

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: P522184

Luminaire Tested: **CST-CA6-230-727-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522184  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA6-230-727-U-T5R-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (6) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19296 lumens  
Efficiency: N/A  
Efficacy: 84.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U2 - G3

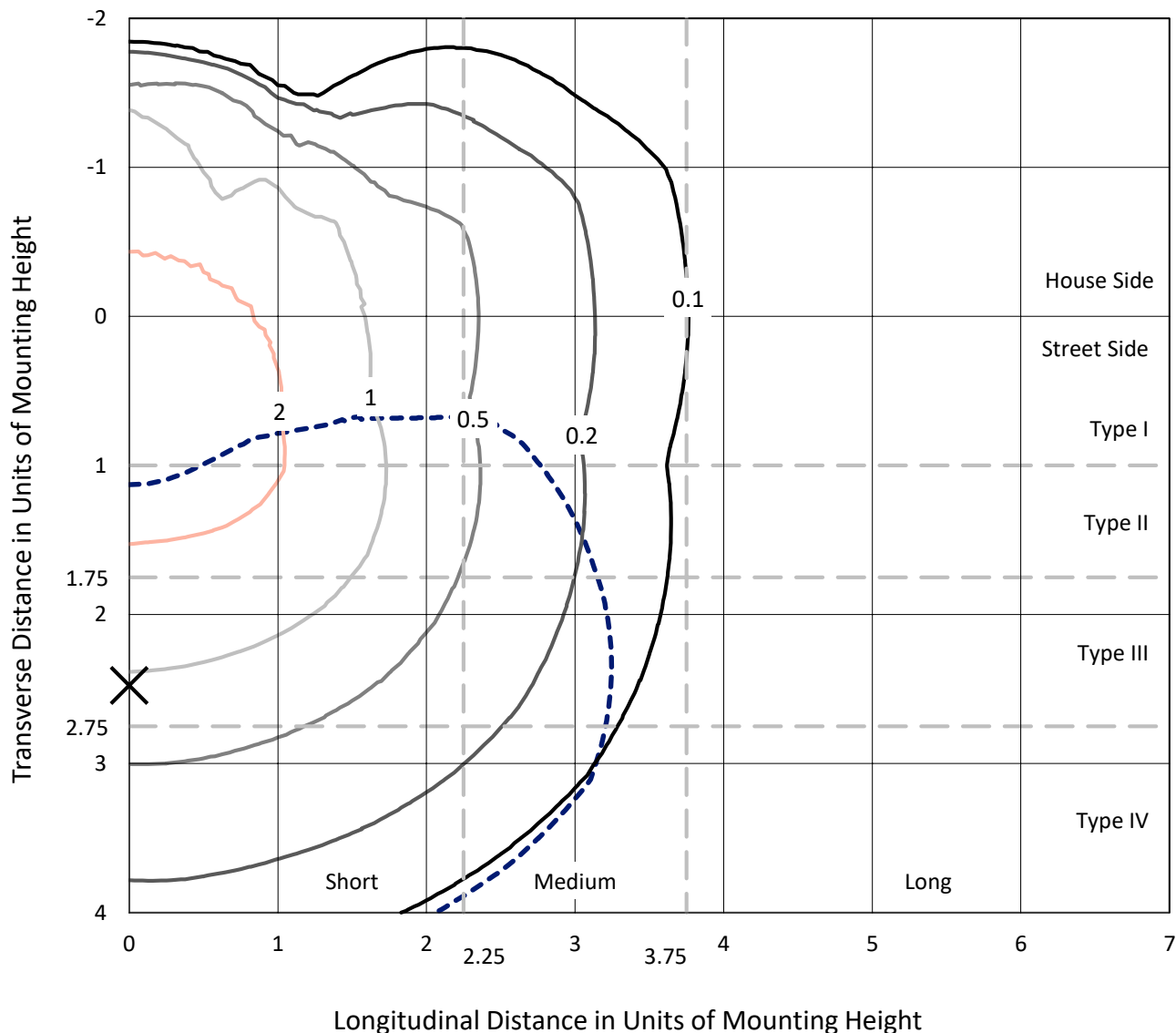
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

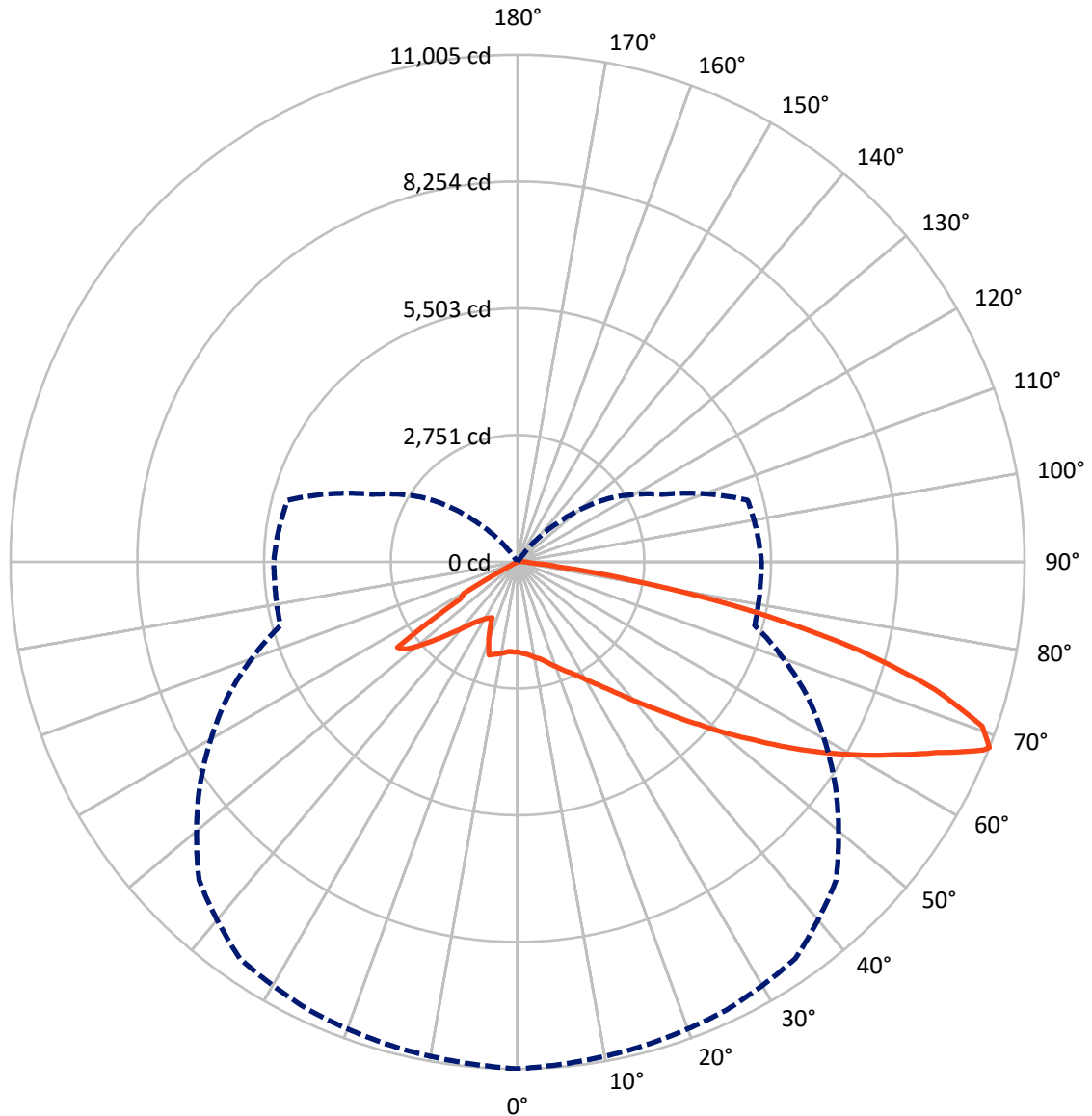
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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

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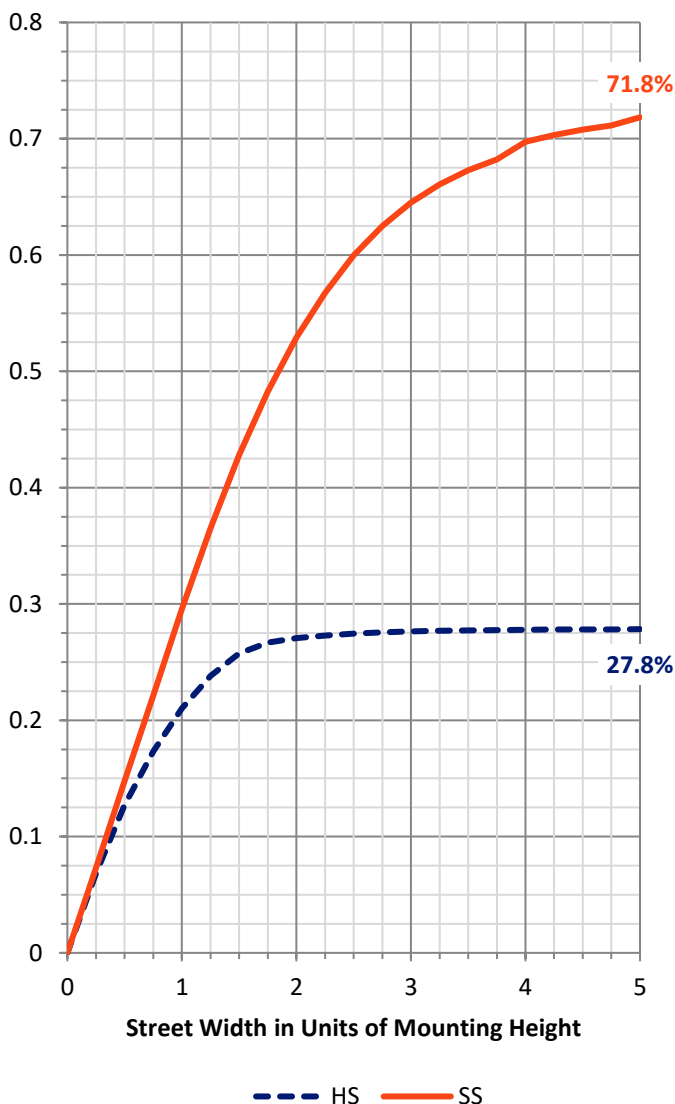
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5389.4	0.1	5389.5
	% Fixture	27.9	0.0	27.9
<b>Street Side</b>	Lumens	13895.4	11.1	13906.5
	% Fixture	72.0	0.1	72.1
<b>Total</b>	Lumens	19284.8	11.2	19296.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.7	1.0
10°-20°	601.2	3.1
20°-30°	1017.8	5.3
30°-40°	1612.5	8.4
40°-50°	2636.3	13.7
50°-60°	4038.2	20.9
60°-70°	4965.3	25.7
70°-80°	3836.6	19.9
80°-90°	387.1	2.0
90°-100°	11.0	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°	19284.8	99.9
0°-180°	19296.0	100.0

