

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: P232693

Luminaire Tested: **CST-10-8-D-U-T3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232693  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-19)  
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-T3-7030  
Description: CELESTEON HIGH MAST LUMINAIRE  
(10) 70 CRI, 3000K LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 78609 lumens  
Efficiency: N/A  
Efficacy: 124.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B4 - U0 - G5

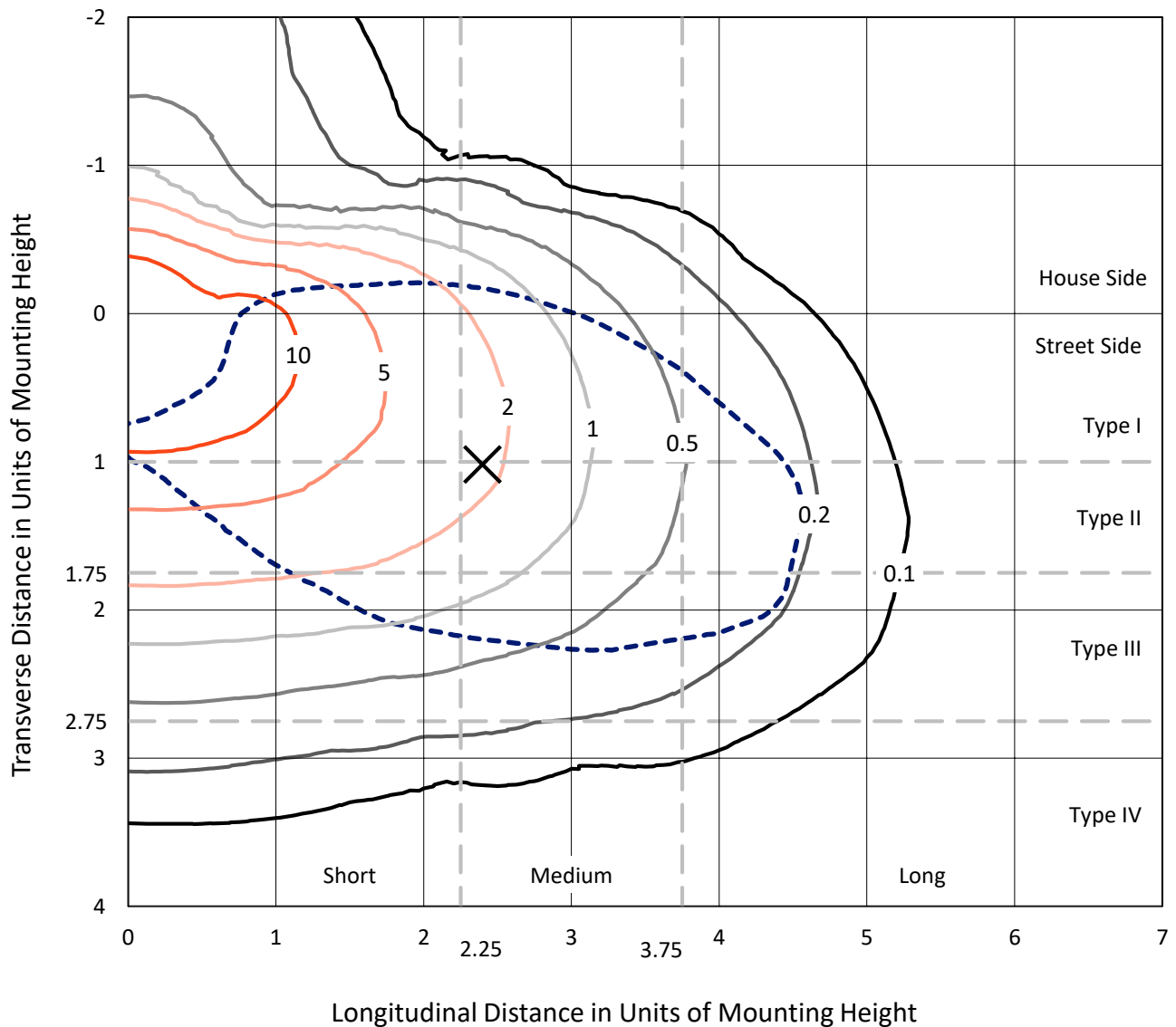
Input Watts (W): 631  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

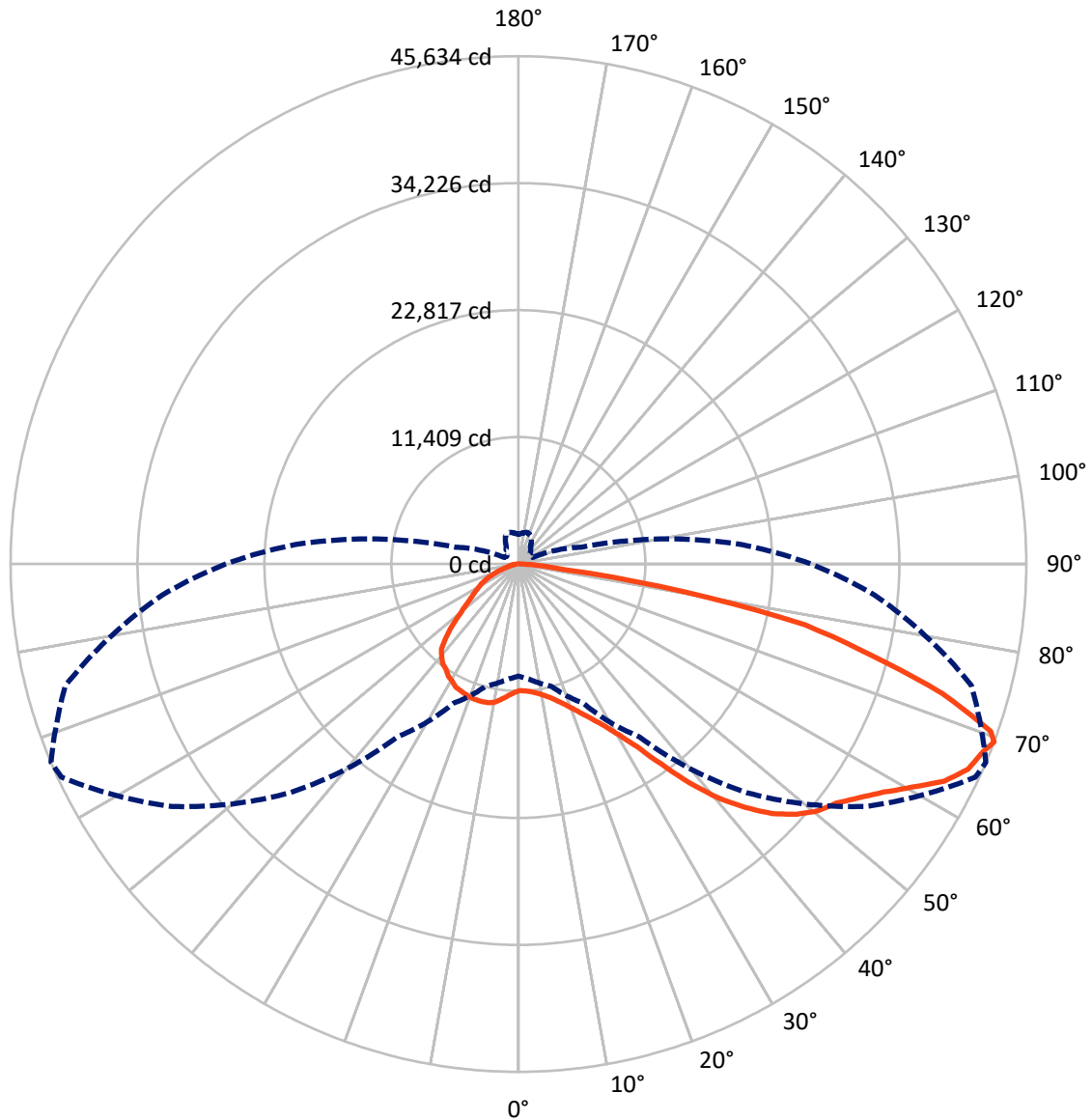


Based on 30 foot mounting height. Maximum calculated value = 15 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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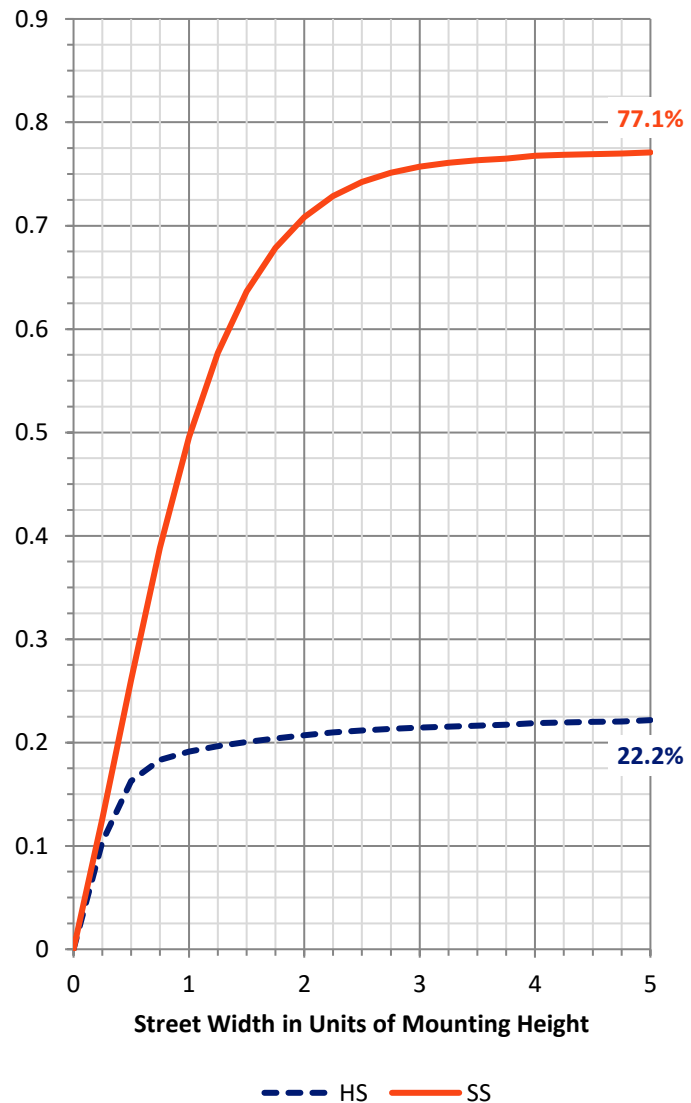
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17881.9	0.0	17881.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	60727.1	0.0	60727.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	78609.0	0.0	78609.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1154.8	1.5
10°-20°	3708.8	4.7
20°-30°	6449.7	8.2
30°-40°	9715.7	12.4
40°-50°	13418.2	17.1
50°-60°	16014.7	20.4
60°-70°	16866.4	21.5
70°-80°	9894.0	12.6
80°-90°	1386.7	1.8
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°	78609.0	100.0
0°-180°	78609.0	100.0



