

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: P256720

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256720
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-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 4000K 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: 24179 lumens
Efficiency: N/A
Efficacy: 103.3 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

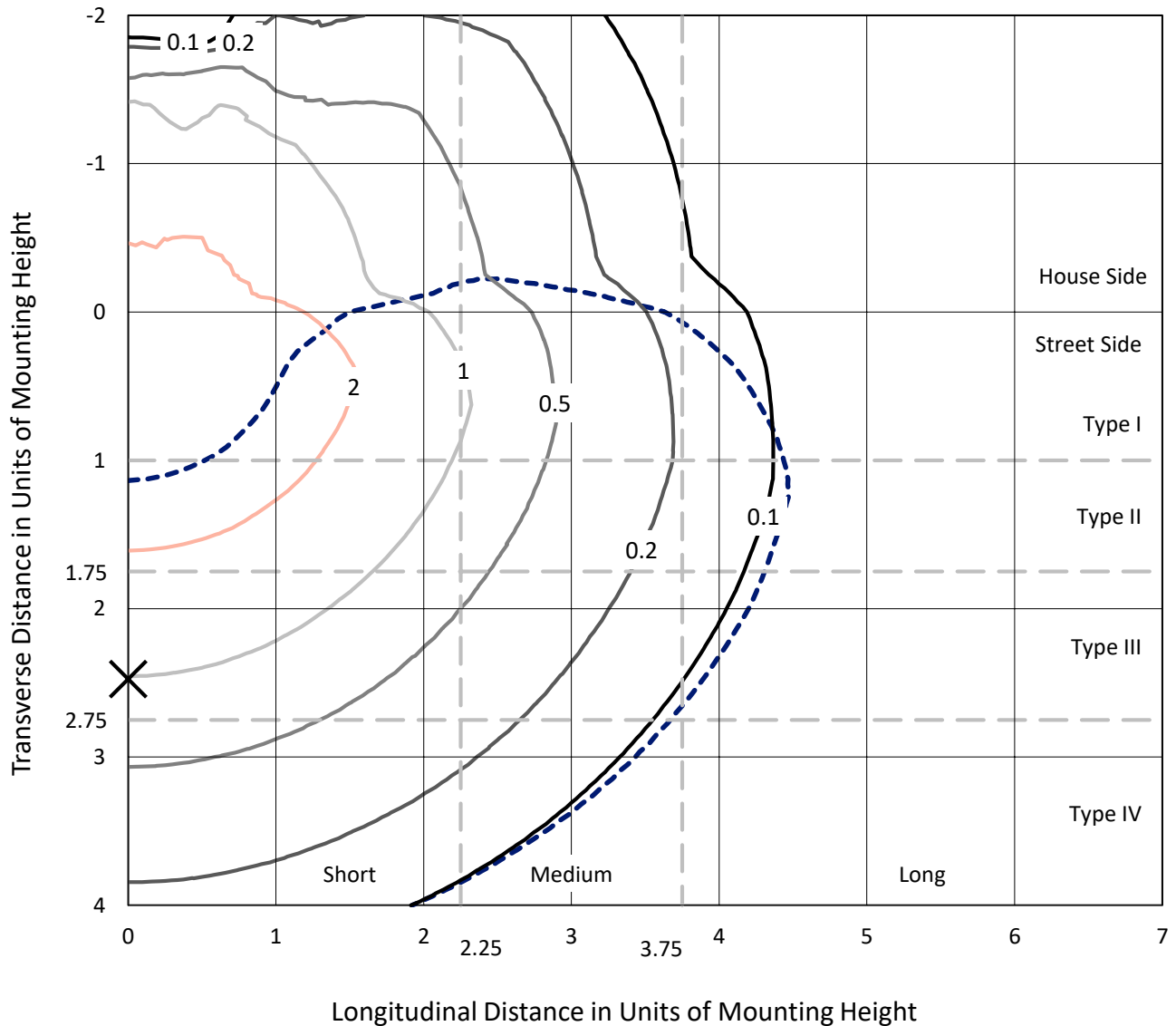


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Iso-Footcandle Lines of Horizontal Illumination

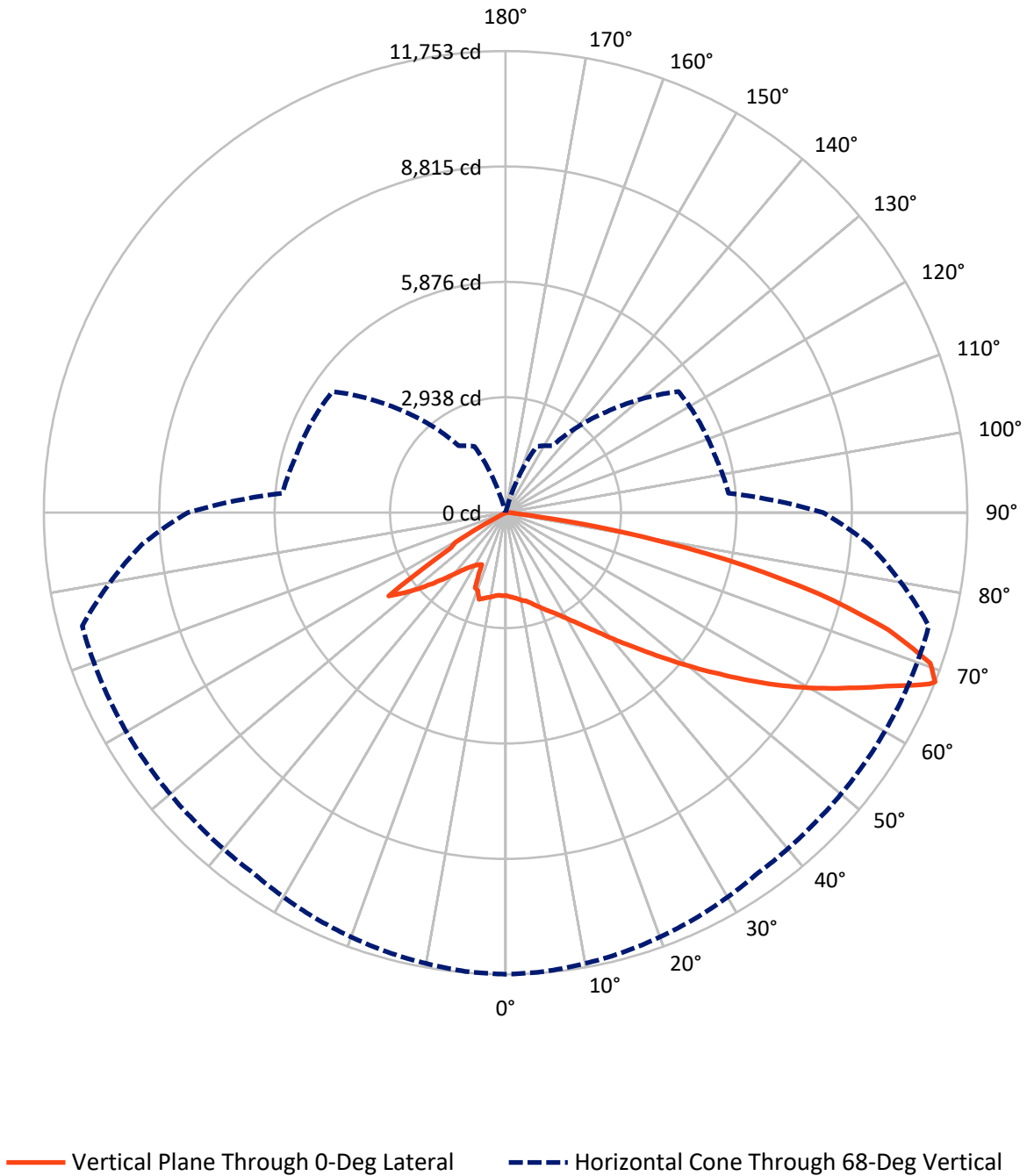
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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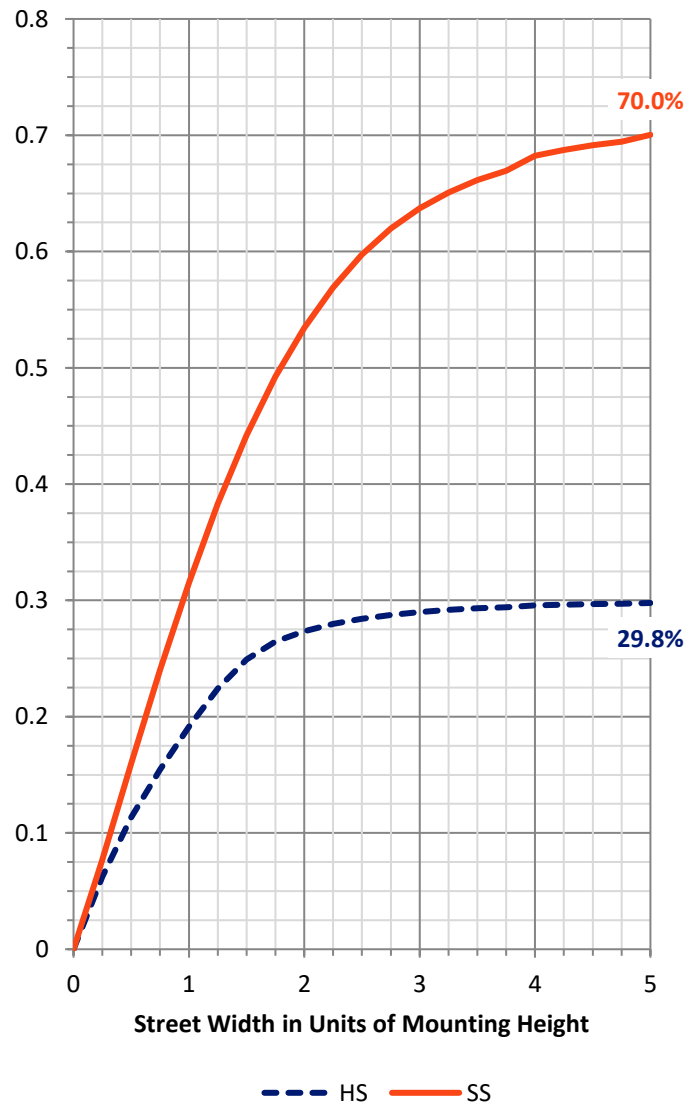
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7207.5	1.1	7208.6
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	16960.5	9.9	16970.4
	% Fixture	70.1	0.0	70.2
Total	Lumens	24168.0	11.0	24179.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.6	0.8
10°-20°	651.2	2.7
20°-30°	1115.3	4.6
30°-40°	1809.3	7.5
40°-50°	3051.4	12.6
50°-60°	4973.8	20.6
60°-70°	6670.7	27.6
70°-80°	5181.4	21.4
80°-90°	510.3	2.1
90°-100°	9.7	0.0
100°-110°	0.6	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°	24168.0	100.0
0°-180°	24179.0	100.0



