

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: McGRAW-EDISON

Report Number: P237507

Luminaire Tested: **CTN-8-6-D-E1-T4-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237507
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-27)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-8-6-D-E1-T4-7030-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 3000K LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53502 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

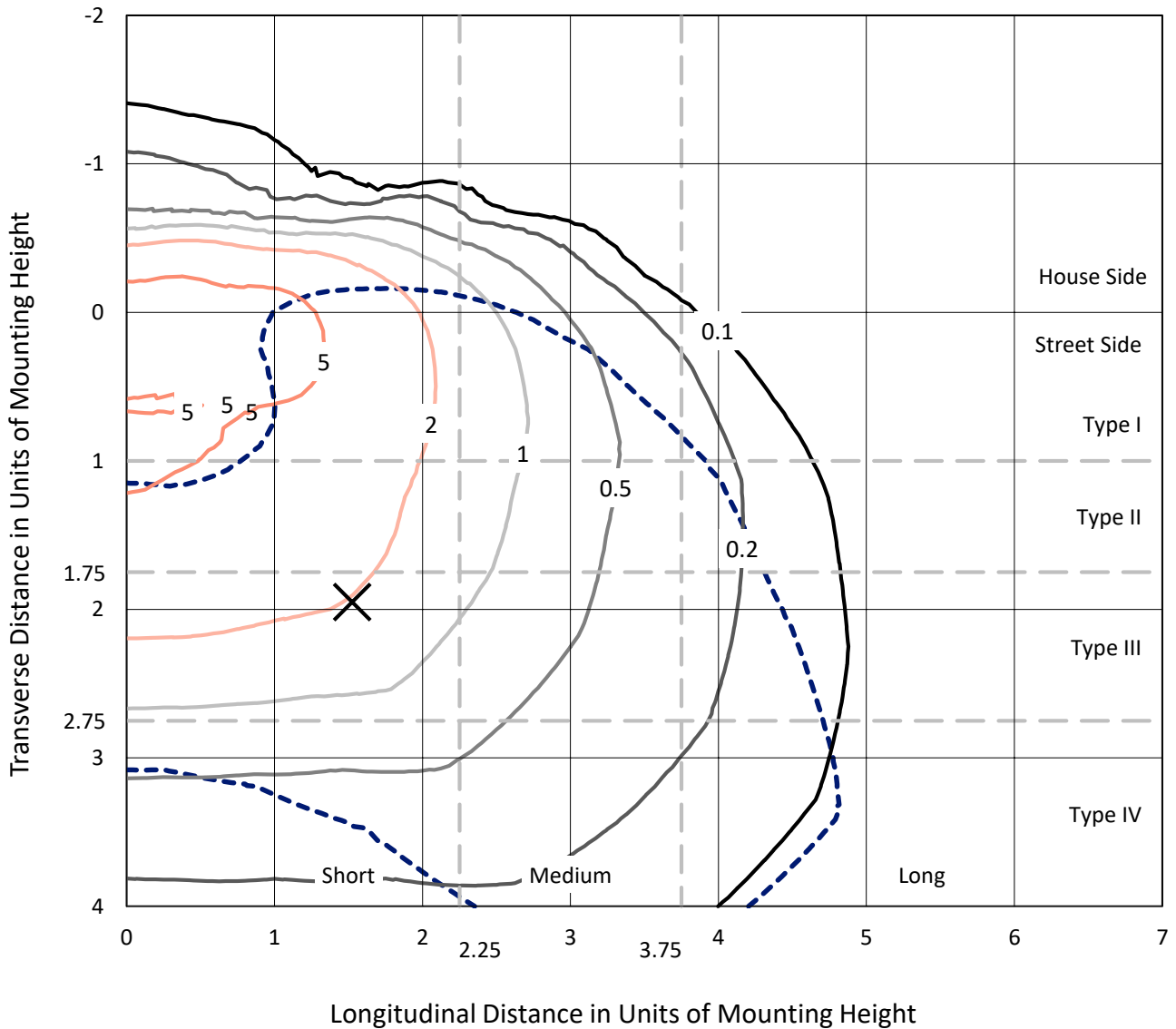
Input Watts (W): 477
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

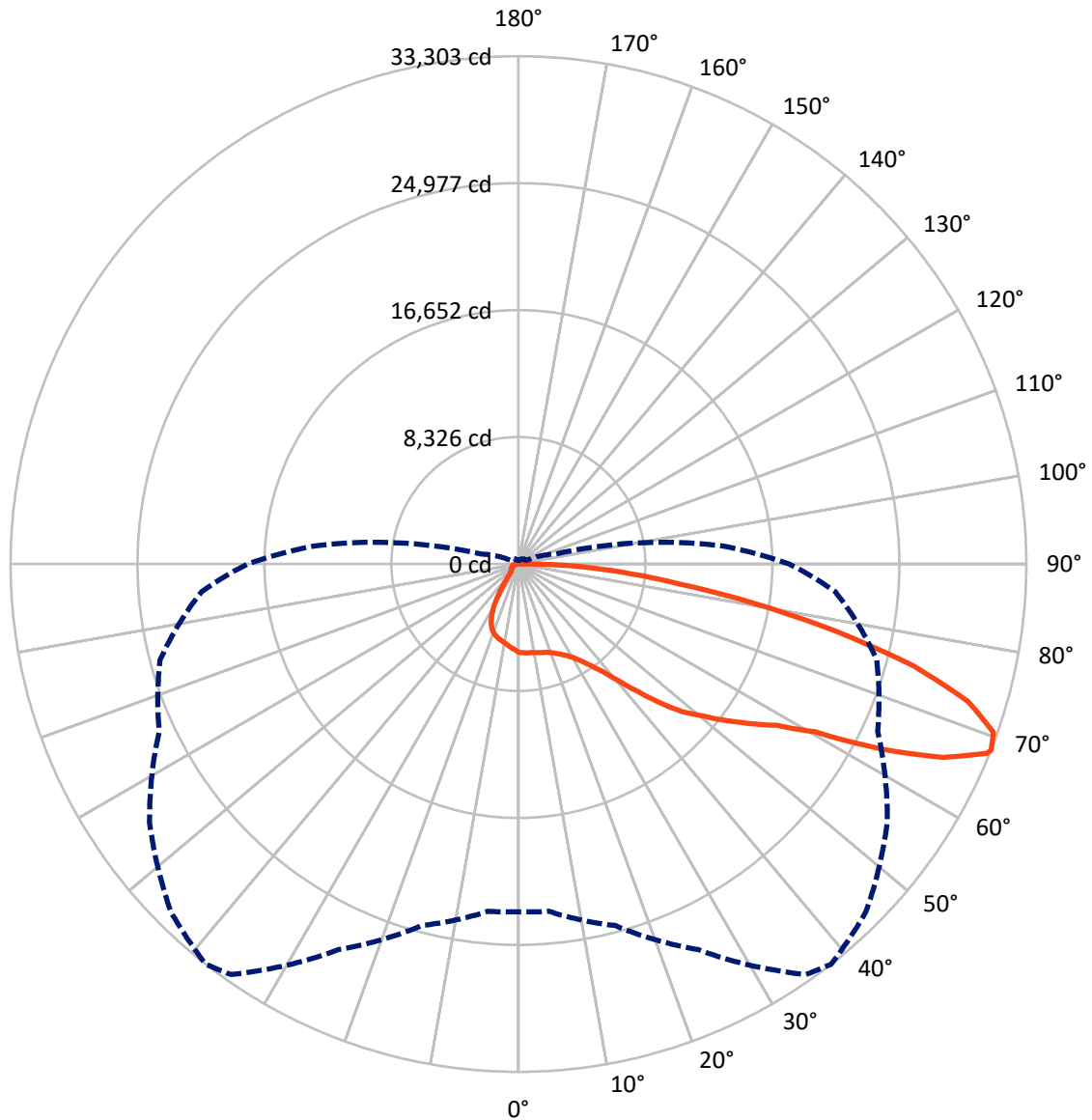
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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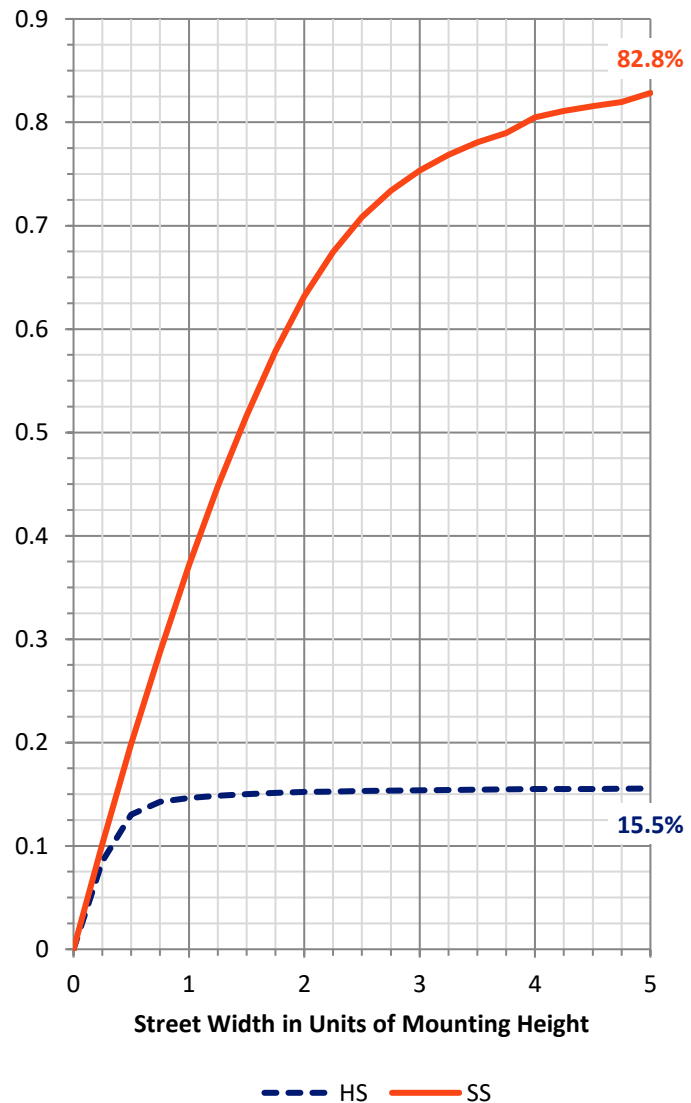
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8438.8	0.0	8438.8
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	45063.2	0.0	45063.2
	% Fixture	84.2	0.0	84.2
Total	Lumens	53502.0	0.0	53502.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	547.8	1.0
10°-20°	1626.9	3.0
20°-30°	2715.1	5.1
30°-40°	4164.6	7.8
40°-50°	7170.0	13.4
50°-60°	10655.5	19.9
60°-70°	14096.4	26.3
70°-80°	10352.5	19.3
80°-90°	2173.1	4.1
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°	53502.0	100.0
0°-180°	53502.0	100.0

