

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: P256736

Luminaire Tested: **CST-6-3-D-U-T5R-7030-HSS-HM-EX180**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256736
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-7030-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 3000K 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: 20200 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U2 - G3

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

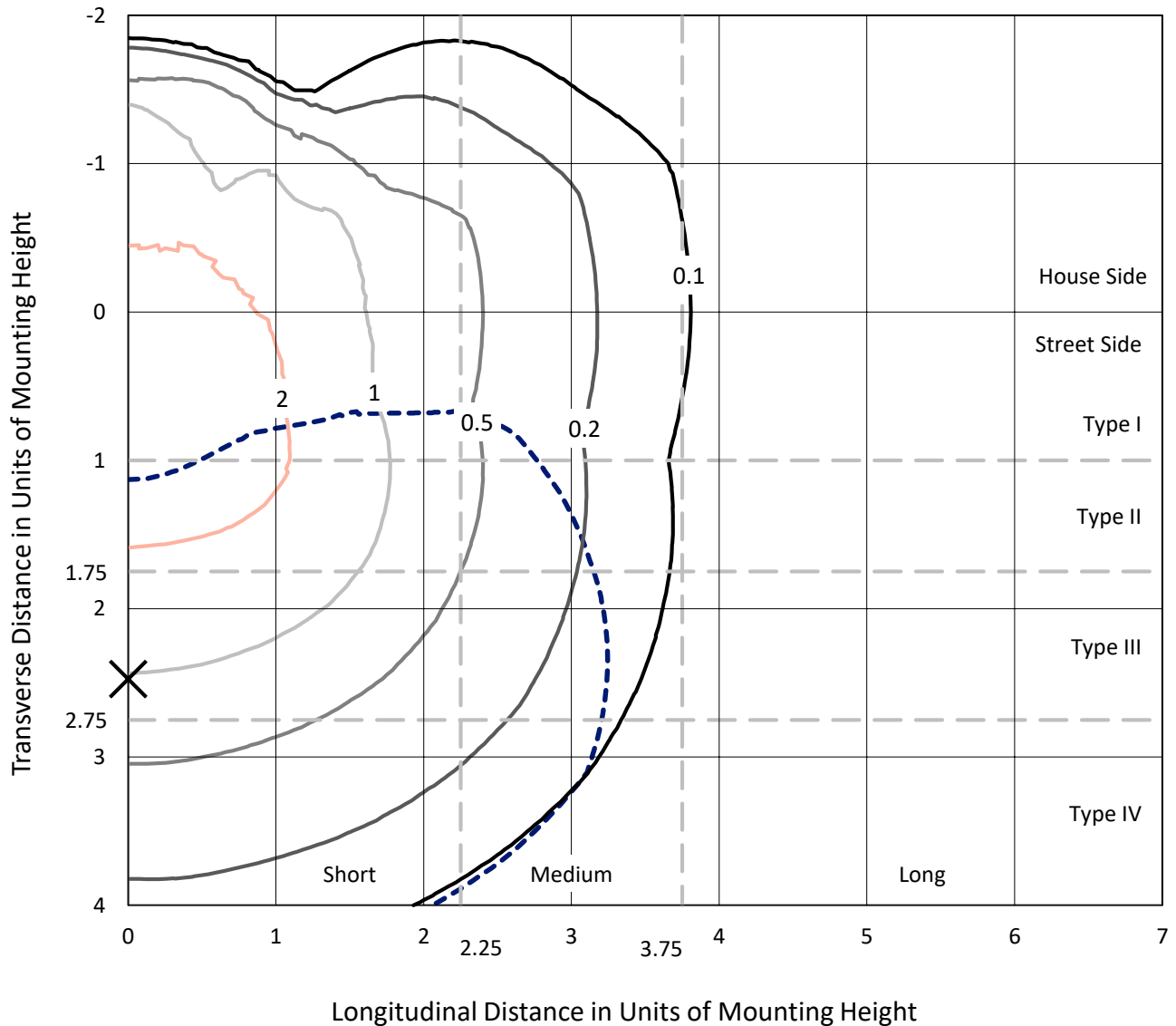


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

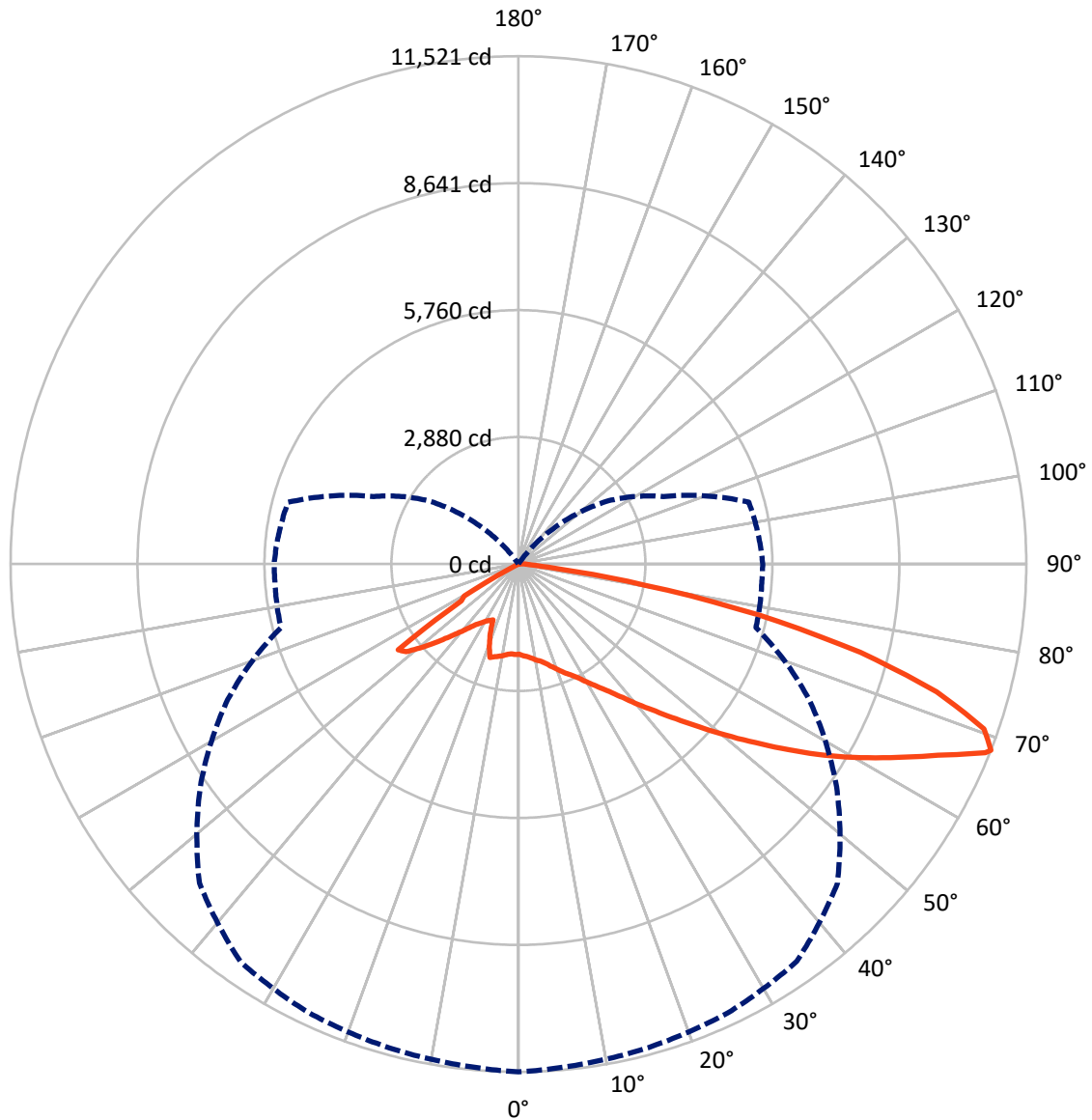


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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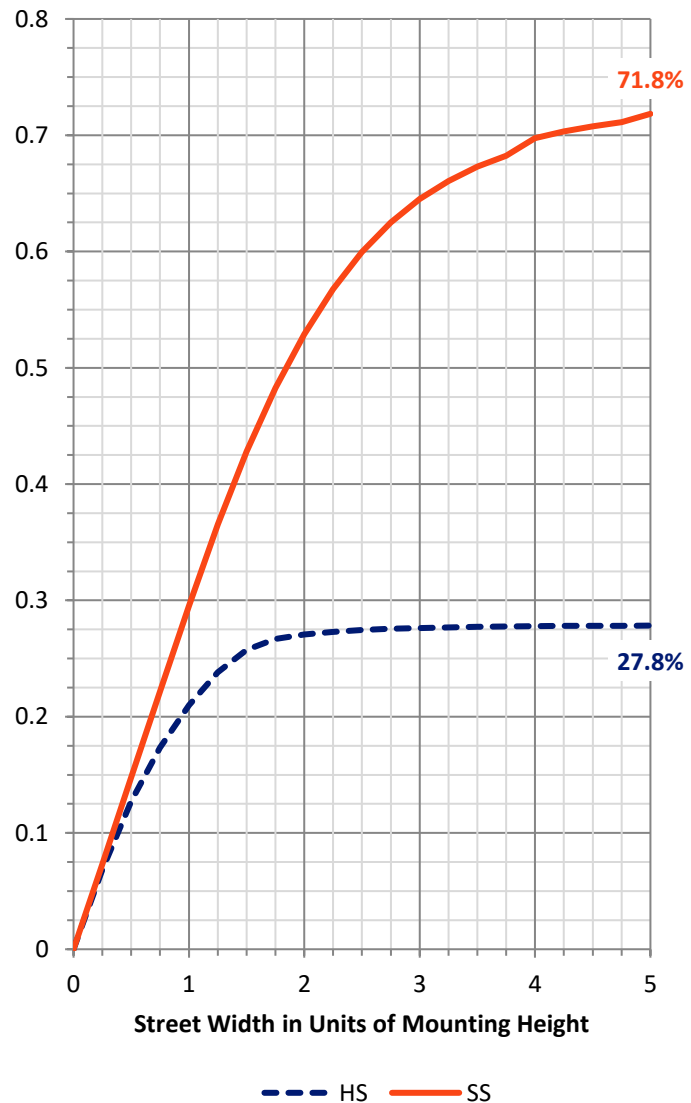
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5641.9	0.1	5642.0
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	14546.4	11.6	14558.0
	% Fixture	72.0	0.1	72.1
Total	Lumens	20188.3	11.7	20200.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.6	1.0
10°-20°	629.4	3.1
20°-30°	1065.5	5.3
30°-40°	1688.0	8.4
40°-50°	2759.8	13.7
50°-60°	4227.4	20.9
60°-70°	5197.9	25.7
70°-80°	4016.4	19.9
80°-90°	405.2	2.0
90°-100°	11.5	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°	20188.3	99.9
0°-180°	20200.0	100.0