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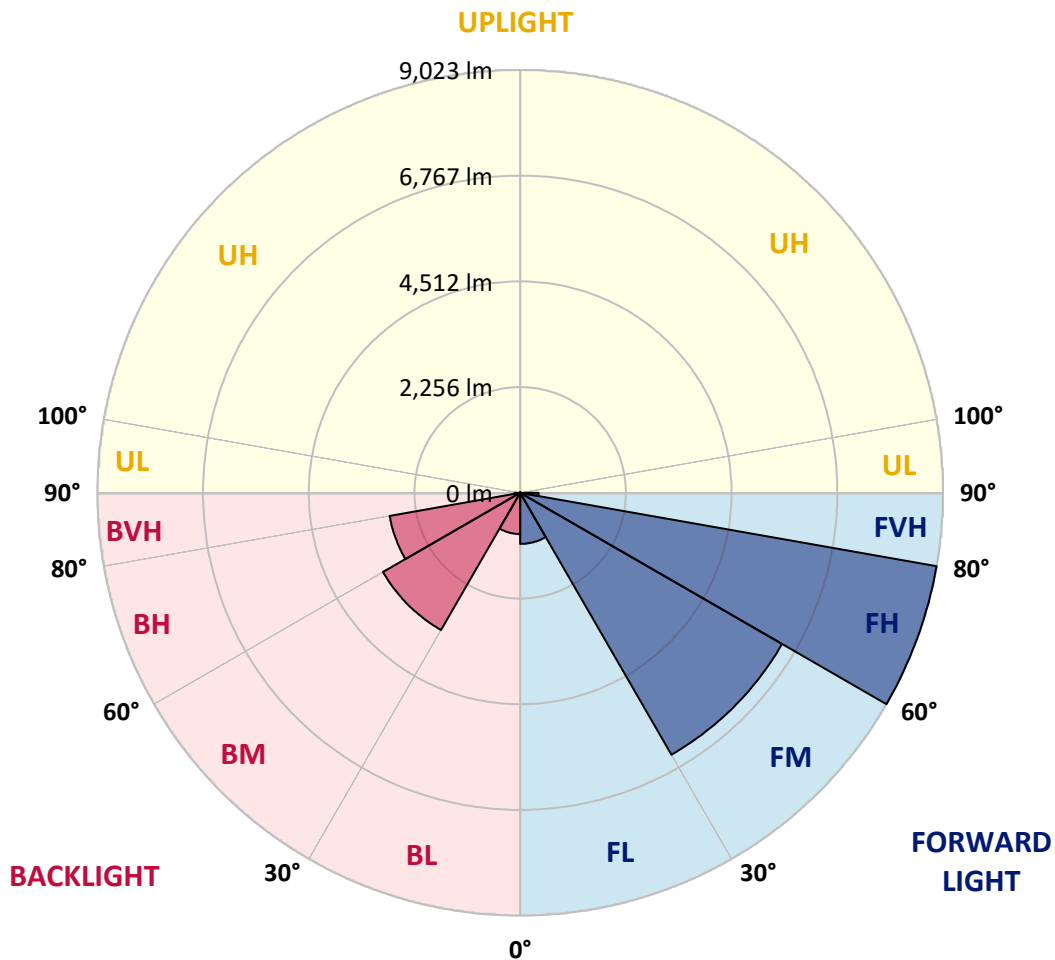
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1090.6	4.5			
FM	(30°-60°)	6454.2	26.7			
FH	(60°-80°)	9023.3	37.3			G4/12000
FVH	(80°-90°)	392.3	1.6			G3/500
BL	(0°-30°)	880.5	3.6	B2/1000		
BM	(30°-60°)	3380.3	14.0	B3/5000		
BH	(60°-80°)	2828.8	11.7	B4/5000		G4/5000
BVH	(80°-90°)	117.9	0.5			G2/225
UL	(90°-100°)	9.7	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°	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0
2.5°	2143.0	2137.0	2136.0	2148.0	2110.0	2129.0	2112.0	2126.0	2117.0	2124.0	2125.0
5°	2172.0	2161.0	2154.0	2168.0	2144.0	2153.0	2134.0	2140.0	2115.0	2129.0	2131.0
7.5°	2214.0	2196.0	2194.0	2198.0	2177.0	2184.0	2153.0	2160.0	2142.0	2134.0	2141.0
10°	2271.0	2254.0	2241.0	2250.0	2222.0	2226.0	2193.0	2194.0	2181.0	2166.0	2178.0
12.5°	2303.0	2305.0	2299.0	2306.0	2283.0	2270.0	2247.0	2239.0	2226.0	2208.0	2202.0
15°	2383.0	2379.0	2367.0	2378.0	2375.0	2363.0	2335.0	2317.0	2289.0	2279.0	2269.0
17.5°	2481.0	2468.0	2458.0	2472.0	2487.0	2462.0	2435.0	2410.0	2373.0	2353.0	2341.0
20°	2584.0	2575.0	2565.0	2587.0	2592.0	2573.0	2553.0	2516.0	2473.0	2447.0	2422.0
22.5°	2699.0	2681.0	2684.0	2713.0	2704.0	2695.0	2669.0	2639.0	2587.0	2554.0	2482.0
25°	2817.9	2807.9	2821.9	2834.9	2827.9	2808.9	2795.9	2773.9	2716.0	2676.0	2571.0
