

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: P237548

Luminaire Tested: **CST-10-8-D-U-T3-7050-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237548  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-26)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-10-8-D-U-T3-7050-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
(10) 70 CRI, 5000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 75379 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B4 - U0 - G5

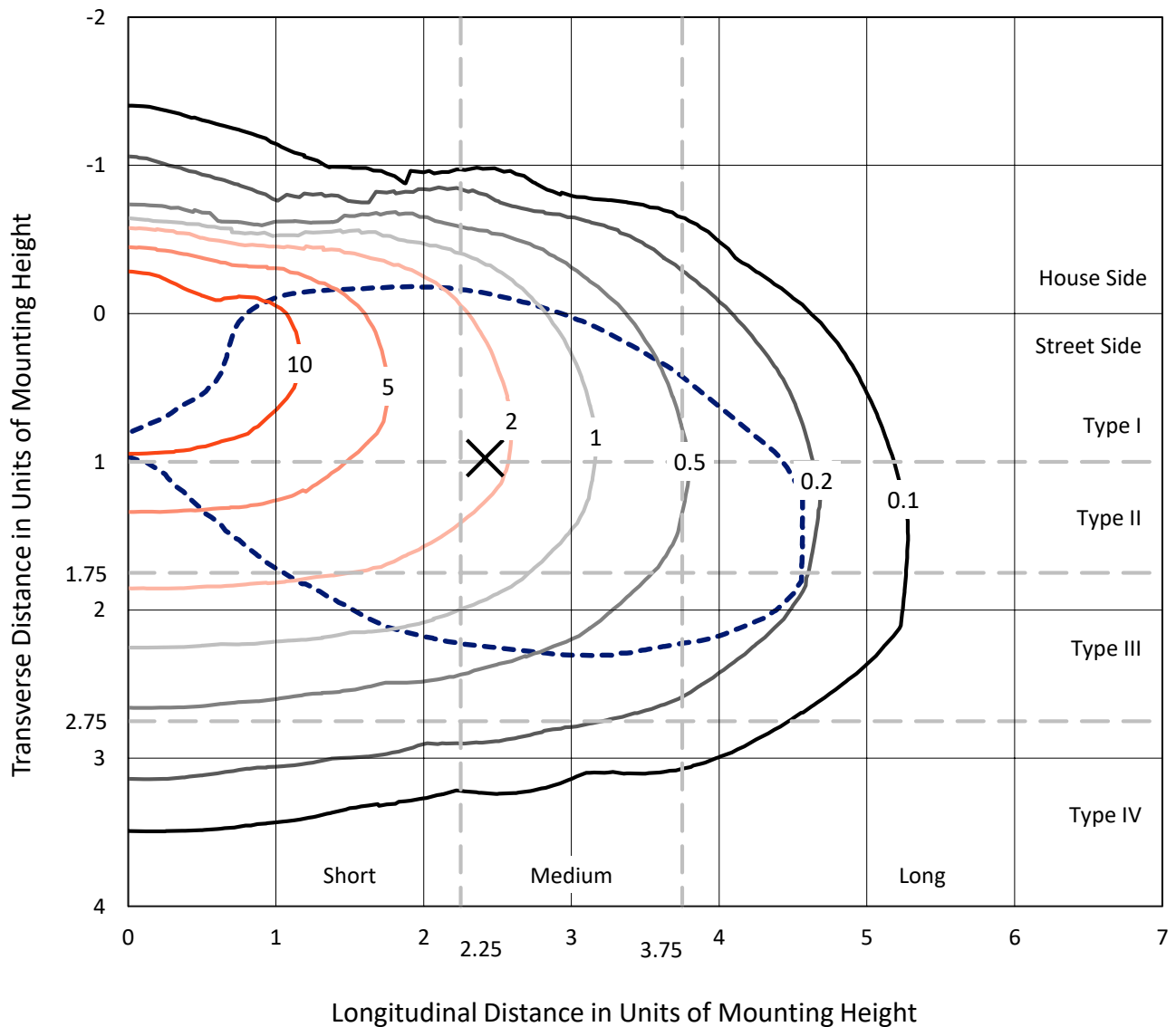
Input Watts (W): 631  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

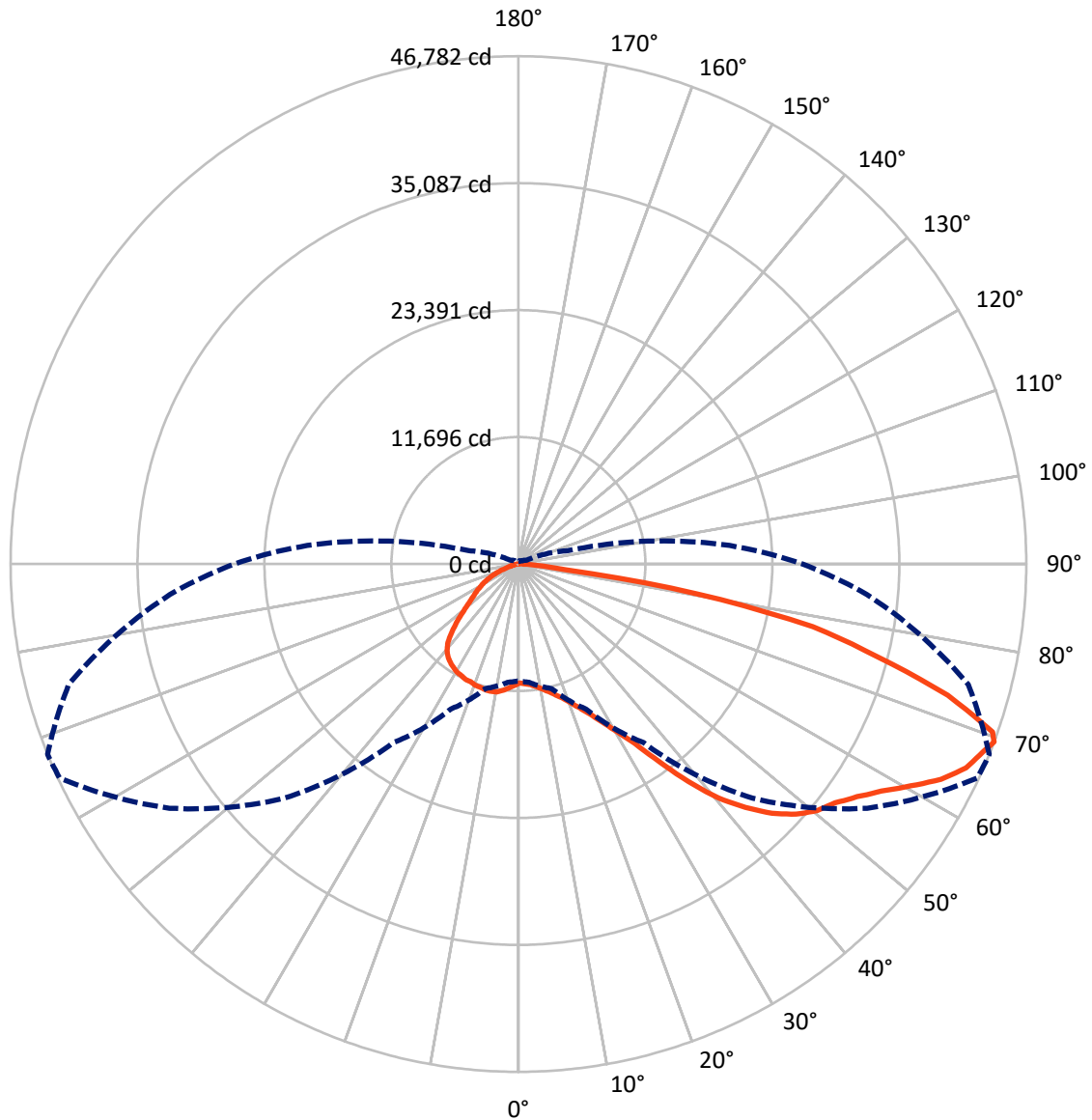


Based on 30 foot mounting height. Maximum calculated value = 14.9 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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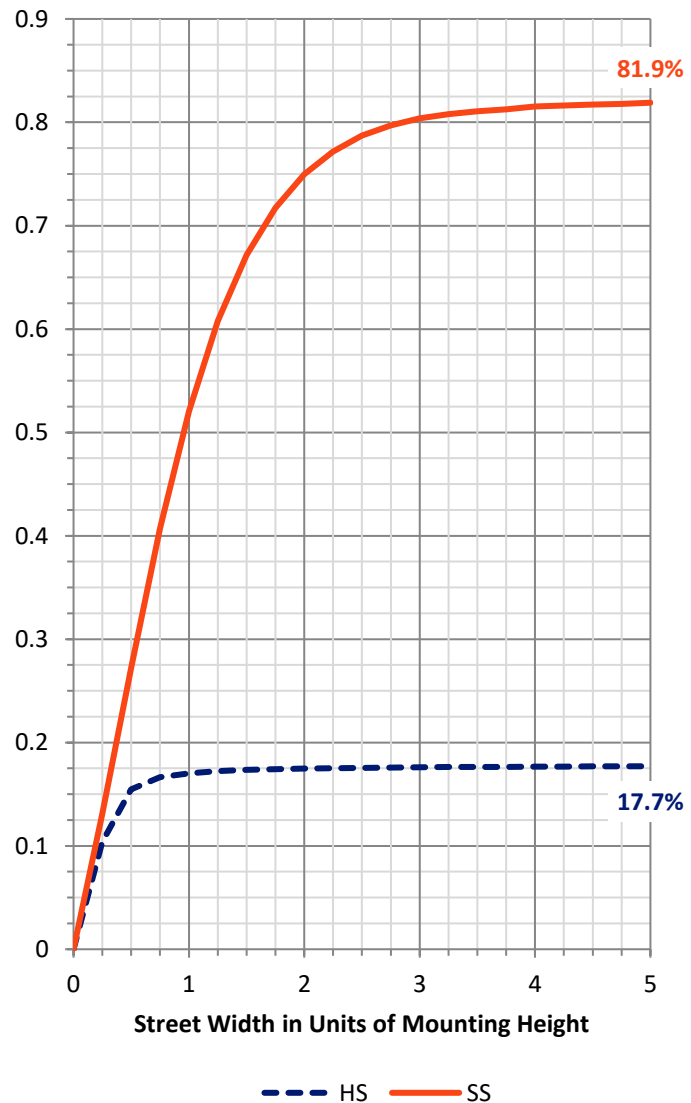
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13527.8	0.0	13527.8
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	61851.2	0.0	61851.2
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	75379.0	0.0	75379.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1101.1	1.5
10°-20°	3455.3	4.6
20°-30°	5906.4	7.8
30°-40°	9101.2	12.1
40°-50°	13060.6	17.3
50°-60°	15719.0	20.9
60°-70°	16495.7	21.9
70°-80°	9556.5	12.7
80°-90°	983.3	1.3
90°-100°	0.0	0.0
100°-110°	0.0	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°	75379.0	100.0