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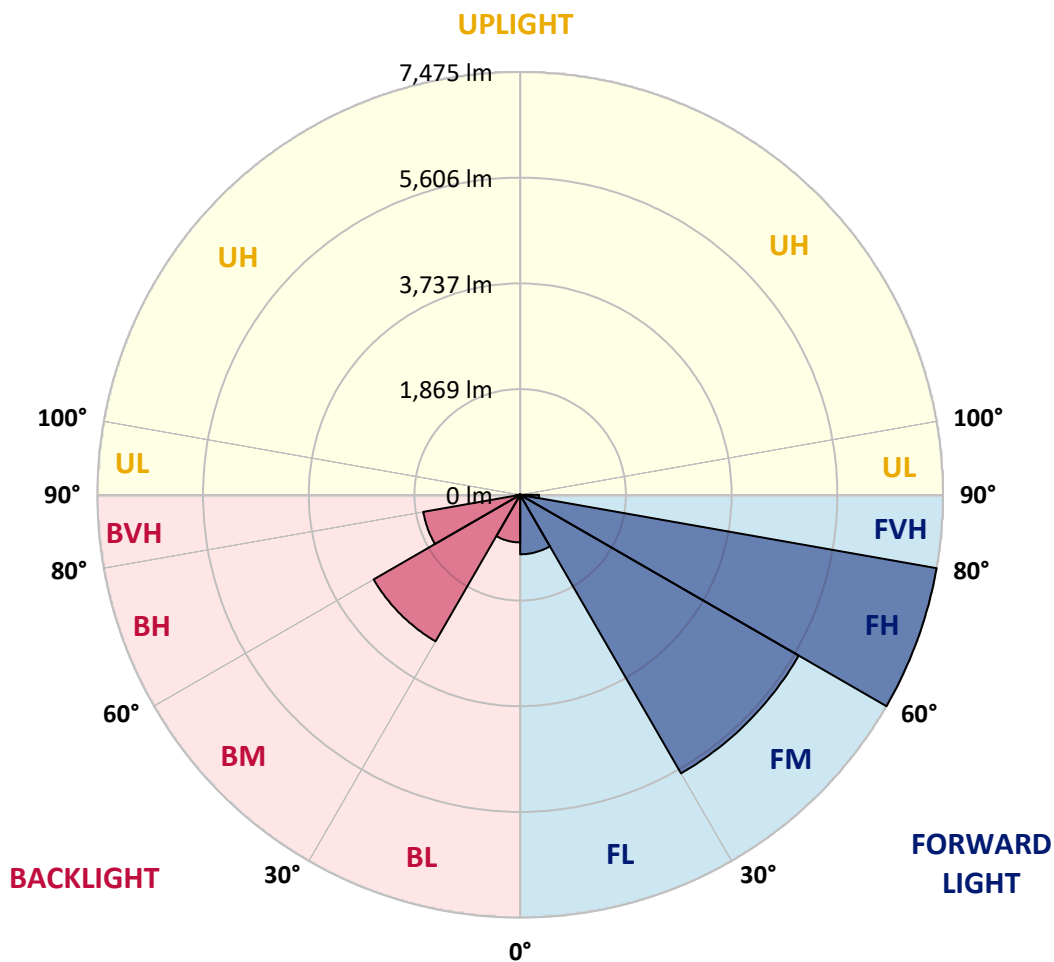
CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1051.4	5.2			
FM	(30°-60°)	5686.0	28.1			
FH	(60°-80°)	7474.8	37.0			G3/7500
FVH	(80°-90°)	334.2	1.7			G3/500
BL	(0°-30°)	842.1	4.2	B2/1000		
BM	(30°-60°)	2989.3	14.8	B3/5000		
BH	(60°-80°)	1739.4	8.6	B3/2500		G3/2500
BVH	(80°-90°)	71.0	0.4			G1/100
UL	(90°-100°)	11.5	0.1		U2/50	
UH	(100°-180°)	0.1	0.0		U1/10	

BUG Rating: B3-U2-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5
2.5°	2083.5	2079.6	2075.7	2084.4	2050.4	2065.0	2053.3	2064.0	2056.2	2065.0	2062.0
5°	2110.7	2106.8	2095.1	2104.9	2082.5	2088.3	2073.7	2077.6	2051.3	2066.9	2065.9
7.5°	2155.5	2144.8	2137.0	2137.0	2117.5	2116.5	2093.2	2094.2	2073.7	2071.8	2075.7
10°	2215.8	2208.0	2186.6	2188.6	2161.3	2157.4	2128.2	2127.2	2110.7	2101.0	2109.7
12.5°	2260.6	2268.3	2248.9	2248.9	2221.6	2202.2	2181.7	2168.1	2155.5	2140.9	2134.1
15°	2342.3	2350.1	2323.8	2322.8	2312.1	2288.8	2266.4	2237.2	2214.8	2208.0	2197.3
17.5°	2448.4	2443.5	2421.1	2422.1	2424.0	2386.1	2363.7	2325.8	2293.6	2270.3	2264.5
20°	2556.4	2556.4	2532.1	2539.8	2530.1	2495.1	2480.5	2427.9	2383.2	2357.9	2337.4
22.5°	2677.1	2672.2	2655.6	2672.2	2652.7	2617.7	2593.4	2540.8	2483.4	2340.4	2282.0