27.5°	2965.9	2949.9	2967.9	2972.9	2966.9	2961.9	2943.9	2926.9	2863.9	2818.9	2688.0
30°	3139.9	3120.9	3149.9	3142.9	3136.9	3140.9	3129.9	3092.9	3036.9	2975.9	2844.9
32.5°	3346.9	3321.9	3354.9	3339.9	3325.9	3353.9	3327.9	3292.9	3226.9	3155.9	3027.9
35°	3586.9	3587.9	3604.9	3579.9	3574.9	3604.9	3587.9	3544.9	3483.9	3409.9	3227.9
37.5°	3877.9	3869.9	3912.9	3900.9	3882.9	3922.9	3927.9	3873.9	3763.9	3690.9	3475.9
40°	4231.9	4229.9	4243.9	4245.9	4240.9	4259.9	4268.9	4196.9	4125.9	4015.9	3279.9
42.5°	4609.9	4617.9	4642.9	4624.9	4648.9	4673.9	4676.9	4616.9	4514.9	3852.9	3483.9
45°	5063.9	5088.9	5105.9	5101.9	5112.9	5148.9	5151.9	5119.9	5019.9	4173.9	3853.9
47.5°	5584.9	5608.9	5613.9	5645.9	5635.9	5686.9	5679.9	5680.9	5573.9	4620.9	4256.9
50°	6183.9	6194.9	6235.9	6253.9	6228.9	6297.9	6279.9	6301.9	6169.9	5132.9	4689.9
52.5°	6819.9	6838.9	6855.9	6923.9	6891.9	6951.9	6927.9	6978.9	6825.9	5653.9	5170.9
55°	7542.9	7545.9	7574.9	7643.9	7601.9	7673.9	7638.9	7657.9	7535.9	6229.9	5671.9
57.5°	8308.8	8298.9	8309.8	8364.8	8326.8	8380.8	8366.8	8384.8	8270.9	6835.9	6037.9
60°	9066.8	9051.8	9067.8	9104.8	9052.8	9145.8	9095.8	9112.8	8989.8	7454.9	6559.9
62.5°	9828.8	9817.8	9799.8	9836.8	9760.8	9808.8	9829.8	9801.8	9693.8	8014.9	7013.9
65°	10646.8	10635.8	10569.8	10592.8	10456.8	10433.8	10441.8	10450.8	10378.8	8569.8	7511.9
