

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: P256712

Luminaire Tested: **CST-6-3-D-U-T5R-7030-HSS-HM-EX120**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256712
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
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-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 3000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED 120
DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23529 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B4 - U1 - 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

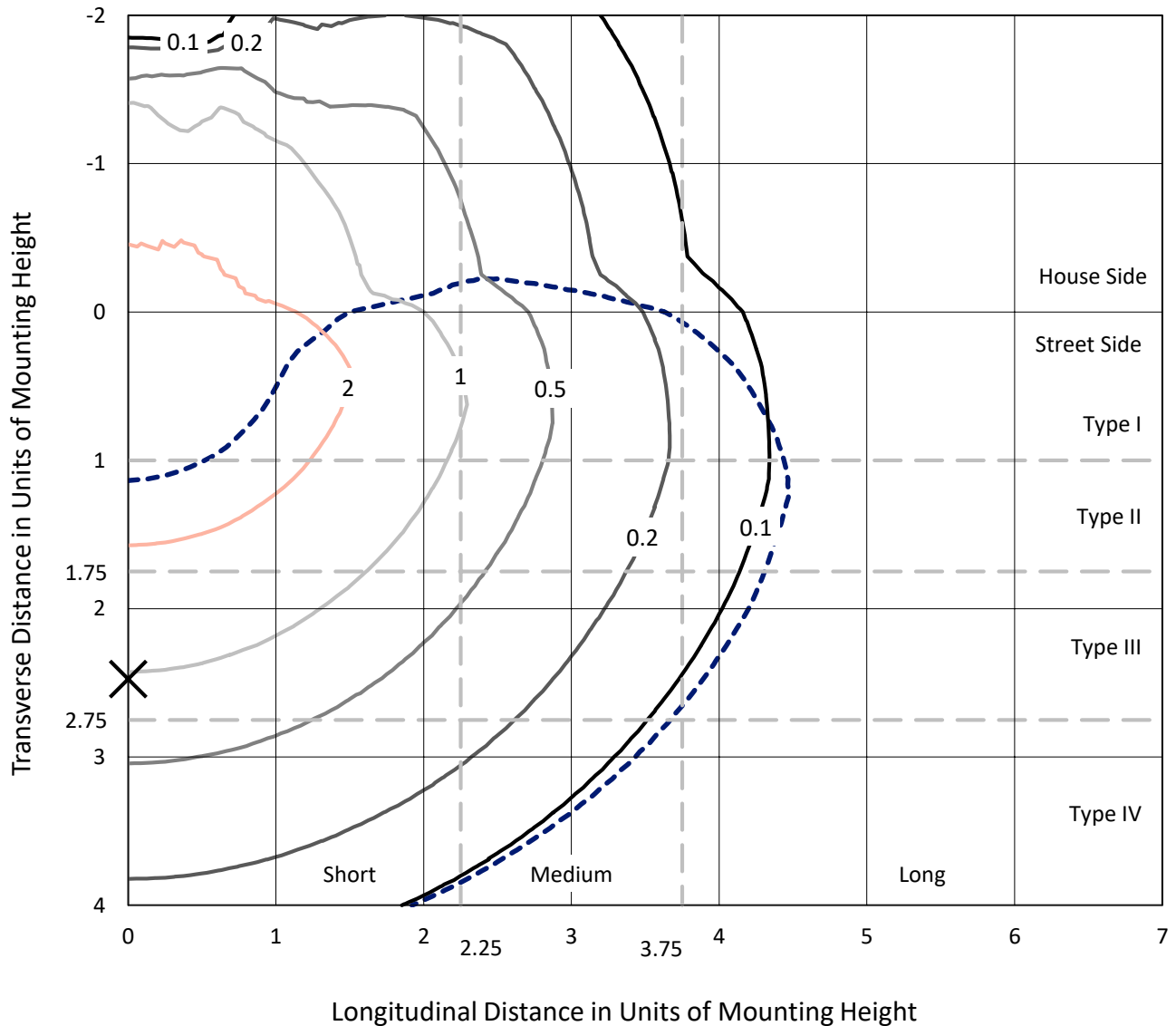


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

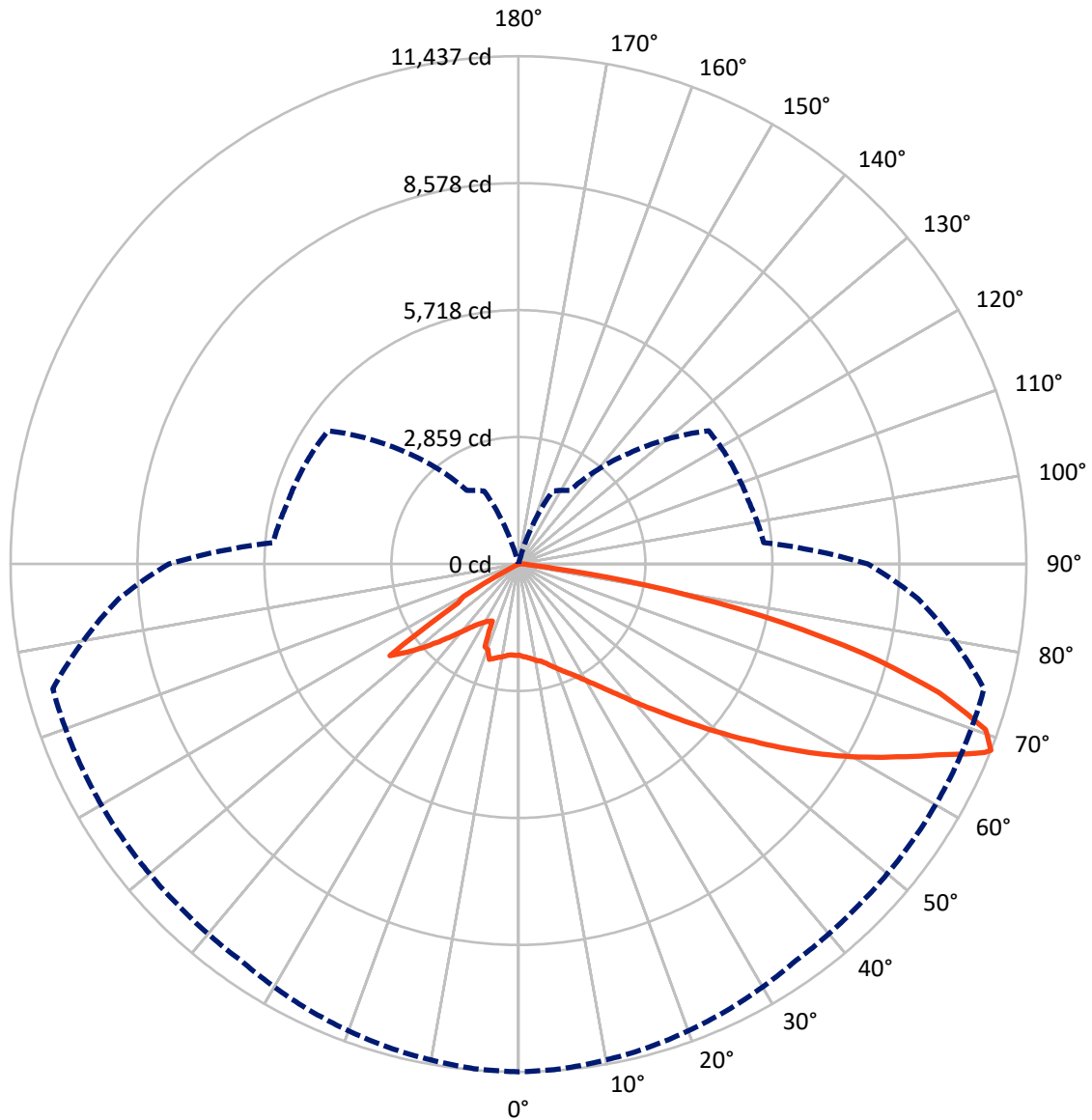


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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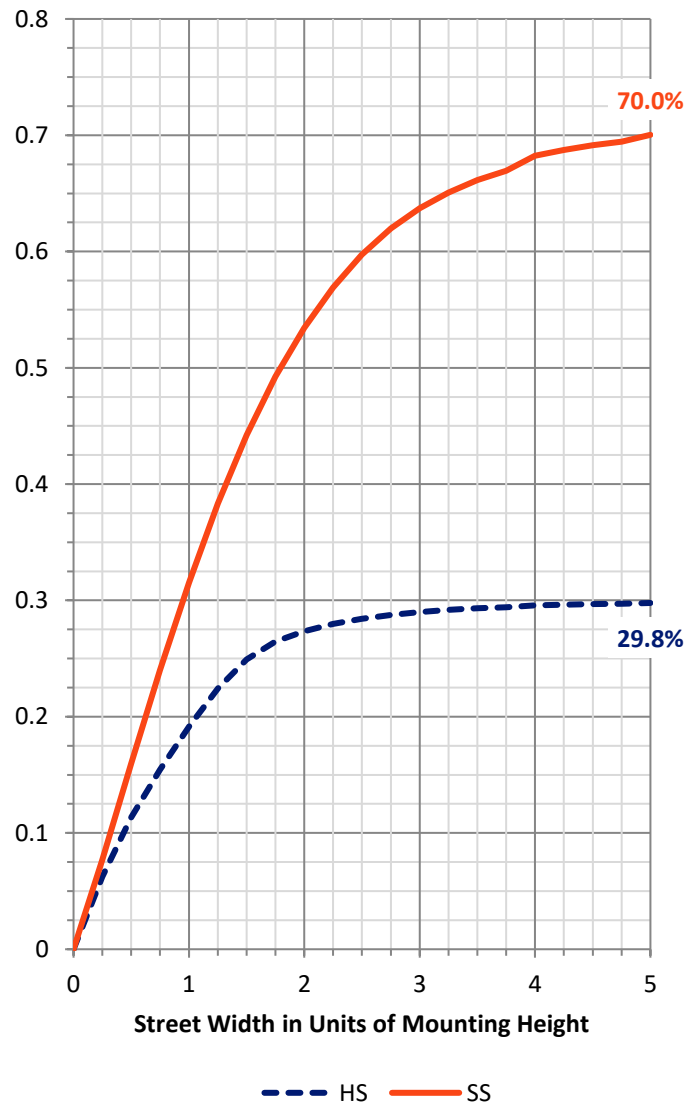
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7013.7	1.1	7014.8
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	16504.5	9.6	16514.2
	% Fixture	70.1	0.0	70.2
Total	Lumens	23518.3	10.8	23529.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.1	0.8
10°-20°	633.6	2.7
20°-30°	1085.4	4.6
30°-40°	1760.7	7.5
40°-50°	2969.3	12.6
50°-60°	4840.1	20.6
60°-70°	6491.4	27.6
70°-80°	5042.1	21.4
80°-90°	496.6	2.1
90°-100°	9.4	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°	23518.3	100.0
0°-180°	23529.0	100.0



