

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: P191220

Luminaire Tested: **GLEON-AF-02-LED-E1-SL4-1200-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191220
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-02-LED-E1-SL4-1200-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11091.9 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 129
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

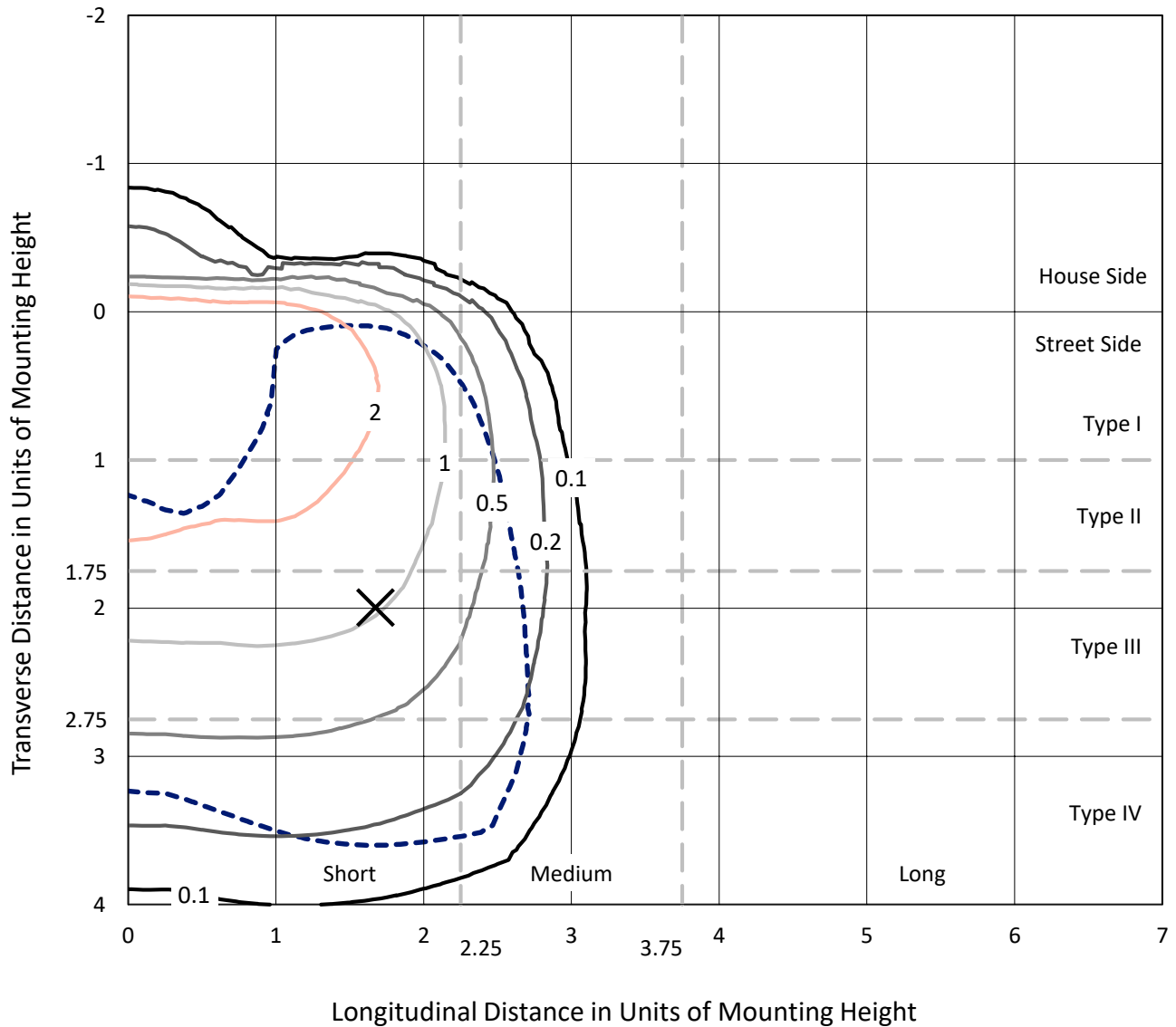


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Iso-Footcandle Lines of Horizontal Illumination

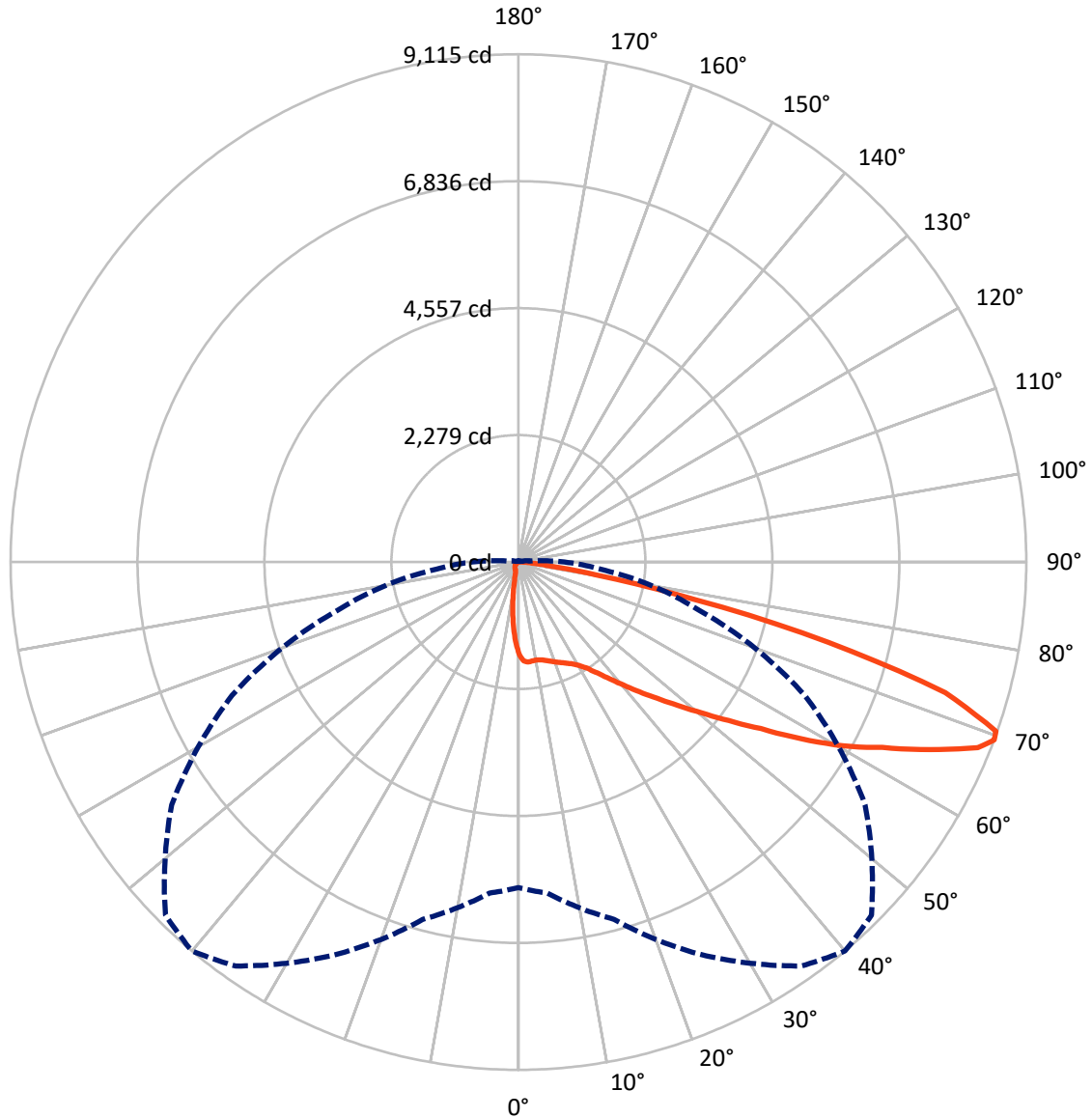
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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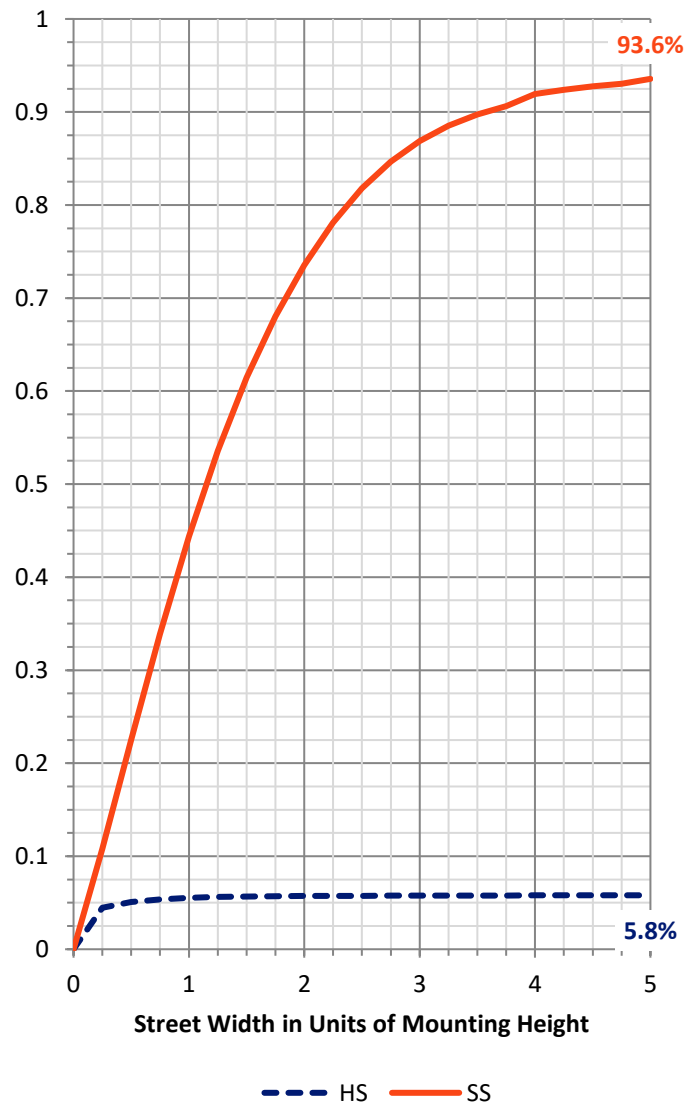
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	648.9	0.0	648.9
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	10442.9	0.0	10442.9
	% Fixture	94.1	0.0	94.1
Total	Lumens	11091.9	0.0	11091.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	1.2
10°-20°	330.4	3.0
20°-30°	556.6	5.0
30°-40°	911.1	8.2
40°-50°	1577.5	14.2
50°-60°	2484.8	22.4
60°-70°	3245.0	29.3
70°-80°	1671.3	15.1
80°-90°	180.8	1.6