Coefficient of Utilization



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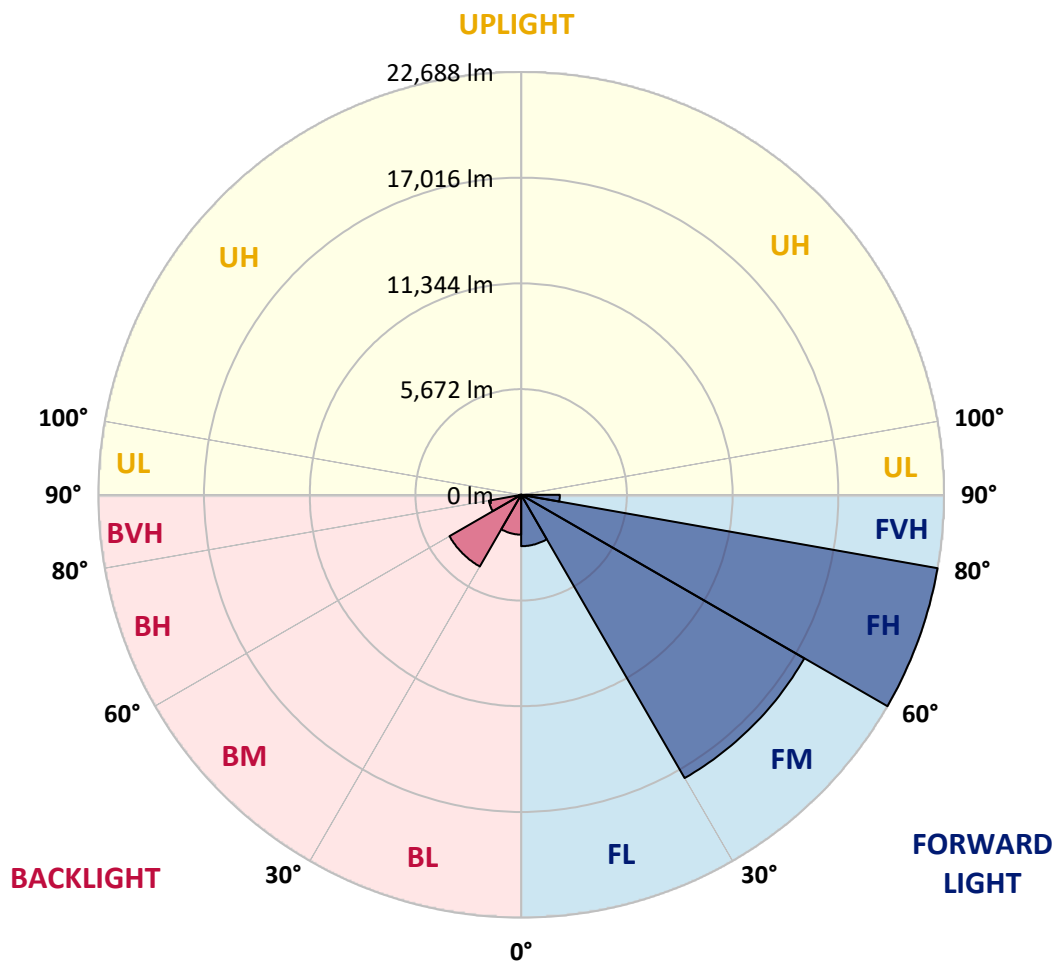
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2754.7	5.1			
FM	(30°-60°)	17547.8	32.8			
FH	(60°-80°)	22687.5	42.4			G5
FVH	(80°-90°)	2073.1	3.9			G5
BL	(0°-30°)	2135.2	4.0	B3/2500		
BM	(30°-60°)	4442.4	8.3	B3/5000		
BH	(60°-80°)	1761.4	3.3	B3/2500		G3/2500
BVH	(80°-90°)	99.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3
2.5°	5933.5	5892.5	5900.3	5925.7	5822.1	5814.2	5847.5	5810.3	5859.2	5835.8	5837.7
5°	5949.2	5910.1	5925.7	5964.8	5867.1	5865.1	5902.3	5855.3	5892.5	5863.1	5855.3
7.5°	5935.5	5900.3	5912.0	5949.2	5865.1	5871.0	5919.9	5904.2	5959.0	5929.6	5908.1
10°	5929.6	5906.2	5908.1	5959.0	5892.5	5908.1	5970.7	5980.5	6068.5	6043.1	6033.3
12.5°	5876.8	5859.2	5876.8	5957.0	5935.5	5966.8	6050.9	6101.7	6205.4	6195.6	6215.2
15°	5845.5	5837.7	5851.4	5945.3	5970.7	6021.5	6133.0	6232.8	6357.9	6375.5	6420.5
17.5°	5882.7	5894.4	5919.9	5996.1	6031.3	6084.1	6209.3	6346.2	6524.2	6600.4	6653.2
20°	6039.2	6052.8	6076.3	6125.2	6164.3	6209.3	6320.8	6477.2	6713.9	6833.2	6917.3
22.5°	6266.0	6242.5	6275.8	6316.9	6328.6	6367.7	6481.1	6637.6	6905.5	7085.4	7202.8
25°	6442.0	6426.4	6459.6	6530.0	6528.1	6563.3	6674.7	6835.1	7124.6	7382.7	7590.0
