

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: P323018

Luminaire Tested: **GLEON-SA4D-827-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323018  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA4D-827-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16676 lumens  
Efficiency: N/A  
Efficacy: 64.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G4

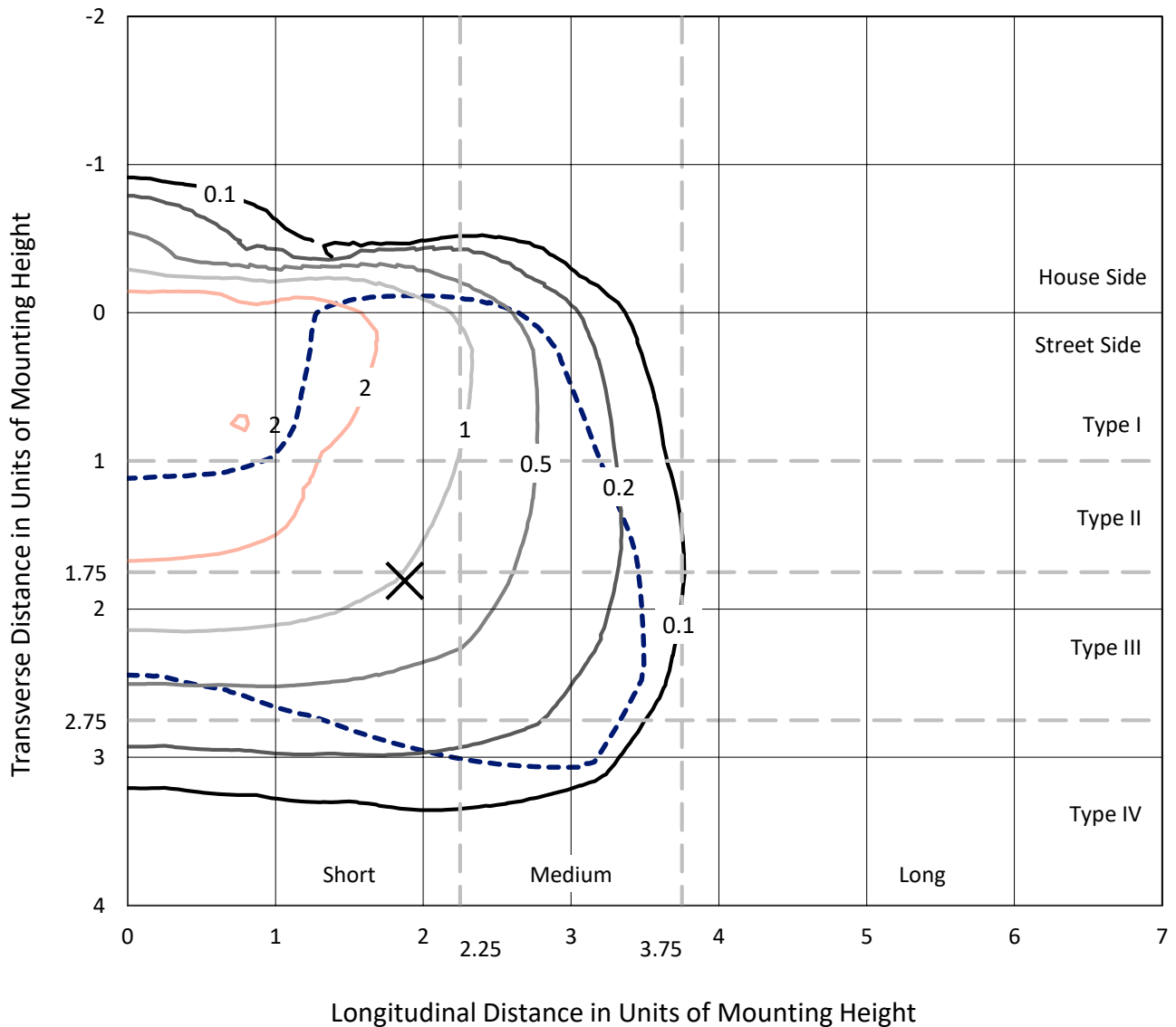
Input Watts (W): 258  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

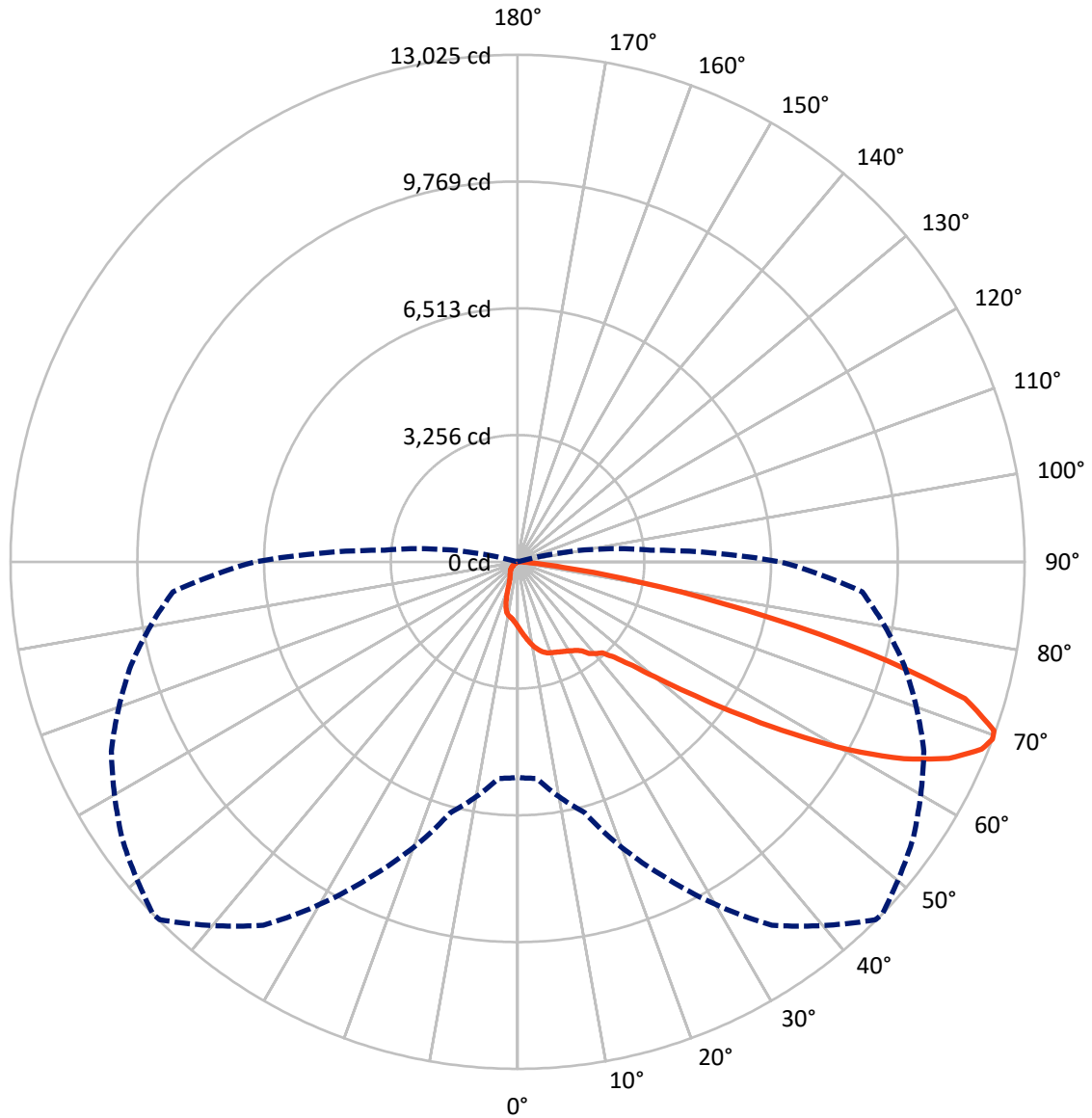
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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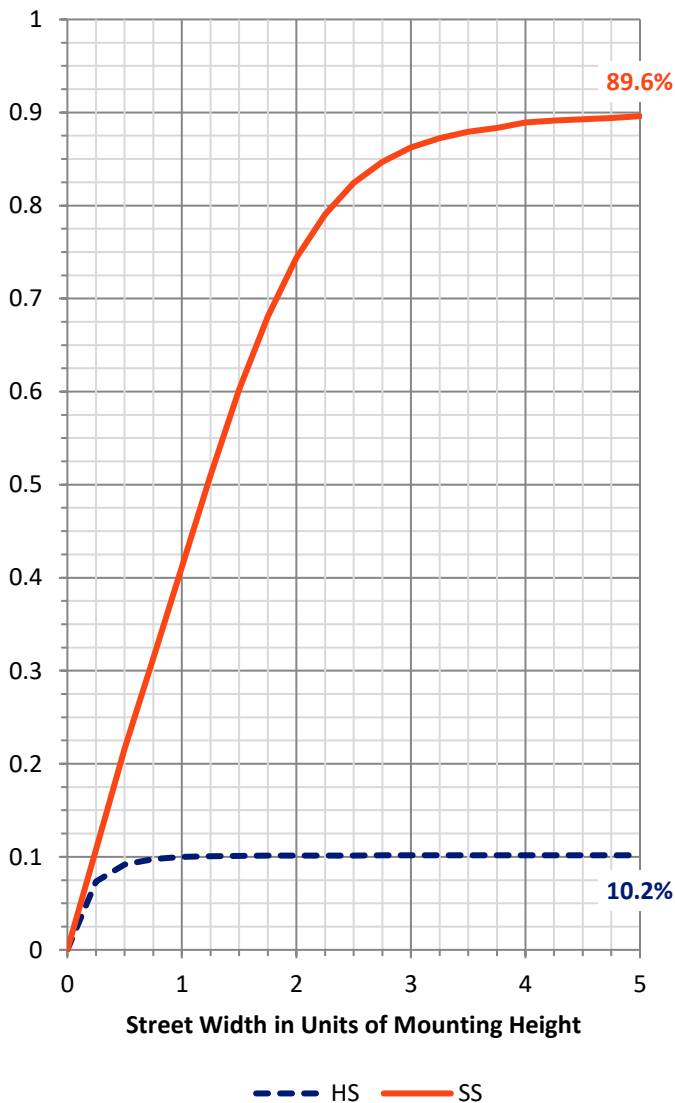
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1711.4	0.0	1711.4
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	14964.6	0.0	14964.6
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	16676.0	0.0	16676.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.3	1.0
10°-20°	504.5	3.0
20°-30°	793.5	4.8
30°-40°	1137.9	6.8
40°-50°	1966.6	11.8
50°-60°	3885.3	23.3
60°-70°	5430.0	32.6
70°-80°	2623.3	15.7
80°-90°	168.6	1.0
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°	16676.0	100.0
