

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: P256688

Luminaire Tested: **CST-6-3-D-U-T5R-7030-HSS-HM-EX90**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-5)
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-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 3000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED 90
DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25861.1 lumens
Efficiency: N/A
Efficacy: 110.5 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

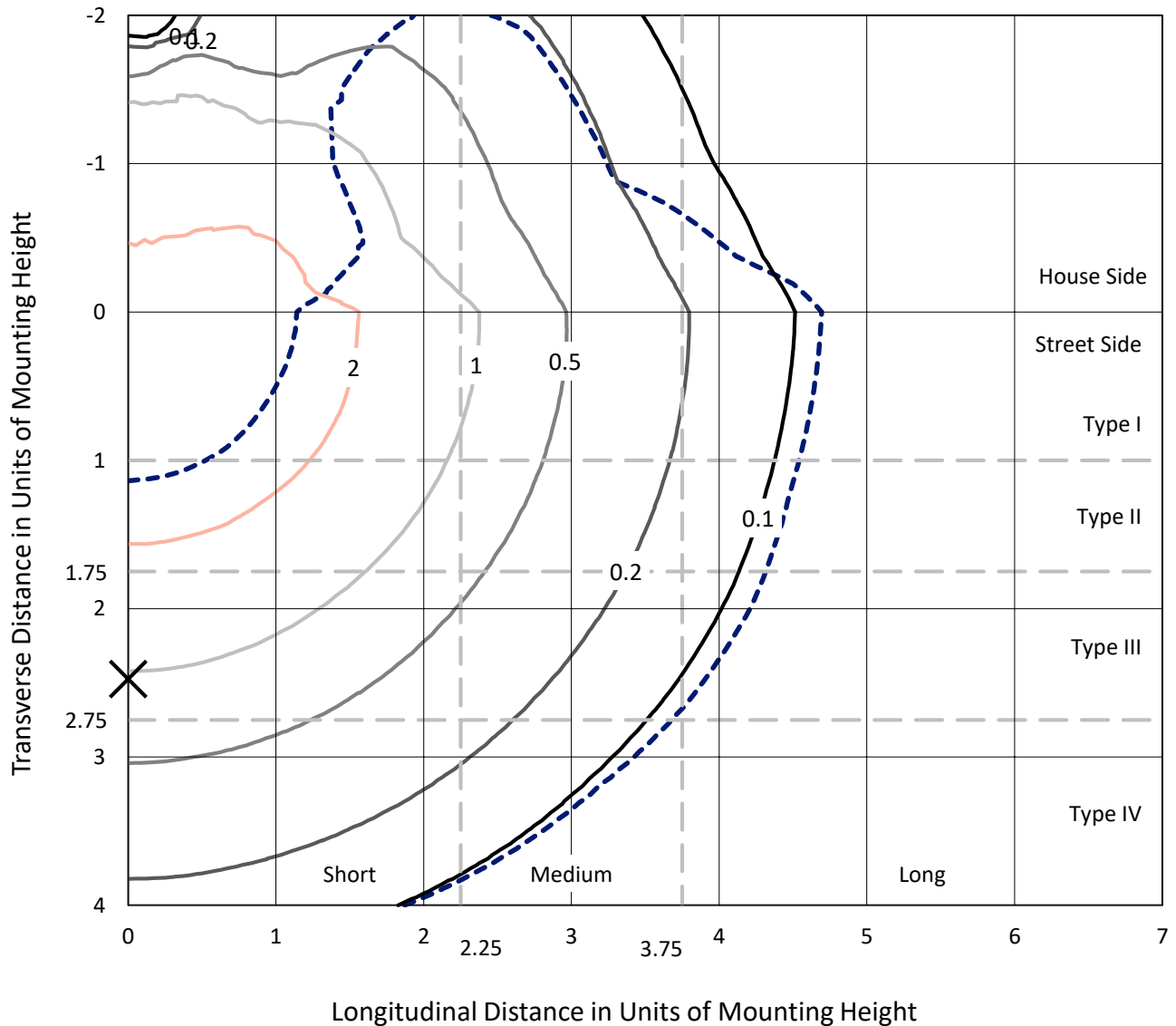


REPORT NUMBER: P256688

CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX90

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

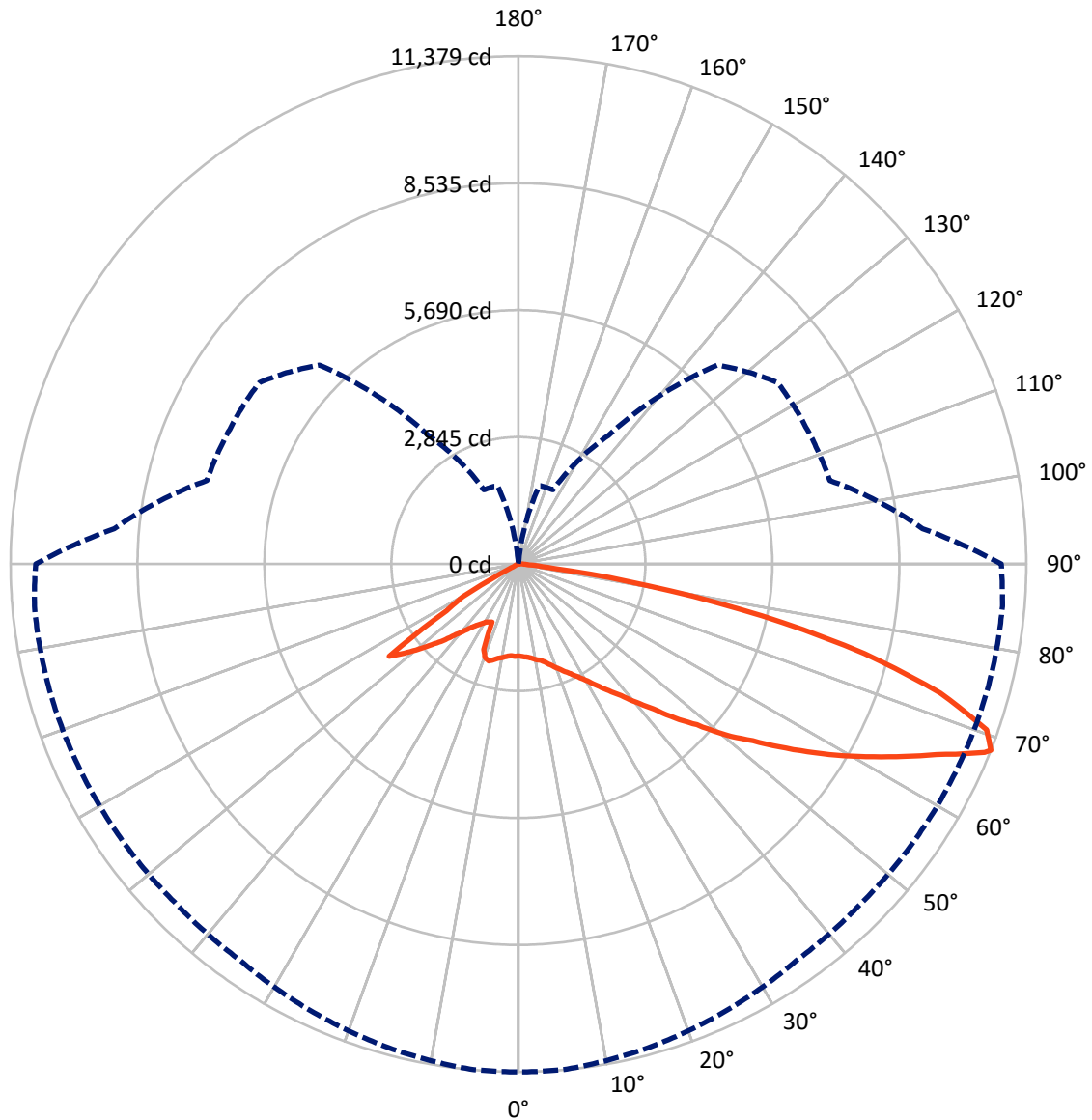


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P256688

CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX90

Luminous Intensity Polar Plot



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

REPORT NUMBER: P256688

CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX90

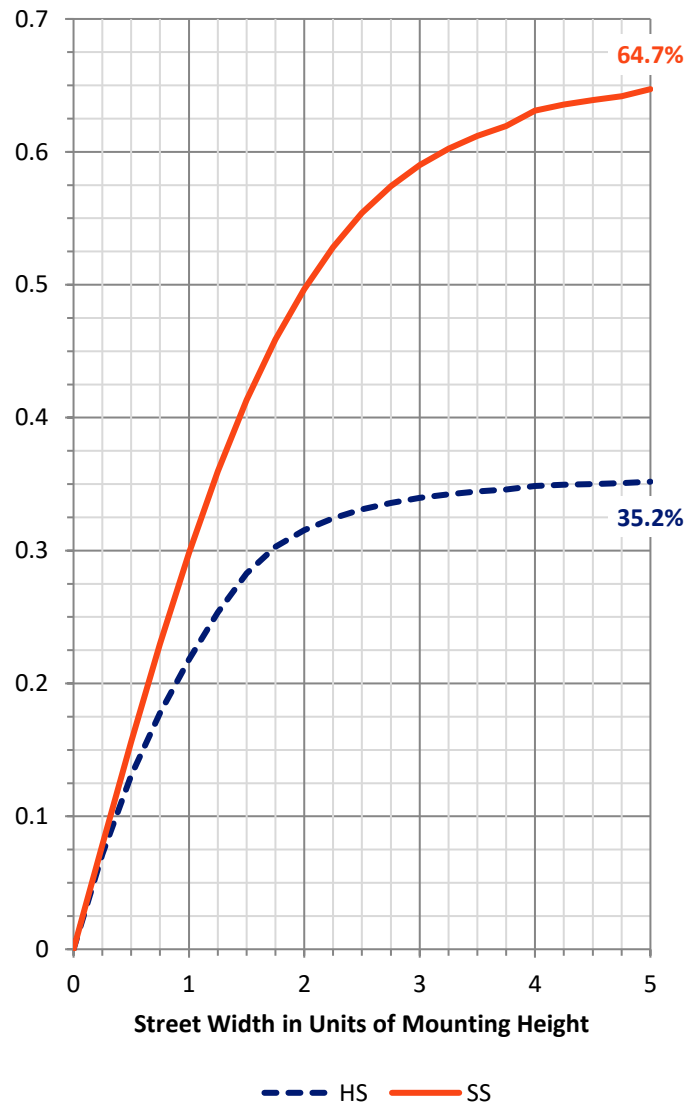
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9101.3	1.6	9102.9
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	16751.3	6.8	16758.1