67.5°	11640.8	11624.8	11500.8	11344.8	11148.8	11105.8	11109.8	11133.8	11143.8	9283.8	8094.9
68°	11752.8	11723.8	11585.8	11404.8	11199.8	11149.8	11144.8	11149.8	11154.8	9289.8	8088.9
70°	11466.8	11455.8	11350.8	11131.8	10921.8	10801.8	10697.8	10693.8	10645.8	8814.8	7641.9
72.5°	10175.8	10161.8	10036.8	9881.8	9751.8	9563.8	9428.8	9436.8	9357.8	7790.9	6688.9
75°	8234.9	8233.9	8083.9	7953.9	7955.9	7941.9	7896.9	7975.9	7893.9	6607.9	5704.9
77.5°	5738.9	5758.9	5748.9	5672.9	5779.9	5927.9	6088.9	6240.9	6193.9	5219.9	4548.9
80°	2997.9	3053.9	3251.9	3260.9	3335.9	3479.9	3589.9	3691.9	3698.9	2961.9	2628.0
82.5°	797.0	814.0	881.0	862.0	856.0	885.0	909.0	912.0	914.0	772.0	721.0
85°	248.0	255.0	247.0	236.0	219.0	200.0	195.0	159.0	126.0	104.0	91.0
87.5°	176.0	188.0	170.0	160.0	142.0	135.0	121.0	95.0	74.0	52.0	35.0
90°	91.0	93.0	83.0	71.0	66.0	62.0	53.0	38.0	19.0	10.0	9.0
92.5°	46.0	47.0	41.0	35.0	30.0	26.0	20.0	11.0	6.0	3.0	1.0
95°	18.0	19.0	17.0	15.0	12.0	9.0	8.0	6.0	4.0	2.0	1.0
97.5°	6.0	6.0	6.0	5.0	5.0	5.0	5.0	4.0	3.0	2.0	1.0
100°	0.0	0.0	0.0	1.0	2.0	3.0	3.0	3.0	2.0	1.0	1.0
102.5°	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	2.0	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°	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0	2108.0
