

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: P232688

Luminaire Tested: **CST-8-3-D-U-T3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232688  
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-8-3-D-U-T3-7030  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 3000K LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30499 lumens  
Efficiency: N/A  
Efficacy: 135.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 226  
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

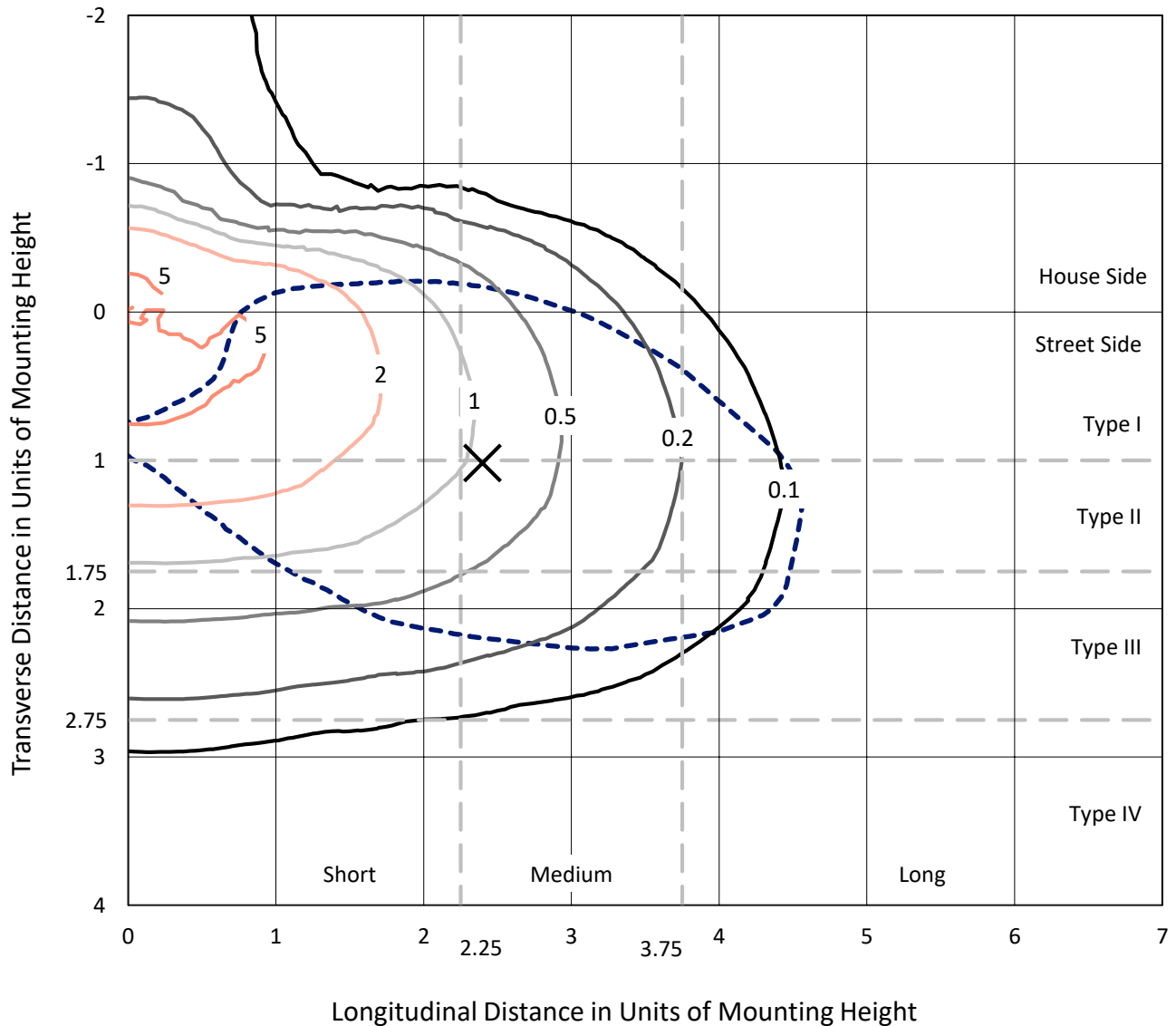


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

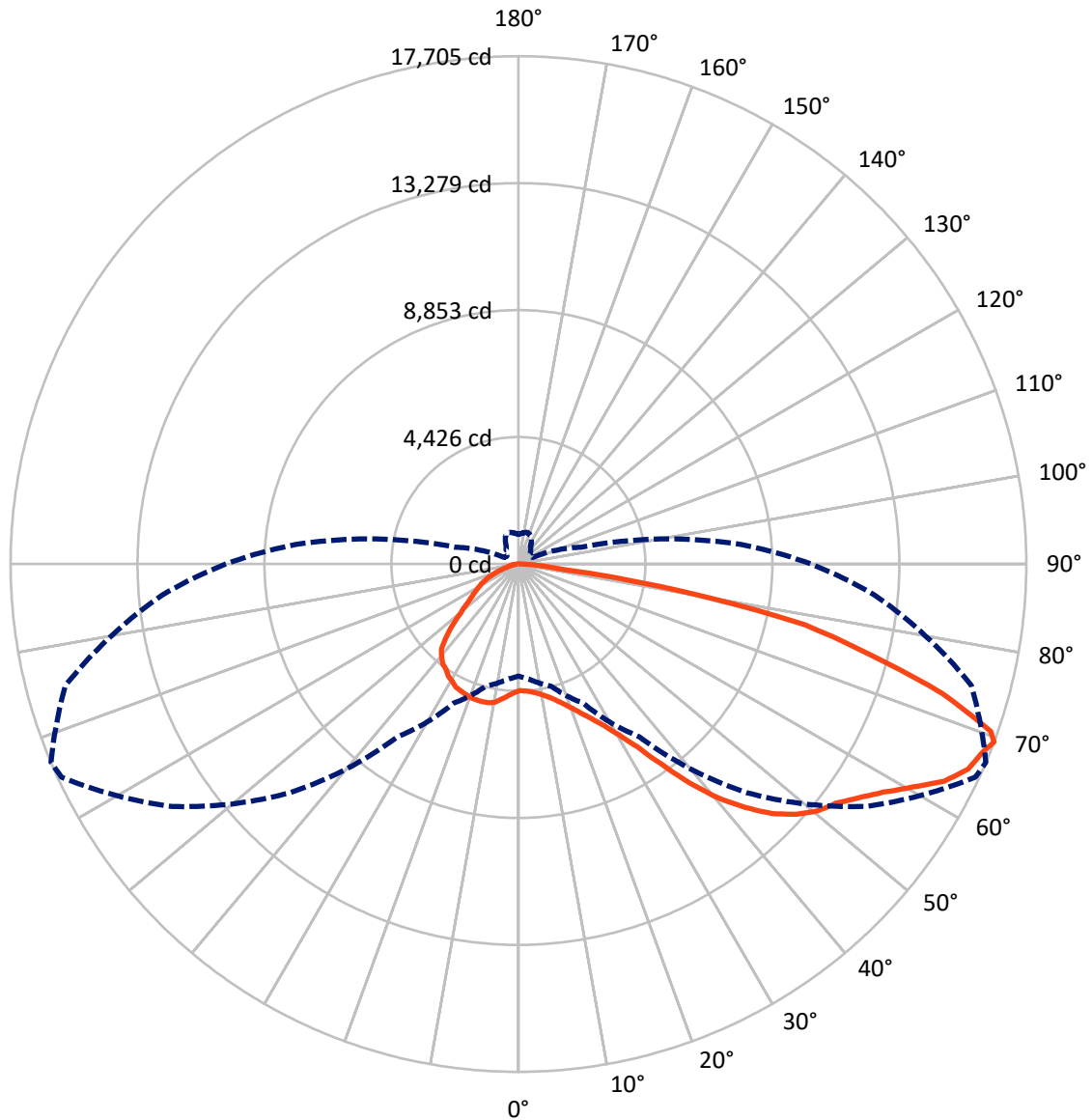


Based on 30 foot mounting height. Maximum calculated value = 5.8 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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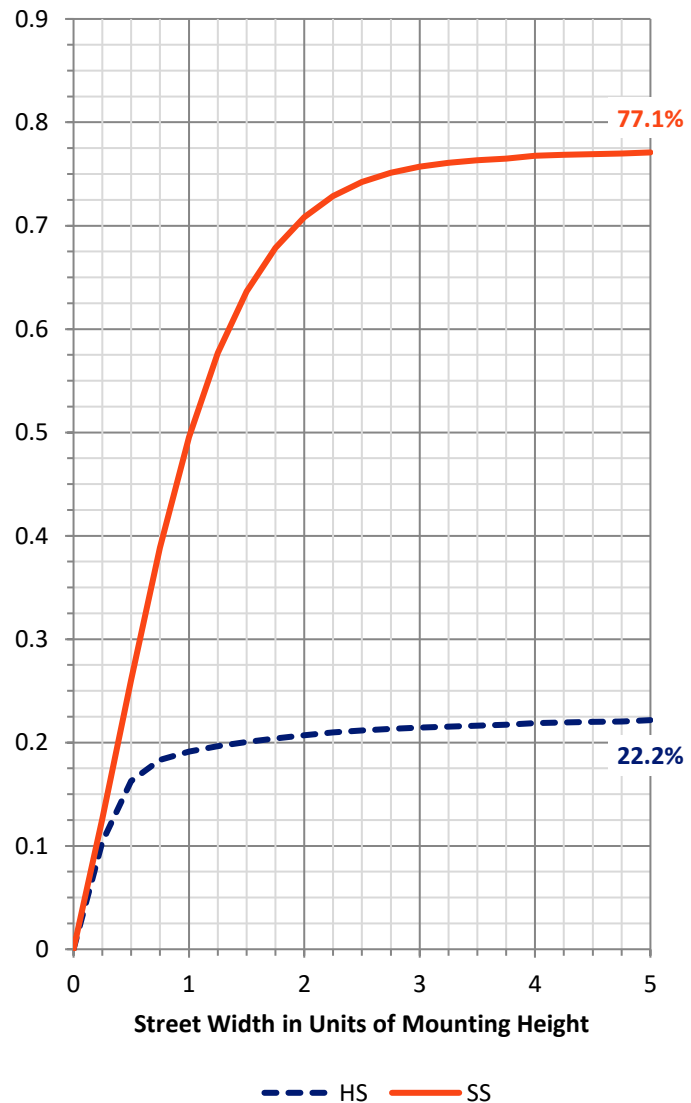
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6937.9	0.0	6937.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	23561.1	0.0	23561.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	30499.0	0.0	30499.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	448.0	1.5
10°-20°	1439.0	4.7
20°-30°	2502.4	8.2
30°-40°	3769.5	12.4
40°-50°	5206.0	17.1
50°-60°	6213.4	20.4
60°-70°	6543.9	21.5
70°-80°	3838.7	12.6
