	6701.2
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	15766.6	9.2	15775.8
	% Fixture	70.1	0.0	70.2
Total	Lumens	22466.8	10.2	22477.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.2	0.8
10°-20°	605.3	2.7
20°-30°	1036.8	4.6
30°-40°	1682.0	7.5
40°-50°	2836.6	12.6
50°-60°	4623.7	20.6
60°-70°	6201.1	27.6
70°-80°	4816.7	21.4
80°-90°	474.4	2.1
90°-100°	9.0	0.0
100°-110°	0.5	0.0
110°-120°	0.1	0.0
120°-130°	0.1	0.0
130°-140°	0.1	0.0
140°-150°	0.1	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	22466.8	100.0
0°-180°	22477.0	100.0

Coefficient of Utilization

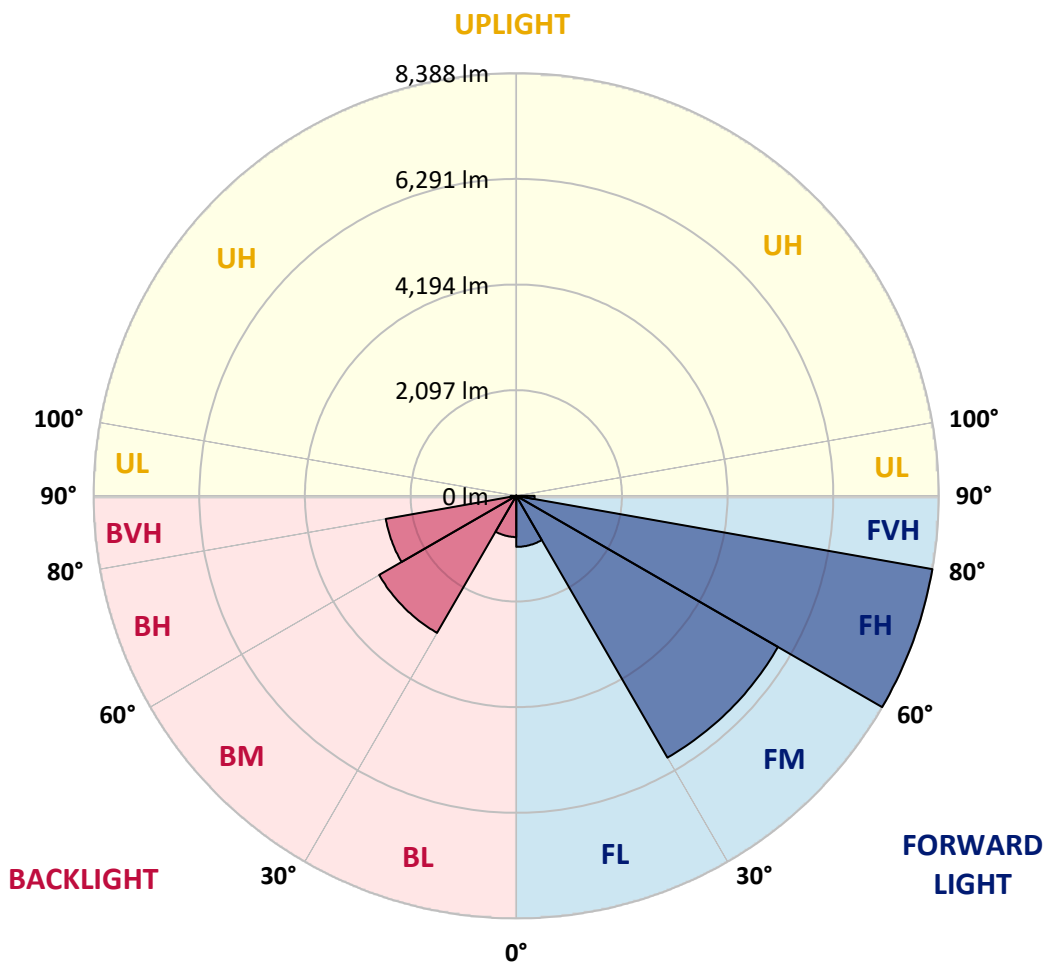


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1013.8	4.5			
FM	(30°-60°)	5999.9	26.7			
FH	(60°-80°)	8388.2	37.3			G4/12000
FVH	(80°-90°)	364.7	1.6			G3/500
BL	(0°-30°)	818.5	3.6	B2/1000		
BM	(30°-60°)	3142.3	14.0	B3/5000		
BH	(60°-80°)	2629.7	11.7	B4/5000		G4/5000
BVH	(80°-90°)	109.6	0.5			G2/225
UL	(90°-100°)	9.0	0.0		U1/10	
UH	(100°-180°)	1.2	0.0		U1/10	

BUG Rating: B4-U1-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6
2.5°	1992.1	1986.5	1985.6	1996.8	1961.4	1979.1	1963.3	1976.3	1967.9	1974.5	1975.4
5°	2019.1	2008.8	2002.3	2015.4	1993.0	2001.4	1983.7	1989.3	1966.1	1979.1	1981.0
7.5°	2058.1	2041.4	2039.5	2043.2	2023.7	2030.2	2001.4	2007.9	1991.2	1983.7	1990.3
10°	2111.1	2095.3	2083.2	2091.6	2065.6	2069.3	2038.6	2039.5	2027.4	2013.5	2024.7
12.5°	2140.8	2142.7	2137.1	2143.6	2122.3	2110.2	2088.8	2081.4	2069.3	2052.5	2047.0
15°	2215.2	2211.5	2200.3	2210.6	2207.8	2196.6	2170.6	2153.9	2127.8	2118.5	2109.2
17.5°	2306.3	2294.2	2284.9	2298.0	2311.9	2288.7	2263.6	2240.3	2205.9	2187.3	2176.2
20°	2402.1	2393.7	2384.4	2404.9	2409.5	2391.8	2373.2	2338.9	2298.9	2274.7	2251.5
22.5°	2509.0	2492.2	2495.0	2522.0	2513.6	2505.2	2481.1	2453.2	2404.9	2374.2	2307.2
25°	2619.6	2610.3	2623.3	2635.4	2628.9	2611.2	2599.1	2578.7	2524.8	2487.6	2390.0