27.5°	6625.9	6616.1	6629.8	6723.6	6760.8	6803.8	6901.6	7081.5	7408.1	7732.8	8059.4
30°	6891.8	6913.3	6889.9	6997.4	7077.6	7126.5	7226.3	7447.2	7797.3	8241.3	8653.9
32.5°	7304.5	7314.3	7275.1	7394.4	7509.8	7584.1	7680.0	7969.4	8352.7	8894.4	9426.4
35°	8184.5	8186.5	8026.1	8008.5	8073.1	8180.6	8321.4	8751.7	9322.7	10157.8	10760.2
37.5°	9518.3	9453.8	9301.2	9004.0	8908.1	8927.7	9129.1	9727.6	10593.9	12135.0	12711.9
40°	11047.7	10973.3	10705.4	10312.3	10030.7	10013.1	10081.5	10799.3	12066.6	14358.6	14650.0
42.5°	12698.3	12647.4	12213.2	11806.5	11446.6	11389.9	11235.4	11955.1	13689.8	16343.6	16341.7
45°	14221.7	14212.0	13682.0	13480.5	13099.2	12950.5	12766.7	13326.0	15358.0	17908.2	17720.4
47.5°	15651.3	15622.0	15058.8	14828.0	14536.6	14456.4	14239.3	14630.5	16783.7	19369.1	18901.7
50°	17168.9	17079.0	16242.0	16009.2	15721.7	15659.2	15545.7	15995.5	18336.5	20646.2	19871.7
52.5°	18933.0	18796.1	17654.0	17221.7	17016.4	17057.5	16985.1	17388.0	20073.1	21714.0	20665.7
55°	21019.7	20609.0	19517.7	18733.5	18277.8	18467.5	18326.7	18829.3	21739.4	22545.1	21244.6
57.5°	22551.0	22549.0	22105.1	20990.4	19957.8	19967.5	19684.0	20257.0	23086.8	23372.4	21582.9
60°	24303.3	24406.9	24559.5	24064.7	22846.3	22335.9	21338.5	21670.9	24170.3	23972.8	21733.5
62.5°	25826.8	25887.4	26562.1	26751.8	26845.7	26720.5	24502.8	23300.0	25056.2	24307.2	21776.5