80°-90°	538.0	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°	30499.0	100.0
0°-180°	30499.0	100.0

**Coefficient of Utilization**



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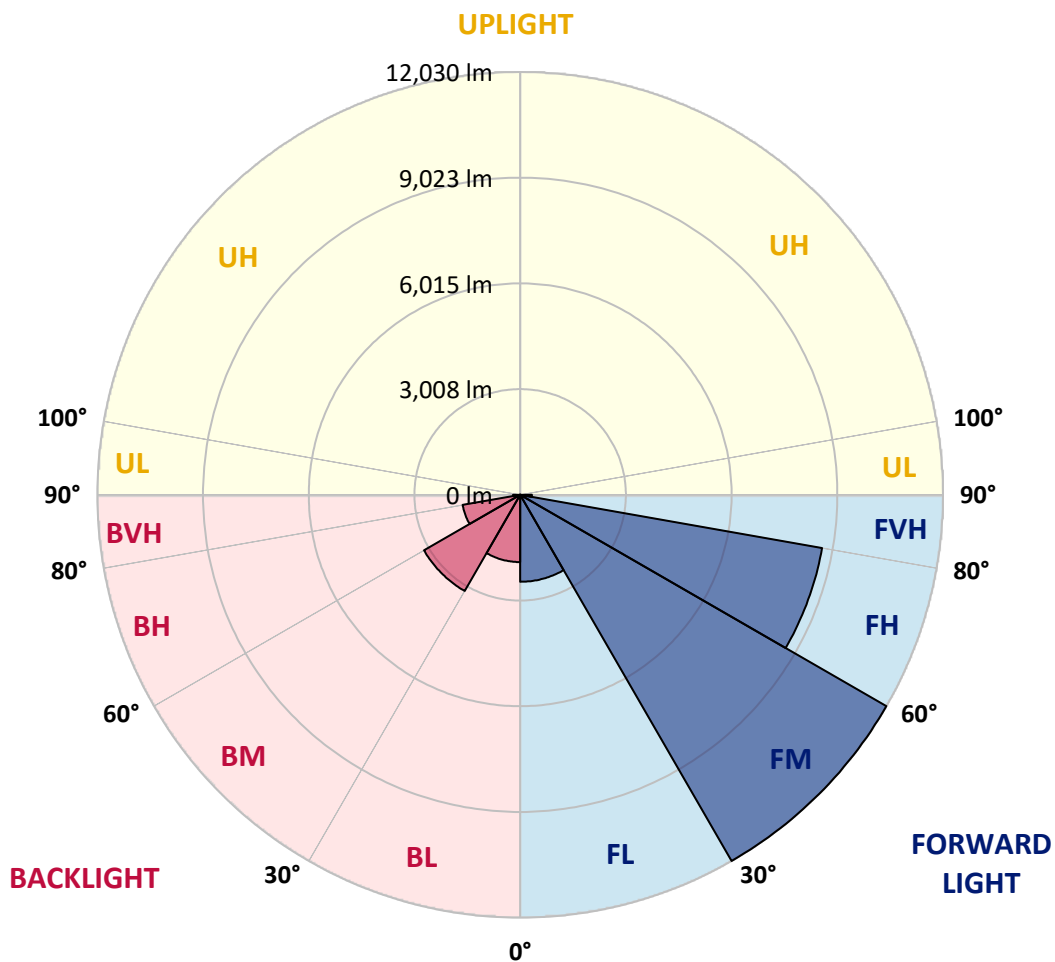
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2475.0	8.1			
FM	(30°-60°)	12030.4	39.4			
FH	(60°-80°)	8721.4	28.6			G4/12000
FVH	(80°-90°)	334.4	1.1			G3/500
BL	(0°-30°)	1914.4	6.3	B3/2500		
BM	(30°-60°)	3158.6	10.4	B3/5000		
BH	(60°-80°)	1661.2	5.4	B3/2500		G3/2500
BVH	(80°-90°)	203.7	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6
2.5°	4432.2	4438.0	4432.2	4422.4	4390.2	4404.9	4392.2	4433.2	4430.2	4414.6	4442.9
5°	4535.7	4542.5	4529.8	4522.0	4472.2	4479.1	4451.7	4474.2	4466.4	4440.0	4483.9
7.5°	4704.6	4711.4	4695.8	4685.0	4614.8	4599.1	4549.3	4556.2	4541.5	4499.6	4550.3
10°	4932.0	4937.9	4911.5	4885.2	4795.4	4757.3	4674.3	4660.6	4639.2	4598.2	4649.9
12.5°	5177.1	5185.9	5153.6	5119.5	5015.0	4952.5	4834.4	4792.4	4766.1	4716.3	4772.9
15°	5439.7	5450.4	5417.2	5378.2	5263.0	5166.3	5018.9	4955.5	4930.1	4867.6	4902.7
17.5°	5784.3	5781.4	5754.0	5700.3	5562.7	5421.1	5239.6	5144.9	5127.3	5066.8	5075.5
20°	6183.6	6169.9	6144.5	6070.3	5921.0	5745.3	5508.0	5387.9	5370.4	5319.6	5265.9
22.5°	6617.0	6603.4	6579.0	6484.3	6336.9	6106.5	5822.4	5680.8	5657.4	5593.9	5504.1
