

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: McGRAW-EDISON

Report Number: P579401

Luminaire Tested: **CTN-CA6-230-722-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-722-U-T5-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 2200K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17317 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U2 - G3

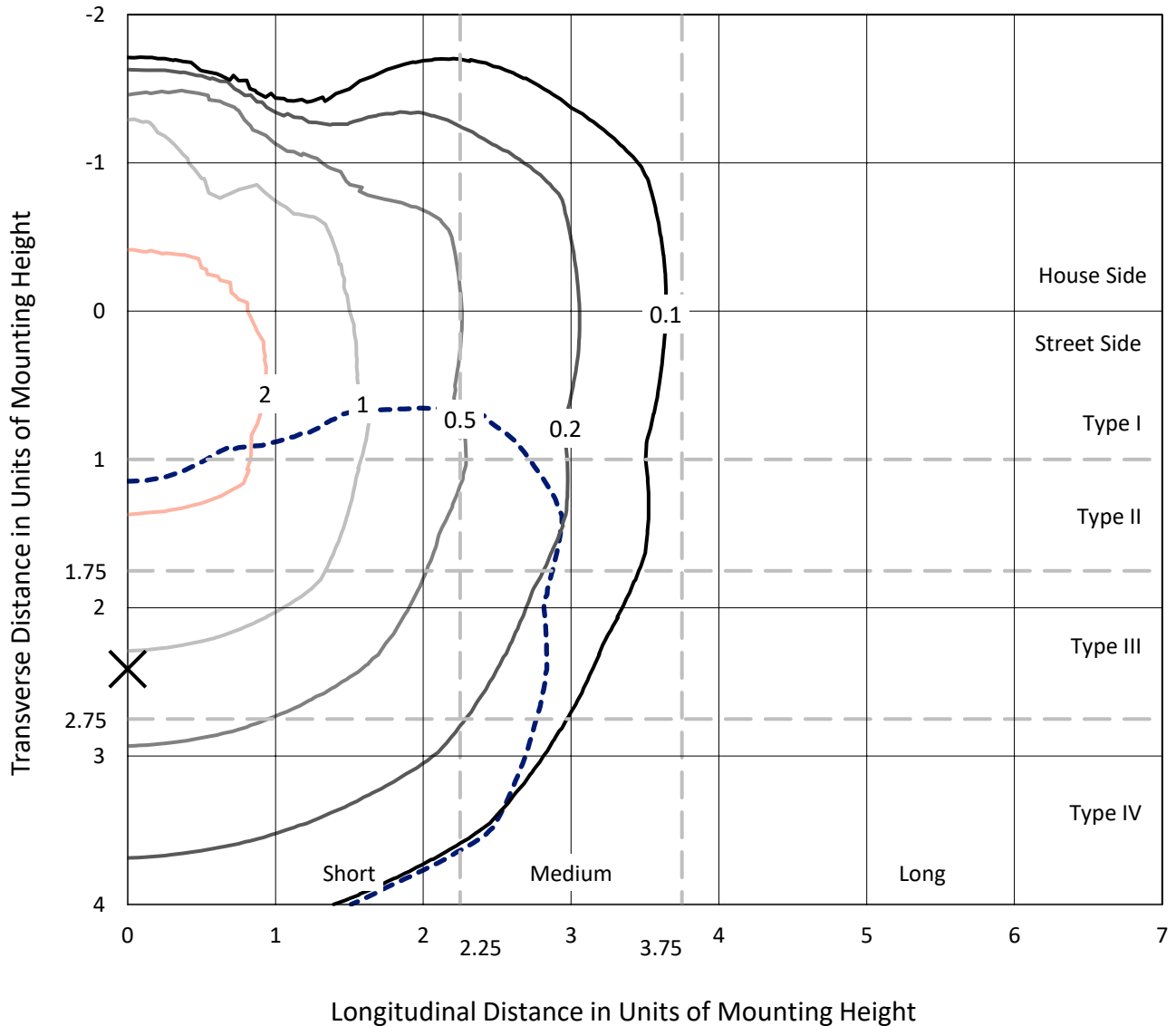
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

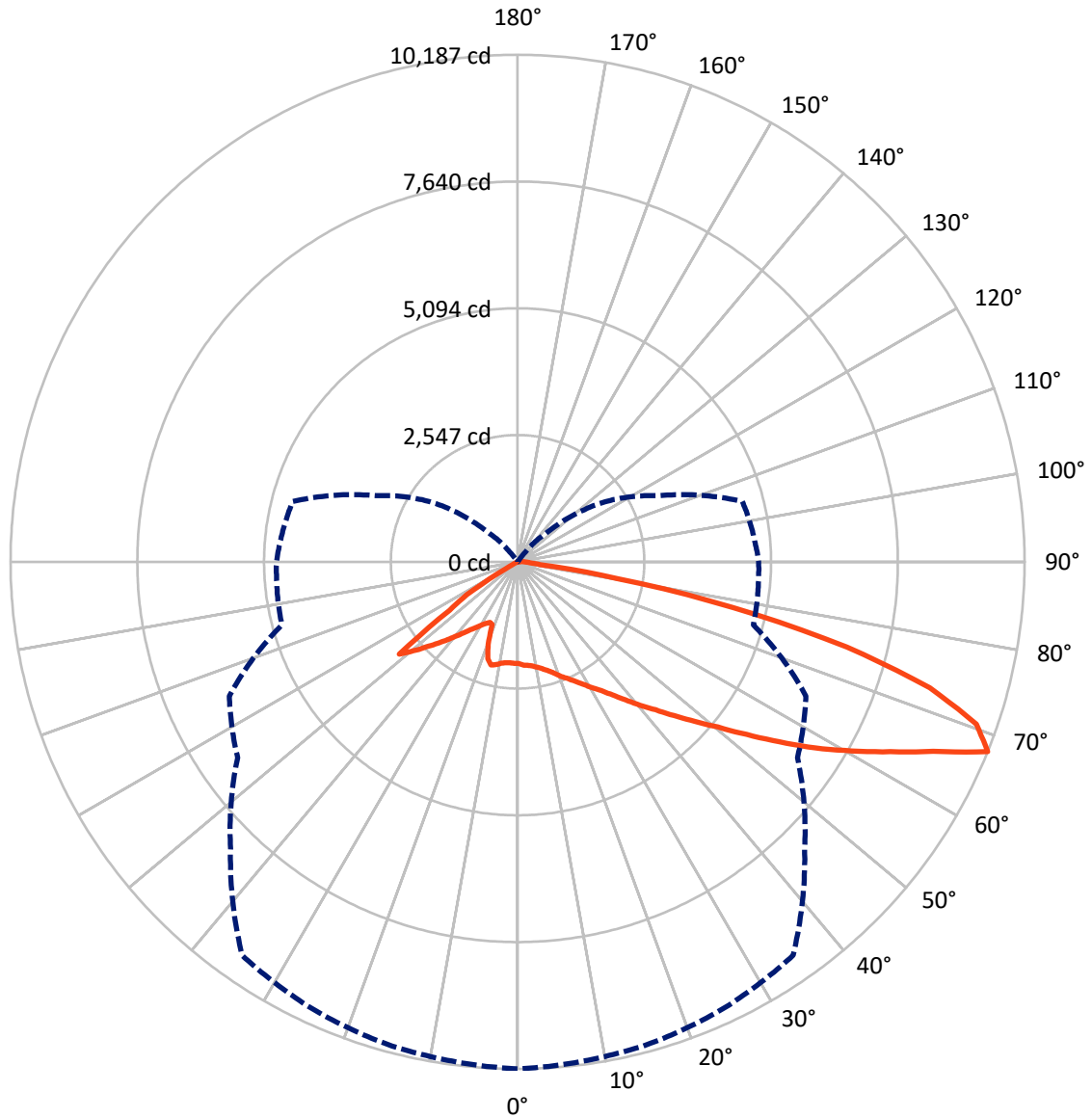
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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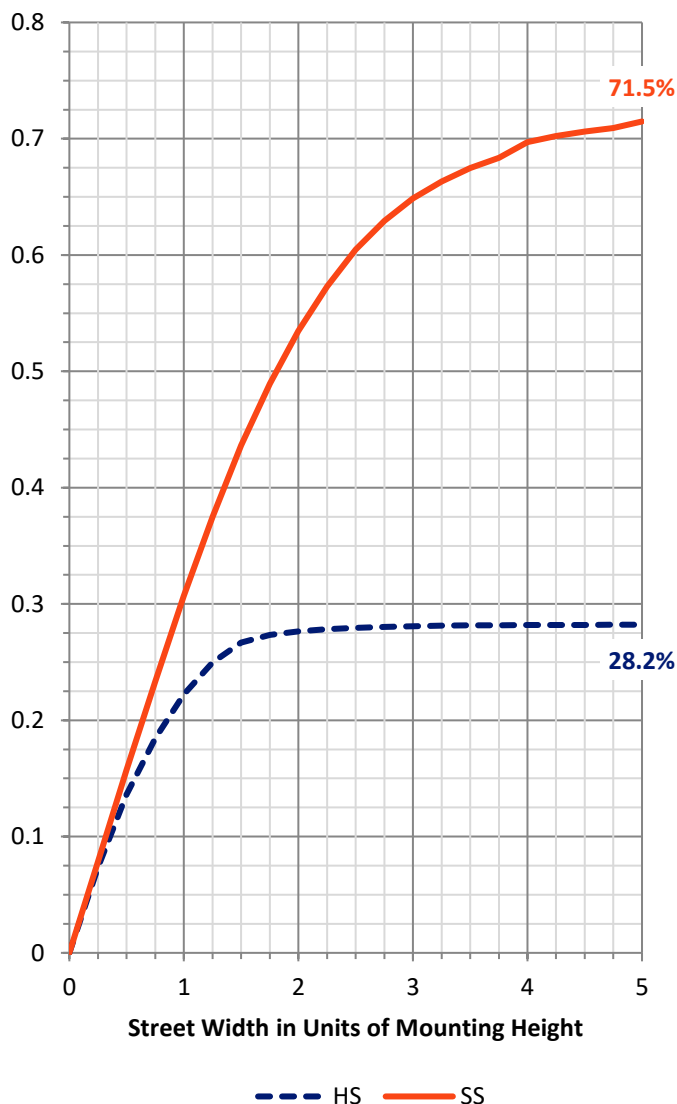
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4908.0	0.1	4908.0
	% Fixture	28.3	0.0	28.3
Street Side	Lumens	12386.9	22.1	12409.0
	% Fixture	71.5	0.1	71.7
Total	Lumens	17294.9	22.1	17317.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.7	1.1
10°-20°	605.5	3.5
20°-30°	1002.6	5.8
30°-40°	1578.2	9.1
40°-50°	2470.0	14.3
50°-60°	3566.2	20.6
60°-70°	4417.9	25.5
70°-80°	3217.5	18.6
80°-90°	240.4	1.4
90°-100°	18.9	0.1
100°-110°	3.2	0.0
110°-120°	0.1	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°	17294.9	99.9
0°-180°	17317.0	100.0

Coefficient of Utilization



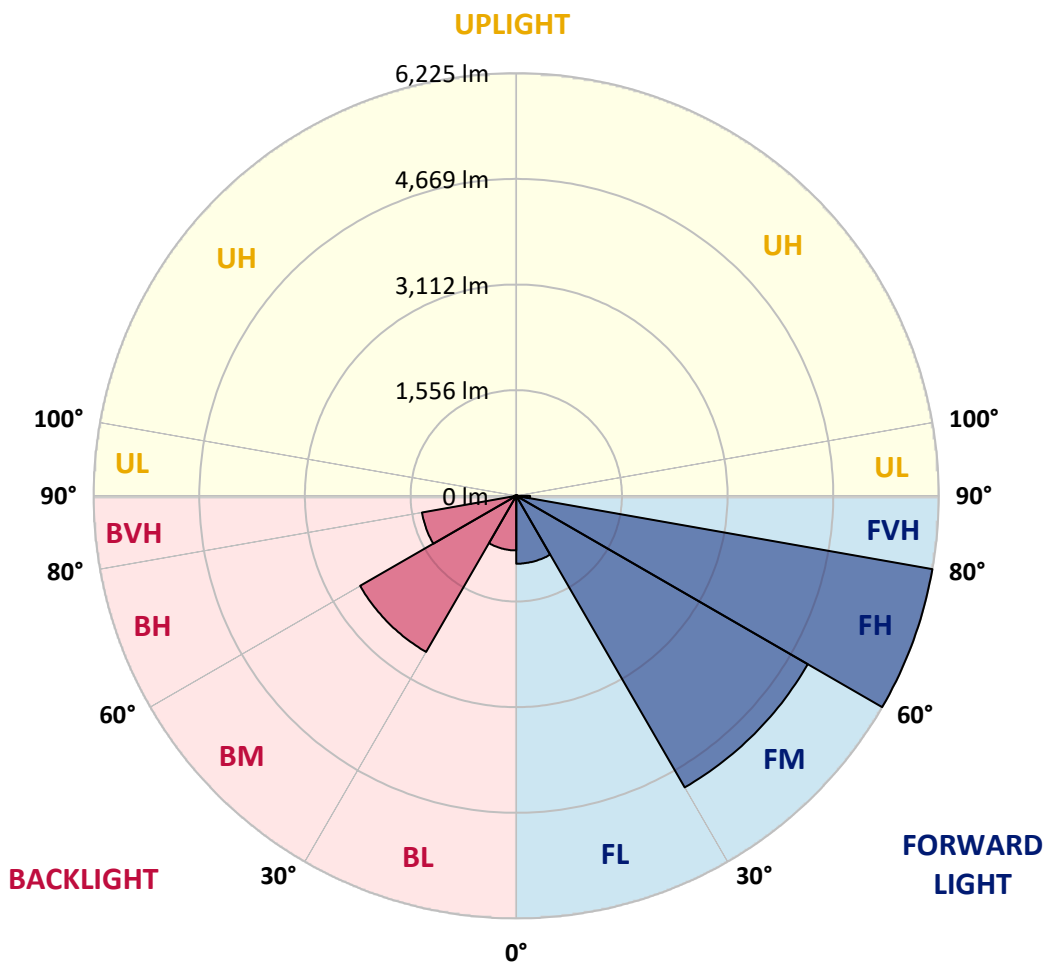