**Coefficient of Utilization**



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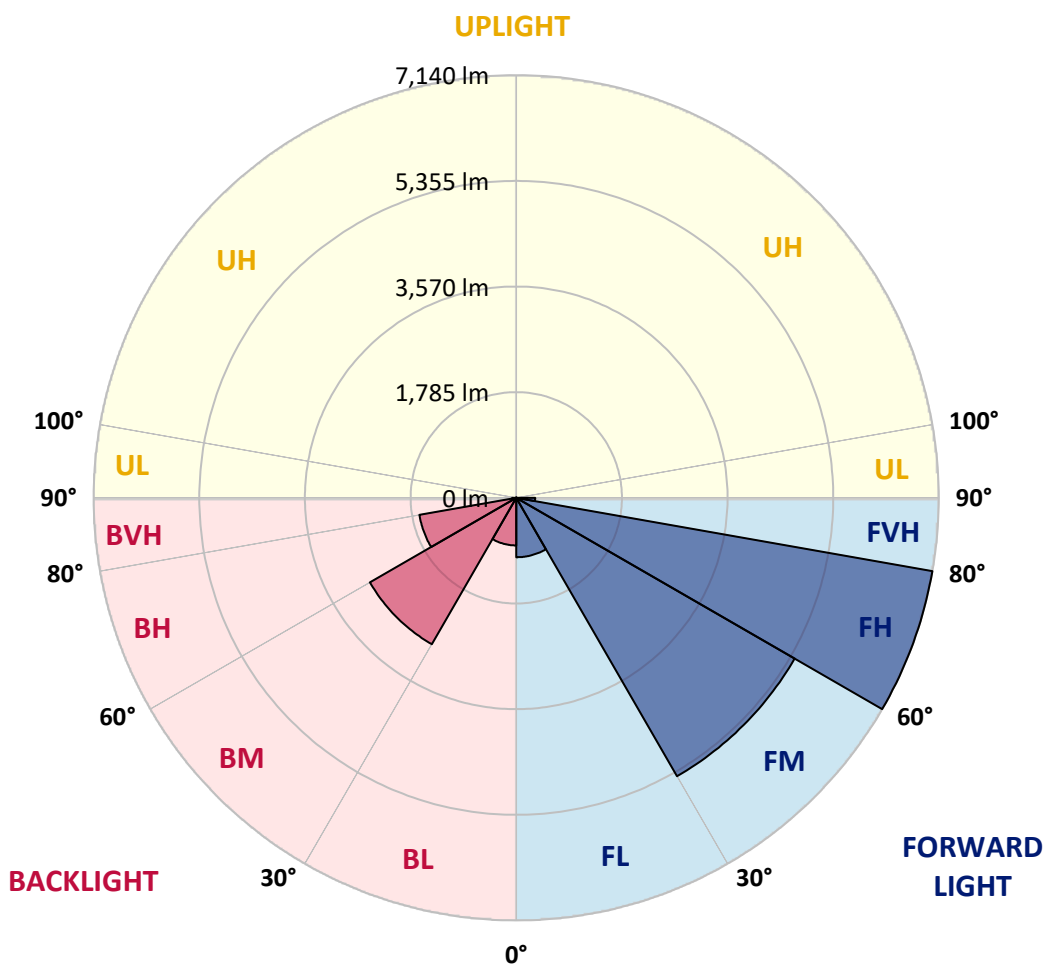
CATALOG NUMBER: CST-CA6-230-727-U-T5R-HSS-HM-EX180

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1004.4	5.2			
FM (30°-60°)	5431.5	28.1			
FH (60°-80°)	7140.3	37.0			G3/7500
FVH (80°-90°)	319.2	1.7			G3/500
BL (0°-30°)	804.4	4.2	B2/1000		
BM (30°-60°)	2855.5	14.8	B3/5000		
BH (60°-80°)	1661.6	8.6	B3/2500		G3/2500
BVH (80°-90°)	67.9	0.4			G1/100
UL (90°-100°)	11.0	0.1		U2/50	
UH (100°-180°)	0.2	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°	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9
2.5°	1990.2	1986.5	1982.8	1991.1	1958.6	1972.6	1961.4	1971.6	1964.2	1972.6	1969.8
5°	2016.2	2012.5	2001.4	2010.7	1989.3	1994.9	1980.9	1984.6	1959.5	1974.4	1973.5
7.5°	2059.0	2048.8	2041.3	2041.3	2022.7	2021.8	1999.5	2000.4	1980.9	1979.1	1982.8
10°	2116.6	2109.2	2088.7	2090.6	2064.6	2060.9	2033.0	2032.0	2016.2	2006.9	2015.3
12.5°	2159.4	2166.8	2148.2	2148.2	2122.2	2103.6	2084.1	2071.1	2059.0	2045.1	2038.6
15°	2237.5	2244.9	2219.8	2218.9	2208.7	2186.4	2165.0	2137.1	2115.7	2109.2	2099.0
17.5°	2338.8	2334.2	2312.8	2313.7	2315.6	2279.3	2257.9	2221.7	2191.0	2168.7	2163.1
20°	2442.0	2442.0	2418.7	2426.2	2416.9	2383.4	2369.5	2319.3	2276.5	2252.4	2232.8
22.5°	2557.3	2552.6	2536.8	2552.6	2534.0	2500.5	2477.3	2427.1	2372.3	2235.6	2179.8