2.5°	2120.0	2114.0	2117.0	2092.0	2098.0	2082.0	2116.0	2107.0	2103.0	2117.0
5°	2125.0	2103.0	2121.0	2104.0	2107.0	2084.0	2112.0	2101.0	2100.0	2108.0
7.5°	2127.0	2116.0	2133.0	2105.0	2114.0	2105.0	2126.0	2115.0	2125.0	2132.0
10°	2155.0	2149.0	2147.0	2137.0	2144.0	2124.0	2150.0	2150.0	2155.0	2174.0
12.5°	2196.0	2188.0	2183.0	2165.0	2172.0	2166.0	2187.0	2191.0	2200.0	2208.0
15°	2252.0	2238.0	2233.0	2217.0	2222.0	2221.0	2236.0	2237.0	2257.0	2256.0
17.5°	2324.0	2304.0	2310.0	2298.0	2299.0	2291.0	2283.0	2283.0	2301.0	2305.0
20°	2410.0	2296.0	2146.0	2062.0	2047.0	2058.0	2101.0	2172.0	2083.0	2108.0
22.5°	2255.0	2152.0	2145.0	2126.0	2114.0	1846.0	1777.0	1755.0	1870.0	2068.0
25°	2275.0	2231.0	2218.0	2194.0	1840.0	1837.0	1817.0	1784.0	1458.0	1451.0
27.5°	2381.0	2338.0	2317.0	1922.0	1914.0	1913.0	1883.0	1552.0	1477.0	1487.0
30°	2505.0	2455.0	2079.0	2019.0	2012.0	1996.0	1824.0	1533.0	1532.0	1533.0
32.5°	2648.0	2482.0	2139.0	2136.0	2140.0	2091.0	1616.0	1610.0	1609.0	1619.0
35°	2843.9	2303.0	2289.0	2304.0	2283.0	1808.0	1713.0	1710.0	1711.0	1706.0
37.5°	2714.0	2483.0	2480.0	2480.0	2431.0	1850.0	1831.0	1845.0	1843.0	1836.0
40°	2768.9	2701.0	2683.0	2677.0	2055.0	1996.0	1985.0	2003.0	2006.0	2011.0
42.5°	3035.9	2973.9	2964.9	2893.9	2236.0	2217.0	2183.0	2202.0	2200.0	2206.0
45°	3363.9	3321.9	3282.9	2509.0	2480.0	2456.0	2421.0	2443.0	2449.0	2445.0