25°	2791.9	2789.0	2795.8	2800.6	2776.3	2732.5	2716.0	2660.5	2500.9	2313.1	2195.4
27.5°	2936.9	2927.2	2942.7	2952.5	2928.1	2890.2	2855.1	2792.9	2455.2	2307.3	2294.6
30°	3122.7	3101.3	3123.7	3128.6	3103.3	3079.9	3027.4	2716.0	2470.8	2427.9	2424.0
32.5°	3321.3	3296.0	3325.2	3329.0	3296.0	3276.5	3144.2	2676.1	2623.5	2573.9	2578.8
35°	3556.8	3556.8	3571.4	3573.3	3549.0	3515.9	3011.8	2870.7	2824.0	2778.3	2777.3
37.5°	3843.8	3835.1	3874.0	3897.4	3871.1	3776.7	3204.5	3138.3	3066.3	3007.9	2887.3
40°	4190.3	4205.8	4216.5	4239.9	4214.6	4002.5	3485.7	3410.8	3354.4	3158.8	2854.2
42.5°	4563.9	4567.8	4591.2	4620.4	4620.4	4396.6	3814.6	3750.4	3677.4	3088.7	2951.5
45°	5010.6	5001.8	5046.6	5093.3	5080.7	4849.1	4197.1	4149.4	3807.8	3292.1	3293.0
47.5°	5517.6	5506.9	5571.1	5632.4	5569.2	5351.2	4617.5	4580.5	3675.5	3636.6	3628.8
50°	6103.4	6077.1	6151.1	6232.8	6181.3	5911.7	5128.4	4418.0	4044.3	4013.2	4008.3
52.5°	6729.1	6708.7	6753.5	6892.6	6824.5	6498.5	5612.0	4558.1	4471.5	4436.5	4427.7
55°	7435.6	7395.7	7492.1	7598.1	7519.3	7147.6	6088.8	5023.3	4933.7	4873.4	4785.8
57.5°	8178.1	8120.7	8170.3	8303.6	8227.7	7812.2	6703.8	5502.0	5396.0	4465.7	4110.5
60°	8917.7	8891.4	8910.9	9028.6	8935.2	8458.4	7279.9	5981.8	4566.9	4417.0	4434.5
62.5°	9661.2	9603.7	9621.3	9741.9	9622.2	9073.4	7825.8	6417.7	4806.2	4753.7	4772.2