25°	2666.9	2664.2	2670.7	2675.3	2652.1	2610.2	2594.4	2541.5	2389.0	2209.6	2097.1
27.5°	2805.4	2796.2	2811.0	2820.3	2797.1	2760.8	2727.4	2667.9	2345.3	2204.0	2191.9
30°	2983.0	2962.5	2983.9	2988.6	2964.4	2942.1	2891.9	2594.4	2360.2	2319.3	2315.6
32.5°	3172.6	3148.5	3176.3	3180.1	3148.5	3129.9	3003.4	2556.3	2506.1	2458.7	2463.4
35°	3397.6	3397.6	3411.5	3413.4	3390.2	3358.5	2877.0	2742.2	2697.6	2653.9	2653.0
37.5°	3671.8	3663.4	3700.6	3722.9	3697.8	3607.7	3061.1	2997.9	2929.1	2873.3	2758.0
40°	4002.7	4017.6	4027.8	4050.1	4026.0	3823.3	3329.7	3258.2	3204.2	3017.4	2726.4
42.5°	4359.7	4363.4	4385.7	4413.6	4413.6	4199.8	3643.9	3582.6	3512.9	2950.5	2819.4
45°	4786.4	4778.0	4820.8	4865.4	4853.3	4632.1	4009.2	3963.7	3637.4	3144.7	3145.7
47.5°	5270.7	5260.4	5321.8	5380.4	5319.9	5111.7	4410.8	4375.5	3511.0	3473.8	3466.4
50°	5830.3	5805.2	5875.8	5953.9	5904.6	5647.2	4898.8	4220.3	3863.3	3833.6	3828.9
52.5°	6428.0	6408.5	6451.2	6584.2	6519.1	6207.7	5360.8	4354.1	4271.4	4237.9	4229.6
55°	7102.9	7064.7	7156.8	7258.1	7182.8	6827.7	5816.3	4798.5	4712.9	4655.3	4571.6
57.5°	7812.1	7757.3	7804.7	7932.0	7859.5	7462.6	6403.8	5255.8	5154.5	4265.8	3926.5
60°	8518.6	8493.5	8512.1	8624.6	8535.3	8079.8	6954.1	5714.1	4362.5	4219.3	4236.1
62.5°	9228.8	9173.9	9190.7	9305.9	9191.6	8667.3	7475.6	6130.5	4591.2	4541.0	4558.6
