

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: P579618

Luminaire Tested: **CST-CA10-210-727-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-210-727-U-T5-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23860 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

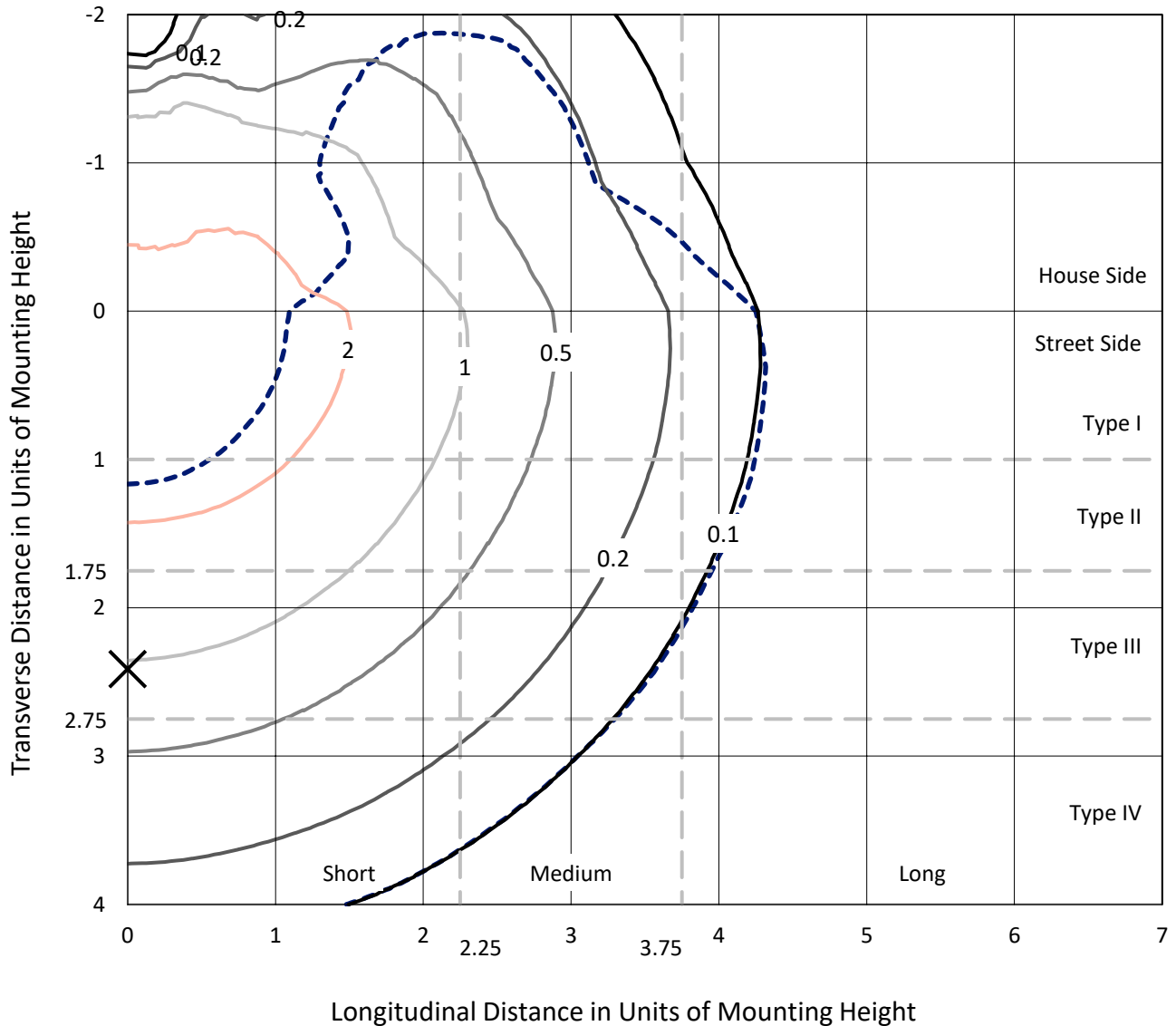
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P579618
 CATALOG NUMBER: CST-CA10-210-727-U-T5-HSS-HM-EX90