	% Fixture	64.8	0.0	64.8
Total	Lumens	25852.6	8.4	25861.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.1	0.8
10°-20°	637.9	2.5
20°-30°	1138.8	4.4
30°-40°	1852.6	7.2
40°-50°	3163.7	12.2
50°-60°	5278.7	20.4
60°-70°	7343.8	28.4
70°-80°	5692.6	22.0
80°-90°	545.5	2.1
90°-100°	6.6	0.0
100°-110°	0.6	0.0
110°-120°	0.3	0.0
120°-130°	0.2	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	25852.6	100.0
0°-180°	25861.1	100.0



REPORT NUMBER: P256688

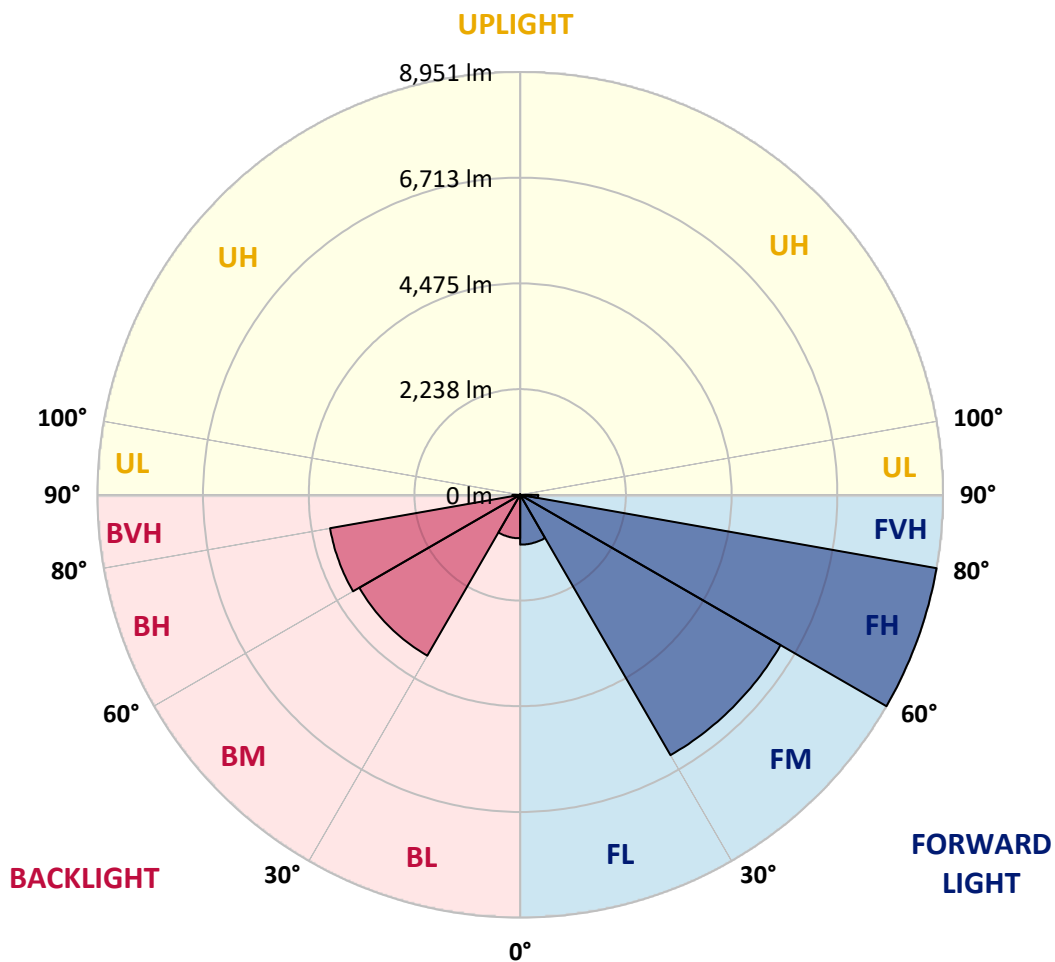
CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX90