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°	11091.9	100.0
0°-180°	11091.9	100.0



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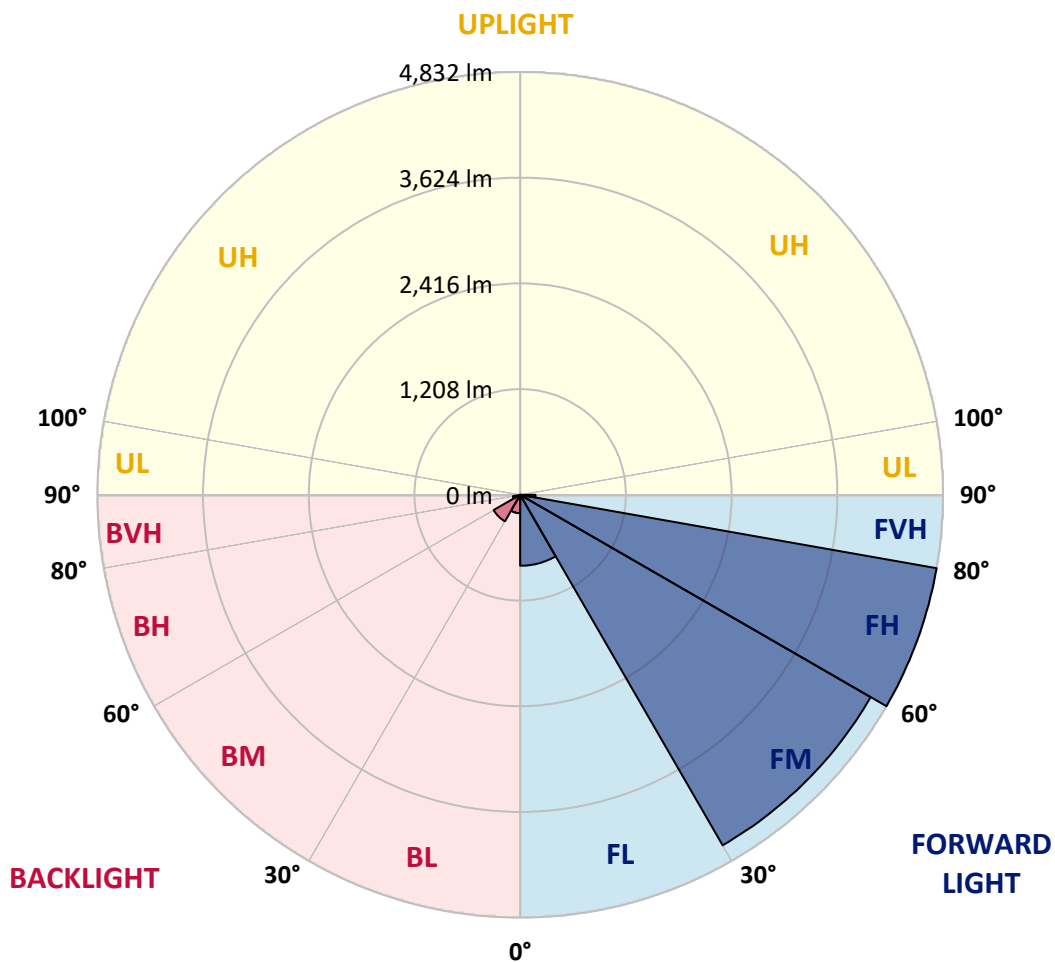
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	811.1	7.3			
FM	(30°-60°)	4624.6	41.7			
FH	(60°-80°)	4832.1	43.6			G2/5000
FVH	(80°-90°)	175.1	1.6			G2/225
BL	(0°-30°)	210.2	1.9	B1/500		
BM	(30°-60°)	348.8	3.1	B1/1000		
BH	(60°-80°)	84.3	0.8	B0/110		G0/110
BVH	(80°-90°)	5.7	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2
2.5°	1819.6	1809.7	1803.8	1795.8	1786.0	1777.4	1774.0	1749.7	1726.5	1694.8	1658.5
5°	1853.3	1850.0	1839.4	1828.8	1817.0	1803.8	1796.5	1767.5	1734.4	1688.2	1624.9
7.5°	1856.6	1852.6	1839.4	1824.8	1808.4	1792.5	1779.9	1750.9	1720.6	1673.6	1596.4
10°	1851.3	1846.6	1836.8	1821.0	1800.5	1785.3	1772.7	1744.9	1719.3	1677.0	1591.2
12.5°	1845.3	1840.7	1836.1	1828.2	1810.3	1799.8	1789.2	1762.9	1739.7	1704.0	1610.3
15°	1851.3	1848.7	1853.9	1850.6	1840.7	1831.5	1821.0	1797.1	1776.0	1746.3	1645.3
17.5°	1876.4	1876.4	1892.9	1894.9	1885.6	1872.4	1857.3	1833.4	1815.6	1790.6	1686.8
20°	1935.1	1933.2	1954.2	1958.2	1935.8	1915.4	1892.9	1863.8	1850.0	1834.2	1727.9
22.5°	2036.2	2026.9	2039.5	2035.5	1991.3	1959.6	1931.8	1896.1	1888.9	1881.6	1773.4