Iso-Footcandle Lines of Horizontal Illumination

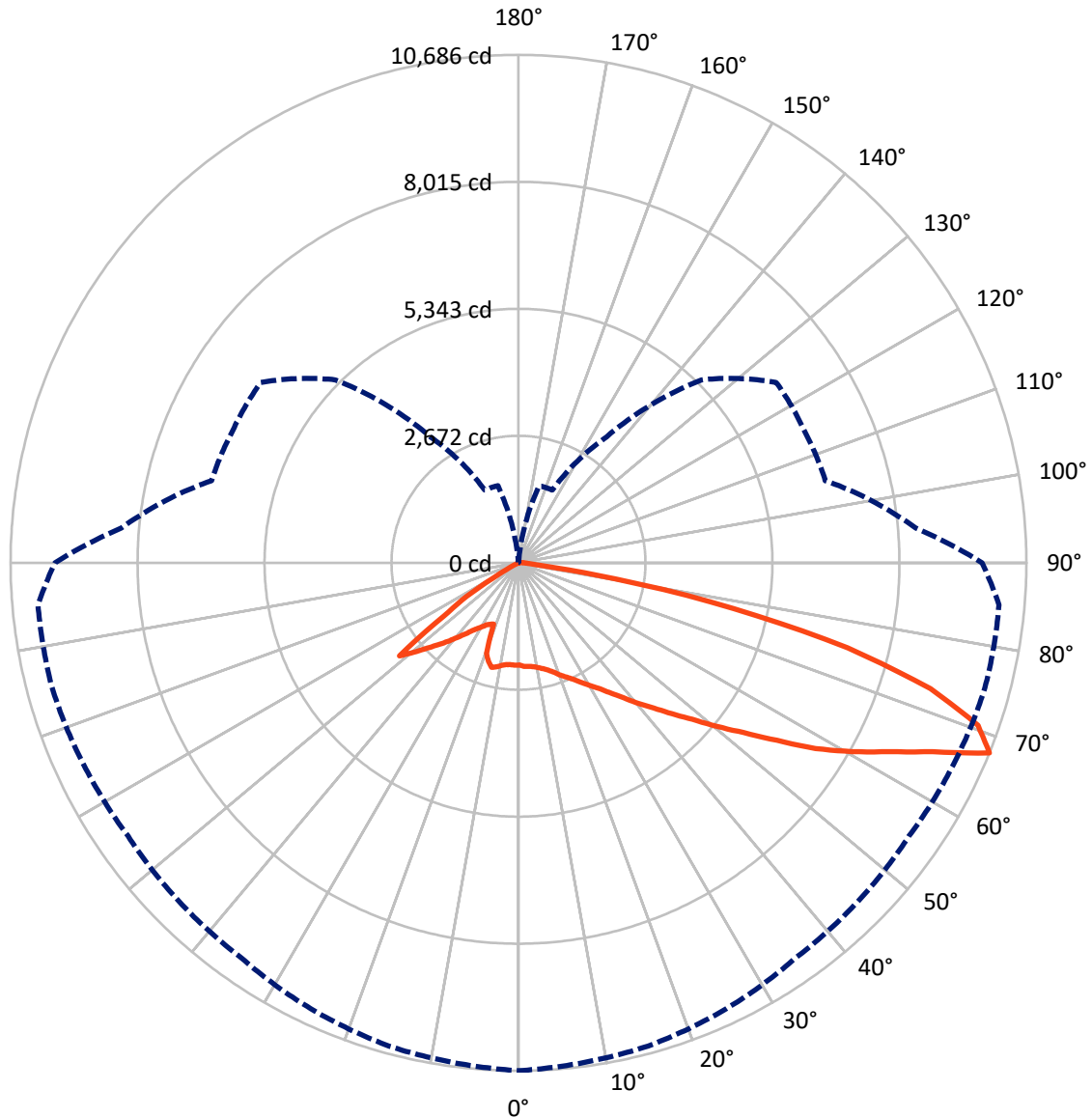
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P579618
CATALOG NUMBER: CST-CA10-210-727-U-T5-HSS-HM-EX90