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1055.5	4.1			
FM	(30°-60°)	6363.6	24.6			
FH	(60°-80°)	8950.6	34.6			G4/12000
FVH	(80°-90°)	381.6	1.5			G3/500
BL	(0°-30°)	920.3	3.6	B2/1000		
BM	(30°-60°)	3931.4	15.2	B3/5000		
BH	(60°-80°)	4085.8	15.8	B4/5000		G4/5000
BVH	(80°-90°)	163.9	0.6			G2/225
UL	(90°-100°)	6.6	0.0		U1/10	
UH	(100°-180°)	1.6	0.0		U1/10	

BUG Rating: B4-U1-G4

Type IV Short





REPORT NUMBER: P256688

CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1
2.5°	2081.5	2078.5	2076.6	2089.2	2053.2	2067.8	2058.1	2070.8	2067.8	2073.7	2074.6
5°	2096.1	2091.2	2084.4	2098.0	2076.6	2086.3	2075.6	2081.5	2063.0	2078.5	2080.5
7.5°	2129.1	2115.5	2114.5	2118.4	2103.8	2110.6	2092.2	2099.0	2089.2	2083.4	2089.2
10°	2178.8	2167.1	2154.4	2162.2	2137.9	2146.7	2127.2	2133.0	2128.2	2115.5	2127.2
12.5°	2212.8	2216.7	2208.0	2213.8	2192.4	2184.6	2177.8	2176.8	2173.9	2155.4	2152.5
15°	2288.7	2290.7	2275.1	2279.0	2274.1	2270.2	2260.5	2252.7	2237.1	2225.5	2217.7
17.5°	2388.0	2377.3	2362.7	2366.6	2380.2	2362.7	2356.8	2342.2	2319.9	2300.4	2296.5
20°	2492.1	2485.3	2471.7	2479.5	2478.5	2466.8	2469.7	2445.4	2413.3	2396.7	2384.1
22.5°	2607.9	2598.2	2588.4	2603.0	2591.4	2583.6	2580.7	2564.1	2524.2	2505.7	2502.8
25°	2723.7	2718.8	2725.6	2720.8	2704.2	2698.4	2702.3	2696.5	2649.7	2627.4	2613.7
27.5°	2868.7	2857.0	2867.7	2861.9	2844.4	2845.3	2846.3	2847.3	2794.7	2765.5	2746.1
30°	3034.1	3030.2	3043.8	3025.4	3008.8	3019.5	3028.3	3008.8	2963.1	2920.3	2913.5
32.5°	3249.2	3224.8	3240.4	3217.1	3191.8	3217.1	3232.6	3193.7	3156.7	3102.2	3112.0
35°	3487.6	3479.8	3479.8	3449.6	3436.0	3475.9	3491.5	3453.5	3396.1	3348.4	3336.7
37.5°	3740.6	3748.4	3772.7	3760.0	3747.4	3771.7	3806.8	3756.2	3682.2	3631.6	3618.0
40°	4076.3	4095.8	4112.3	4095.8	4081.2	4096.7	4136.6	4070.5	4018.9	3991.6	3962.5
42.5°	4437.3	4470.4	4459.7	4461.6	4474.3	4496.7	4536.6	4476.2	4416.9	4415.9	4373.1
45°	4925.8	4925.8	4903.4	4924.8	4922.9	4978.4	4995.9	4962.8	4913.2	4898.6	4861.6
47.5°	5382.2	5429.9	5421.1	5452.3	5427.9	5474.6	5534.0	5505.8	5448.4	5396.8	5389.0
50°	6018.6	6006.9	5995.3	6042.0	6038.1	6070.2	6124.7	6107.2	6027.4	5969.0	5958.3
52.5°	6578.1	6639.4	6624.8	6694.9	6656.0	6701.7	6766.9	6764.0	6666.7	6609.3	6592.7
55°	7284.6	7325.5	7322.6	7394.6	7341.0	7401.4	7455.9	7461.7	7355.6	7273.9	7299.2
57.5°	8020.3	8054.3	8034.9	8094.2	8041.7	8124.4	8157.5	8136.1	8073.8	7970.6	8008.6