65°	25772.0	25766.1	27225.1	28496.3	30471.5	30583.0	29943.5	25719.2	25742.7	24350.2	21553.6
67.5°	23257.0	23376.3	25328.1	28052.3	32763.6	33115.6	32233.6	29231.6	25996.9	24330.7	21021.6
68°	22807.2	22858.0	24545.8	27895.9	32861.4	33303.3	32237.5	29525.0	25989.1	24332.6	20857.4
70°	19942.1	20018.4	21985.8	26000.8	32888.7	33041.3	31754.4	29685.3	25730.9	24150.7	19672.2
72.5°	15743.3	15831.3	17624.6	21938.9	30839.2	30833.3	29589.5	28341.8	24856.7	22820.9	16687.8
75°	11405.5	11693.0	13261.5	17231.5	26399.8	26802.6	26642.3	26393.9	22369.1	19285.0	11777.1
77.5°	7996.8	8143.5	9620.0	12960.3	20745.9	21361.9	22443.4	22764.2	18647.4	14321.5	5303.8
80°	5043.7	5319.5	6541.8	9203.4	15113.5	15682.6	16992.9	17532.7	13764.1	7024.8	928.9
82.5°	2939.4	3103.7	4003.3	5960.9	10161.7	10558.7	11417.3	10754.3	5579.6	934.8	516.3
85°	1423.7	1574.3	2149.3	3391.2	6344.2	6745.2	7208.6	4689.7	923.1	367.7	348.1
87.5°	576.9	592.6	880.1	1505.9	3162.3	3506.5	3393.1	1539.1	240.5	133.0	109.5
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°	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3	5810.3
2.5°	5847.5	5818.2	5783.0	5771.2	5689.1	5685.2	5616.7	5716.5	5687.1	5689.1	5712.6
5°	5851.4	5818.2	5749.7	5718.4	5630.4	5606.9	5493.5	5556.1	5489.6	5483.7	5522.9
7.5°	5892.5	5855.3	5757.5	5708.6	5544.4	5466.1	5358.6	5413.3	5311.6	5290.1	5297.9