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1000.2	5.8			
FM (30°-60°)	4959.1	28.6			
FH (60°-80°)	6224.9	35.9			G3/7500
FVH (80°-90°)	202.7	1.2			G2/225
BL (0°-30°)	804.6	4.6	B2/1000		
BM (30°-60°)	2655.3	15.3	B3/5000		
BH (60°-80°)	1410.5	8.1	B3/2500		G3/2500
BVH (80°-90°)	37.6	0.2			G1/100
UL (90°-100°)	18.9	0.1		U2/50	
UH (100°-180°)	3.3	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°	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5
2.5°	2076.8	2065.5	2065.5	2077.7	2043.8	2054.3	2040.4	2052.5	2045.6	2049.0	2053.4
5°	2089.0	2075.9	2076.8	2091.6	2061.2	2069.9	2053.4	2059.5	2053.4	2056.0	2056.0
7.5°	2111.5	2100.2	2100.2	2108.9	2078.6	2081.2	2066.4	2066.4	2058.6	2064.7	2059.5
10°	2154.1	2141.9	2135.8	2140.2	2113.3	2109.8	2089.8	2089.8	2077.7	2087.2	2079.4
12.5°	2205.3	2187.9	2186.2	2187.0	2156.7	2150.6	2128.0	2128.9	2106.3	2119.3	2109.8
15°	2266.9	2245.2	2243.4	2246.9	2214.8	2203.5	2178.4	2178.4	2153.2	2160.1	2147.1
17.5°	2345.9	2320.7	2316.3	2322.4	2290.3	2279.9	2250.4	2245.2	2217.4	2212.2	2200.9
20°	2450.0	2421.4	2412.7	2425.7	2384.9	2375.4	2339.8	2328.5	2291.2	2229.6	2148.8
22.5°	2543.7	2521.2	2516.0	2524.6	2487.3	2477.8	2443.1	2419.6	2329.4	2205.3	2130.6
25°	2650.5	2641.8	2639.2	2634.0	2600.1	2583.7	2550.7	2517.7	2312.9	2142.8	2141.0
27.5°	2782.4	2778.1	2765.9	2761.6	2724.2	2713.8	2670.4	2457.8	2253.9	2241.7	2234.8
