

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: P456519

Luminaire Tested: **GALN-SA7D-740-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456519
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7D-740-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53784 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G5

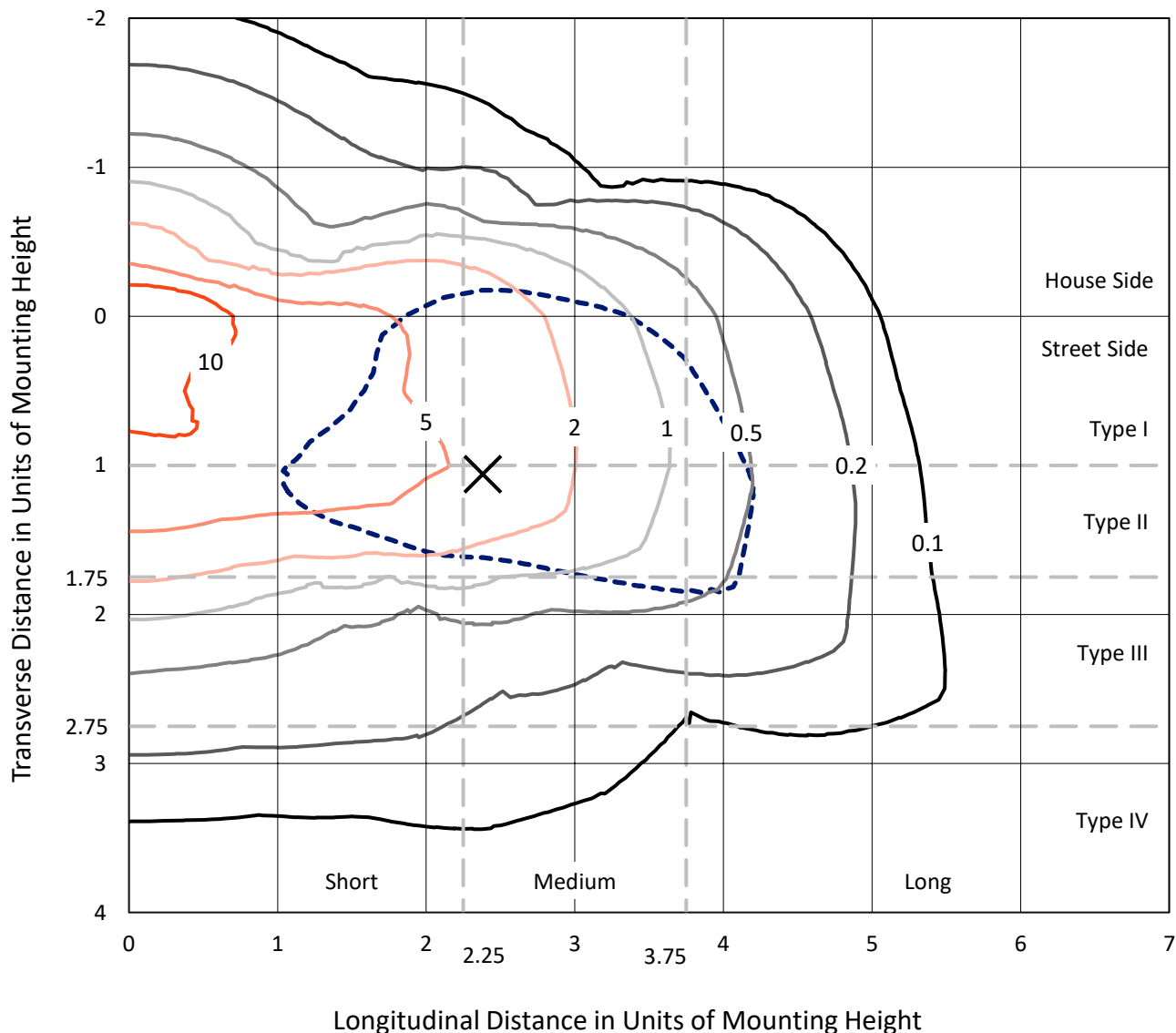
Input Watts (W): 433
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

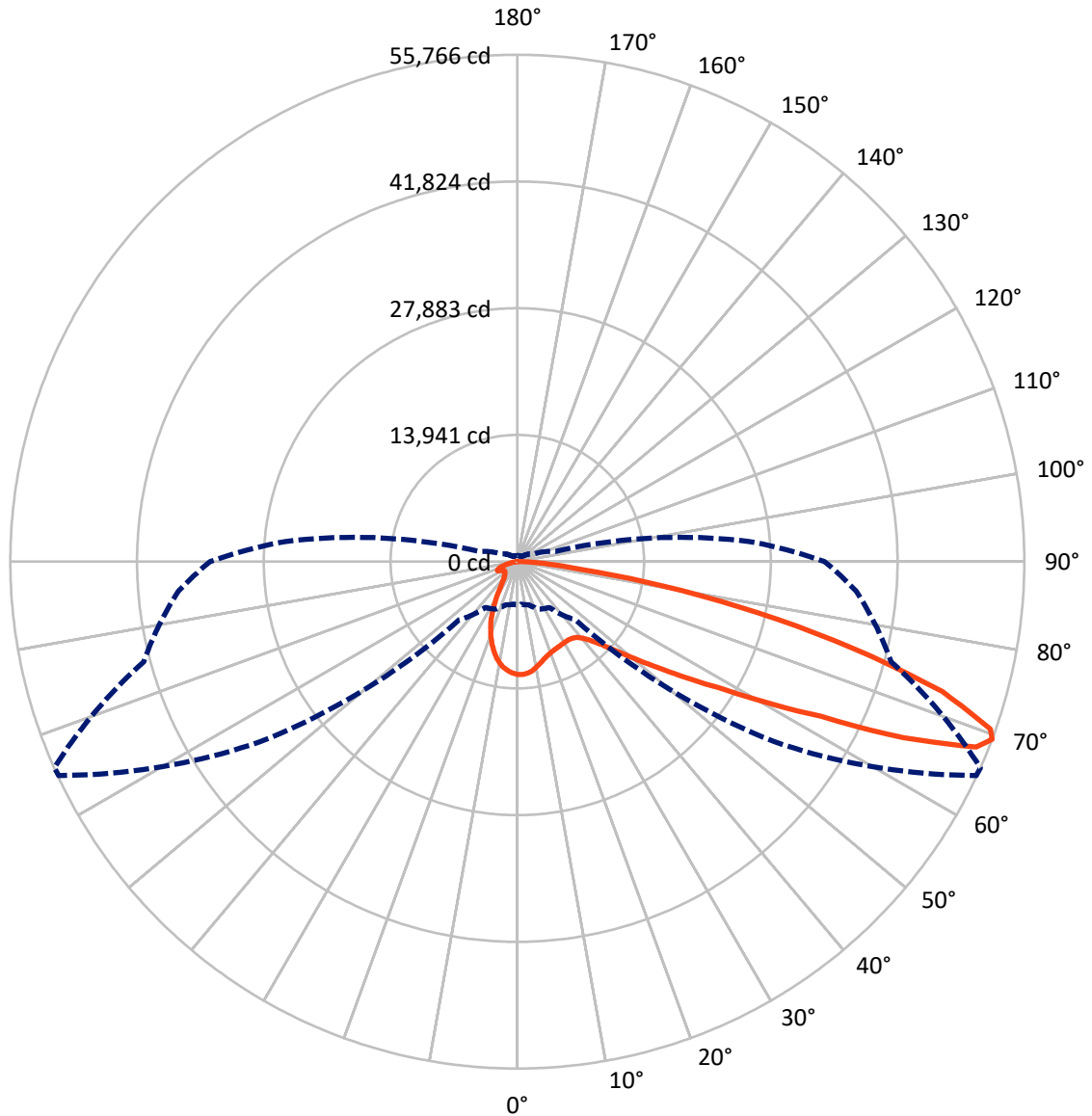
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 19.9 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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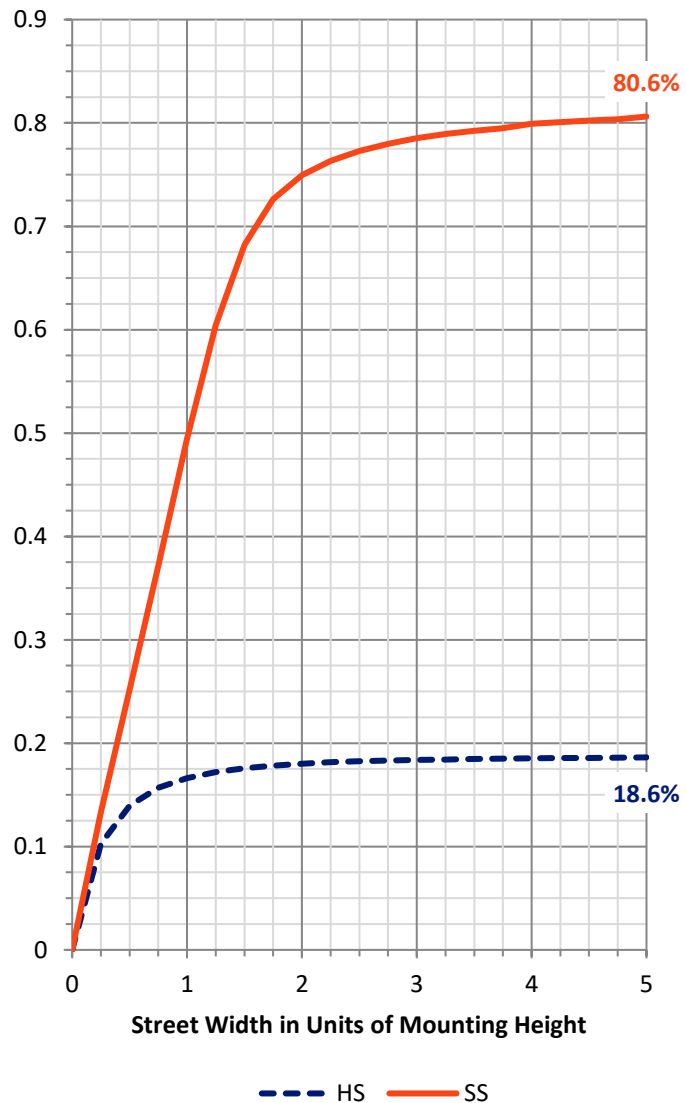
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10114.7	0.0	10114.7
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	43669.2	0.0	43669.2
	% Fixture	81.2	0.0	81.2
Total	Lumens	53784.0	0.0	53784.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1078.6	2.0
10°-20°	2558.3	4.8
20°-30°	3482.7	6.5
30°-40°	4680.0	8.7
40°-50°	6988.1	13.0
50°-60°	11115.7	20.7
60°-70°	13671.7	25.4
70°-80°	8895.4	16.5
80°-90°	1313.6	2.4
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°	53784.0	100.0
0°-180°	53784.0	100.0



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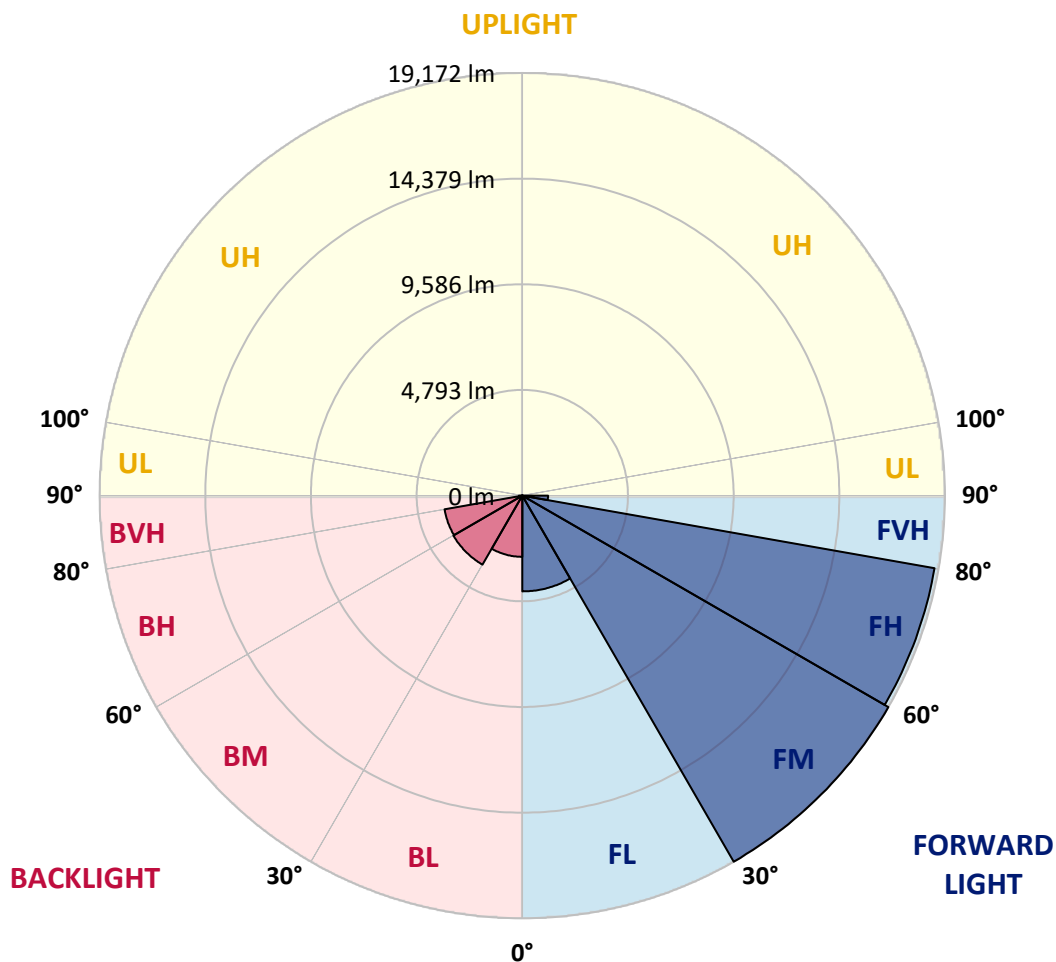