27.5°	2757.2	2742.3	2759.0	2763.7	2758.1	2753.5	2736.7	2720.9	2662.4	2620.5	2498.7
30°	2918.9	2901.3	2928.2	2921.7	2916.1	2919.8	2909.6	2875.2	2823.2	2766.5	2644.7
32.5°	3111.3	3088.1	3118.8	3104.8	3091.8	3117.9	3093.7	3061.1	2999.8	2933.8	2814.8
35°	3334.4	3335.4	3351.2	3327.9	3323.3	3351.2	3335.4	3295.4	3238.7	3169.9	3000.7
37.5°	3605.0	3597.5	3637.5	3626.3	3609.6	3646.8	3651.4	3601.2	3499.0	3431.1	3231.3
40°	3934.0	3932.2	3945.2	3947.0	3942.4	3960.1	3968.4	3901.5	3835.5	3733.2	3049.1
42.5°	4285.4	4292.9	4316.1	4299.4	4321.7	4344.9	4347.7	4291.9	4197.1	3581.7	3238.7
45°	4707.5	4730.7	4746.5	4742.8	4753.0	4786.5	4789.3	4759.5	4666.5	3880.1	3582.6
47.5°	5191.8	5214.1	5218.7	5248.5	5239.2	5286.6	5280.1	5281.0	5181.5	4295.6	3957.3
50°	5748.6	5758.8	5796.9	5813.7	5790.4	5854.6	5837.8	5858.3	5735.6	4771.6	4359.8
52.5°	6339.8	6357.5	6373.3	6436.5	6406.7	6462.5	6440.2	6487.6	6345.4	5255.9	4806.9
55°	7011.9	7014.7	7041.7	7105.8	7066.8	7133.7	7101.1	7118.8	7005.4	5791.4	5272.6
57.5°	7724.0	7714.7	7724.9	7776.0	7740.7	7790.9	7777.9	7794.6	7688.7	6354.7	5612.9
60°	8428.6	8414.7	8429.5	8463.9	8415.6	8502.0	8455.6	8471.4	8357.0	6930.1	6098.1
62.5°	9137.0	9126.7	9110.0	9144.4	9073.7	9118.4	9137.9	9111.9	9011.5	7450.7	6520.2
65°	9897.4	9887.1	9825.8	9847.2	9720.7	9699.4	9706.8	9715.2	9648.2	7966.6	6983.1
67.5°	10821.4	10806.5	10691.2	10546.2	10364.0	10324.0	10327.8	10350.1	10359.4	8630.3	7525.0
68°	10925.5	10898.5	10770.2	10602.0	10411.4	10364.9	10360.3	10364.9	10369.6	8635.9	7519.5
70°	10659.6	10649.4	10551.8	10348.2	10153.0	10041.4	9944.8	9941.1	9896.4	8194.3	7103.9
72.5°	9459.5	9446.5	9330.3	9186.2	9065.4	8890.6	8765.1	8772.6	8699.1	7242.4	6218.0
75°	7655.2	7654.3	7514.8	7394.0	7395.8	7382.8	7341.0	7414.4	7338.2	6142.7	5303.3
77.5°	5334.9	5353.5	5344.2	5273.6	5373.0	5510.6	5660.3	5801.6	5757.9	4852.5	4228.7
80°	2786.9	2839.0	3023.0	3031.4	3101.1	3235.0	3337.2	3432.1	3438.6	2753.5	2443.0