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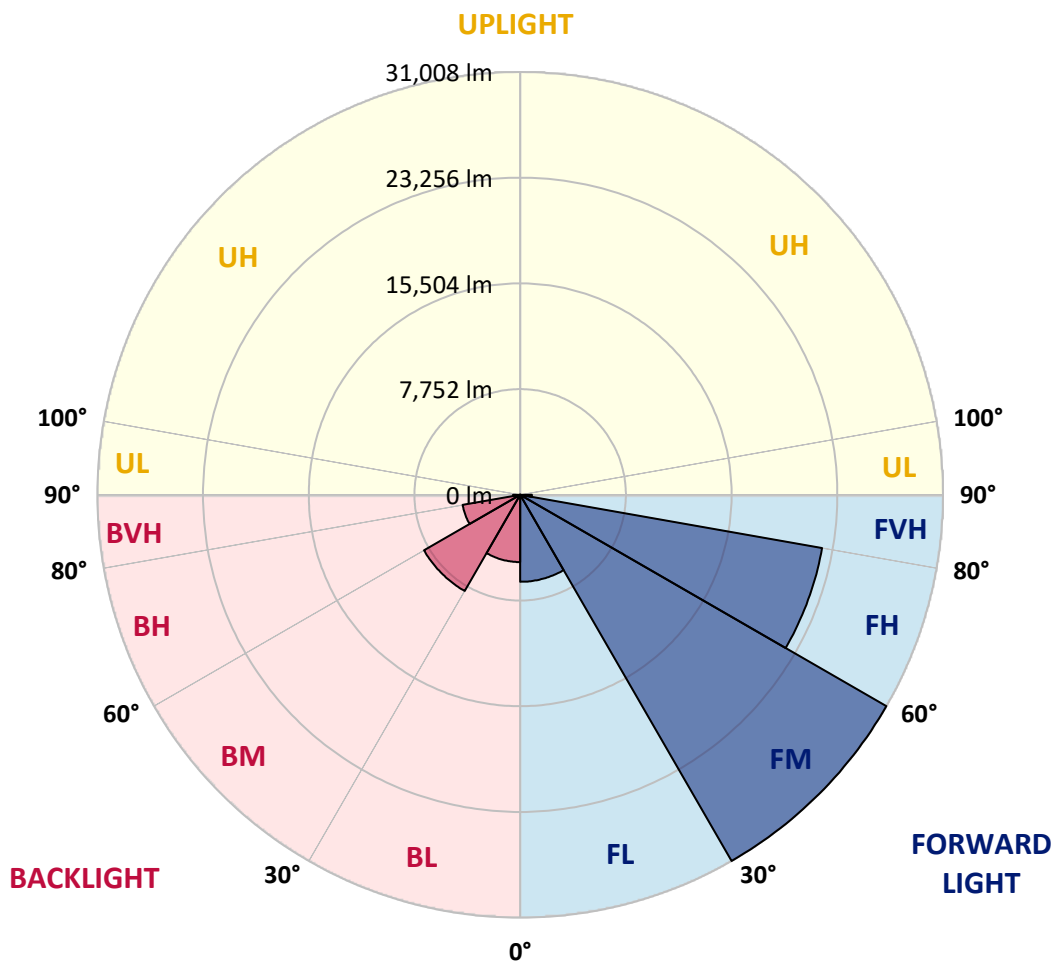
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6379.0	8.1			
FM	(30°-60°)	31007.5	39.4			
FH	(60°-80°)	22478.8	28.6			G5
FVH	(80°-90°)	861.8	1.1			G5
BL	(0°-30°)	4934.3	6.3	B4/5000		
BM	(30°-60°)	8141.0	10.4	B4/8500		
BH	(60°-80°)	4281.6	5.4	B4/5000		G4/5000
BVH	(80°-90°)	524.9	0.7			G4/750
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°	67°	75°	85°
0°	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8
2.5°	11423.7	11438.8	11423.7	11398.5	11315.5	11353.2	11320.5	11426.2	11418.6	11378.4	11451.3
5°	11690.4	11708.0	11675.3	11655.2	11526.8	11544.4	11474.0	11531.9	11511.7	11443.8	11557.0
7.5°	12125.7	12143.3	12103.0	12075.4	11894.2	11853.9	11725.6	11743.2	11705.5	11597.3	11728.1
10°	12712.0	12727.1	12659.1	12591.2	12359.7	12261.6	12047.7	12012.5	11957.1	11851.4	11984.8
12.5°	13343.5	13366.2	13283.1	13195.1	12925.8	12764.8	12460.3	12352.1	12284.2	12155.9	12301.8
15°	14020.4	14048.1	13962.5	13861.9	13565.0	13315.9	12935.9	12772.4	12706.9	12545.9	12636.5
17.5°	14908.6	14901.1	14830.6	14692.2	14337.4	13972.6	13504.6	13260.5	13215.2	13059.2	13081.8
20°	15937.8	15902.5	15837.1	15645.9	15260.9	14808.0	14196.5	13887.0	13841.7	13710.9	13572.5
22.5°	17055.0	17019.7	16956.8	16712.8	16332.8	15739.0	15006.8	14641.9	14581.5	14418.0	14186.5
25°	18154.6	18116.8	18081.6	17850.1	17480.2	16805.9	15925.2	15459.7	15432.0	15265.9	14840.7