0°-180°	16676.0	100.0

**Coefficient of Utilization**

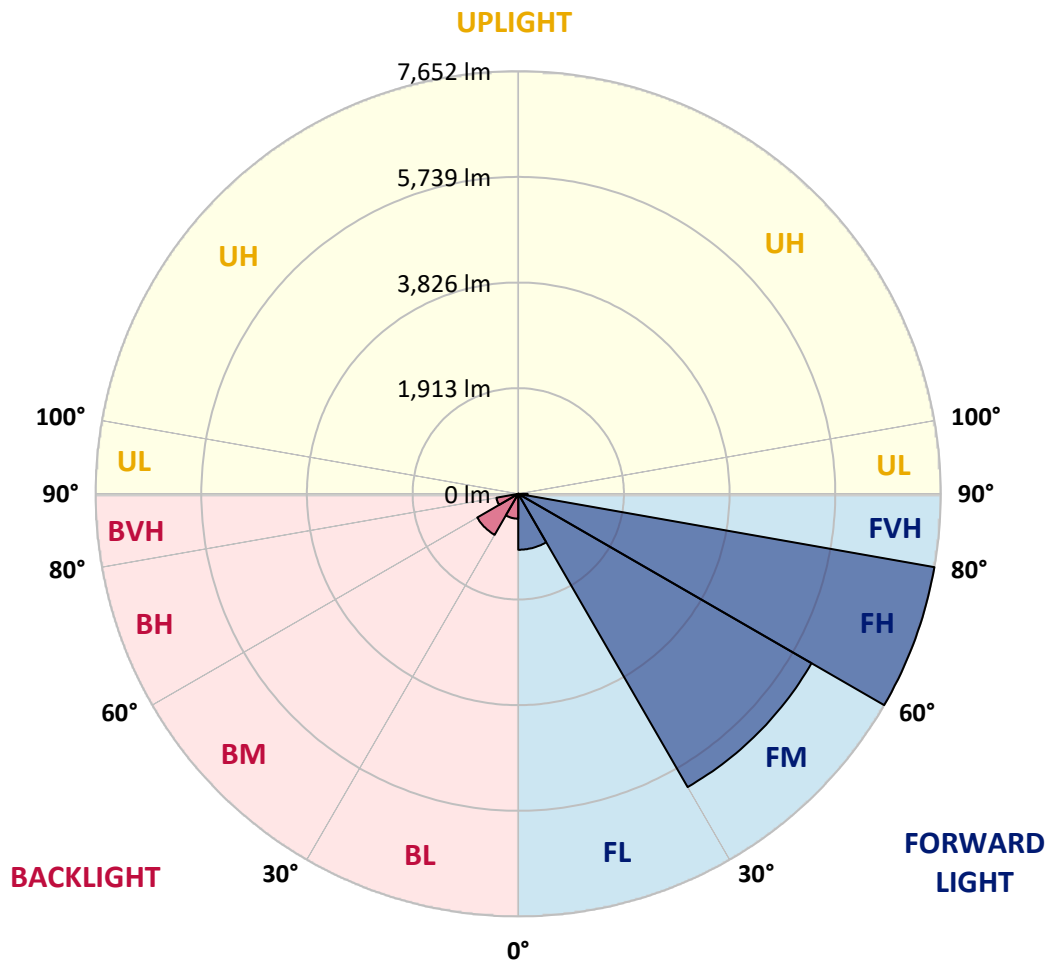


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1013.3	6.1			
FM (30°-60°)	6132.1	36.8			
FH (60°-80°)	7652.0	45.9			G4/12000
FVH (80°-90°)	167.2	1.0			G2/225
BL (0°-30°)	451.1	2.7	B1/500		
BM (30°-60°)	857.6	5.1	B1/1000		
BH (60°-80°)	401.3	2.4	B1/500		G1/500
BVH (80°-90°)	1.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9
2.5°	1856.2	1853.8	1842.9	1838.2	1811.6	1796.0	1789.7	1770.2	1742.0	1713.9	1682.6
5°	2067.3	2066.5	2046.2	2026.6	1976.6	1929.7	1921.1	1875.7	1812.4	1753.0	1693.5
7.5°	2283.1	2272.9	2252.6	2215.1	2142.3	2067.3	2060.2	1996.1	1906.2	1820.2	1735.0
10°	2466.0	2459.8	2433.2	2376.1	2290.9	2205.7	2197.1	2118.1	2016.5	1910.9	1802.2
12.5°	2608.3	2603.7	2568.5	2497.3	2406.6	2318.3	2306.5	2236.2	2127.5	2009.4	1881.2
15°	2695.1	2692.8	2649.8	2573.9	2484.8	2408.2	2398.0	2336.3	2235.4	2111.9	1967.2
17.5°	2715.5	2716.2	2671.7	2595.1	2521.6	2466.8	2459.0	2412.1	2327.7	2204.9	2053.2
20°	2670.1	2679.5	2639.6	2573.2	2527.8	2498.9	2492.6	2464.5	2393.3	2277.6	2122.0
22.5°	2606.0	2610.7	2583.3	2538.8	2520.0	2525.5	2522.3	2506.7	2446.5	2340.2	2190.0