30°	2926.5	2917.8	2905.6	2906.5	2881.3	2862.2	2759.0	2404.9	2367.6	2367.6	2349.3
32.5°	3086.1	3076.6	3064.5	3067.1	3056.6	3040.2	2729.5	2544.6	2516.0	2523.8	2501.2
35°	3284.0	3268.4	3264.1	3274.5	3275.3	3168.6	2781.5	2734.7	2712.1	2706.9	2621.8
37.5°	3514.9	3501.9	3517.5	3541.8	3514.0	3201.6	2988.9	2974.2	2951.6	2825.8	2624.4
40°	3791.7	3768.3	3787.4	3803.0	3784.8	3397.7	3206.8	3212.0	3192.0	2818.8	2595.8
42.5°	4066.0	4043.4	4059.9	4099.0	4092.0	3640.7	3472.4	3483.6	3282.3	2835.3	2818.0
45°	4405.3	4397.5	4392.3	4424.4	4451.3	3931.5	3787.4	3786.5	3218.1	3097.4	3081.8
47.5°	4789.8	4779.4	4782.0	4822.8	4863.5	4278.6	4159.7	3810.8	3383.8	3396.0	3382.1
50°	5218.5	5207.2	5241.1	5300.1	5320.9	4668.3	4522.5	3744.9	3729.2	3742.3	3718.8
52.5°	5762.7	5737.5	5789.6	5852.9	5879.8	5129.1	4542.4	4134.5	4108.5	4111.1	4036.5
55°	6381.5	6361.5	6408.4	6479.5	6519.4	5643.8	4957.3	4513.8	4498.2	4055.6	3652.0
57.5°	7054.1	7031.5	7094.0	7114.8	7125.2	6175.8	5374.7	4925.2	4202.2	3703.2	3680.6
60°	7713.6	7689.3	7768.3	7771.8	7802.2	6706.9	5771.3	5321.8	4048.6	3982.7	3963.6
62.5°	8406.2	8375.8	8445.3	8442.6	8382.8	7192.9	6164.5	5702.8	4322.9	4270.8	4241.3
65°	9175.1	9152.6	9201.2	9123.1	9004.2	7695.4	6572.4	6117.6	4642.2	4632.7	4625.8
67.5°	10187.1	10142.8	10044.7	9878.1	9650.7	8156.3	6864.0	6391.0	4901.7	4857.5	4843.6
