

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: P256752

Luminaire Tested: **CST-6-3-D-U-T5R-7050-HSS-HM-EX180**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256752
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-6-3-D-U-T5R-7050-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 5000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED 180
DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20969 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U2 - G4

Input Watts (W): 234
Input Voltage (V): NR
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: 28.75 FT

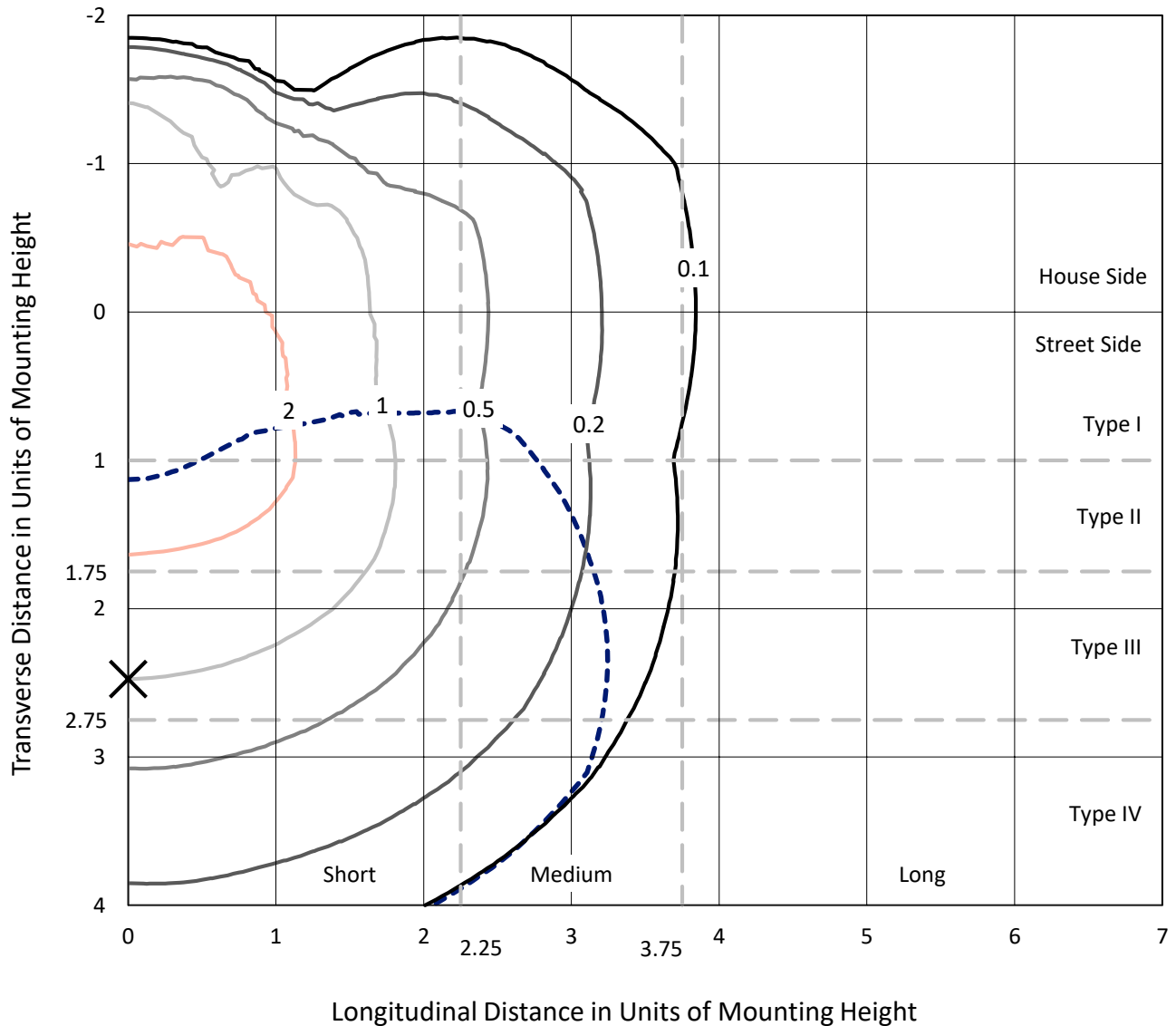


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

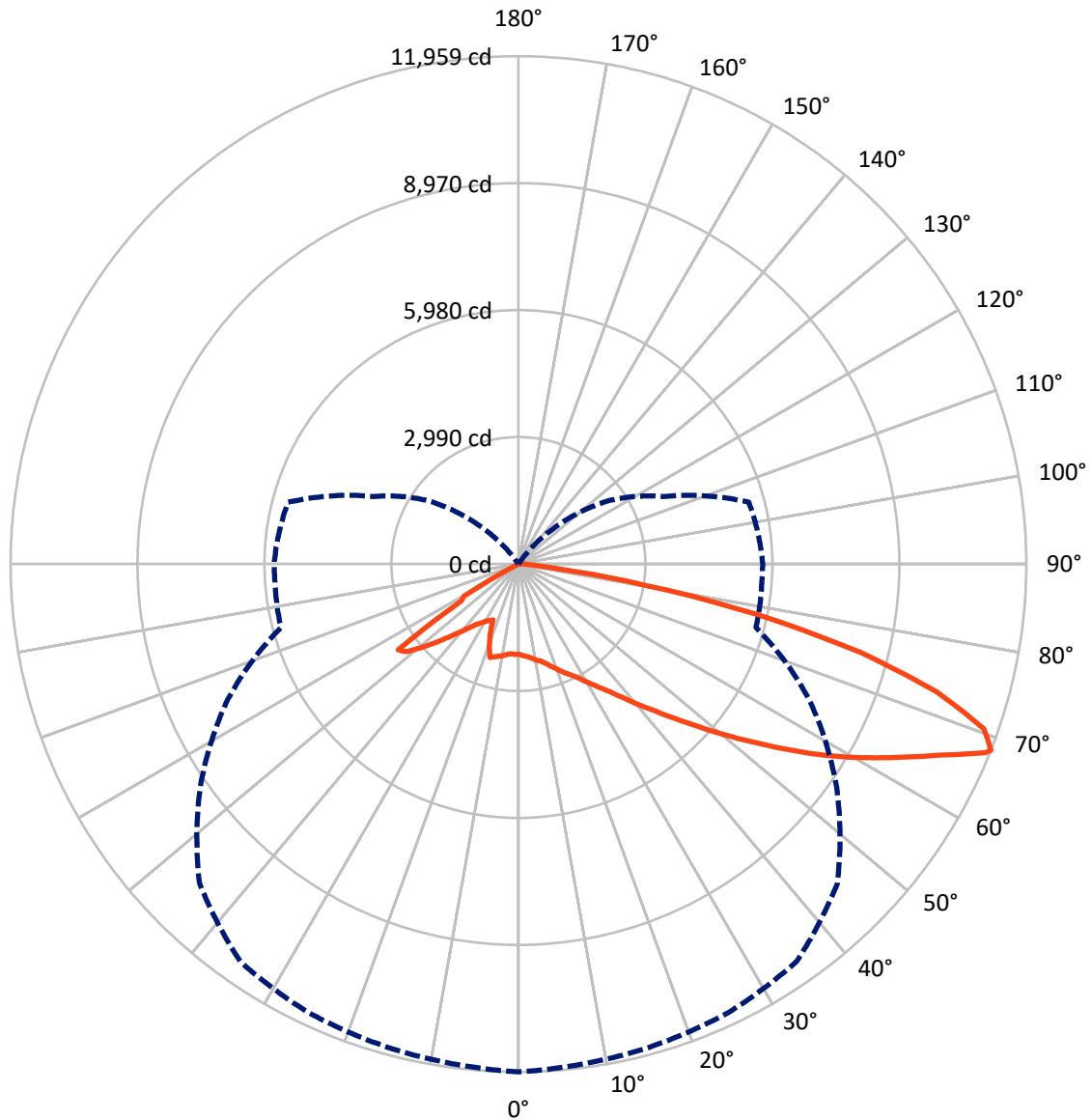


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical



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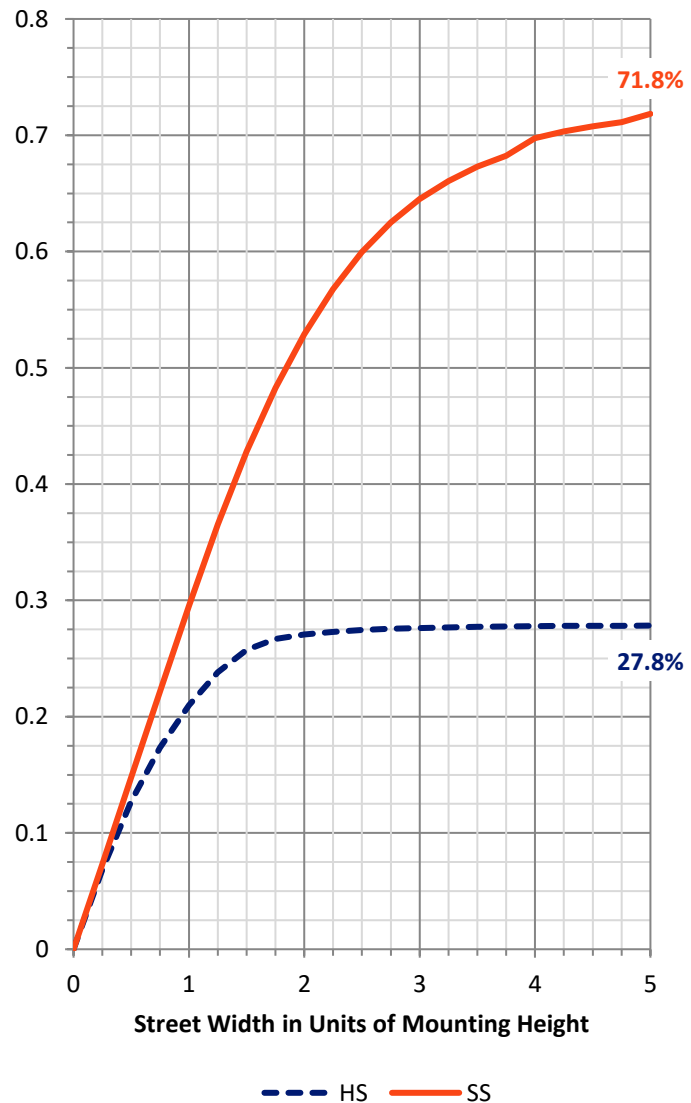
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5856.7	0.1	5856.8
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	15100.2	12.0	15112.2
	% Fixture	72.0	0.1	72.1
Total	Lumens	20956.9	12.1	20969.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.2	1.0
10°-20°	653.3	3.1
20°-30°	1106.1	5.3
30°-40°	1752.3	8.4
40°-50°	2864.9	13.7
50°-60°	4388.3	20.9
60°-70°	5395.8	25.7
70°-80°	4169.3	19.9
80°-90°	420.7	2.0
90°-100°	11.9	0.1
100°-110°	0.2	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°	20956.9	99.9
0°-180°	20969.0	100.0