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4343.0	8.1			
FM	(30°-60°)	19172.4	35.6			
FH	(60°-80°)	18986.0	35.3			G5
FVH	(80°-90°)	1167.9	2.2			G5
BL	(0°-30°)	2776.5	5.2	B4/5000		
BM	(30°-60°)	3611.4	6.7	B3/5000		
BH	(60°-80°)	3581.1	6.7	B4/5000		G4/5000
BVH	(80°-90°)	145.7	0.3			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°	66°	75°	85°
0°	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2
2.5°	11985.4	12033.0	12086.6	12146.2	12259.4	12321.9	12366.6	12417.2	12423.2	12450.0	12429.2
5°	11100.8	11157.3	11237.8	11350.9	11520.7	11785.8	12059.8	12283.2	12310.0	12435.1	12470.9
7.5°	10362.1	10394.9	10460.4	10642.1	10883.3	11178.2	11577.3	12030.0	12095.6	12393.4	12497.7
10°	9760.4	9793.2	9870.6	10058.3	10296.6	10665.9	11103.7	11699.4	11753.0	12265.3	12503.6
12.5°	9310.7	9340.5	9423.9	9608.5	9882.6	10228.1	10710.6	11342.0	11419.5	12095.6	12447.0
15°	8968.2	9024.8	9093.3	9245.2	9534.1	9867.7	10335.3	11014.4	11076.9	11916.9	12408.3
17.5°	8822.2	8849.0	8896.7	9036.7	9248.1	9575.8	10046.4	10758.2	10832.7	11791.8	12399.4
20°	8828.2	8855.0	8863.9	8941.4	9093.3	9376.2	9840.9	10555.7	10645.1	11681.6	12414.3
22.5°	9030.7	9033.7	9000.9	8974.1	9033.7	9269.0	9694.9	10403.8	10508.0	11633.9	12426.2
25°	9343.5	9397.1	9349.4	9224.3	9114.1	9227.3	9638.3	10320.4	10418.7	11565.4	12411.3
27.5°	9849.8	9858.7	9820.0	9650.2	9364.3	9280.9	9614.5	10257.9	10341.2	11514.8	12336.8