0°-180°	75379.0	100.0

**Coefficient of Utilization**



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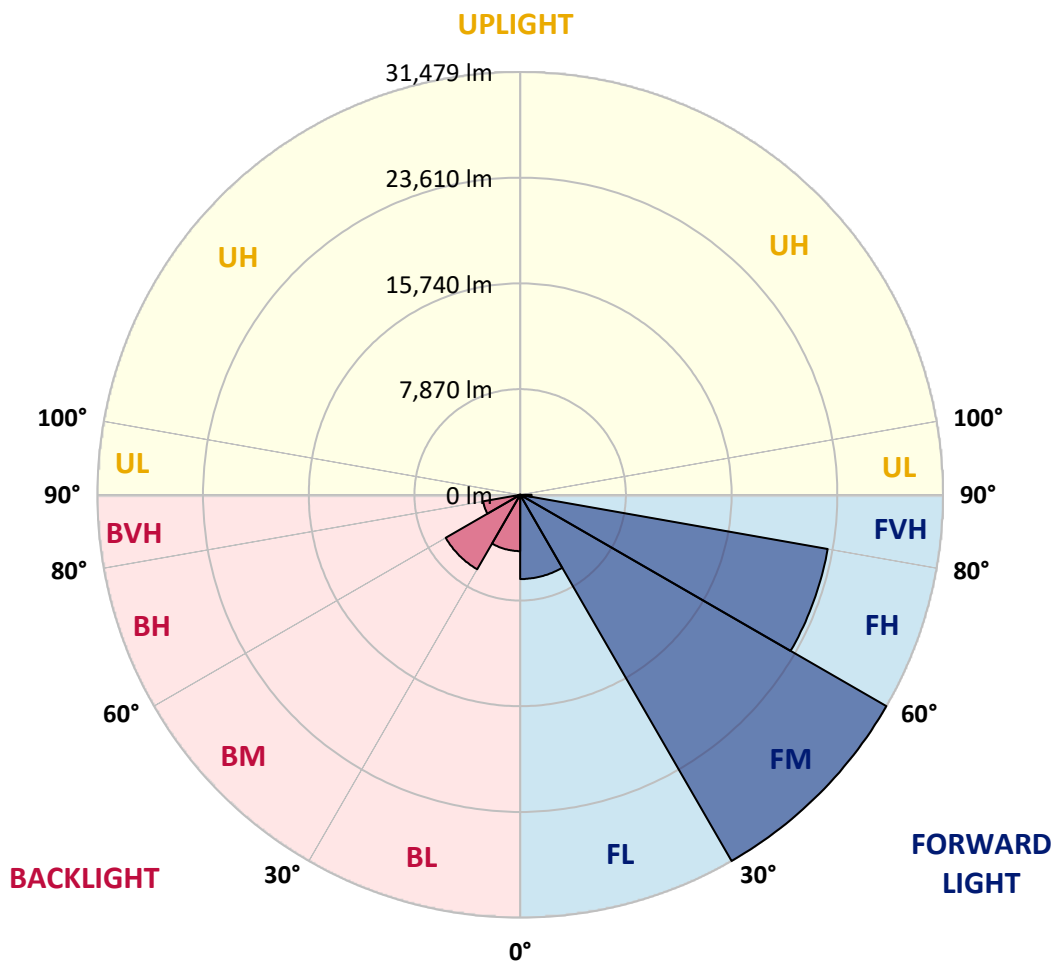
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6271.2	8.3			
FM	(30°-60°)	31479.3	41.8			
FH	(60°-80°)	23246.1	30.8			G5
FVH	(80°-90°)	854.6	1.1			G5
BL	(0°-30°)	4191.7	5.6	B4/5000		
BM	(30°-60°)	6401.4	8.5	B4/8500		
BH	(60°-80°)	2806.1	3.7	B4/5000		G4/5000
BVH	(80°-90°)	128.7	0.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3
2.5°	11087.0	10998.2	11008.7	11079.2	10870.2	10959.0	10904.2	11019.1	11037.4	10982.5	11032.2
5°	11306.4	11230.7	11228.1	11298.6	11066.1	11134.0	11047.8	11126.2	11149.7	11092.2	11178.4
7.5°	11732.1	11651.2	11635.5	11706.0	11410.9	11431.8	11314.2	11353.4	11374.3	11296.0	11382.2
10°	12343.3	12254.5	12197.0	12236.2	11904.5	11852.3	11651.2	11645.9	11677.3	11570.2	11708.6
12.5°	13027.6	12923.1	12839.5	12847.4	12468.7	12379.9	12113.5	12019.4	12040.3	11896.7	12063.8
15°	13771.9	13620.4	13542.1	13544.7	13119.0	12970.1	12628.0	12473.9	12460.8	12322.4	12419.0
17.5°	14667.8	14545.0	14445.8	14393.5	13941.7	13646.6	13239.1	13038.0	12964.9	12873.5	12823.9
20°	15720.3	15566.2	15461.8	15443.5	14889.8	14498.0	13957.4	13691.0	13604.8	13529.0	13307.0
22.5°	16893.0	16736.3	16592.7	16569.2	15981.5	15508.8	14782.7	14453.6	14377.9	14291.7	13847.7