70°	9780.0	9728.0	9653.3	9470.2	9238.5	7723.2	6395.3	5977.9	4583.2	4585.0	4552.0
72.5°	8659.6	8569.4	8499.1	8242.2	8114.6	6745.1	5572.6	5188.1	3964.4	4038.2	4022.6
75°	6831.0	6739.0	6623.6	6522.9	6509.0	5471.1	4493.0	4216.1	3160.8	3214.6	3253.6
77.5°	4427.9	4394.0	4539.8	4444.4	4530.3	3767.4	3209.4	2971.6	2178.4	2314.6	2296.4
80°	2026.5	1987.4	2221.7	2155.8	2187.9	1850.3	1568.2	1506.6	985.9	992.8	1013.7
82.5°	458.2	442.6	459.1	421.8	411.4	348.0	306.4	277.7	174.4	184.9	194.4
85°	250.8	250.8	247.3	230.0	197.0	162.3	128.4	98.9	53.8	59.0	58.1
87.5°	176.2	171.8	171.0	152.7	131.0	111.1	88.5	63.4	30.4	20.8	19.1
90°	120.6	118.9	112.8	101.5	87.7	72.0	53.8	31.2	13.0	6.1	4.3
92.5°	87.7	85.9	81.6	72.0	59.9	48.6	35.6	20.8	10.4	4.3	0.9
95°	58.1	57.3	54.7	46.9	39.1	31.2	22.6	13.0	8.7	3.5	0.9
97.5°	39.9	39.1	36.5	31.2	25.2	20.0	13.9	9.5	6.9	2.6	0.9
100°	26.9	26.0	24.3	20.0	15.6	12.2	8.7	6.9	5.2	2.6	0.9
102.5°	17.4	16.5	14.8	12.2	8.7	6.9	6.1	5.2	3.5	1.7	0.9
105°	10.4	9.5	7.8	6.1	5.2	4.3	4.3	3.5	2.6	0.9	0.9
107.5°	5.2	4.3	3.5	3.5	3.5	2.6	2.6	2.6	1.7	0.9	0.0
110°	0.9	0.9	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.9	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
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°	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5	2039.5