60°	8756.9	8786.1	8808.5	8813.3	8783.2	8831.8	8863.0	8881.5	8783.2	8665.4	8711.2
62.5°	9505.2	9538.3	9518.8	9526.6	9442.9	9509.1	9548.0	9552.9	9440.0	9335.9	9368.0
65°	10293.4	10339.2	10269.1	10222.4	10119.2	10118.3	10169.8	10178.6	10098.8	10024.8	10012.2
67.5°	11269.4	11289.9	11140.0	10983.3	10809.2	10771.2	10807.2	10827.6	10873.4	10871.4	10814.0
68°	11379.4	11375.5	11223.7	11036.9	10850.0	10806.2	10823.8	10850.0	10880.2	10886.0	10816.9
70°	11129.3	11081.6	10995.0	10759.5	10574.6	10459.8	10398.5	10447.2	10365.4	10366.4	10237.0
72.5°	9885.7	9879.9	9720.3	9603.5	9439.0	9248.3	9160.7	9159.8	9167.5	9111.1	8977.8
75°	8007.6	8015.4	7829.5	7748.8	7698.2	7662.2	7680.7	7738.1	7743.9	7742.9	7696.2
77.5°	5584.6	5616.7	5567.1	5435.7	5576.8	5697.5	5930.1	6048.8	6010.8	6124.7	6196.7
80°	2927.1	2991.3	2993.2	3085.7	3199.5	3309.5	3510.0	3690.0	3557.6	3499.3	3438.9
82.5°	769.7	793.1	828.1	774.6	791.1	807.7	963.4	948.8	875.8	914.7	973.1
85°	219.9	226.7	217.0	196.6	180.0	165.4	169.3	143.0	124.6	123.6	119.7
87.5°	154.7	166.4	146.9	126.5	113.9	106.1	102.2	86.6	70.1	61.3	48.7
90°	72.0	71.0	61.3	47.7	41.8	39.9	39.9	31.1	17.5	10.7	9.7
92.5°	30.2	31.1	25.3	20.4	17.5	13.6	10.7	6.8	3.9	1.9	1.0
95°	10.7	11.7	9.7	7.8	6.8	5.8	4.9	3.9	1.9	1.0	1.0
97.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9	1.0	1.0
100°	0.0	0.0	0.0	1.0	1.9	1.9	1.9	1.9	1.0	1.0	1.0
102.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	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



REPORT NUMBER: P256688

CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX90

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	1.0	1.0	1.0	1.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	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	0.0	1.0	1.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	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	1.0	1.0	1.0	1.0	1.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
165°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
167.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
170°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
172.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
175°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
177.5°	0.0	0.0	0.0	0.0	1.0	1.0	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