30°	10528.9	10502.1	10466.3	10278.7	9829.0	9486.4	9665.1	10201.3	10287.6	11440.3	12247.5
32.5°	11216.9	11300.3	11267.6	11047.1	10463.4	9885.5	9829.0	10195.3	10266.8	11383.7	12149.2
35°	11946.6	11985.4	12140.2	12027.1	11428.4	10531.9	10135.7	10287.6	10344.2	11386.7	12080.7
37.5°	12518.5	12622.8	12986.1	13084.4	12521.5	11386.7	10633.1	10549.7	10573.6	11532.6	12107.5
40°	13209.5	13388.2	13855.8	14257.9	13888.6	12497.7	11479.0	11035.2	11065.0	11884.1	12283.2
42.5°	14085.2	14210.3	14838.7	15383.8	15324.2	13966.0	12503.6	11830.5	11845.4	12584.0	12774.7
45°	15109.8	15288.5	15994.4	16813.5	16953.5	15628.0	13983.9	13033.8	13024.8	13671.2	13692.0
47.5°	16420.3	16530.5	17230.4	18124.0	18689.9	17715.9	15779.9	14761.3	14666.0	15255.7	15086.0
50°	17626.6	17799.3	18329.5	19306.4	20715.3	20161.3	18141.9	17001.1	16777.7	17328.7	17042.8
52.5°	18132.9	18314.6	18761.4	19973.6	22451.7	23324.4	21141.2	19672.8	19300.5	19723.4	19619.2
55°	17254.3	17489.6	17906.6	19380.9	23214.2	26973.0	25185.9	22761.5	22490.4	22308.7	22338.5
57.5°	14892.4	15115.7	15678.7	17304.9	22302.8	29620.9	30961.2	26731.8	26151.0	25314.0	25457.0
60°	11336.1	11476.0	11767.9	13569.9	19601.3	30308.9	37519.8	31750.5	31381.2	28307.4	28408.6
62.5°	8050.8	8208.7	8411.2	9310.7	14350.3	28369.9	42654.7	38758.8	37439.4	31408.0	31309.7