25°	17974.3	17956.0	17796.7	17770.6	17203.8	16590.0	15738.6	15318.1	15318.1	15216.2	14534.6
27.5°	19180.9	19207.1	19063.4	19032.1	18499.3	17820.2	16806.8	16404.6	16488.2	16305.4	15399.1
30°	20452.9	20398.0	20358.9	20392.8	19899.2	19180.9	18125.8	17786.2	17916.8	17707.9	16558.7
32.5°	21591.6	21549.8	21575.9	21706.5	21351.3	20687.9	19781.6	19570.1	19695.5	19826.0	18637.7
35°	22492.7	22403.9	22733.0	23020.3	22918.4	22289.0	21560.3	22006.9	22351.6	22947.1	21701.3
37.5°	23286.7	23221.4	23621.0	24208.6	24336.6	23986.6	23762.0	25007.8	25402.2	26204.0	24388.8
40°	23683.7	23670.6	24161.6	24926.9	25446.6	25673.8	26068.2	27765.9	28340.5	28559.8	26433.9
42.5°	23555.7	23597.5	24464.6	25645.1	26486.1	27460.3	28254.3	30121.7	30649.3	30469.1	28225.5
45°	23197.9	23218.8	24098.9	25940.2	27387.2	29296.4	30356.8	32305.1	32772.7	32138.0	29651.6
47.5°	22701.6	22709.5	23639.3	25736.5	28123.7	30957.5	32169.3	34049.8	34428.5	33532.7	30678.0
50°	22030.4	22043.5	23153.5	25480.6	28758.3	32318.2	33587.5	35402.7	35695.2	34522.6	31566.0
52.5°	21181.6	21296.5	22511.0	25070.5	29155.3	33284.6	34661.0	36395.2	36538.8	35705.7	32352.2
55°	20202.1	20322.3	21693.5	24514.2	29309.4	33833.0	35413.2	37617.5	37847.4	37027.3	32992.0
57.5°	19042.5	19207.1	20651.4	23610.5	28949.0	34062.9	36178.4	39127.1	39437.9	38408.9	33650.2
60°	17697.4	17901.2	19421.2	22482.2	28115.8	34305.8	37609.7	41151.3	41511.7	39895.0	34224.8