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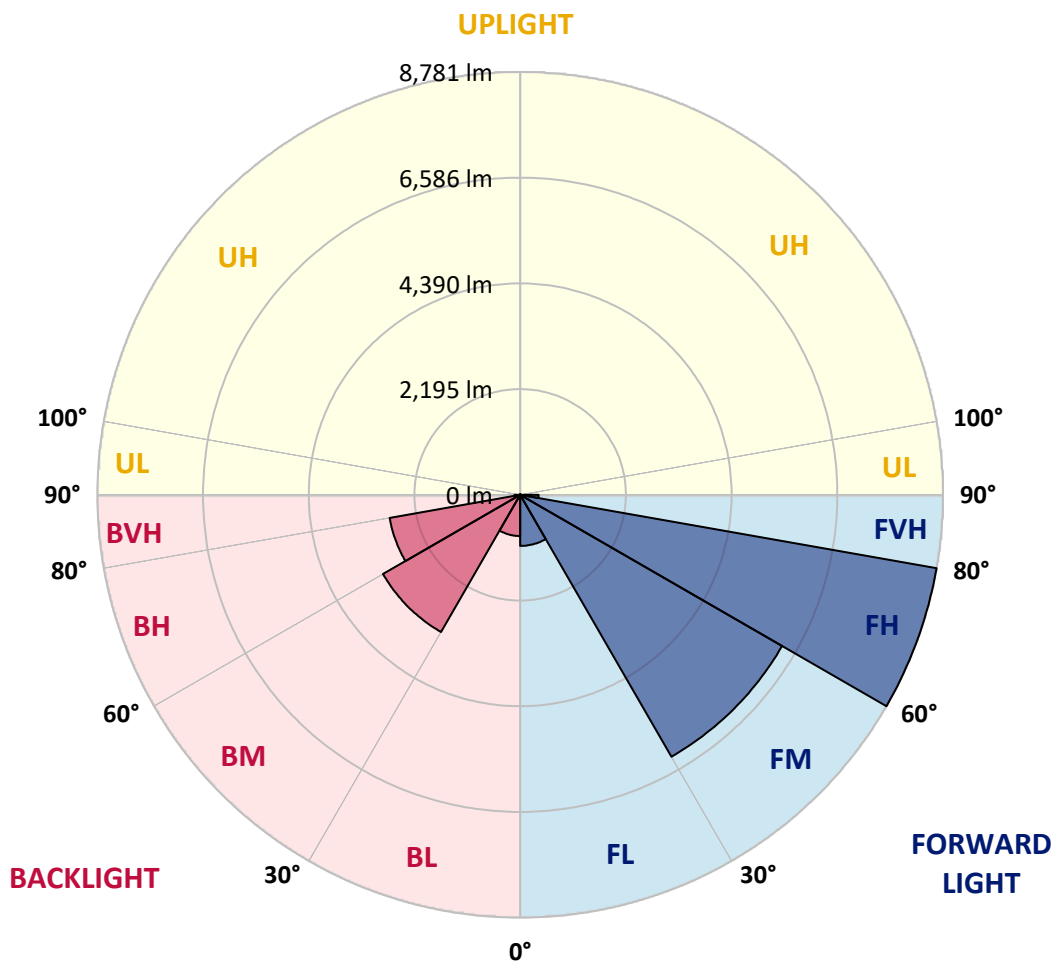
CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1061.3	4.5			
FM	(30°-60°)	6280.7	26.7			
FH	(60°-80°)	8780.7	37.3			G4/12000
FVH	(80°-90°)	381.8	1.6			G3/500
BL	(0°-30°)	856.8	3.6	B2/1000		
BM	(30°-60°)	3289.4	14.0	B3/5000		
BH	(60°-80°)	2752.7	11.7	B4/5000		G4/5000
BVH	(80°-90°)	114.8	0.5			G2/225
UL	(90°-100°)	9.4	0.0		U1/10	
UH	(100°-180°)	1.1	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°	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3
2.5°	2085.4	2079.5	2078.5	2090.2	2053.2	2071.7	2055.2	2068.8	2060.1	2066.9	2067.8
5°	2113.6	2102.9	2096.1	2109.7	2086.3	2095.1	2076.6	2082.4	2058.1	2071.7	2073.7
7.5°	2154.4	2136.9	2135.0	2138.9	2118.4	2125.2	2095.1	2101.9	2084.4	2076.6	2083.4
10°	2209.9	2193.4	2180.7	2189.5	2162.2	2166.1	2134.0	2135.0	2122.3	2107.7	2119.4
12.5°	2241.0	2243.0	2237.2	2244.0	2221.6	2208.9	2186.6	2178.8	2166.1	2148.6	2142.8
15°	2318.9	2315.0	2303.3	2314.0	2311.1	2299.4	2272.2	2254.7	2227.4	2217.7	2208.0
17.5°	2414.3	2401.6	2391.9	2405.5	2420.1	2395.8	2369.5	2345.2	2309.2	2289.7	2278.0
20°	2514.5	2505.7	2496.0	2517.4	2522.3	2503.8	2484.3	2448.3	2406.5	2381.2	2356.8
22.5°	2626.4	2608.9	2611.8	2640.0	2631.3	2622.5	2597.2	2568.0	2517.4	2485.3	2415.2
25°	2742.2	2732.5	2746.1	2758.7	2751.9	2733.4	2720.8	2699.4	2642.9	2604.0	2501.8
27.5°	2886.2	2870.6	2888.2	2893.0	2887.2	2882.3	2864.8	2848.3	2787.0	2743.2	2615.7