10°	6002.0	5955.1	5835.8	5720.4	5517.0	5403.6	5192.3	5209.9	5120.0	5090.6	5116.1
12.5°	6168.2	6111.5	5968.7	5798.6	5540.5	5341.0	5082.8	4979.2	4842.3	4797.3	4811.0
15°	6395.1	6328.6	6140.8	5943.3	5591.3	5311.6	4959.6	4744.5	4478.5	4404.2	4376.8
17.5°	6643.5	6573.1	6356.0	6107.6	5681.3	5278.4	4818.8	4476.6	4093.2	3925.1	3915.3
20°	6934.9	6858.6	6631.7	6299.3	5753.6	5237.3	4642.8	4151.9	3653.2	3371.6	3352.0
22.5°	7269.3	7202.8	6946.6	6469.4	5790.8	5129.8	4376.8	3737.3	3113.4	2761.4	2743.8
25°	7662.4	7599.8	7239.9	6588.7	5749.7	4940.1	4013.1	3228.8	2477.9	2125.8	2110.2
27.5°	8131.7	8033.9	7470.7	6623.9	5628.5	4629.1	3557.4	2575.6	1830.5	1562.6	1548.9
30°	8665.6	8491.6	7687.8	6614.1	5413.3	4232.1	2929.6	1899.0	1300.5	1120.6	1114.7
32.5°	9338.4	9033.3	7895.1	6535.9	5106.3	3711.9	2229.5	1318.1	934.8	846.8	844.9
35°	10461.0	9807.8	8122.0	6395.1	4689.7	3029.4	1545.0	897.7	760.8	743.2	743.2
37.5°	12135.0	11084.8	8444.6	6170.2	4150.0	2309.7	1017.0	713.8	715.8	725.6	727.5
40°	13854.1	12553.5	8912.0	5835.8	3520.2	1623.2	739.2	663.0	686.4	702.1	713.8
42.5°	15432.3	13883.4	9432.3	5378.1	2808.4	1071.7	661.0	637.6	649.3	661.0	672.8
45°	16756.3	15049.0	9923.1	4856.0	2080.8	762.7	655.2	608.2	602.4	610.2	618.0
47.5°	17873.0	15997.5	10267.3	4267.3	1415.9	653.2	639.5	576.9	557.4	559.3	563.2