62.5°	16292.3	16422.9	17796.7	20943.9	26781.2	34493.8	39150.6	43645.5	43676.9	41198.3	34543.4
65°	14411.8	14550.2	15780.4	19000.7	24778.0	33895.7	39928.9	45395.4	45301.4	42219.5	34436.4
67.5°	12259.7	12390.3	13395.8	16584.8	22027.8	32219.0	39662.5	46092.8	46155.4	42961.2	33409.9
69°	10765.8	10938.1	11886.2	14748.7	20084.6	30503.0	39215.9	46636.0	46782.3	42893.3	32221.6
70°	9488.6	9710.6	10611.7	13126.8	18439.2	28943.8	38354.0	46327.8	46338.3	42206.4	31127.2
72.5°	6197.8	6333.6	6490.3	8517.0	13265.2	22936.7	33940.1	41086.0	41357.6	37661.9	27214.8
75°	3066.2	3186.4	3771.4	4505.3	6822.0	15365.1	26909.2	33660.7	34175.2	31983.9	22296.8
77.5°	1692.4	1715.9	1922.3	2951.3	3536.4	6947.3	18392.2	26833.5	27734.5	26065.6	16012.8
80°	1055.2	1049.9	1096.9	1373.8	1982.3	3293.5	7767.4	15059.5	16678.8	13610.0	6328.4
82.5°	822.7	807.0	809.7	888.0	838.4	1551.4	3233.4	4385.2	4424.4	3928.1	2462.9
85°	420.5	475.3	564.1	590.3	496.2	843.6	1488.7	1731.6	1773.4	1554.0	1282.4
87.5°	141.0	143.6	151.5	148.9	133.2	289.9	551.1	642.5	572.0	323.9	438.8
90°	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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3	10964.3
2.5°	11107.9	11084.4	11131.4	11238.5	11149.7	11230.7	11149.7	11421.3	11390.0	11371.7	11423.9
5°	11262.0	11259.4	11335.1	11507.5	11499.7	11643.3	11565.0	11834.0	11794.8	11789.6	11836.6