2.5°	2049.0	2035.2	2043.0	2030.8	2028.2	2015.2	2036.0	2038.6	2036.9	2040.4
5°	2051.6	2036.9	2045.6	2030.8	2030.8	2016.9	2036.9	2036.9	2031.7	2033.4
7.5°	2058.6	2043.8	2049.9	2033.4	2034.3	2017.8	2042.1	2039.5	2035.2	2041.2
10°	2078.6	2062.1	2061.2	2045.6	2049.0	2031.7	2062.1	2062.1	2057.7	2069.0
12.5°	2110.7	2086.4	2082.0	2062.9	2069.9	2055.1	2092.4	2094.2	2095.0	2113.3
15°	2144.5	2115.0	2119.3	2096.8	2094.2	2086.4	2120.2	2118.5	2117.6	2142.8
17.5°	2192.2	2053.4	2030.8	2015.2	2011.7	1992.6	2023.9	2083.8	2052.5	2035.2
20°	2116.7	2043.8	1954.4	1924.1	1918.0	1752.2	1621.2	1680.2	1760.0	1767.0
22.5°	2048.2	2022.1	2015.2	1967.5	1702.8	1647.2	1652.4	1630.7	1441.5	1359.1
25°	2133.2	2110.7	2081.2	1789.5	1727.1	1707.1	1701.0	1478.9	1329.6	1339.1
27.5°	2227.8	2202.7	1945.8	1793.9	1807.8	1780.0	1642.9	1379.9	1371.2	1387.7
30°	2345.9	2144.5	1898.9	1890.2	1903.2	1867.7	1459.8	1440.7	1438.1	1455.4
32.5°	2480.4	2068.1	2023.9	2023.9	2017.8	1633.3	1537.9	1524.8	1531.8	1550.0
35°	2430.0	2187.9	2182.7	2204.4	2058.6	1675.9	1662.8	1640.3	1645.5	1651.6
37.5°	2374.5	2384.9	2387.5	2376.2	1501.4	1797.4	1786.9	1782.6	1777.4	1779.1
40°	2581.0	2588.0	2585.4	2482.1	1620.3	1820.8	1927.5	1919.7	1918.9	1929.3
42.5°	2822.3	2841.4	2826.7	2189.6	1779.1	1530.9	2089.8	2085.5	2083.8	2105.5