65°	10458.1	10390.0	10405.6	10440.6	10292.7	9625.1	8308.5	6829.4	5166.3	5110.8	5131.3
67.5°	11418.6	11356.3	11271.7	11167.5	10963.2	10211.0	8788.3	7262.4	5571.1	5540.0	5546.8
68°	11520.8	11460.5	11358.3	11234.7	11005.0	10235.3	8808.7	7275.1	5577.0	5538.0	5540.0
70°	11202.6	11238.6	11122.8	10915.5	10723.8	9879.1	8474.9	6994.8	5328.8	5271.4	5256.8
72.5°	9921.0	9999.8	9840.2	9805.2	9569.7	8800.9	7416.2	6069.4	4635.0	4653.5	4600.9
75°	8009.8	8125.6	7931.9	7942.6	7808.3	7341.2	6215.3	5053.4	3805.9	3890.5	3906.1
77.5°	5570.1	5736.6	5651.9	5736.6	5670.4	5502.0	4810.1	3891.5	2903.8	3001.1	3039.1
80°	2904.8	3102.3	3214.2	3249.3	3270.7	3263.9	2929.1	2335.5	1678.6	1714.6	1712.7
82.5°	918.6	870.9	899.2	891.4	867.1	876.8	790.2	617.9	428.2	472.0	451.5
85°	277.3	279.3	271.5	269.6	249.1	219.0	179.1	103.2	50.6	59.4	55.5
87.5°	204.4	206.3	190.7	181.0	169.3	146.9	113.9	64.2	24.3	23.4	18.5
90°	112.9	109.0	101.2	93.4	88.6	75.9	57.4	24.3	8.8	6.8	5.8
92.5°	61.3	58.4	54.5	51.6	44.8	36.0	23.4	7.8	3.9	1.0	0.0
95°	28.2	26.3	25.3	22.4	19.5	13.6	7.8	4.9	2.9	1.0	0.0
97.5°	12.7	11.7	10.7	8.8	6.8	3.9	3.9	2.9	1.9	1.0	0.0
100°	2.9	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	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°	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5
