

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: P191210

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191210
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-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K, 1050mA 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: 10110.9 lumens
Efficiency: N/A
Efficacy: 89.5 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

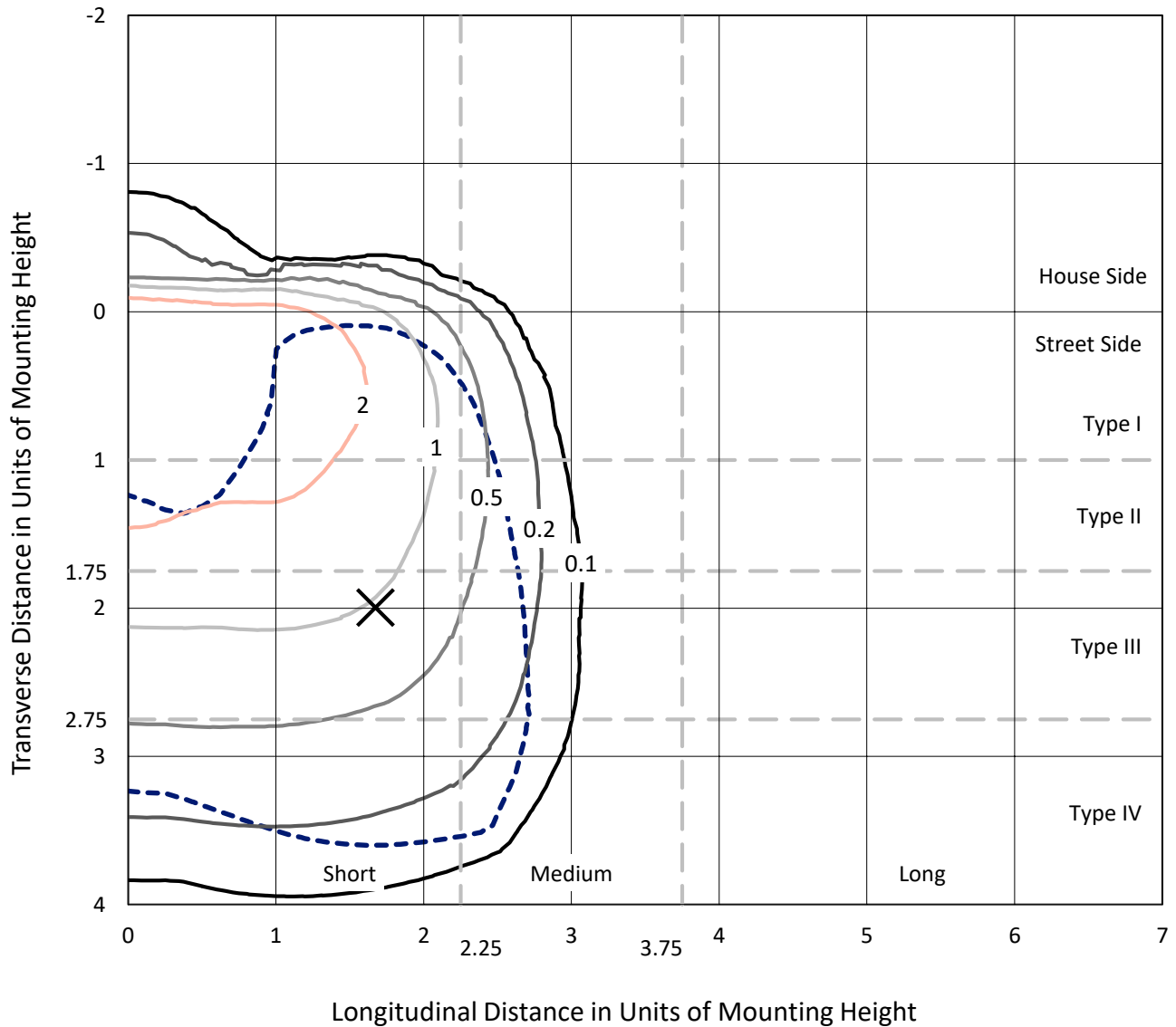
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

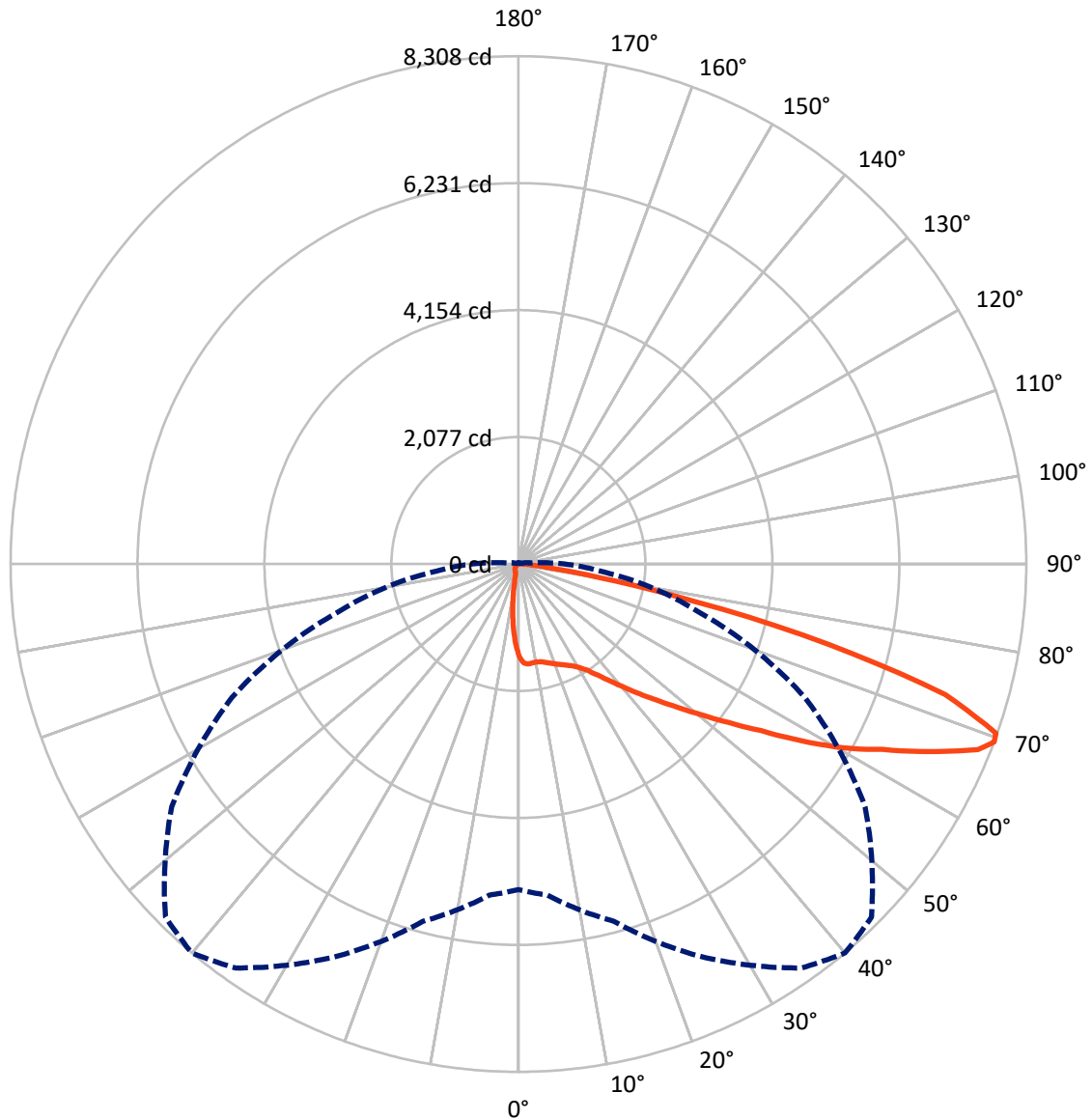
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.1 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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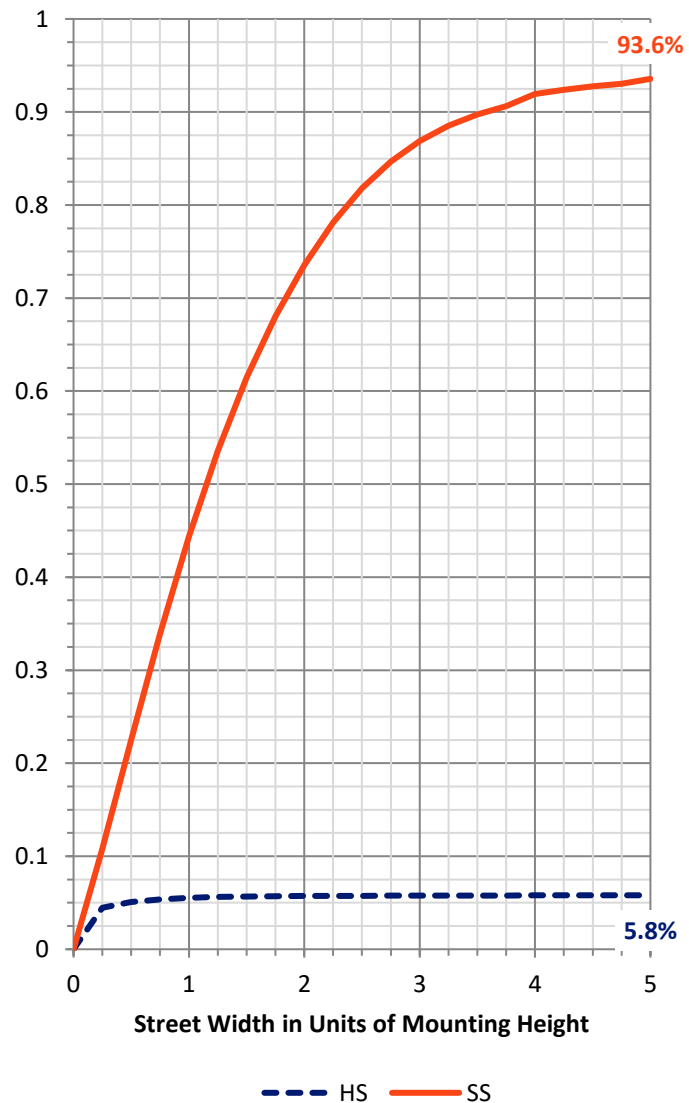
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	591.5	0.0	591.5
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	9519.3	0.0	9519.3
	% Fixture	94.1	0.0	94.1
Total	Lumens	10110.9	0.0	10110.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.5	1.2
10°-20°	301.2	3.0
20°-30°	507.3	5.0
30°-40°	830.5	8.2
40°-50°	1438.0	14.2
50°-60°	2265.0	22.4
60°-70°	2958.0	29.3
70°-80°	1523.5	15.1
80°-90°	164.8	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°	10110.9	100.0