25°	7043.7	7029.0	7015.4	6925.5	6782.0	6520.4	6178.7	5998.1	5987.4	5922.9	5757.9
27.5°	7486.9	7478.1	7482.0	7404.9	7261.4	6990.0	6602.4	6406.2	6387.6	6305.6	6081.1
30°	7942.8	7944.8	7981.8	7899.8	7768.0	7494.7	7110.1	6909.9	6912.9	6839.6	6511.6
32.5°	8350.9	8352.8	8435.8	8394.8	8322.6	8050.2	7696.8	7556.2	7584.5	7578.7	7242.8
35°	8645.7	8658.4	8843.9	8899.5	8872.2	8635.0	8422.1	8456.3	8546.1	8800.0	8447.5
37.5°	8923.0	8927.8	9165.1	9293.9	9395.5	9252.9	9210.0	9534.1	9675.6	10027.1	9505.8
40°	9003.0	9070.4	9370.1	9549.7	9786.0	9856.3	10074.0	10553.3	10720.2	10932.1	10218.4
42.5°	8929.8	9025.5	9401.3	9827.9	10156.0	10504.5	10903.8	11446.6	11597.9	11728.7	10900.8
45°	8776.5	8849.7	9240.2	9878.7	10473.2	11164.4	11625.2	12275.4	12412.1	12327.2	11433.9
47.5°	8572.5	8628.1	9063.5	9797.7	10727.1	11756.0	12286.2	12940.2	13039.8	12841.6	11796.1
50°	8289.4	8355.8	8841.9	9686.4	10913.5	12251.0	12817.2	13440.1	13524.0	13161.9	12151.4
52.5°	7939.9	8022.9	8588.1	9497.0	11053.1	12620.0	13188.2	13773.0	13857.9	13622.6	12432.6
55°	7543.5	7658.7	8240.6	9266.6	11062.9	12816.3	13419.6	14261.1	14382.2	14128.3	12678.6
57.5°	7141.3	7215.5	7831.5	8914.2	10879.4	12881.7	13696.8	14829.3	15006.0	14618.4	12947.1
60°	6650.2	6721.5	7331.7	8442.6	10513.3	12982.2	14251.4	15642.5	15783.1	15189.5	13175.5
62.5°	6069.4	6150.4	6703.9	7797.3	9971.5	13023.2	14816.6	16507.5	16668.6	15708.9	13307.3