27.5°	19296.9	19274.3	19284.3	19085.6	18715.7	18016.2	17017.2	16511.5	16463.7	16252.3	15673.6
30°	20472.0	20477.0	20572.6	20361.3	20021.6	19317.1	18325.7	17809.8	17817.4	17628.7	16783.2
32.5°	21523.8	21528.8	21742.7	21637.0	21450.8	20748.8	19837.9	19475.6	19548.5	19533.4	18667.9
35°	22283.7	22316.4	22794.5	22937.9	22867.4	22256.0	21707.5	21795.5	22027.0	22681.2	21772.9
37.5°	22998.3	23010.9	23622.3	23954.5	24216.1	23848.8	23738.1	24573.4	24938.3	25844.1	24500.5
40°	23204.6	23378.2	24150.7	24613.7	25222.6	25403.8	25964.9	27200.4	27630.7	28176.7	26337.3
42.5°	23015.9	23262.5	24231.2	25330.8	26176.3	27074.6	28103.7	29502.7	29892.7	30229.9	28096.2
45°	22620.9	22809.6	23816.1	25461.7	26994.1	28775.5	29963.2	31639.0	31991.3	31772.4	29470.0
47.5°	22095.0	22238.4	23360.6	25252.8	27648.3	30300.4	31666.7	33352.6	33609.2	33098.4	30403.5
50°	21365.3	21536.4	22789.4	24966.0	28128.9	31576.1	33035.5	34640.9	34857.3	33923.7	31319.4
52.5°	20464.5	20678.3	22135.2	24477.8	28488.7	32527.2	33991.7	35498.9	35717.8	35111.4	32044.1
55°	19442.9	19739.8	21239.4	23884.0	28513.9	33033.0	34588.0	36757.0	37069.0	36414.8	32678.2
57.5°	18406.2	18597.4	20185.2	22975.6	28040.8	33201.6	35302.6	38221.4	38676.9	37677.9	33370.2
60°	17140.5	17324.2	18896.8	21760.3	27097.2	33460.7	36731.8	40317.5	40679.8	39149.9	33959.0
62.5°	15643.4	15852.2	17278.9	20097.1	25700.7	33566.4	38188.7	42546.8	42962.0	40488.6	34298.7