30°	3055.5	3037.0	3065.3	3058.5	3052.6	3056.5	3045.8	3009.8	2955.3	2895.9	2768.5
32.5°	3257.0	3232.6	3264.7	3250.2	3236.5	3263.8	3238.5	3204.4	3140.2	3071.1	2946.5
35°	3490.5	3491.5	3508.0	3483.7	3478.8	3508.0	3491.5	3449.6	3390.3	3318.3	3141.2
37.5°	3773.7	3765.9	3807.7	3796.1	3778.5	3817.5	3822.3	3769.8	3662.7	3591.7	3382.5
40°	4118.2	4116.2	4129.8	4131.8	4126.9	4145.4	4154.2	4084.1	4015.0	3908.0	3191.8
42.5°	4486.0	4493.8	4518.1	4500.6	4523.9	4548.3	4551.2	4492.8	4393.5	3749.4	3390.3
45°	4927.8	4952.1	4968.6	4964.8	4975.5	5010.5	5013.4	4982.3	4885.0	4061.7	3750.3
47.5°	5434.8	5458.1	5463.0	5494.1	5484.4	5534.0	5527.2	5528.2	5424.1	4496.7	4142.5
50°	6017.6	6028.4	6068.2	6085.8	6061.4	6128.6	6111.1	6132.5	6004.0	4994.9	4563.8
52.5°	6636.5	6655.0	6671.6	6737.7	6706.6	6765.0	6741.6	6791.3	6642.4	5501.9	5031.9
55°	7340.1	7343.0	7371.2	7438.4	7397.5	7467.6	7433.5	7452.0	7333.3	6062.4	5519.4
57.5°	8085.5	8075.8	8086.5	8140.0	8103.0	8155.5	8141.9	8159.4	8048.5	6652.1	5875.6
60°	8823.1	8808.5	8824.1	8860.1	8809.5	8900.0	8851.3	8867.9	8748.2	7254.5	6383.5
62.5°	9564.6	9553.9	9536.4	9572.4	9498.4	9545.1	9565.6	9538.3	9433.2	7799.4	6825.3
65°	10360.6	10349.9	10285.7	10308.0	10175.7	10153.3	10161.1	10169.9	10099.8	8339.5	7309.9
67.5°	11327.9	11312.3	11191.6	11039.8	10849.1	10807.2	10811.1	10834.5	10844.2	9034.3	7877.2
68°	11436.8	11408.6	11274.3	11098.2	10898.7	10850.1	10845.2	10850.1	10854.9	9040.1	7871.4