2.5°	2059.1	2053.3	2050.4	2031.9	2037.7	2021.2	2053.3	2045.5	2040.6	2054.3
5°	2061.1	2040.6	2053.3	2042.6	2046.5	2023.1	2048.4	2037.7	2036.7	2042.6
7.5°	2065.9	2052.3	2065.0	2043.6	2053.3	2043.6	2062.0	2051.3	2060.1	2065.9
10°	2092.2	2084.4	2078.6	2073.7	2080.5	2061.1	2084.4	2085.4	2088.3	2105.8
12.5°	2129.2	2121.4	2111.7	2099.0	2105.8	2098.1	2115.6	2120.4	2131.1	2139.9
15°	2180.8	2166.2	2162.3	2150.6	2157.4	2153.5	2157.4	2154.5	2174.9	2172.0
17.5°	2251.8	2235.3	2179.8	2123.4	2087.3	2098.1	2142.8	2201.2	2215.8	2217.7
20°	2278.1	2161.3	2155.5	2091.2	2062.0	2060.1	1967.7	1829.5	1871.3	1969.6
22.5°	2246.9	2087.3	2070.8	2058.2	1933.6	1729.2	1709.8	1689.3	1684.5	1699.1
25°	2176.9	2158.4	2143.8	1978.4	1781.8	1782.8	1754.5	1620.2	1411.0	1393.5
27.5°	2283.9	2258.6	2117.5	1862.6	1858.7	1856.7	1814.9	1470.4	1425.6	1436.3
30°	2405.6	2363.7	1994.9	1961.8	1960.8	1943.3	1627.1	1483.0	1483.0	1485.0
32.5°	2545.7	2285.9	2065.0	2080.5	2079.6	1996.8	1571.6	1561.9	1558.0	1567.7
35°	2652.7	2223.6	2215.8	2244.0	2224.6	1694.2	1669.9	1661.1	1657.2	1652.4
37.5°	2619.6	2402.6	2402.6	2420.2	2263.5	1804.2	1792.5	1792.5	1784.7	1780.8
40°	2670.2	2625.5	2603.1	2609.9	1644.6	1937.5	1946.2	1944.3	1943.3	1950.1
42.5°	2936.9	2897.0	2876.5	2635.2	1841.1	1925.8	2139.9	2138.9	2141.8	2138.9