65°	13741.1	13972.6	15273.5	18084.1	23705.3	32816.6	38817.8	44195.0	44408.8	41515.2	34152.7
67.5°	11662.7	11853.9	12890.6	15580.5	20945.0	30861.5	38488.2	44803.9	45020.3	42212.2	33279.6
69°	10072.4	10366.8	11363.3	13796.5	18959.7	29072.5	37984.9	45304.6	45634.2	42134.2	32132.2
70°	8799.2	9128.9	10029.7	12223.8	17273.9	27215.5	37048.9	44924.7	45017.8	41381.8	31098.0
72.5°	5560.9	5669.1	6079.2	7538.6	12153.4	21156.4	32421.5	39882.2	39857.0	36920.6	27147.5
75°	2747.7	2888.6	3666.1	4232.3	5988.6	13607.7	25519.5	32756.2	32761.2	31160.9	22318.9
77.5°	1650.6	1711.0	1909.8	2727.6	3422.1	6106.9	17321.7	25932.2	26329.8	25361.0	16061.1
80°	1137.3	1107.1	1165.0	1341.1	1841.9	3210.7	7120.9	14659.5	15089.8	13917.2	6841.6
82.5°	895.8	870.6	888.2	933.5	878.2	1487.1	3011.9	4383.3	4254.9	3751.7	2629.5
85°	626.5	576.2	608.9	591.3	523.4	873.1	1464.4	1821.7	1809.2	1869.6	1431.7
87.5°	198.8	176.1	181.2	176.1	145.9	309.5	525.9	709.6	654.2	664.3	503.2
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°	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8	11375.8
2.5°	11468.9	11448.8	11471.5	11589.7	11562.0	11665.2	11690.4	11859.0	11866.5	11851.4	11926.9
5°	11609.9	11630.0	11715.5	11904.3	11967.2	12188.6	12289.2	12495.6	12515.7	12523.2	12596.2
7.5°	11813.7	11848.9	12032.6	12279.2	12397.4	12686.8	12837.8	13091.9	13109.5	13137.2	13220.2
10°	12115.6	12165.9	12311.9	12649.1	12686.8	12915.8	13054.2	13273.1	13258.0	13295.7	13371.2