65°	5331.3	5421.1	5925.9	7016.3	9197.3	12732.3	15060.7	17146.9	17229.9	16107.2	13250.7
67.5°	4524.9	4599.1	5001.3	6045.0	8126.3	11973.8	14932.8	17383.2	17467.1	16377.6	12911.9
69°	3907.9	4022.2	4408.8	5352.8	7356.1	11279.6	14737.5	17577.4	17705.3	16347.4	12466.8
70°	3414.0	3541.8	3891.3	4742.6	6702.0	10559.2	14374.4	17430.0	17466.2	16055.5	12065.5
72.5°	2157.5	2199.5	2358.6	2924.9	4715.3	8208.3	12579.0	15473.6	15463.9	14324.6	10532.8
75°	1066.1	1120.7	1422.4	1642.1	2323.5	5279.6	9901.2	12708.9	12710.8	12089.9	8659.4
77.5°	640.4	663.9	741.0	1058.3	1327.7	2369.4	6720.5	10061.3	10215.5	9839.7	6231.4
80°	441.3	429.6	452.0	520.3	714.6	1245.7	2762.8	5687.7	5854.6	5399.7	2654.4
82.5°	347.5	337.8	344.6	362.2	340.7	577.0	1168.6	1700.6	1650.8	1455.6	1020.2
85°	243.1	223.6	236.3	229.4	203.1	338.8	568.2	706.8	701.9	725.4	555.5
87.5°	77.1	68.3	70.3	68.3	56.6	120.1	204.0	275.3	253.8	257.7	195.3
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°	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6	4413.6
2.5°	4449.8	4442.0	4450.7	4496.6	4485.9	4525.9	4535.7	4601.1	4604.0	4598.2	4627.4
5°	4504.4	4512.2	4545.4	4618.7	4643.1	4729.0	4768.0	4848.1	4855.9	4858.8	4887.1
7.5°	4583.5	4597.2	4668.4	4764.1	4810.0	4922.3	4980.8	5079.4	5086.3	5097.0	5129.2