82.5°	740.9	756.7	819.0	801.3	795.7	822.7	845.0	847.8	849.6	717.6	670.2
85°	230.5	237.0	229.6	219.4	203.6	185.9	181.3	147.8	117.1	96.7	84.6
87.5°	163.6	174.8	158.0	148.7	132.0	125.5	112.5	88.3	68.8	48.3	32.5
90°	84.6	86.5	77.2	66.0	61.4	57.6	49.3	35.3	17.7	9.3	8.4
92.5°	42.8	43.7	38.1	32.5	27.9	24.2	18.6	10.2	5.6	2.8	0.9
95°	16.7	17.7	15.8	13.9	11.2	8.4	7.4	5.6	3.7	1.9	0.9
97.5°	5.6	5.6	5.6	4.6	4.6	4.6	4.6	3.7	2.8	1.9	0.9
100°	0.0	0.0	0.0	0.9	1.9	2.8	2.8	2.8	1.9	0.9	0.9
102.5°	0.0	0.0	0.0	0.0	0.0	0.9	1.9	1.9	1.9	0.9	0.9
105°	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9



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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	0.9	0.9	0.9
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
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	0.9
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
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°	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6	1959.6
2.5°	1970.7	1965.2	1967.9	1944.7	1950.3	1935.4	1967.0	1958.6	1954.9	1967.9
5°	1975.4	1954.9	1971.7	1955.9	1958.6	1937.3	1963.3	1953.1	1952.1	1959.6
7.5°	1977.2	1967.0	1982.8	1956.8	1965.2	1956.8	1976.3	1966.1	1975.4	1981.9
10°	2003.3	1997.7	1995.8	1986.5	1993.0	1974.5	1998.6	1998.6	2003.3	2020.9
12.5°	2041.4	2033.9	2029.3	2012.6	2019.1	2013.5	2033.0	2036.7	2045.1	2052.5
15°	2093.4	2080.4	2075.8	2060.9	2065.6	2064.6	2078.6	2079.5	2098.1	2097.2
17.5°	2160.4	2141.8	2147.4	2136.2	2137.1	2129.7	2122.3	2122.3	2139.0	2142.7
20°	2240.3	2134.3	1994.9	1916.8	1902.9	1913.1	1953.1	2019.1	1936.3	1959.6
22.5°	2096.2	2000.5	1994.0	1976.3	1965.2	1716.0	1651.9	1631.4	1738.3	1922.4
25°	2114.8	2073.9	2061.8	2039.5	1710.4	1707.7	1689.1	1658.4	1355.3	1348.8
27.5°	2213.4	2173.4	2153.9	1786.7	1779.2	1778.3	1750.4	1442.7	1373.0	1382.3
30°	2328.6	2282.1	1932.6	1876.8	1870.3	1855.5	1695.6	1425.1	1424.1	1425.1