REPORT NUMBER: P256688

CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1	2058.1
2.5°	2072.7	2067.8	2065.9	2041.6	2048.4	2033.8	2067.8	2058.1	2056.2	2069.8
5°	2077.6	2055.2	2068.8	2053.2	2057.1	2035.7	2063.0	2051.3	2052.3	2059.1
7.5°	2080.5	2067.8	2081.5	2054.2	2064.9	2057.1	2076.6	2064.9	2076.6	2082.4
10°	2109.7	2103.8	2094.1	2086.3	2094.1	2075.6	2099.9	2098.0	2104.8	2122.3
12.5°	2149.6	2142.8	2133.0	2119.4	2125.2	2118.4	2136.9	2138.9	2151.5	2160.3
15°	2208.9	2200.2	2195.3	2181.7	2183.6	2178.8	2189.5	2191.4	2216.7	2213.8
17.5°	2292.6	2282.9	2286.8	2274.1	2269.3	2257.6	2238.1	2231.3	2261.5	2270.2
20°	2384.1	2373.4	2378.2	2367.5	2277.0	2093.1	2216.7	2301.4	2237.1	2232.3
22.5°	2488.2	2476.5	2480.4	2463.9	2352.0	2007.5	1746.7	1725.3	1970.5	2069.8
25°	2603.0	2587.5	2585.5	2564.1	2196.3	1817.7	1788.6	1750.6	1571.6	1429.5
27.5°	2745.1	2721.8	2710.1	2387.0	2180.7	1888.8	1845.0	1709.7	1449.9	1458.7
30°	2898.9	2864.8	2645.9	2432.7	2294.6	1972.5	1914.1	1498.6	1500.5	1496.6
32.5°	3074.0	2998.1	2592.3	2572.9	2430.8	2062.0	1589.1	1571.6	1573.5	1579.3
35°	3303.7	2783.1	2772.4	2773.3	2597.2	1994.8	1683.5	1666.9	1668.9	1672.8
37.5°	3352.3	3000.1	3002.0	2979.6	2774.3	1822.6	1798.3	1797.3	1793.4	1789.5
40°	3391.2	3273.5	3245.3	3209.3	2571.9	1962.7	1955.0	1949.1	1952.0	1959.8
42.5°	3695.8	3607.3	3580.0	3537.2	2638.1	2174.9	2149.6	2142.8	2150.5	2146.7
45°	4100.6	4026.7	3973.2	3270.6	2914.4	2405.5	2385.1	2376.3	2379.2	2403.5
47.5°	4528.8	4485.0	4321.5	3533.3	3236.5	2678.0	2657.5	2643.9	2648.8	2642.9
50°	4994.9	4955.0	4000.4	3929.4	3592.7	2971.8	2941.7	2936.8	2938.8	2937.8
52.5°	5500.9	4667.0	4433.4	4359.5	3968.3	3279.3	3268.6	3242.4	3248.2	3242.4
55°	6094.5	4916.1	4910.2	4823.6	4390.6	3636.5	3623.8	3586.8	3354.3	3557.6
57.5°	6657.9	5391.9	5391.9	5308.2	4822.7	3991.6	3971.2	3944.0	2384.1	1922.8
60°	7274.9	5868.7	5855.1	5786.0	5239.2	4330.3	3519.7	3511.9	1440.2	1445.0
62.5°	7808.1	6294.0	6318.3	6254.1	5640.1	3242.4	1630.9	1597.8	142.1	218.9
65°	8405.6	6764.0	6793.2	6727.0	6074.1	3438.9	1770.1	1753.5	32.1	29.2
67.5°	9082.9	7233.0	7166.9	7093.9	6328.0	3541.1	1839.2	1824.6	8.8	5.8
68°	9088.7	7223.3	7137.7	7088.0	6303.7	3521.6	1833.3	1819.7	8.8	5.8
70°	8621.6	6859.4	6773.7	6786.4	6002.1	3367.9	1757.4	1732.1	8.8	5.8
72.5°	7563.9	6104.2	6007.9	5939.8	5322.8	2994.2	1575.4	1527.8	8.8	5.8
75°	6472.1	5173.0	5013.4	4863.5	4282.6	2450.3	1292.3	1238.8	8.8	5.8
77.5°	5101.0	3943.0	3716.3	3618.0	3218.0	1810.0	960.4	902.1	8.8	4.9
80°	2819.1	2262.5	2069.8	2009.4	1840.1	1063.6	550.8	515.7	7.8	4.9
82.5°	728.8	546.9	476.8	460.3	432.1	252.0	134.3	127.5	6.8	3.9
85°	104.1	76.9	84.7	100.2	96.3	65.2	46.7	39.9	5.8	2.9
87.5°	54.5	45.7	53.5	60.3	61.3	38.0	19.5	10.7	2.9	0.0
90°	8.8	8.8	9.7	10.7	10.7	4.9	3.9	0.0	0.0	0.0
92.5°	1.0	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	1.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.0	1.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P256688

CATALOG NUMBER: CST-6-3-D-U-T5R-7030-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.0	1.0	1.0	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)