0°-180°	10110.9	100.0



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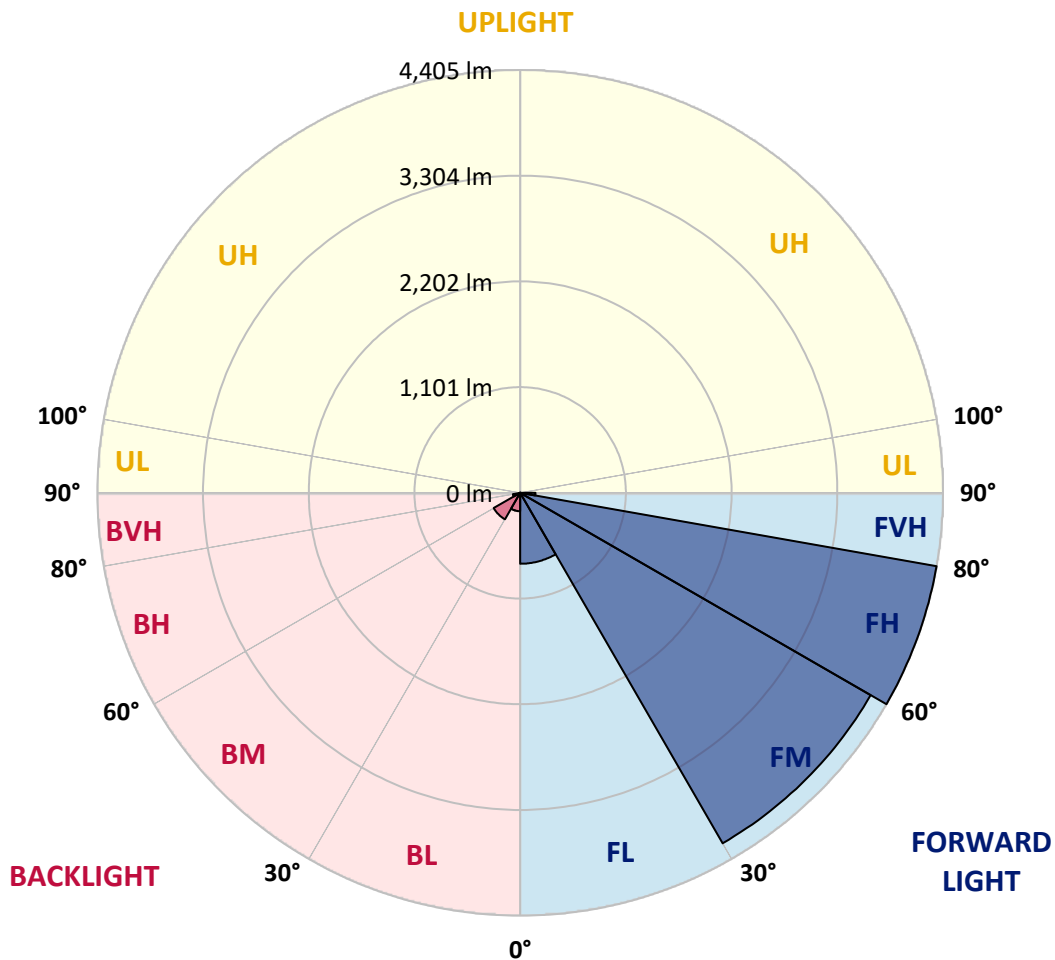
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	739.4	7.3			
FM	(30°-60°)	4215.6	41.7			
FH	(60°-80°)	4404.7	43.6			G2/5000
FVH	(80°-90°)	159.6	1.6			G2/225
BL	(0°-30°)	191.6	1.9	B1/500		
BM	(30°-60°)	317.9	3.1	B1/1000		
BH	(60°-80°)	76.8	0.8	B0/110		G0/110
BVH	(80°-90°)	5.2	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°	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6
2.5°	1658.7	1649.6	1644.2	1637.0	1627.9	1620.1	1617.2	1594.9	1573.8	1545.0	1511.8
5°	1689.4	1686.3	1676.7	1667.1	1656.3	1644.2	1637.6	1611.1	1581.1	1538.9	1481.1
7.5°	1692.4	1688.8	1676.7	1663.5	1648.4	1634.0	1622.6	1596.1	1568.4	1525.6	1455.2
10°	1687.6	1683.4	1674.3	1659.8	1641.2	1627.4	1616.0	1590.7	1567.2	1528.7	1450.4
12.5°	1682.1	1677.9	1673.8	1666.5	1650.2	1640.6	1631.0	1607.0	1585.9	1553.4	1467.8
15°	1687.6	1685.1	1689.9	1686.9	1677.9	1669.5	1659.8	1638.2	1618.9	1591.8	1499.7
17.5°	1710.4	1710.4	1725.5	1727.3	1718.9	1706.8	1693.0	1671.3	1655.0	1632.2	1537.7
20°	1764.0	1762.1	1781.5	1785.0	1764.6	1746.0	1725.5	1699.0	1686.3	1671.9	1575.0