Luminous Intensity Polar Plot



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

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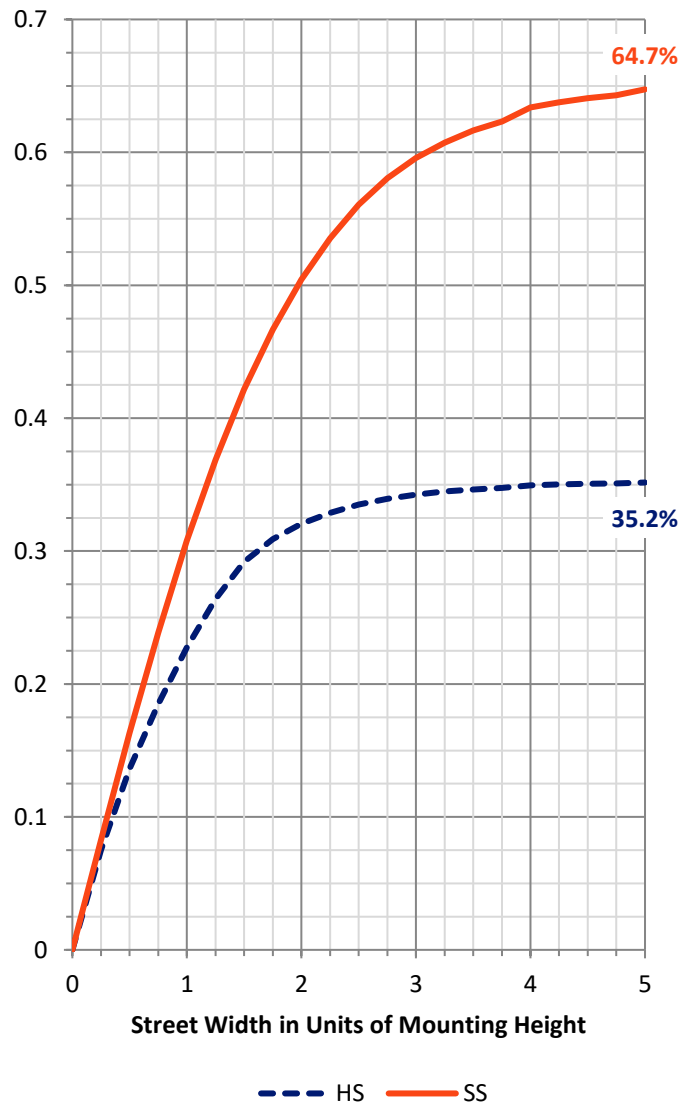
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8398.7	0.5	8399.2
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	15444.0	16.8	15460.8
	% Fixture	64.7	0.1	64.8
Total	Lumens	23842.7	17.3	23860.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.8	0.9
10°-20°	642.6	2.7
20°-30°	1114.1	4.7
30°-40°	1828.1	7.7
40°-50°	3049.3	12.8
50°-60°	4934.9	20.7
60°-70°	6811.8	28.5
70°-80°	4914.4	20.6
80°-90°	340.6	1.4
90°-100°	14.8	0.1
100°-110°	2.5	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°	23842.7	99.9
0°-180°	23860.0	100.0