47.5°	3745.9	3699.9	3417.9	2759.0	2758.0	2739.0	2700.0	2718.0	2715.0	2715.0
50°	4129.9	4079.9	3104.9	3076.9	3066.9	3036.9	3004.9	3007.9	3008.9	3018.9
52.5°	4558.9	3643.9	3436.9	3380.9	3388.9	3368.9	3337.9	2527.0	3322.9	3331.9
55°	4260.9	3813.9	3801.9	3727.9	3746.9	3720.9	3700.9	2493.0	3304.9	3651.9
57.5°	4212.9	4180.9	4170.9	4094.9	4118.9	3871.9	4056.9	2728.0	2286.0	1670.0
60°	4579.9	4545.9	4539.9	4472.9	4470.9	3076.9	3687.9	1871.0	1462.0	1472.0
62.5°	4935.9	4880.9	4895.9	4816.9	3395.9	1875.0	1653.0	42.0	67.0	71.0
65°	5332.9	5240.9	5255.9	5182.9	3502.9	1977.0	1787.0	22.0	19.0	18.0
67.5°	5714.9	5553.9	5476.9	5399.9	3637.9	2082.0	1862.0	6.0	0.0	0.0
68°	5695.9	5525.9	5446.9	5373.9	3623.9	2079.0	1858.0	6.0	0.0	0.0
70°	5374.9	5221.9	5146.9	5090.9	3459.9	2008.0	1783.0	6.0	0.0	0.0
72.5°	4698.9	4613.9	4565.9	4516.9	3073.9	1796.0	1599.0	6.0	0.0	0.0
75°	3992.9	3968.9	3938.9	3830.9	2562.0	1470.0	1314.0	6.0	0.0	0.0
77.5°	3163.9	3162.9	3089.9	2962.9	1929.0	1079.0	969.0	5.0	0.0	0.0
80°	1711.0	1865.0	1809.0	1744.0	1094.0	587.0	559.0	4.0	0.0	0.0
82.5°	481.0	455.0	437.0	409.0	230.0	128.0	125.0	4.0	0.0	0.0
85°	67.0	74.0	82.0	93.0	53.0	34.0	30.0	2.0	0.0	0.0
87.5°	38.0	43.0	53.0	55.0	20.0	16.0	5.0	0.0	0.0	0.0
90°	8.0	9.0	10.0	10.0	4.0	4.0	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)