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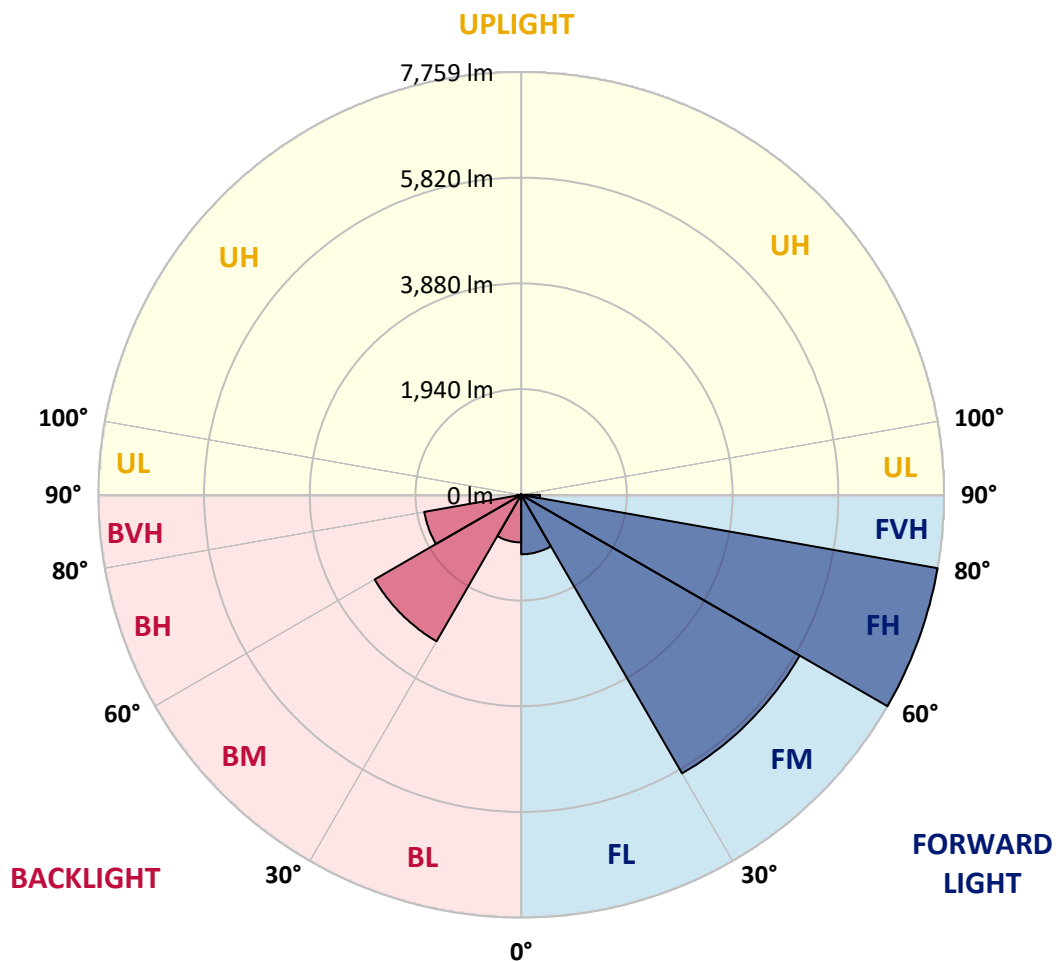
CATALOG NUMBER: CST-6-3-D-U-T5R-7050-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1091.5	5.2			
FM	(30°-60°)	5902.4	28.1			
FH	(60°-80°)	7759.4	37.0			G4/12000
FVH	(80°-90°)	346.9	1.7			G3/500
BL	(0°-30°)	874.2	4.2	B2/1000		
BM	(30°-60°)	3103.1	14.8	B3/5000		
BH	(60°-80°)	1805.6	8.6	B3/2500		G3/2500
BVH	(80°-90°)	73.7	0.4			G1/100
UL	(90°-100°)	11.9	0.1		U2/50	
UH	(100°-180°)	0.1	0.0		U1/10	