65°	6537.7	6430.5	6674.8	7094.7	8420.1	21987.1	43810.3	48486.5	46669.6	35491.4	34127.3
67.5°	5376.1	5263.0	5504.2	6251.8	6403.7	12762.7	39646.4	54800.9	54437.5	39932.3	36989.6
69°	4759.6	4700.0	4911.5	5763.3	6147.6	9063.5	34538.3	55679.5	55765.9	42550.4	37430.4
70°	4289.0	4312.8	4518.3	5516.1	6031.4	7473.0	29519.6	54467.3	55200.0	43858.0	36953.9
72.5°	3157.2	3207.8	3493.7	4569.0	5921.2	6341.2	17567.0	47575.1	48870.7	43935.4	33805.6
75°	2207.0	2183.2	2436.4	3440.1	5593.6	6284.6	10317.4	36793.0	38261.4	37975.5	28405.7
77.5°	1444.6	1483.3	1685.8	2430.4	4706.0	6236.9	6725.4	26103.3	27056.4	25397.4	16801.5
80°	1018.6	1015.7	1128.8	1659.0	3490.8	5992.7	5507.2	16453.1	16211.8	9980.9	4983.0
82.5°	583.8	625.5	756.5	1167.6	2335.1	5274.9	5066.4	7869.1	7184.1	2844.4	1682.8
85°	324.7	339.5	449.7	705.9	1364.1	3973.3	4423.0	3580.1	3377.6	1188.4	723.8
87.5°	104.2	113.2	187.6	357.4	619.5	1876.4	2504.9	1653.1	1525.0	428.9	291.9
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°	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2	12420.2
2.5°	12438.1	12473.8	12378.5	12286.2	12202.8	12086.6	11982.4	11896.0	11836.4	11827.5	11797.7
5°	12479.8	12482.8	12301.1	12056.8	11818.6	11556.5	11285.4	11091.8	10910.1	10808.9	10758.2
7.5°	12509.6	12482.8	12155.1	11759.0	11300.3	10823.8	10347.2	9966.0	9671.1	9554.9	9599.6