12.5°	12420.1	12447.8	12558.5	12790.0	12764.8	12988.7	13049.1	13192.6	13182.5	13180.0	13235.3
15°	12747.2	12699.4	12714.5	12802.5	12709.4	12847.8	12805.1	12910.7	12772.4	12717.0	12754.7
17.5°	13094.4	12978.7	12830.2	12764.8	12588.7	12566.0	12420.1	12369.8	12274.1	12243.9	12274.1
20°	13507.1	13260.5	12900.7	12712.0	12327.0	12128.2	11848.9	11685.3	11463.9	11481.5	11524.3
22.5°	13927.3	13580.1	13036.6	12530.8	11987.3	11584.7	11028.6	10880.2	10590.8	10505.2	10590.8
25°	14443.1	13977.6	13104.5	12369.8	11474.0	10756.9	10193.2	9667.3	9448.4	9234.5	9315.1
27.5°	15120.0	14490.9	13351.1	12171.0	10892.7	9936.6	9040.8	8361.4	8089.7	7860.7	7875.8
30°	15998.2	15177.9	13444.2	11753.3	10193.2	8811.8	7684.5	6929.7	6590.0	6496.9	6456.6
32.5°	17621.1	16285.0	13610.3	11448.8	9322.6	7588.9	6205.0	5394.8	5180.9	5221.2	5352.0
35°	20497.2	18602.4	14113.5	10812.2	8361.4	6255.3	4821.1	4194.5	4229.8	4302.7	4287.6
37.5°	22978.2	20693.4	14951.4	10364.3	7186.3	4738.1	3641.0	3308.8	3520.2	3663.6	3658.6
40°	24664.0	22218.3	16048.5	9526.4	5701.8	3376.8	2679.8	2496.1	2765.3	3072.3	3125.2
42.5°	26337.3	23604.7	16579.4	8784.1	4003.3	2382.9	1940.0	1987.8	2332.5	2621.9	2674.7
45°	27540.1	24611.2	16813.4	7460.6	2556.5	1824.3	1693.4	1869.6	2242.0	2470.9	2496.1
47.5°	28423.3	25368.6	16559.3	6036.4	1882.1	1668.3	1670.8	1894.7	2269.6	2528.8	2538.9