10°	4700.7	4720.2	4776.8	4907.6	4922.3	5011.1	5064.8	5149.7	5143.9	5158.5	5187.8
12.5°	4818.8	4829.5	4872.5	4962.3	4952.5	5039.4	5062.9	5118.5	5114.6	5113.6	5135.1
15°	4945.7	4927.2	4933.0	4967.2	4931.1	4984.8	4968.2	5009.2	4955.5	4934.0	4948.6
17.5°	5080.4	5035.5	4977.9	4952.5	4884.2	4875.4	4818.8	4799.3	4762.2	4750.5	4762.2
20°	5240.5	5144.9	5005.3	4932.0	4782.7	4705.5	4597.2	4533.7	4447.8	4454.6	4471.2
22.5°	5403.6	5268.8	5058.0	4861.7	4650.9	4494.7	4278.9	4221.3	4109.1	4075.9	4109.1
25°	5603.7	5423.1	5084.3	4799.3	4451.7	4173.5	3954.8	3750.8	3665.8	3582.9	3614.1
27.5°	5866.3	5622.2	5180.0	4722.1	4226.2	3855.2	3507.7	3244.1	3138.7	3049.8	3055.7
30°	6207.0	5888.8	5216.1	4560.1	3954.8	3418.8	2981.5	2688.6	2556.8	2520.7	2505.1
32.5°	6836.7	6318.3	5280.6	4442.0	3617.0	2944.4	2407.4	2093.1	2010.1	2025.7	2076.5
35°	7952.6	7217.4	5475.8	4195.0	3244.1	2427.0	1870.5	1627.4	1641.1	1669.4	1663.5
37.5°	8915.1	8028.7	5800.9	4021.2	2788.2	1838.3	1412.6	1283.8	1365.8	1421.4	1419.5
40°	9569.2	8620.3	6226.5	3696.1	2212.2	1310.1	1039.7	968.4	1072.9	1192.0	1212.5
42.5°	10218.4	9158.2	6432.5	3408.1	1553.2	924.5	752.7	771.2	905.0	1017.3	1037.8
45°	10685.1	9548.7	6523.3	2894.6	991.9	707.8	657.0	725.4	869.8	958.7	968.4
47.5°	11027.8	9842.6	6424.7	2342.0	730.2	647.3	648.2	735.1	880.6	981.1	985.0
50°	11330.4	10049.6	6027.4	1826.6	657.0	626.8	660.9	763.4	911.8	1013.4	1010.4