22.5°	1856.0	1847.7	1859.1	1855.4	1815.1	1786.3	1761.0	1728.5	1721.8	1715.3	1616.6
25°	1975.8	1971.0	1978.8	1943.3	1872.3	1833.2	1803.2	1766.4	1766.4	1773.0	1663.5
27.5°	2149.7	2131.7	2105.2	2042.6	1936.1	1886.1	1853.7	1814.5	1824.7	1849.5	1725.5
30°	2327.9	2308.1	2247.2	2151.0	2013.8	1961.4	1923.5	1882.5	1906.6	1951.8	1808.5
32.5°	2503.7	2481.4	2395.3	2273.7	2125.1	2072.7	2036.0	1990.9	2031.2	2107.1	1930.1
35°	2674.0	2654.1	2554.8	2411.6	2273.1	2229.8	2196.1	2157.0	2208.8	2314.6	2101.7
37.5°	2865.4	2843.7	2722.7	2567.4	2453.1	2421.8	2397.1	2358.0	2448.2	2603.5	2340.5
40°	3100.7	3063.9	2900.9	2746.2	2661.3	2646.3	2629.4	2624.0	2764.2	2979.1	2659.0
42.5°	3370.3	3310.1	3087.5	2934.5	2890.0	2900.9	2896.7	2920.7	3159.7	3446.1	3046.6
45°	3639.9	3562.3	3295.0	3135.5	3141.6	3179.5	3203.0	3299.3	3655.0	3981.7	3463.6
47.5°	3868.6	3792.2	3494.3	3352.8	3425.0	3499.7	3563.4	3745.8	4164.1	4509.0	3788.0
50°	4064.2	3992.0	3705.5	3591.8	3754.2	3874.6	3978.2	4248.4	4711.8	4910.4	4015.5
52.5°	4224.3	4176.2	3924.6	3865.6	4130.4	4306.7	4458.4	4782.2	5196.9	5236.6	4192.4
55°	4380.2	4345.9	4159.9	4191.2	4572.2	4812.3	5004.3	5348.5	5614.6	5508.6	4362.2
57.5°	4559.5	4528.2	4428.4	4604.1	5152.9	5455.1	5664.5	5850.5	5982.2	5786.6	4522.2