70°	11158.5	11147.8	11045.7	10832.5	10628.2	10511.4	10410.2	10406.3	10359.6	8577.9	7436.4
72.5°	9902.3	9888.6	9767.0	9616.2	9489.7	9306.7	9175.4	9183.1	9106.3	7581.4	6509.1
75°	8013.5	8012.5	7866.5	7740.0	7742.0	7728.4	7684.6	7761.4	7681.6	6430.2	5551.5
77.5°	5584.6	5604.1	5594.3	5520.4	5624.5	5768.5	5925.2	6073.1	6027.4	5079.6	4426.6
80°	2917.4	2971.8	3164.5	3173.3	3246.3	3386.4	3493.4	3592.7	3599.5	2882.3	2557.3
82.5°	775.6	792.1	857.3	838.8	833.0	861.2	884.5	887.5	889.4	751.2	701.6
85°	241.3	248.1	240.4	229.7	213.1	194.6	189.8	154.7	122.6	101.2	88.6
87.5°	171.3	182.9	165.4	155.7	138.2	131.4	117.7	92.4	72.0	50.6	34.1
90°	88.6	90.5	80.8	69.1	64.2	60.3	51.6	37.0	18.5	9.7	8.8
92.5°	44.8	45.7	39.9	34.1	29.2	25.3	19.5	10.7	5.8	2.9	1.0
95°	17.5	18.5	16.5	14.6	11.7	8.8	7.8	5.8	3.9	1.9	1.0
97.5°	5.8	5.8	5.8	4.9	4.9	4.9	4.9	3.9	2.9	1.9	1.0
100°	0.0	0.0	0.0	1.0	1.9	2.9	2.9	2.9	1.9	1.0	1.0
102.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.9	1.9	1.9	1.0	1.0
105°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0



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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	1.0	1.0	1.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
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	1.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
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°	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3	2051.3