Coefficient of Utilization

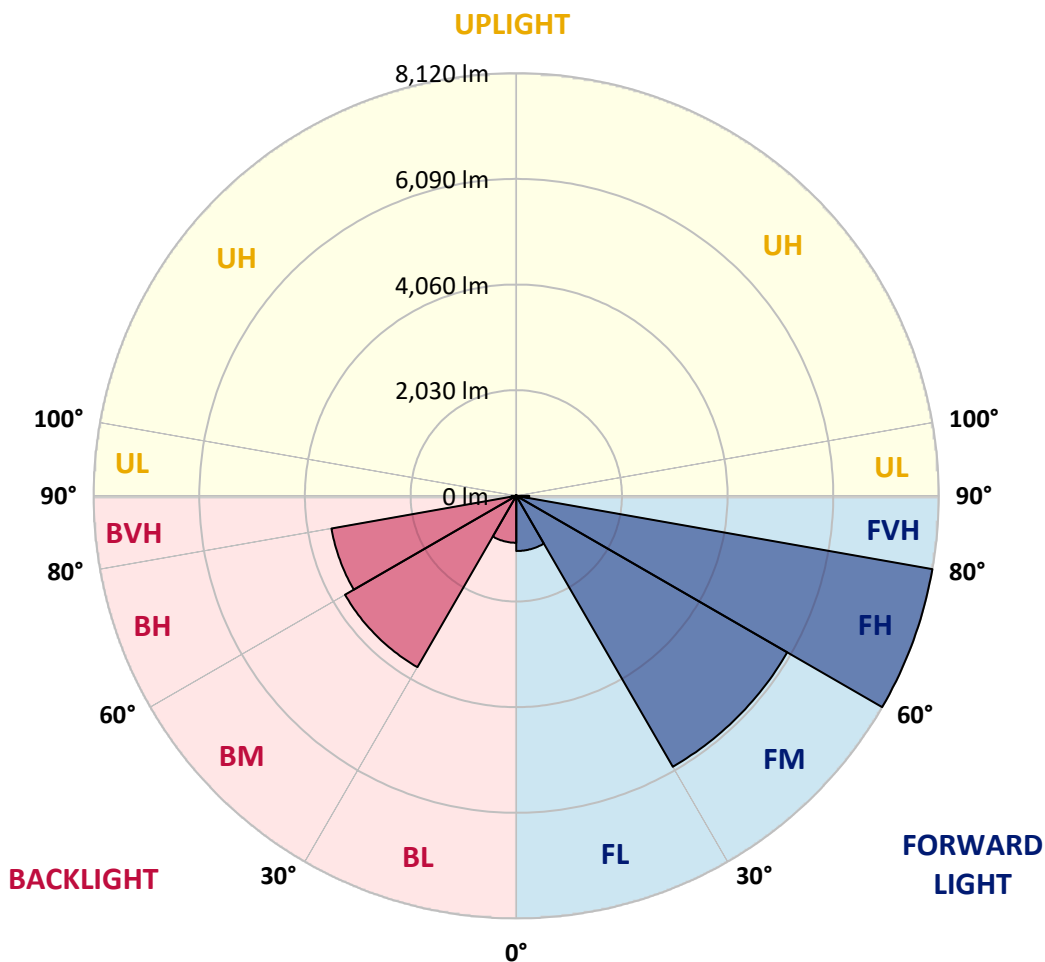


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 CATALOG NUMBER: CST-CA10-210-727-U-T5-HSS-HM-EX90

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1061.0	4.4			
FM (30°-60°)	6012.1	25.2			
FH (60°-80°)	8119.9	34.0			G4/12000
FVH (80°-90°)	251.0	1.1			G3/500
BL (0°-30°)	902.6	3.8	B2/1000		
BM (30°-60°)	3800.2	15.9	B3/5000		
BH (60°-80°)	3606.3	15.1	B4/5000		G4/5000
BVH (80°-90°)	89.6	0.4			G1/100
UL (90°-100°)	14.8	0.1		U2/50	
UH (100°-180°)	2.6	0.0		U1/10	