52.5°	11537.4	10110.1	5545.1	1496.6	636.5	615.0	671.7	789.8	921.6	989.9	984.1
55°	11675.0	10019.3	5174.1	1232.0	618.9	614.1	689.2	823.0	931.3	958.7	945.0
57.5°	11760.0	9835.8	4860.8	1059.2	604.3	614.1	708.8	835.7	967.5	1017.3	1001.6
60°	11734.6	9753.7	4436.1	917.7	583.8	616.0	719.5	854.2	1112.9	1230.1	1233.0
62.5°	11683.8	9593.6	4021.2	805.4	559.4	627.7	733.2	961.6	1366.8	1367.7	1318.9
65°	11442.7	9111.4	3417.9	703.9	534.0	630.7	736.1	1138.3	1532.7	1403.9	1340.4
67.5°	10778.8	8405.5	2712.0	609.2	505.7	613.1	733.2	1113.9	1237.9	1108.0	1075.8
69°	10199.9	7793.4	2265.9	552.6	485.2	595.5	736.1	1068.0	1146.1	1069.0	1039.7
70°	9778.2	7297.5	1925.2	518.4	466.6	586.7	736.1	1051.4	1133.4	1060.2	1031.9
72.5°	8392.9	5732.6	1153.9	432.5	413.0	552.6	729.3	1026.0	1143.2	1080.7	1043.6
75°	6429.6	4169.6	671.7	355.4	347.5	495.9	693.1	1010.4	1176.4	1081.7	1000.7
77.5°	4119.8	1924.2	500.8	289.0	282.1	429.6	647.3	959.7	1208.6	1134.4	1031.9
80°	1431.2	872.8	373.9	228.4	218.7	351.5	567.2	865.0	1151.0	1158.8	1081.7
82.5°	784.9	575.0	264.6	169.9	161.1	220.6	441.3	745.9	1065.1	1147.1	1153.0
85°	431.5	324.1	173.8	109.3	123.0	189.4	305.6	579.9	857.2	996.8	1040.7
87.5°	174.7	117.2	68.3	43.0	50.8	75.2	103.5	296.8	517.4	667.8	735.1
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)