45°	3276.5	3239.5	3186.0	2465.9	2090.3	1688.4	2358.8	2369.6	2370.5	2369.6
47.5°	3632.7	3609.3	3061.4	2729.6	2360.8	1812.0	2254.7	2633.3	2628.4	2634.2
50°	4009.3	3904.2	3045.9	3042.0	2648.8	2016.3	2017.3	2863.9	2913.5	2929.1
52.5°	4428.7	3539.2	3375.8	3079.9	2940.8	2226.5	2205.1	2537.9	3215.2	3230.8
55°	4113.4	3738.7	3735.8	2741.3	3059.5	2428.9	2431.8	2408.5	2948.6	3351.4
57.5°	4093.0	4101.7	4094.9	3058.5	2232.3	2277.1	2649.8	2629.4	1909.3	1547.3
60°	4446.2	4458.8	3978.1	3302.8	2413.3	1400.3	1631.9	1386.7	1405.2	1419.8
62.5°	4783.9	4787.8	3235.6	2165.2	1196.0	56.4	27.2	22.4	21.4	21.4
65°	5157.5	5157.5	3468.2	2361.8	1155.1	21.4	3.9	2.9	10.7	10.7
67.5°	5518.6	5438.8	3638.5	2507.7	1175.5	2.9	0.0	0.0	0.0	0.0
68°	5498.1	5410.6	3622.9	2503.8	1172.6	1.9	0.0	0.0	0.0	0.0
70°	5192.6	5107.9	3437.1	2390.0	1128.8	1.9	0.0	0.0	0.0	0.0
72.5°	4583.4	4505.6	3043.9	2106.8	1017.9	1.0	0.0	0.0	0.0	0.0
75°	3879.8	3869.1	2629.4	1777.9	872.9	1.0	0.0	0.0	0.0	0.0
77.5°	3121.8	3073.1	2055.2	1393.5	703.6	0.0	0.0	0.0	0.0	0.0
80°	1739.0	1811.0	1202.8	819.4	442.8	0.0	0.0	0.0	0.0	0.0
82.5°	470.0	439.9	262.7	178.1	84.7	0.0	0.0	0.0	0.0	0.0
85°	60.3	66.2	30.2	24.3	5.8	0.0	0.0	0.0	0.0	0.0
87.5°	31.1	37.0	9.7	7.8	1.9	0.0	0.0	0.0	0.0	0.0
90°	5.8	6.8	2.9	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)