65°	9990.1	9925.0	9939.9	9973.4	9832.1	9194.4	7936.7	6523.7	4935.1	4882.1	4901.6
67.5°	10907.6	10848.1	10767.2	10667.8	10472.6	9754.0	8395.0	6937.4	5321.8	5292.1	5298.6
68°	11005.2	10947.6	10850.0	10731.9	10512.5	9777.2	8414.5	6949.5	5327.4	5290.2	5292.1
70°	10701.2	10735.6	10625.0	10427.0	10243.9	9437.0	8095.6	6681.8	5090.3	5035.5	5021.5
72.5°	9477.0	9552.3	9399.8	9366.4	9141.4	8407.1	7084.3	5797.7	4427.6	4445.2	4395.0
75°	7651.3	7761.9	7576.9	7587.2	7458.9	7012.7	5937.2	4827.3	3635.6	3716.4	3731.3
77.5°	5320.9	5479.8	5399.0	5479.8	5416.6	5255.8	4594.9	3717.4	2773.8	2866.8	2903.1
80°	2774.8	2963.5	3070.4	3103.8	3124.3	3117.8	2798.0	2231.0	1603.5	1637.9	1636.0
82.5°	877.5	832.0	858.9	851.5	828.2	837.5	754.8	590.3	409.0	450.8	431.3
85°	264.9	266.8	259.4	257.5	238.0	209.2	171.0	98.5	48.3	56.7	53.0
87.5°	195.2	197.1	182.2	172.9	161.7	140.4	108.8	61.4	23.2	22.3	17.7
90°	107.8	104.1	96.7	89.2	84.6	72.5	54.8	23.2	8.4	6.5	5.6
92.5°	58.6	55.8	52.1	49.3	42.8	34.4	22.3	7.4	3.7	0.9	0.0
95°	27.0	25.1	24.2	21.4	18.6	13.0	7.4	4.6	2.8	0.9	0.0
97.5°	12.1	11.2	10.2	8.4	6.5	3.7	3.7	2.8	1.9	0.9	0.0
100°	2.8	2.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.9	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	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°	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9	1954.9