BUG Rating: B3-U2-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4
2.5°	2162.8	2158.7	2154.7	2163.8	2128.4	2143.6	2131.5	2142.6	2134.5	2143.6	2140.5
5°	2191.1	2187.0	2174.9	2185.0	2161.8	2167.8	2152.7	2156.7	2129.4	2145.6	2144.6
7.5°	2237.5	2226.4	2218.3	2218.3	2198.1	2197.1	2172.9	2173.9	2152.7	2150.6	2154.7
10°	2300.2	2292.1	2269.8	2271.9	2243.6	2239.5	2209.2	2208.2	2191.1	2181.0	2190.0
12.5°	2346.6	2354.7	2334.5	2334.5	2306.2	2286.0	2264.8	2250.7	2237.5	2222.4	2215.3
15°	2431.5	2439.6	2412.3	2411.3	2400.2	2375.9	2352.7	2322.4	2299.1	2292.1	2281.0
17.5°	2541.6	2536.5	2513.3	2514.3	2516.3	2476.9	2453.7	2414.3	2381.0	2356.7	2350.7
20°	2653.7	2653.7	2628.5	2636.5	2626.4	2590.1	2574.9	2520.4	2473.9	2447.6	2426.4
22.5°	2779.0	2773.9	2756.7	2773.9	2753.7	2717.4	2692.1	2637.5	2577.9	2429.5	2368.8
25°	2898.2	2895.1	2902.2	2907.3	2882.0	2836.6	2819.4	2761.8	2596.1	2401.2	2278.9
27.5°	3048.7	3038.6	3054.7	3064.8	3039.6	3000.2	2963.8	2899.2	2548.7	2395.1	2382.0
30°	3241.6	3219.4	3242.6	3247.7	3221.4	3197.2	3142.6	2819.4	2564.8	2520.4	2516.3
32.5°	3447.7	3421.4	3451.7	3455.8	3421.4	3401.2	3263.9	2778.0	2723.4	2671.9	2676.9
35°	3692.2	3692.2	3707.3	3709.3	3684.1	3649.7	3126.5	2980.0	2931.5	2884.0	2883.0
37.5°	3990.2	3981.1	4021.5	4045.7	4018.4	3920.5	3326.5	3257.8	3183.0	3122.4	2997.2
40°	4349.8	4365.9	4377.1	4401.3	4375.0	4154.8	3618.4	3540.6	3482.0	3279.0	2962.8
42.5°	4737.7	4741.7	4766.0	4796.3	4796.3	4563.9	3959.9	3893.2	3817.4	3206.3	3063.8
45°	5201.4	5192.3	5238.7	5287.2	5274.1	5033.7	4356.9	4307.4	3952.8	3417.4	3418.4
47.5°	5727.7	5716.5	5783.2	5846.9	5781.2	5554.9	4793.2	4754.9	3815.4	3775.0	3766.9
50°	6335.8	6308.5	6385.3	6470.1	6416.6	6136.8	5323.6	4586.2	4198.3	4165.9	4160.9
52.5°	6985.3	6964.1	7010.6	7155.0	7084.3	6745.9	5825.6	4731.6	4641.7	4605.4	4596.3
55°	7718.7	7677.3	7777.3	7887.4	7805.6	7419.7	6320.6	5214.5	5121.6	5058.9	4968.0
57.5°	8489.5	8429.9	8481.4	8619.8	8541.0	8109.6	6959.0	5711.5	5601.4	4635.7	4266.9
60°	9257.2	9229.9	9250.1	9372.3	9275.4	8780.4	7557.1	6209.5	4740.7	4585.2	4603.3
62.5°	10028.9	9969.3	9987.5	10112.8	9988.5	9418.8	8123.8	6662.1	4989.2	4934.7	4953.9
65°	10856.3	10785.6	10801.7	10838.1	10684.5	9991.6	8624.8	7089.4	5363.0	5305.4	5326.6
67.5°	11853.3	11788.7	11700.8	11592.7	11380.6	10599.7	9122.8	7538.9	5783.2	5750.9	5758.0
68°	11959.4	11896.7	11790.7	11662.4	11424.0	10624.9	9144.0	7552.0	5789.3	5748.9	5750.9
70°	11629.1	11666.4	11546.2	11331.1	11132.1	10255.2	8797.6	7261.1	5531.7	5472.1	5456.9
72.5°	10298.7	10380.5	10214.8	10178.5	9934.0	9136.0	7698.5	6300.4	4811.4	4830.6	4776.1
75°	8314.7	8434.9	8233.9	8245.0	8105.6	7620.7	6451.9	5245.8	3950.8	4038.7	4054.8
77.5°	5782.2	5954.9	5867.1	5954.9	5886.2	5711.5	4993.3	4039.7	3014.3	3115.4	3154.8
80°	3015.4	3220.4	3336.6	3373.0	3395.2	3388.1	3040.6	2424.4	1742.5	1779.9	1777.9
82.5°	953.6	904.1	933.4	925.3	900.1	910.2	820.3	641.5	444.5	489.9	468.7
85°	287.9	289.9	281.8	279.8	258.6	227.3	185.9	107.1	52.5	61.6	57.6
87.5°	212.1	214.2	198.0	187.9	175.8	152.5	118.2	66.7	25.3	24.2	19.2
90°	117.2	113.1	105.1	97.0	91.9	78.8	59.6	25.3	9.1	7.1	6.1
92.5°	63.6	60.6	56.6	53.5	46.5	37.4	24.2	8.1	4.0	1.0	0.0
95°	29.3	27.3	26.3	23.2	20.2	14.1	8.1	5.1	3.0	1.0	0.0
97.5°	13.1	12.1	11.1	9.1	7.1	4.0	4.0	3.0	2.0	1.0	0.0
100°	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0