60°	4742.5	4724.4	4726.9	5062.7	5819.8	6109.9	6225.4	6273.6	6343.3	6048.5	4531.3
62.5°	4917.0	4951.3	5068.1	5573.0	6458.3	6681.0	6739.4	6787.0	6705.0	6090.0	4186.4
65°	5212.5	5268.5	5547.2	6256.1	7160.7	7399.0	7459.2	7296.1	6762.2	5553.2	3405.2
67.5°	5357.0	5459.3	5956.3	6892.8	7841.9	8106.8	8084.5	7329.1	6068.3	4234.5	2185.2
69°	5326.9	5435.8	6050.9	7087.8	8068.2	8308.4	8166.9	6924.1	5169.8	3067.5	1341.5
70°	5207.7	5317.8	6002.2	7080.7	8097.2	8287.3	8014.1	6424.0	4371.2	2243.0	838.9
72.5°	4348.9	4444.0	5328.7	6400.0	7459.2	7304.5	6704.4	4450.6	2129.9	610.9	188.9
75°	2677.0	2729.9	3823.5	4821.4	5633.8	5236.6	4466.8	2214.2	634.9	172.8	104.8
77.5°	1414.3	1438.4	2093.2	2841.9	3571.3	2955.0	2289.4	863.7	292.5	108.3	75.8
80°	836.0	854.0	1127.3	1299.4	1545.5	1291.0	915.4	530.2	209.4	68.0	67.4
82.5°	478.4	489.9	817.3	722.2	609.1	520.0	455.6	502.6	125.8	45.7	69.8
85°	175.7	178.1	459.8	549.4	362.3	215.4	226.3	416.4	33.7	28.8	54.7
87.5°	81.8	80.0	236.5	336.4	211.9	136.7	176.4	91.5	13.2	18.6	15.0
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°	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6	1510.6
2.5°	1492.6	1470.3	1430.0	1388.5	1346.3	1313.8	1282.0	1256.6	1248.2	1232.6	1233.8