7.5°	11471.0	11520.6	11601.5	11779.1	11781.8	11899.3	11810.5	12022.0	11935.8	11915.0	11980.2
10°	11789.6	11802.6	11865.3	11988.1	11815.7	11867.9	11721.7	11888.8	11768.7	11755.6	11852.3
12.5°	12095.2	12113.5	12019.4	11980.2	11758.2	11690.3	11434.4	11523.2	11384.8	11371.7	11418.7
15°	12421.6	12298.9	12074.3	11946.3	11562.4	11316.9	11029.6	10854.6	10616.9	10507.2	10549.0
17.5°	12761.2	12523.5	12103.0	11792.2	11277.7	10919.9	10347.9	10050.1	9697.6	9517.3	9483.4
20°	13132.0	12797.7	12173.5	11713.8	10990.4	10285.2	9587.9	8906.2	8504.0	8318.5	8268.9
22.5°	13549.9	13142.5	12272.8	11452.7	10541.2	9684.5	8506.6	7647.3	7062.3	6882.0	6832.4
25°	14072.3	13529.0	12408.6	11387.4	10110.2	8702.5	7237.3	6263.1	5581.4	5307.1	5249.7
27.5°	14707.0	14061.8	12630.6	11076.6	9352.8	7608.1	5975.8	4855.3	4147.5	3823.7	3753.1
30°	15631.5	14743.5	12779.5	10893.7	8679.0	6472.0	4643.8	3392.7	2721.5	2483.8	2421.1
32.5°	17454.5	15913.6	13082.4	10473.3	7683.9	5150.4	3196.8	2081.6	1611.5	1475.7	1423.4
35°	20163.0	18117.9	13518.6	9974.4	6566.0	3664.3	1898.8	1206.6	969.0	919.3	903.7
37.5°	22631.1	20293.6	14362.2	9206.5	5098.2	2254.0	1099.6	773.1	713.0	720.9	720.9
40°	24493.3	21910.2	15346.8	8193.2	3458.0	1264.1	754.8	642.5	655.6	658.2	655.6
42.5°	26238.0	23391.1	15822.2	7075.3	2003.2	838.4	655.6	598.1	608.5	600.7	595.5
45°	27609.2	24451.5	15963.2	5570.9	1096.9	749.6	616.4	556.3	551.1	556.3	561.5