25°	2566.9	2566.9	2550.5	2513.0	2525.5	2559.1	2559.9	2556.7	2509.0	2416.8	2272.9
27.5°	2565.3	2560.6	2541.9	2513.7	2548.1	2599.7	2602.9	2624.0	2594.3	2509.8	2376.1
30°	2627.9	2622.4	2582.5	2545.8	2589.6	2645.1	2652.9	2699.0	2684.2	2610.7	2491.1
32.5°	2774.1	2754.6	2666.2	2606.0	2638.8	2705.3	2715.5	2789.0	2812.4	2735.0	2602.1
35°	2974.3	2912.5	2785.0	2720.2	2723.3	2792.9	2802.3	2910.1	2979.7	2849.2	2688.1
37.5°	3250.3	3219.8	3012.6	2839.0	2853.1	2958.6	2986.0	3103.3	3083.7	2911.7	2785.8
40°	3855.4	3807.7	3587.3	3172.1	2977.4	3093.1	3101.7	3164.3	3165.8	3053.2	2989.1
42.5°	4679.5	4660.0	4427.8	3776.5	3222.1	3183.0	3198.7	3304.2	3422.3	3351.9	3348.8
45°	5592.0	5581.8	5335.5	4578.7	3717.0	3477.8	3497.3	3638.9	3864.8	3880.5	3979.8
47.5°	6326.2	6321.5	6180.0	5473.9	4474.7	3977.4	3983.7	4133.8	4531.0	4727.2	4886.0
50°	6995.5	7018.1	6906.3	6442.7	5506.8	4760.1	4745.2	4845.3	5483.3	5804.7	6001.7
52.5°	7925.9	7958.0	7644.4	7346.5	6589.7	5731.2	5719.4	5824.2	6628.0	6868.8	6904.0
55°	8747.6	8692.9	8445.1	8359.1	7910.3	6930.6	6927.4	7019.7	7735.1	7837.5	7902.4
57.5°	9110.4	9089.3	9209.0	9406.0	9293.4	8348.1	8341.1	8270.7	8725.8	8736.7	8936.1
60°	9339.5	9365.3	9732.0	10339.6	10620.2	9873.6	9828.2	9399.0	9671.8	9647.6	9861.0