2.5°	1967.0	1961.4	1958.6	1940.9	1946.5	1930.7	1961.4	1954.0	1949.3	1962.3
5°	1968.8	1949.3	1961.4	1951.2	1954.9	1932.6	1956.7	1946.5	1945.6	1951.2
7.5°	1973.5	1960.5	1972.6	1952.1	1961.4	1952.1	1969.8	1959.5	1967.9	1973.5
10°	1998.6	1991.1	1985.6	1980.9	1987.4	1968.8	1991.1	1992.1	1994.9	2011.6
12.5°	2033.9	2026.5	2017.2	2005.1	2011.6	2004.2	2020.9	2025.5	2035.8	2044.1
15°	2083.2	2069.2	2065.5	2054.4	2060.9	2057.1	2060.9	2058.1	2077.6	2074.8
17.5°	2151.0	2135.2	2082.2	2028.3	1993.9	2004.2	2046.9	2102.7	2116.6	2118.5
20°	2176.1	2064.6	2059.0	1997.7	1969.8	1967.9	1879.6	1747.6	1787.6	1881.5
22.5°	2146.4	1993.9	1978.1	1966.0	1847.1	1651.8	1633.3	1613.7	1609.1	1623.0
25°	2079.5	2061.8	2047.8	1889.8	1702.0	1703.0	1676.0	1547.7	1347.9	1331.1
27.5°	2181.7	2157.5	2022.7	1779.2	1775.5	1773.6	1733.7	1404.6	1361.8	1372.0
30°	2297.9	2257.9	1905.6	1874.0	1873.1	1856.4	1554.2	1416.7	1416.7	1418.5
32.5°	2431.8	2183.6	1972.6	1987.4	1986.5	1907.5	1501.3	1492.0	1488.2	1497.5
35°	2534.0	2124.1	2116.6	2143.6	2125.0	1618.4	1595.1	1586.8	1583.1	1578.4
37.5°	2502.4	2295.1	2295.1	2311.8	2162.2	1723.4	1712.3	1712.3	1704.8	1701.1
40°	2550.7	2508.0	2486.6	2493.1	1571.0	1850.8	1859.1	1857.3	1856.4	1862.9
42.5°	2805.4	2767.3	2747.8	2517.3	1758.8	1839.6	2044.1	2043.2	2046.0	2043.2
45°	3129.9	3094.5	3043.4	2355.5	1996.7	1612.8	2253.3	2263.5	2264.4	2263.5