10°	12497.7	12414.3	11934.7	11300.3	10633.1	9921.3	9236.2	8700.1	8208.7	7955.5	7961.5
12.5°	12432.1	12295.1	11607.1	10785.0	9805.1	8852.0	7803.6	7079.8	6510.9	6174.4	6070.1
15°	12375.5	12137.3	11222.9	10085.1	8866.9	7505.7	6228.0	5334.4	4857.9	4592.8	4589.8
17.5°	12316.0	11985.4	10802.9	9343.5	7788.7	6037.4	4697.0	4015.0	3791.6	3818.4	3773.7
20°	12253.4	11806.7	10365.1	8518.4	6475.2	4503.4	3517.6	3240.6	3303.1	3425.2	3443.1
22.5°	12181.9	11616.0	9894.5	7610.0	5093.2	3389.5	2853.4	2811.7	2972.5	3163.1	3189.9
25°	12071.7	11377.8	9301.8	6659.9	3928.6	2731.3	2498.9	2528.7	2686.6	2847.4	2865.3
27.5°	11916.9	11082.9	8703.1	5474.4	2951.7	2344.1	2284.5	2323.2	2400.6	2498.9	2522.8
30°	11708.4	10749.3	8015.1	4449.8	2364.9	2150.5	2126.6	2147.5	2192.2	2233.9	2245.8
32.5°	11499.9	10427.6	7321.1	3407.4	2108.8	2022.4	1998.6	1998.6	1998.6	2004.5	2007.5
35°	11306.3	10123.8	6576.5	2653.8	1974.7	1921.1	1888.3	1852.6	1846.7	1825.8	1825.8
37.5°	11199.0	9846.8	5784.2	2221.9	1876.4	1837.7	1793.0	1733.5	1700.7	1703.7	1697.7
40°	11219.9	9665.1	5063.4	1977.7	1796.0	1754.3	1685.8	1617.3	1596.5	1596.5	1590.5
42.5°	11455.2	9605.6	4372.4	1849.6	1718.6	1670.9	1584.5	1522.0	1510.1	1507.1	1513.1
45°	11997.3	9751.5	3752.9	1766.2	1653.1	1581.6	1495.2	1438.6	1426.7	1426.7	1423.7
47.5°	13054.6	10225.1	3309.1	1712.6	1605.4	1513.1	1423.7	1367.1	1346.3	1340.3	1340.3