62.5°	9167.5	9218.3	9878.2	10890.8	11613.2	11205.1	11141.0	10432.6	10480.3	10396.6	10595.2
65°	8254.3	8333.3	9414.6	10786.8	12105.8	12245.8	12180.9	11345.0	11122.2	10984.6	10874.4
67.5°	6702.3	6749.2	7878.2	9882.2	11883.8	12866.6	12853.3	12144.9	11607.0	10885.3	10029.9
69°	5538.8	5585.0	6671.8	8929.8	11395.1	12999.5	13025.3	12401.4	11514.7	10281.7	8886.8
70°	4691.3	4740.5	5753.1	8113.5	10828.2	12937.7	12983.9	12377.1	11250.4	9582.7	7883.7
72.5°	2460.6	2502.8	3541.9	5589.6	8827.4	11879.9	12019.8	11331.0	9536.6	6959.5	4661.6
75°	773.3	797.5	1383.1	2921.9	6043.9	9237.1	9269.2	8888.4	6771.8	3828.1	1941.4
77.5°	294.8	287.7	460.5	1076.6	3055.6	5816.4	6012.6	5554.5	3553.6	1353.4	448.0
80°	158.7	159.5	239.3	445.7	1307.3	2989.1	3154.9	2692.0	1262.7	422.2	103.2
82.5°	68.8	71.9	134.5	236.1	600.5	1102.4	1185.3	986.7	482.4	283.8	38.3
85°	14.9	16.4	64.9	128.2	244.7	309.6	324.5	319.8	307.3	220.5	14.9
87.5°	0.0	0.0	28.9	46.1	61.8	70.4	61.8	80.5	169.7	148.6	7.8
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°	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9	1670.9
2.5°	1672.4	1658.4	1634.1	1607.5	1588.8	1569.2	1553.6	1546.6	1538.7	1533.3	1540.3