5°	1446.9	1405.9	1321.7	1236.1	1147.1	1073.7	1004.4	948.5	921.4	893.8	893.8
7.5°	1407.1	1347.5	1215.7	1076.7	932.8	811.9	703.0	621.1	575.9	539.8	539.2
10°	1392.0	1311.4	1127.3	928.0	727.6	562.7	433.3	350.3	307.5	279.9	278.7
12.5°	1398.7	1298.7	1059.3	790.8	539.2	361.7	250.9	197.4	179.3	170.9	170.9
15°	1417.9	1295.2	991.2	656.6	380.9	226.3	166.7	152.2	151.1	151.1	151.1
17.5°	1441.4	1296.4	921.4	526.0	259.4	161.9	143.8	142.0	143.2	143.2	143.2
20°	1465.5	1297.0	846.2	405.0	183.0	140.9	135.4	134.8	136.1	136.1	136.7
22.5°	1494.9	1300.0	771.0	302.7	151.1	133.0	128.8	128.8	129.4	129.4	128.8
25°	1528.7	1306.0	692.7	224.4	137.8	127.6	124.0	123.4	124.0	123.4	122.8
27.5°	1570.8	1314.4	605.5	175.7	131.8	122.1	119.2	119.2	118.6	117.9	117.3
30°	1623.7	1324.0	507.4	149.2	125.8	117.3	114.4	113.8	113.1	111.9	111.9
32.5°	1704.4	1345.1	410.4	135.4	119.2	110.8	108.3	108.3	107.1	105.9	105.4
35°	1828.4	1386.6	323.8	126.9	111.9	103.5	100.6	100.6	99.3	98.7	98.1
37.5°	1999.9	1449.8	251.5	119.2	104.8	95.6	92.7	92.1	90.8	89.7	89.1
40°	2228.0	1528.1	198.0	111.9	97.5	87.9	85.4	84.3	81.8	80.0	80.0
42.5°	2514.5	1617.2	160.7	104.1	89.1	80.6	78.9	77.0	72.8	71.0	70.4