BUG Rating: B4-U2-G4
 Type IV Short





REPORT NUMBER: P579618

CATALOG NUMBER: CST-CA10-210-727-U-T5-HSS-HM-EX90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2
2.5°	2183.1	2170.3	2171.2	2184.0	2149.3	2162.1	2147.5	2160.3	2153.9	2158.4	2163.9
5°	2189.5	2174.0	2175.8	2191.3	2163.9	2174.0	2156.6	2163.9	2158.4	2163.9	2164.8
7.5°	2205.9	2190.4	2191.3	2203.2	2174.9	2182.2	2165.7	2169.4	2160.3	2170.3	2167.6
10°	2240.6	2226.0	2220.5	2230.6	2205.9	2206.8	2187.7	2191.3	2177.6	2191.3	2185.8
12.5°	2287.2	2267.1	2268.9	2274.4	2244.3	2246.1	2223.3	2228.8	2205.9	2225.1	2218.7
15°	2343.8	2319.2	2321.9	2331.1	2301.8	2299.1	2278.1	2278.1	2258.0	2272.6	2266.2
17.5°	2422.4	2395.0	2393.2	2399.6	2375.8	2375.8	2352.1	2349.3	2329.2	2341.1	2339.3
20°	2524.7	2493.7	2488.2	2500.0	2469.9	2473.6	2443.4	2440.7	2418.8	2426.1	2427.0
22.5°	2617.0	2592.3	2591.4	2609.7	2574.0	2578.6	2551.2	2543.9	2525.6	2535.7	2538.4
25°	2722.9	2719.3	2716.5	2722.9	2687.3	2687.3	2668.1	2661.7	2649.8	2657.2	2664.5
27.5°	2856.3	2854.5	2847.1	2848.1	2817.9	2822.5	2801.5	2797.8	2792.3	2791.4	2787.8
30°	3003.3	2995.1	2985.1	2991.5	2977.8	2982.3	2964.1	2952.2	2950.4	2951.3	2945.8
32.5°	3166.8	3155.9	3149.5	3160.5	3165.9	3178.7	3177.8	3144.9	3144.9	3158.6	3134.0
35°	3369.6	3352.3	3357.8	3372.4	3383.3	3416.2	3410.7	3387.9	3395.2	3401.6	3372.4
37.5°	3608.0	3596.2	3620.8	3648.2	3649.1	3695.7	3684.8	3690.2	3689.3	3681.1	3661.9
40°	3893.9	3874.8	3900.3	3921.3	3908.5	3964.3	3962.4	3987.1	4003.5	4031.9	4020.9
42.5°	4178.0	4163.4	4188.1	4233.7	4226.4	4290.4	4299.5	4337.9	4360.7	4404.5	4379.0
45°	4527.8	4519.6	4542.5	4578.1	4602.8	4687.7	4721.5	4737.9	4795.5	4848.5	4789.1
47.5°	4919.7	4930.7	4927.0	4991.9	5046.7	5149.9	5163.6	5216.6	5266.8	5325.3	5267.7
50°	5407.5	5389.2	5405.7	5467.8	5557.3	5632.2	5702.5	5778.3	5827.7	5887.9	5782.0
52.5°	5932.7	5948.2	5984.8	6080.7	6146.4	6235.0	6299.0	6389.4	6437.8	6489.9	6352.0
55°	6594.9	6607.7	6647.9	6746.6	6793.1	6893.6	6937.5	7027.9	7074.5	7097.3	6921.0
57.5°	7371.3	7328.4	7361.3	7412.4	7484.6	7593.3	7605.2	7690.1	7690.1	7719.4	7494.7
60°	8064.6	8035.4	8070.1	8143.2	8171.5	8270.2	8260.1	8329.5	8347.8	8325.9	8057.3
62.5°	8747.9	8753.4	8798.1	8821.9	8810.9	8869.4	8893.1	8966.2	8936.0	8943.3	8633.7
65°	9577.3	9590.1	9585.5	9541.6	9443.0	9558.1	9551.7	9667.7	9675.0	9740.8	9380.9
67.5°	10686.2	10629.5	10526.3	10350.0	10154.5	10087.0	10027.6	10085.1	10159.1	10147.2	9752.6
70°	10255.0	10162.8	10108.9	9955.4	9694.2	9559.0	9435.7	9445.7	9553.5	9563.6	9159.8
72.5°	9065.7	9019.2	8811.8	8677.5	8498.5	8394.4	8245.5	8279.3	8420.0	8443.7	8122.2
75°	7151.2	7108.3	6921.0	6877.2	6788.6	6839.7	6803.2	6816.9	6930.2	6826.0	6633.3
77.5°	4628.3	4638.4	4609.1	4708.7	4705.1	4707.8	4841.2	4854.9	4965.4	4901.4	4715.1
80°	2075.3	2105.4	2176.7	2321.0	2233.3	2280.8	2332.0	2316.4	2427.9	2175.8	2266.2
82.5°	420.2	434.8	410.1	428.4	400.1	414.7	435.7	403.7	400.1	370.9	344.4
85°	216.5	219.2	218.3	213.7	188.2	173.6	167.2	140.7	127.0	124.2	115.1
87.5°	140.7	142.5	137.9	137.0	120.6	110.5	98.6	83.1	69.4	48.4	40.2
90°	85.9	85.9	81.3	76.7	68.5	61.2	49.3	35.6	21.0	8.2	4.6
92.5°	57.5	57.5	55.7	53.0	47.5	41.1	32.0	21.0	10.0	3.7	1.8
95°	36.5	36.5	35.6	34.7	31.1	26.5	20.1	12.8	6.4	2.7	0.9
97.5°	23.7	23.7	23.7	22.8	21.0	18.3	13.7	8.2	4.6	1.8	0.9
100°	14.6	15.5	14.6	14.6	13.7	11.9	9.1	5.5	3.7	1.8	0.9
102.5°	8.2	8.2	9.1	9.1	8.2	7.3	5.5	4.6	2.7	1.8	0.9
105°	3.7	3.7	4.6	4.6	4.6	3.7	3.7	2.7	1.8	1.8	0.9
107.5°	0.9	0.9	0.9	1.8	2.7	2.7	2.7	2.7	1.8	0.9	0.9
110°	0.0	0.0	0.0	0.9	0.9	1.8	1.8	1.8	1.8	0.9	0.9



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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