5°	1669.3	1641.9	1595.0	1549.7	1516.8	1490.3	1468.4	1459.8	1451.2	1444.9	1444.1
7.5°	1696.7	1658.4	1586.4	1520.0	1469.1	1433.2	1403.5	1391.0	1380.8	1376.1	1372.2
10°	1749.1	1699.8	1603.6	1516.8	1451.2	1390.2	1326.1	1276.8	1244.7	1229.9	1224.4
12.5°	1817.1	1755.3	1636.5	1533.3	1437.9	1320.6	1184.5	1067.3	991.4	966.4	951.5
15°	1896.8	1820.2	1679.5	1554.4	1389.4	1175.2	944.5	791.3	720.9	706.8	691.2
17.5°	1973.5	1889.0	1731.1	1558.3	1283.1	939.0	692.0	588.0	560.6	570.0	572.3
20°	2040.7	1957.0	1781.9	1523.9	1089.9	704.5	535.6	509.8	519.9	537.9	541.1
22.5°	2108.7	2022.7	1828.8	1433.2	842.9	534.8	482.4	488.7	498.8	516.8	519.9
25°	2191.6	2102.5	1872.6	1266.6	632.5	455.1	458.2	467.6	477.7	494.1	495.7
27.5°	2287.0	2203.3	1901.5	1050.1	469.1	418.3	428.5	442.5	452.7	468.3	471.5
30°	2413.7	2336.3	1910.9	825.7	393.3	385.5	390.2	407.4	422.2	436.3	438.6
32.5°	2532.5	2467.6	1879.6	623.2	364.4	355.0	355.0	365.1	382.3	395.6	398.8
35°	2642.0	2599.7	1779.6	455.8	342.5	326.8	319.0	319.0	330.0	340.9	344.0
37.5°	2786.6	2785.0	1617.7	363.6	321.4	303.4	286.9	274.4	270.5	272.9	274.4
40°	3034.5	3036.8	1406.6	326.0	303.4	279.1	254.1	231.4	210.3	203.3	202.5
42.5°	3421.5	3386.3	1185.3	308.1	287.7	254.1	216.6	186.1	153.2	143.1	142.3