25°	2167.5	2162.2	2170.8	2131.9	2054.0	2011.0	1978.1	1937.8	1937.8	1945.0	1824.8
27.5°	2358.3	2338.6	2309.5	2240.8	2124.0	2069.1	2033.5	1990.6	2001.8	2028.9	1892.9
30°	2553.8	2532.0	2465.3	2359.6	2209.2	2151.7	2110.1	2065.2	2091.6	2141.1	1984.0
32.5°	2746.5	2722.2	2627.8	2494.4	2331.3	2273.8	2233.6	2184.0	2228.3	2311.5	2117.4
35°	2933.4	2911.6	2802.7	2645.6	2493.6	2446.2	2409.2	2366.3	2423.1	2539.3	2305.5
37.5°	3143.3	3119.6	2986.9	2816.6	2691.1	2656.8	2629.7	2586.7	2685.9	2856.2	2567.6
40°	3401.5	3361.2	3182.3	3012.6	2919.5	2903.0	2884.5	2878.6	3032.4	3268.1	2916.9
42.5°	3697.3	3631.3	3387.0	3219.3	3170.4	3182.3	3177.7	3204.1	3466.2	3780.5	3342.1
45°	3993.1	3907.9	3614.8	3439.8	3446.4	3488.0	3513.7	3619.4	4009.6	4368.1	3799.6
47.5°	4243.9	4160.1	3833.3	3678.1	3757.4	3839.2	3909.2	4109.3	4568.1	4946.5	4155.5
50°	4458.5	4379.4	4065.0	3940.3	4118.5	4250.6	4364.1	4660.6	5169.0	5386.9	4405.0
52.5°	4634.2	4581.4	4305.4	4240.6	4531.2	4724.6	4891.0	5246.2	5701.1	5744.7	4599.2
55°	4805.2	4767.6	4563.5	4597.9	5015.7	5279.2	5489.9	5867.4	6159.3	6043.1	4785.4
57.5°	5001.9	4967.6	4858.0	5050.8	5652.9	5984.4	6214.1	6418.1	6562.7	6348.1	4961.0