2.5°	2063.0	2057.1	2060.1	2035.7	2041.6	2026.0	2059.1	2050.3	2046.4	2060.1
5°	2067.8	2046.4	2063.9	2047.4	2050.3	2027.9	2055.2	2044.5	2043.5	2051.3
7.5°	2069.8	2059.1	2075.6	2048.4	2057.1	2048.4	2068.8	2058.1	2067.8	2074.6
10°	2097.0	2091.2	2089.2	2079.5	2086.3	2066.9	2092.2	2092.2	2097.0	2115.5
12.5°	2136.9	2129.1	2124.3	2106.8	2113.6	2107.7	2128.2	2132.1	2140.8	2148.6
15°	2191.4	2177.8	2172.9	2157.4	2162.2	2161.3	2175.9	2176.8	2196.3	2195.3
17.5°	2261.5	2242.0	2247.9	2236.2	2237.2	2229.4	2221.6	2221.6	2239.1	2243.0
20°	2345.2	2234.2	2088.3	2006.5	1991.9	2002.6	2044.5	2113.6	2027.0	2051.3
22.5°	2194.3	2094.1	2087.3	2068.8	2057.1	1796.3	1729.2	1707.8	1819.7	2012.4
25°	2213.8	2171.0	2158.3	2135.0	1790.5	1787.6	1768.1	1736.0	1418.8	1412.0
27.5°	2317.0	2275.1	2254.7	1870.3	1862.5	1861.5	1832.3	1510.3	1437.3	1447.0
30°	2437.6	2389.0	2023.1	1964.7	1957.9	1942.3	1774.9	1491.8	1490.8	1491.8
32.5°	2576.8	2415.2	2081.5	2078.5	2082.4	2034.8	1572.5	1566.7	1565.7	1575.4
35°	2767.5	2241.0	2227.4	2242.0	2221.6	1759.4	1666.9	1664.0	1665.0	1660.1
37.5°	2641.0	2416.2	2413.3	2413.3	2365.6	1800.2	1781.7	1795.4	1793.4	1786.6
40°	2694.5	2628.3	2610.8	2605.0	1999.7	1942.3	1931.6	1949.1	1952.0	1956.9
42.5°	2954.3	2894.0	2885.2	2816.2	2175.9	2157.4	2124.3	2142.8	2140.8	2146.7
45°	3273.5	3232.6	3194.7	2441.5	2413.3	2389.9	2355.9	2377.3	2383.1	2379.2
47.5°	3645.2	3600.5	3326.1	2684.8	2683.8	2665.3	2627.4	2644.9	2642.0	2642.0