32.5°	2461.6	2307.2	1988.4	1985.6	1989.3	1943.8	1502.2	1496.6	1495.7	1505.0
35°	2643.8	2140.8	2127.8	2141.8	2122.3	1680.7	1592.4	1589.6	1590.5	1585.9
37.5°	2522.9	2308.2	2305.4	2305.4	2259.8	1719.7	1702.1	1715.1	1713.2	1706.7
40°	2574.0	2510.8	2494.1	2488.5	1910.3	1855.5	1845.2	1862.0	1864.8	1869.4
42.5°	2822.2	2764.6	2756.2	2690.2	2078.6	2060.9	2029.3	2047.0	2045.1	2050.7
45°	3127.1	3088.1	3051.8	2332.3	2305.4	2283.1	2250.5	2271.0	2276.6	2272.9
47.5°	3482.2	3439.5	3177.3	2564.7	2563.8	2546.2	2509.9	2526.6	2523.8	2523.8
50°	3839.2	3792.7	2886.4	2860.4	2851.1	2823.2	2793.4	2796.2	2797.1	2806.4
52.5°	4238.0	3387.4	3195.0	3142.9	3150.4	3131.8	3103.0	2349.1	3089.0	3097.4
55°	3961.0	3545.5	3534.3	3465.5	3483.2	3459.0	3440.4	2317.5	3072.3	3394.9
57.5°	3916.4	3886.6	3877.3	3806.7	3829.0	3599.4	3771.4	2535.9	2125.0	1552.4
60°	4257.5	4225.9	4220.3	4158.1	4156.2	2860.4	3428.3	1739.3	1359.1	1368.4
62.5°	4588.5	4537.3	4551.3	4477.8	3156.9	1743.0	1536.6	39.0	62.3	66.0
65°	4957.5	4872.0	4885.9	4818.1	3256.4	1837.8	1661.2	20.5	17.7	16.7
67.5°	5312.6	5163.0	5091.4	5019.8	3381.9	1935.4	1730.9	5.6	0.0	0.0
68°	5295.0	5136.9	5063.5	4995.6	3368.8	1932.6	1727.2	5.6	0.0	0.0
70°	4996.6	4854.3	4784.6	4732.6	3216.4	1866.6	1657.5	5.6	0.0	0.0
72.5°	4368.2	4289.1	4244.5	4199.0	2857.6	1669.5	1486.4	5.6	0.0	0.0
75°	3711.9	3689.5	3661.7	3561.3	2381.6	1366.5	1221.5	5.6	0.0	0.0
77.5°	2941.2	2940.3	2872.4	2754.4	1793.2	1003.0	900.8	4.6	0.0	0.0
80°	1590.5	1733.7	1681.6	1621.2	1017.0	545.7	519.6	3.7	0.0	0.0
82.5°	447.1	423.0	406.2	380.2	213.8	119.0	116.2	3.7	0.0	0.0
85°	62.3	68.8	76.2	86.5	49.3	31.6	27.9	1.9	0.0	0.0
87.5°	35.3	40.0	49.3	51.1	18.6	14.9	4.6	0.0	0.0	0.0
90°	7.4	8.4	9.3	9.3	3.7	3.7	0.0	0.0	0.0	0.0
92.5°	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.9	0.9	0.9	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°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.9	0.9	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)