50°	29203.3	25902.0	15535.2	4707.9	1693.4	1615.4	1703.5	1967.7	2350.2	2611.8	2604.3
52.5°	29736.7	26058.0	14292.2	3857.4	1640.6	1585.2	1731.2	2035.6	2375.3	2551.5	2536.4
55°	30091.5	25824.0	13336.0	3175.5	1595.3	1582.7	1776.5	2121.2	2400.5	2470.9	2435.7
57.5°	30310.4	25351.0	12528.3	2730.1	1557.5	1582.7	1826.8	2153.9	2493.6	2621.9	2581.6
60°	30245.0	25139.6	11433.7	2365.3	1504.7	1587.7	1854.5	2201.7	2868.5	3170.4	3178.0
62.5°	30114.2	24726.9	10364.3	2075.9	1441.8	1617.9	1889.7	2478.5	3522.7	3525.2	3399.4
65°	29492.7	23483.9	8809.3	1814.2	1376.4	1625.5	1897.2	2933.9	3950.5	3618.3	3454.8
67.5°	27781.6	21664.7	6990.1	1570.1	1303.4	1580.2	1889.7	2871.0	3190.6	2855.9	2772.9
69°	26289.5	20087.0	5840.2	1424.2	1250.6	1534.9	1897.2	2752.7	2954.0	2755.3	2679.8
70°	25202.5	18808.8	4962.0	1336.1	1202.8	1512.3	1897.2	2710.0	2921.3	2732.6	2659.6
72.5°	21632.0	14775.3	2974.2	1114.7	1064.4	1424.2	1879.6	2644.6	2946.5	2785.5	2689.8
75°	16571.9	10746.8	1731.2	915.9	895.8	1278.2	1786.5	2604.3	3032.1	2788.0	2579.1
77.5°	10618.5	4959.5	1290.8	744.8	727.2	1107.1	1668.3	2473.4	3115.1	2923.9	2659.6
80°	3688.8	2249.5	963.7	588.8	563.6	905.8	1461.9	2229.4	2966.6	2986.8	2788.0
82.5°	2023.0	1482.1	681.9	437.8	415.2	568.7	1137.3	1922.4	2745.2	2956.6	2971.7
85°	1112.2	835.4	447.9	281.8	317.0	488.1	787.6	1494.6	2209.2	2569.1	2682.3
87.5°	450.4	301.9	176.1	110.7	130.8	193.7	266.7	764.9	1333.6	1721.1	1894.7
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)