50°	4018.9	3970.2	3021.5	2994.2	2984.5	2955.3	2924.2	2927.1	2928.1	2937.8
52.5°	4436.4	3546.0	3344.5	3290.0	3297.8	3278.4	3248.2	2459.0	3233.6	3242.4
55°	4146.4	3711.4	3699.7	3627.7	3646.2	3620.9	3601.4	2425.9	3216.1	3553.8
57.5°	4099.7	4068.5	4058.8	3984.8	4008.2	3767.8	3947.9	2654.6	2224.5	1625.1
60°	4456.8	4423.7	4417.9	4352.7	4350.7	2994.2	3588.8	1820.7	1422.7	1432.4
62.5°	4803.2	4749.7	4764.3	4687.4	3304.6	1824.6	1608.5	40.9	65.2	69.1
65°	5189.5	5100.0	5114.6	5043.6	3408.8	1923.8	1738.9	21.4	18.5	17.5
67.5°	5561.3	5404.6	5329.7	5254.7	3540.1	2026.0	1811.9	5.8	0.0	0.0
68°	5542.8	5377.3	5300.5	5229.4	3526.5	2023.1	1808.0	5.8	0.0	0.0
70°	5230.4	5081.5	5008.5	4954.1	3366.9	1954.0	1735.0	5.8	0.0	0.0
72.5°	4572.6	4489.9	4443.2	4395.5	2991.3	1747.7	1556.0	5.8	0.0	0.0
75°	3885.6	3862.2	3833.0	3727.9	2493.1	1430.5	1278.7	5.8	0.0	0.0
77.5°	3078.9	3077.9	3006.9	2883.3	1877.1	1050.0	942.9	4.9	0.0	0.0
80°	1665.0	1814.8	1760.3	1697.1	1064.6	571.2	544.0	3.9	0.0	0.0
82.5°	468.1	442.8	425.2	398.0	223.8	124.6	121.6	3.9	0.0	0.0
85°	65.2	72.0	79.8	90.5	51.6	33.1	29.2	1.9	0.0	0.0
87.5°	37.0	41.8	51.6	53.5	19.5	15.6	4.9	0.0	0.0	0.0
90°	7.8	8.8	9.7	9.7	3.9	3.9	0.0	0.0	0.0	0.0
92.5°	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.0	1.0	1.0	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°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.0	1.0	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)