47.5°	3470.1	3447.8	2924.4	2607.5	2255.1	1730.9	2153.8	2515.4	2510.8	2516.4
50°	3829.8	3729.4	2909.6	2905.8	2530.3	1926.1	1927.0	2735.7	2783.1	2798.0
52.5°	4230.5	3380.9	3224.7	2942.1	2809.2	2126.9	2106.4	2424.3	3071.3	3086.2
55°	3929.3	3571.4	3568.6	2618.6	2922.6	2320.2	2323.0	2300.7	2816.6	3201.4
57.5°	3909.8	3918.1	3911.6	2921.6	2132.4	2175.2	2531.2	2511.7	1823.8	1478.0
60°	4247.2	4259.3	3800.1	3155.0	2305.3	1337.7	1558.9	1324.6	1342.3	1356.2
62.5°	4569.8	4573.5	3090.8	2068.3	1142.4	53.9	26.0	21.4	20.5	20.5
65°	4926.7	4926.7	3313.0	2256.1	1103.4	20.5	3.7	2.8	10.2	10.2
67.5°	5271.6	5195.4	3475.7	2395.5	1122.9	2.8	0.0	0.0	0.0	0.0
68°	5252.1	5168.4	3460.8	2391.8	1120.1	1.9	0.0	0.0	0.0	0.0
70°	4960.2	4879.3	3283.2	2283.0	1078.3	1.9	0.0	0.0	0.0	0.0
72.5°	4378.3	4303.9	2907.7	2012.5	972.3	0.9	0.0	0.0	0.0	0.0
75°	3706.2	3696.0	2511.7	1698.3	833.8	0.9	0.0	0.0	0.0	0.0
77.5°	2982.1	2935.6	1963.3	1331.1	672.1	0.0	0.0	0.0	0.0	0.0
80°	1661.1	1729.9	1149.0	782.7	423.0	0.0	0.0	0.0	0.0	0.0
82.5°	449.0	420.2	251.0	170.1	80.9	0.0	0.0	0.0	0.0	0.0
85°	57.6	63.2	28.8	23.2	5.6	0.0	0.0	0.0	0.0	0.0
87.5°	29.7	35.3	9.3	7.4	1.9	0.0	0.0	0.0	0.0	0.0
90°	5.6	6.5	2.8	0.9	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



REPORT NUMBER: P522184  
 CATALOG NUMBER: CST-CA6-230-727-U-T5R-HSS-HM-EX180

**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)