50°	18725.7	16668.3	10419.9	3620.0	938.7	635.6	610.2	543.7	512.4	512.4	516.3
52.5°	19300.6	17088.8	10329.9	2890.5	674.7	625.8	586.7	508.5	471.3	477.2	481.1
55°	19727.0	17313.7	9975.9	2123.9	594.5	596.5	559.3	467.4	436.1	451.8	457.6
57.5°	19893.2	17307.8	9381.4	1466.8	590.6	551.5	520.2	432.2	406.8	428.3	438.1
60°	19832.6	17022.3	8517.0	999.4	578.9	516.3	479.1	399.0	379.4	379.4	381.4
62.5°	19711.3	16621.4	7263.4	741.2	551.5	490.9	447.9	371.6	348.1	336.4	332.5
65°	19163.7	15649.4	5333.1	639.5	524.1	477.2	418.5	346.2	314.9	295.3	291.4
67.5°	18080.3	13977.3	2980.5	590.6	504.6	469.4	399.0	322.7	287.5	264.0	262.1
68°	17747.8	13455.1	2526.7	586.7	508.5	469.4	397.0	316.8	283.6	258.2	256.2
70°	15780.4	10854.0	1044.3	551.5	535.9	471.3	387.2	299.2	267.9	242.5	240.5
72.5°	11935.5	6287.5	551.5	479.1	522.2	463.5	391.1	285.5	254.2	224.9	221.0
75°	6577.0	1801.2	490.9	389.2	483.1	488.9	399.0	283.6	246.4	209.3	201.4
77.5°	1460.9	586.7	457.6	340.3	416.6	449.8	369.6	269.9	250.3	191.7	183.8
80°	559.3	477.2	434.2	262.1	330.5	381.4	307.0	240.5	256.2	179.9	170.1
82.5°	467.4	418.5	399.0	203.4	228.8	279.7	246.4	205.3	236.6	166.2	158.4
85°	344.2	404.8	281.6	160.4	168.2	172.1	172.1	160.4	203.4	146.7	138.9
87.5°	138.9	195.6	119.3	74.3	86.1	80.2	70.4	86.1	117.3	103.7	103.7
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)