60°	5202.6	5182.8	5185.4	5553.9	6384.4	6702.7	6829.4	6882.2	6958.8	6635.4	4970.9
62.5°	5394.1	5431.8	5559.8	6113.8	7085.0	7329.2	7393.3	7445.4	7355.6	6680.9	4592.5
65°	5718.3	5779.7	6085.3	6863.1	7855.4	8116.9	8182.9	8004.0	7418.3	6092.0	3735.6
67.5°	5876.8	5989.0	6534.3	7561.7	8602.8	8893.3	8868.9	8040.3	6657.2	4645.4	2397.3
69°	5843.7	5963.2	6637.9	7775.6	8851.1	9114.5	8959.3	7595.9	5671.3	3365.2	1471.6
70°	5713.0	5833.8	6584.5	7767.6	8882.8	9091.4	8791.6	7047.3	4795.3	2460.7	920.3
72.5°	4770.8	4875.2	5845.7	7020.9	8182.9	8013.2	7355.0	4882.4	2336.5	670.1	207.4
75°	2936.7	2994.8	4194.4	5289.1	6180.5	5744.7	4900.2	2429.0	696.5	189.5	114.9
77.5°	1551.5	1577.9	2296.3	3117.6	3917.8	3241.7	2511.5	947.5	320.9	118.9	83.2
80°	917.1	936.8	1236.6	1425.5	1695.4	1416.2	1004.2	581.6	229.8	74.6	74.0
82.5°	524.9	537.5	896.6	792.3	668.2	570.4	499.8	551.3	138.0	50.2	76.6
85°	192.8	195.4	504.4	602.8	397.4	236.4	248.3	456.8	36.9	31.7	60.0
87.5°	89.8	87.8	259.4	369.1	232.4	149.9	193.4	100.4	14.5	20.5	16.5
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°	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2	1657.2
2.5°	1637.3	1613.0	1568.7	1523.2	1476.9	1441.2	1406.3	1378.5	1369.3	1352.1	1353.5