47.5°	28499.8	25099.2	15642.0	4265.0	827.9	697.3	592.9	527.6	514.5	551.1	548.5
50°	29160.6	25543.2	14396.1	3243.8	807.0	652.9	564.1	493.6	498.9	543.3	538.0
52.5°	29641.1	25658.2	13030.2	2601.3	770.5	621.6	538.0	478.0	472.7	506.7	509.3
55°	30022.4	25350.0	12178.7	2047.6	739.1	590.3	517.1	462.3	436.2	446.6	444.0
57.5°	30260.1	24997.4	11207.2	1708.1	710.4	556.3	488.4	420.5	381.3	383.9	381.3
60°	30207.9	24762.3	10091.9	1399.9	673.8	525.0	449.2	376.1	336.9	326.5	326.5
62.5°	30103.4	24279.1	8940.1	1219.7	642.5	514.5	402.2	342.1	313.4	303.0	303.0
65°	29393.0	23127.3	7399.2	1044.7	611.2	485.8	376.1	329.1	295.1	284.7	284.7
67.5°	27630.1	21223.4	5730.3	908.9	587.7	438.8	368.3	321.2	284.7	271.6	271.6
69°	26141.3	19530.9	4706.4	835.8	564.1	417.9	368.3	323.9	279.5	263.8	263.8
70°	24979.1	18201.5	3894.2	791.4	540.6	404.8	368.3	326.5	276.8	258.6	256.0
72.5°	21434.9	14210.7	2162.6	671.2	449.2	368.3	360.4	329.1	263.8	237.7	235.1
75°	16446.4	9990.1	1287.6	566.8	378.7	336.9	342.1	316.0	242.9	214.2	214.2
77.5°	10277.4	4588.9	958.5	444.0	308.2	292.5	297.7	279.5	219.4	195.9	195.9
80°	3510.2	2071.1	723.5	342.1	222.0	227.2	245.5	235.1	195.9	177.6	175.0
82.5°	1922.3	1347.7	511.9	237.7	154.1	188.0	188.0	190.7	169.8	156.7	154.1
85°	1044.7	702.6	316.0	143.6	109.7	138.4	133.2	143.6	138.4	128.0	125.4
87.5°	363.0	240.3	104.5	52.2	44.4	47.0	54.8	73.1	70.5	73.1	75.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)