45°	4036.1	3827.3	950.8	291.6	271.3	226.0	179.1	137.6	111.0	103.2	103.2
47.5°	4931.3	4406.7	736.5	273.7	249.4	193.9	135.3	99.3	81.3	77.4	78.2
50°	5857.0	4974.3	564.5	251.0	222.8	160.3	100.1	71.9	61.8	61.8	62.6
52.5°	6678.0	5390.3	440.2	226.7	190.0	125.9	75.8	56.3	51.6	50.8	51.6
55°	7446.6	5658.4	337.0	198.6	150.9	93.8	57.9	46.1	43.0	41.4	40.7
57.5°	8187.8	5791.4	252.5	160.3	109.5	68.0	46.1	39.1	36.0	33.6	32.8
60°	8681.2	5683.5	173.6	118.1	75.8	49.3	38.3	33.6	29.7	27.4	26.6
62.5°	8959.5	5388.7	111.8	85.2	53.9	36.7	30.5	28.1	22.7	20.3	20.3
65°	8846.9	4902.4	78.2	61.0	39.1	27.4	22.7	22.7	16.4	13.3	12.5
67.5°	7839.9	4141.6	59.4	45.3	28.1	20.3	17.2	19.5	10.2	6.3	6.3
69°	6745.3	3432.4	50.8	37.5	23.5	16.4	14.9	18.0	7.0	4.7	3.9
70°	5862.5	2961.0	46.1	32.8	19.5	14.1	13.3	17.2	7.0	3.9	3.1
72.5°	3507.5	1651.3	35.2	23.5	12.5	10.9	10.9	19.5	7.0	3.9	3.1
75°	1417.5	581.7	25.8	16.4	9.4	9.4	13.3	25.0	6.3	3.1	2.3
77.5°	321.4	127.4	14.9	10.2	6.3	9.4	15.6	19.5	3.9	1.6	0.0
80°	78.2	31.3	9.4	6.3	3.9	7.0	11.7	10.9	0.8	0.0	0.0
82.5°	25.8	10.9	3.9	3.1	0.8	2.3	5.5	3.1	0.0	0.0	0.0
85°	10.9	6.3	1.6	0.8	0.0	0.0	0.8	0.0	0.0	0.0	0.0
87.5°	7.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)