5°	1587.2	1542.3	1449.8	1356.1	1258.4	1177.8	1101.9	1040.5	1010.8	980.4	980.4
7.5°	1543.6	1478.3	1333.6	1181.2	1023.4	890.7	771.1	681.4	631.9	592.2	591.6
10°	1527.2	1438.7	1236.6	1018.0	798.2	617.4	475.4	384.2	337.4	307.0	305.7
12.5°	1534.4	1424.8	1162.0	867.6	591.6	396.8	275.3	216.6	196.7	187.5	187.5
15°	1555.5	1420.8	1087.4	720.4	417.9	248.3	182.9	167.0	165.7	165.7	165.7
17.5°	1581.3	1422.1	1010.8	577.0	284.6	177.6	157.8	155.8	157.1	157.1	157.1
20°	1607.7	1422.8	928.3	444.4	200.7	154.5	148.5	147.9	149.2	149.2	149.9
22.5°	1640.0	1426.1	845.8	332.0	165.7	145.9	141.3	141.3	142.0	142.0	141.3
25°	1677.0	1432.7	760.0	246.2	151.2	139.9	136.1	135.3	136.1	135.3	134.7
27.5°	1723.2	1442.0	664.2	192.8	144.5	134.0	130.7	130.7	130.0	129.4	128.8
30°	1781.3	1452.5	556.6	163.8	138.0	128.8	125.4	124.8	124.1	122.8	122.8
32.5°	1869.7	1475.6	450.3	148.5	130.7	121.5	118.9	118.9	117.5	116.2	115.5
35°	2005.8	1521.1	355.2	139.3	122.8	113.5	110.3	110.3	108.9	108.2	107.6
37.5°	2193.9	1590.5	276.0	130.7	114.9	105.0	101.7	101.0	99.7	98.4	97.7
40°	2444.1	1676.3	217.2	122.8	107.0	96.4	93.7	92.5	89.8	87.8	87.8
42.5°	2758.5	1774.0	176.3	114.3	97.7	88.5	86.4	84.5	79.9	77.9	77.2