45°	2814.2	1697.2	136.1	95.1	80.6	73.4	72.2	69.3	63.8	62.0	62.0
47.5°	3030.3	1715.8	119.8	86.6	72.8	65.6	65.0	59.5	54.7	53.6	53.0
50°	3165.1	1679.2	106.5	78.3	65.6	58.4	56.6	49.9	47.0	45.7	45.1
52.5°	3256.0	1613.5	95.6	71.0	59.0	51.8	47.6	42.8	40.3	39.1	39.1
55°	3328.8	1520.8	84.9	64.4	53.6	46.3	40.3	36.7	34.3	33.1	33.1
57.5°	3349.2	1395.1	74.1	59.0	48.2	40.9	34.3	31.9	28.8	28.3	28.3
60°	3200.6	1168.2	65.6	52.4	43.4	35.5	30.1	27.1	24.0	23.4	22.9
62.5°	2808.8	904.0	57.8	46.3	38.0	30.7	25.9	22.3	19.8	19.8	19.8
65°	2142.6	606.1	50.5	40.3	33.1	25.9	22.3	18.1	16.9	16.9	17.5
67.5°	1282.5	329.8	43.4	34.3	28.3	21.7	18.6	15.7	15.0	15.7	15.7
69°	751.7	193.7	39.1	30.7	24.7	19.2	16.3	13.8	15.0	15.7	15.7
70°	464.0	130.6	36.1	27.7	22.3	17.5	15.0	13.2	14.4	15.0	15.0
72.5°	129.4	67.4	28.8	21.7	18.1	14.4	12.1	12.1	13.8	14.4	14.4
75°	84.3	49.9	22.3	16.3	13.8	11.5	10.2	11.5	13.2	13.8	13.8
77.5°	69.8	40.9	18.1	13.2	11.5	10.8	9.6	10.2	12.1	12.7	12.7
80°	63.8	28.8	14.4	12.1	10.2	9.6	9.0	8.4	10.8	11.5	11.5
82.5°	60.8	22.9	12.7	10.8	9.6	8.4	7.8	8.4	9.6	10.2	10.8
85°	38.0	15.0	11.5	10.2	8.4	7.8	7.8	7.8	9.0	9.6	9.6
87.5°	13.8	12.1	10.2	8.4	7.3	7.3	7.3	7.3	7.8	9.0	9.0
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)