50°	14698.7	11252.7	2978.5	1665.0	1545.8	1450.5	1358.2	1292.7	1259.9	1256.9	1253.9
52.5°	16983.2	12855.1	2850.4	1629.2	1480.3	1385.0	1283.7	1221.2	1179.5	1170.5	1164.6
55°	19654.9	15091.9	3026.1	1602.4	1411.8	1310.5	1206.3	1140.8	1102.0	1084.2	1081.2
57.5°	22749.6	17778.5	3693.3	1566.7	1349.2	1230.1	1128.8	1063.3	1021.6	1000.8	994.8
60°	25528.5	20539.5	4857.9	1545.8	1295.6	1143.7	1039.5	979.9	941.2	920.3	917.4
62.5°	28581.4	23172.5	6248.8	1602.4	1271.8	1060.3	956.1	902.5	869.7	848.9	848.9
65°	31842.8	25808.4	7169.2	1793.0	1307.5	994.8	866.7	822.1	792.3	777.4	774.4
67.5°	34040.9	26719.9	5906.3	1989.6	1396.9	923.3	780.4	744.6	726.7	711.9	711.9
69°	33802.7	25567.2	4357.5	2040.3	1423.7	887.6	732.7	705.9	682.1	676.1	670.2
70°	33049.1	24253.7	3651.6	2007.5	1402.9	854.8	702.9	670.2	649.3	643.3	640.4
72.5°	29436.2	21034.0	2719.3	1745.4	1194.4	741.6	622.5	592.7	574.8	565.9	565.9
75°	24456.2	17191.7	2123.6	1388.0	935.2	625.5	533.1	509.3	494.4	488.5	485.5
77.5°	13706.9	9599.6	1525.0	1087.1	708.9	506.3	446.8	425.9	411.0	405.1	405.1
80°	3818.4	2743.2	896.5	717.8	482.5	384.2	354.4	339.5	318.7	303.8	312.7
82.5°	1438.6	1188.4	512.3	431.9	306.8	256.1	247.2	235.3	226.4	205.5	205.5
85°	699.9	577.8	327.6	229.3	169.8	134.0	128.1	122.1	116.2	101.3	104.2
87.5°	241.3	256.1	143.0	83.4	50.6	32.8	26.8	14.9	14.9	14.9	14.9
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)