45°	3087.3	1861.9	149.2	104.3	88.5	80.5	79.3	75.9	70.0	68.0	68.0
47.5°	3324.3	1882.3	131.3	95.0	79.9	72.0	71.3	65.4	60.0	58.7	58.1
50°	3472.2	1842.0	116.8	85.8	72.0	64.0	62.1	54.8	51.5	50.2	49.5
52.5°	3571.8	1770.1	105.0	77.9	64.8	56.8	52.2	46.9	44.2	43.0	43.0
55°	3651.7	1668.4	93.1	70.7	58.7	50.8	44.2	40.3	37.6	36.3	36.3
57.5°	3674.2	1530.4	81.2	64.8	52.8	44.9	37.6	35.0	31.7	31.0	31.0
60°	3511.1	1281.6	72.0	57.5	47.6	39.0	33.0	29.7	26.4	25.8	25.1
62.5°	3081.3	991.6	63.4	50.8	41.6	33.7	28.4	24.4	21.8	21.8	21.8
65°	2350.4	664.8	55.4	44.2	36.3	28.4	24.4	19.8	18.5	18.5	19.1
67.5°	1407.0	361.8	47.6	37.6	31.0	23.7	20.5	17.2	16.5	17.2	17.2
69°	824.6	212.6	43.0	33.7	27.1	21.2	17.8	15.1	16.5	17.2	17.2
70°	509.0	143.3	39.6	30.4	24.4	19.1	16.5	14.5	15.9	16.5	16.5
72.5°	142.0	74.0	31.7	23.7	19.8	15.9	13.2	13.2	15.1	15.9	15.9
75°	92.5	54.8	24.4	17.8	15.1	12.6	11.3	12.6	14.5	15.1	15.1
77.5°	76.6	44.9	19.8	14.5	12.6	11.9	10.5	11.3	13.2	13.9	13.9
80°	70.0	31.7	15.9	13.2	11.3	10.5	9.9	9.2	11.9	12.6	12.6
82.5°	66.7	25.1	13.9	11.9	10.5	9.2	8.6	9.2	10.5	11.3	11.9
85°	41.6	16.5	12.6	11.3	9.2	8.6	8.6	8.6	9.9	10.5	10.5
87.5°	15.1	13.2	11.3	9.2	7.9	7.9	7.9	7.9	8.6	9.9	9.9
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)