REPORT NUMBER: P579618

CATALOG NUMBER: CST-CA10-210-727-U-T5-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2	2150.2
2.5°	2158.4	2147.5	2155.7	2142.0	2138.3	2126.5	2149.3	2152.9	2151.1	2154.8
5°	2160.3	2146.5	2156.6	2142.9	2142.0	2129.2	2152.9	2153.9	2147.5	2150.2
7.5°	2165.7	2152.9	2160.3	2144.7	2146.5	2131.0	2158.4	2157.5	2153.9	2160.3
10°	2185.8	2171.2	2174.0	2157.5	2162.1	2145.6	2179.4	2181.3	2177.6	2189.5
12.5°	2220.5	2200.4	2206.8	2187.7	2191.3	2174.9	2216.0	2218.7	2218.7	2237.9
15°	2268.0	2247.0	2260.7	2236.1	2237.0	2212.3	2243.4	2243.4	2247.0	2273.5
17.5°	2337.5	2311.9	2330.1	2307.3	2164.8	2110.9	2216.9	2281.7	2174.0	2164.8
20°	2423.3	2411.4	2421.5	2384.0	2152.9	1906.3	1714.5	1704.5	1917.3	2023.2
22.5°	2528.4	2516.5	2521.1	2473.6	1921.8	1748.3	1745.6	1727.3	1461.5	1388.4
25°	2651.7	2645.3	2635.2	2237.0	1986.7	1820.5	1798.5	1560.1	1407.6	1421.3
27.5°	2784.1	2764.9	2426.1	2323.8	2086.3	1892.6	1768.4	1456.9	1451.4	1464.2
30°	2932.1	2830.7	2483.6	2448.9	2202.3	1982.1	1539.1	1520.9	1520.9	1540.9
32.5°	3120.3	2643.5	2643.5	2625.2	2345.7	1740.1	1620.4	1609.5	1622.2	1630.5
35°	3091.9	2843.5	2872.7	2864.5	2540.2	1772.0	1751.0	1732.8	1735.5	1735.5
37.5°	3101.1	3111.1	3145.8	3110.2	2216.0	1910.9	1877.1	1873.4	1876.2	1882.6
40°	3387.9	3393.4	3406.2	3327.6	2381.3	2072.6	2026.0	2016.8	2026.0	2039.7
42.5°	3696.6	3712.2	3726.8	3026.2	2612.4	2256.2	2209.6	2192.2	2208.7	2223.3
45°	4062.0	4085.8	3862.0	3293.8	2873.6	2465.3	2416.0	2395.0	2405.0	2417.8
47.5°	4473.0	4510.5	3641.8	3634.5	3180.5	2712.9	2656.2	2616.1	2631.6	2630.7
50°	4937.1	4310.5	4023.6	4019.1	3523.1	2988.7	2930.3	2893.7	2905.6	2896.5
52.5°	5438.5	4428.3	4437.4	4436.5	3881.1	3285.6	3231.7	3186.0	3091.9	3178.7
55°	5951.9	4835.7	4870.4	4864.9	4256.6	3592.5	3535.0	3492.0	2281.7	1927.3
57.5°	6462.5	5261.3	5272.3	5285.1	4645.7	3888.5	3635.4	3339.5	1301.6	1295.2
60°	6966.7	5666.9	5688.8	5696.1	4855.8	3218.9	1486.1	1513.5	393.7	470.4
62.5°	7489.2	6067.0	6087.1	6080.7	5064.9	2993.3	1561.0	1530.0	36.5	33.8
65°	8156.0	6568.4	6540.1	6519.1	5394.7	3194.2	1677.0	1668.8	11.9	8.2
67.5°	8389.8	6682.6	6625.1	6617.8	5442.2	3237.2	1686.2	1679.8	11.9	8.2
70°	7860.0	6248.7	6150.1	6152.8	5064.0	3028.0	1572.9	1563.8	11.0	8.2
72.5°	6883.6	5518.9	5477.8	5260.4	4385.4	2663.5	1394.8	1360.1	11.0	7.3
75°	5651.4	4458.4	4367.1	4123.2	3490.2	2117.3	1095.2	1050.4	10.0	6.4
77.5°	3923.2	3126.7	2952.2	2703.7	2334.7	1403.9	736.2	678.7	9.1	6.4
80°	1778.4	1283.4	1289.8	988.3	791.9	475.9	233.8	211.9	8.2	5.5
82.5°	309.7	228.4	214.7	207.3	172.6	116.9	71.2	61.2	7.3	3.7
85°	107.8	86.8	95.9	113.3	100.5	70.3	43.8	42.0	4.6	1.8
87.5°	36.5	38.4	44.8	53.9	47.5	27.4	16.4	11.9	0.9	0.0
90°	3.7	4.6	4.6	4.6	2.7	0.0	0.0	0.0	0.0	0.0
92.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579618
 CATALOG NUMBER: CST-CA10-210-727-U-T5-HSS-HM-EX90

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)