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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	0.0	0.0	0.0
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°	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4	2124.4
2.5°	2137.5	2131.5	2128.4	2109.2	2115.3	2098.1	2131.5	2123.4	2118.3	2132.5
5°	2139.5	2118.3	2131.5	2120.3	2124.4	2100.1	2126.4	2115.3	2114.3	2120.3
7.5°	2144.6	2130.4	2143.6	2121.4	2131.5	2121.4	2140.5	2129.4	2138.5	2144.6
10°	2171.9	2163.8	2157.7	2152.7	2159.7	2139.5	2163.8	2164.8	2167.8	2186.0
12.5°	2210.2	2202.2	2192.1	2178.9	2186.0	2177.9	2196.1	2201.2	2212.3	2221.4
15°	2263.8	2248.6	2244.6	2232.5	2239.5	2235.5	2239.5	2236.5	2257.7	2254.7
17.5°	2337.5	2320.4	2262.8	2204.2	2166.8	2177.9	2224.4	2285.0	2300.2	2302.2
20°	2364.8	2243.6	2237.5	2170.9	2140.5	2138.5	2042.6	1899.1	1942.6	2044.6
22.5°	2332.5	2166.8	2149.6	2136.5	2007.2	1795.1	1774.9	1753.7	1748.6	1763.8
25°	2259.7	2240.6	2225.4	2053.7	1849.6	1850.6	1821.3	1681.9	1464.7	1446.6
27.5°	2370.9	2344.6	2198.1	1933.5	1929.4	1927.4	1884.0	1526.4	1479.9	1491.0
30°	2497.1	2453.7	2070.8	2036.5	2035.5	2017.3	1689.0	1539.5	1539.5	1541.5
32.5°	2642.6	2372.9	2143.6	2159.7	2158.7	2072.9	1631.4	1621.3	1617.3	1627.4
35°	2753.7	2308.2	2300.2	2329.4	2309.2	1758.7	1733.4	1724.4	1720.3	1715.3
37.5°	2719.4	2494.1	2494.1	2512.3	2349.7	1872.9	1860.7	1860.7	1852.6	1848.6
40°	2771.9	2725.4	2702.2	2709.3	1707.2	2011.2	2020.3	2018.3	2017.3	2024.4
42.5°	3048.7	3007.3	2986.1	2735.5	1911.2	1999.1	2221.4	2220.3	2223.4	2220.3
45°	3401.2	3362.8	3307.3	2559.8	2169.8	1752.6	2448.6	2459.8	2460.8	2459.8
47.5°	3771.0	3746.7	3178.0	2833.5	2450.7	1880.9	2340.6	2733.5	2728.5	2734.5
50°	4161.9	4052.8	3161.8	3157.8	2749.7	2093.1	2094.1	2972.9	3024.4	3040.6
52.5°	4597.3	3674.0	3504.3	3197.2	3052.7	2311.3	2289.0	2634.5	3337.6	3353.8
55°	4270.0	3881.1	3878.0	2845.6	3176.0	2521.4	2524.4	2500.2	3060.8	3479.0
57.5°	4248.8	4257.9	4250.8	3175.0	2317.3	2363.8	2750.7	2729.5	1981.9	1606.2
60°	4615.5	4628.6	4129.6	3428.5	2505.2	1453.6	1694.1	1439.5	1458.7	1473.8
62.5°	4966.0	4970.0	3358.8	2247.6	1241.5	58.6	28.3	23.2	22.2	22.2
65°	5353.9	5353.9	3600.2	2451.7	1199.1	22.2	4.0	3.0	11.1	11.1
67.5°	5728.7	5645.8	3777.0	2603.2	1220.3	3.0	0.0	0.0	0.0	0.0
68°	5707.4	5616.5	3760.9	2599.2	1217.3	2.0	0.0	0.0	0.0	0.0
70°	5390.3	5302.4	3567.9	2481.0	1171.8	2.0	0.0	0.0	0.0	0.0
72.5°	4757.9	4677.1	3159.8	2187.0	1056.6	1.0	0.0	0.0	0.0	0.0
75°	4027.5	4016.4	2729.5	1845.6	906.1	1.0	0.0	0.0	0.0	0.0
77.5°	3240.6	3190.1	2133.5	1446.6	730.4	0.0	0.0	0.0	0.0	0.0
80°	1805.2	1879.9	1248.6	850.6	459.6	0.0	0.0	0.0	0.0	0.0
82.5°	487.9	456.6	272.7	184.9	87.9	0.0	0.0	0.0	0.0	0.0
85°	62.6	68.7	31.3	25.3	6.1	0.0	0.0	0.0	0.0	0.0
87.5°	32.3	38.4	10.1	8.1	2.0	0.0	0.0	0.0	0.0	0.0
90°	6.1	7.1	3.0	1.0	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)