45°	3094.0	3112.2	2802.4	2345.0	1948.4	1584.7	2101.1	2262.5	2275.6	2294.7
47.5°	3388.2	3384.7	2586.3	2583.7	2147.1	1734.0	1747.0	2474.3	2496.0	2502.9
50°	3726.6	3170.3	2831.9	2736.4	2371.9	1901.5	1852.0	2270.4	2749.4	2756.4
52.5°	3654.6	3136.5	3113.9	2400.5	2573.2	2086.4	2037.8	2024.7	2850.1	3017.6
55°	3406.4	3432.4	3400.3	2634.0	1886.8	2251.3	2220.9	2207.9	2120.2	1678.5
57.5°	3682.4	3690.2	3662.4	2848.4	1918.9	1403.3	2186.2	1875.5	1218.5	1212.4
60°	3968.8	3981.8	2727.7	2092.4	1229.8	469.5	112.0	118.0	336.7	295.9
62.5°	4242.2	4255.2	2887.4	1911.9	776.7	34.7	22.6	15.6	17.4	17.4
65°	4598.8	4604.1	3090.5	2023.9	807.1	8.7	2.6	0.0	0.0	0.0
67.5°	4783.7	4677.0	3141.7	2075.1	828.8	5.2	1.7	0.0	0.0	0.0
70°	4504.3	4389.7	2924.7	1944.9	772.4	4.3	0.9	0.0	0.0	0.0
72.5°	3968.8	3913.2	2625.3	1724.5	683.9	2.6	0.9	0.0	0.0	0.0
75°	3289.2	3215.5	2176.6	1437.2	565.9	1.7	0.0	0.0	0.0	0.0
77.5°	2339.8	2348.5	1517.0	1047.5	385.3	1.7	0.0	0.0	0.0	0.0
80°	1024.1	1047.5	664.8	480.8	136.3	0.9	0.0	0.0	0.0	0.0
82.5°	195.3	179.6	86.8	68.6	17.4	0.0	0.0	0.0	0.0	0.0
85°	64.2	70.3	32.1	26.0	7.8	0.0	0.0	0.0	0.0	0.0
87.5°	22.6	28.6	9.5	7.8	1.7	0.0	0.0	0.0	0.0	0.0
90°	3.5	3.5	0.0	0.0	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
110°	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°
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)