

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: STREETWORKS

Report Number: P265658

Luminaire Tested: **ARCH-L-AF72-180-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265658
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14278.6 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G3

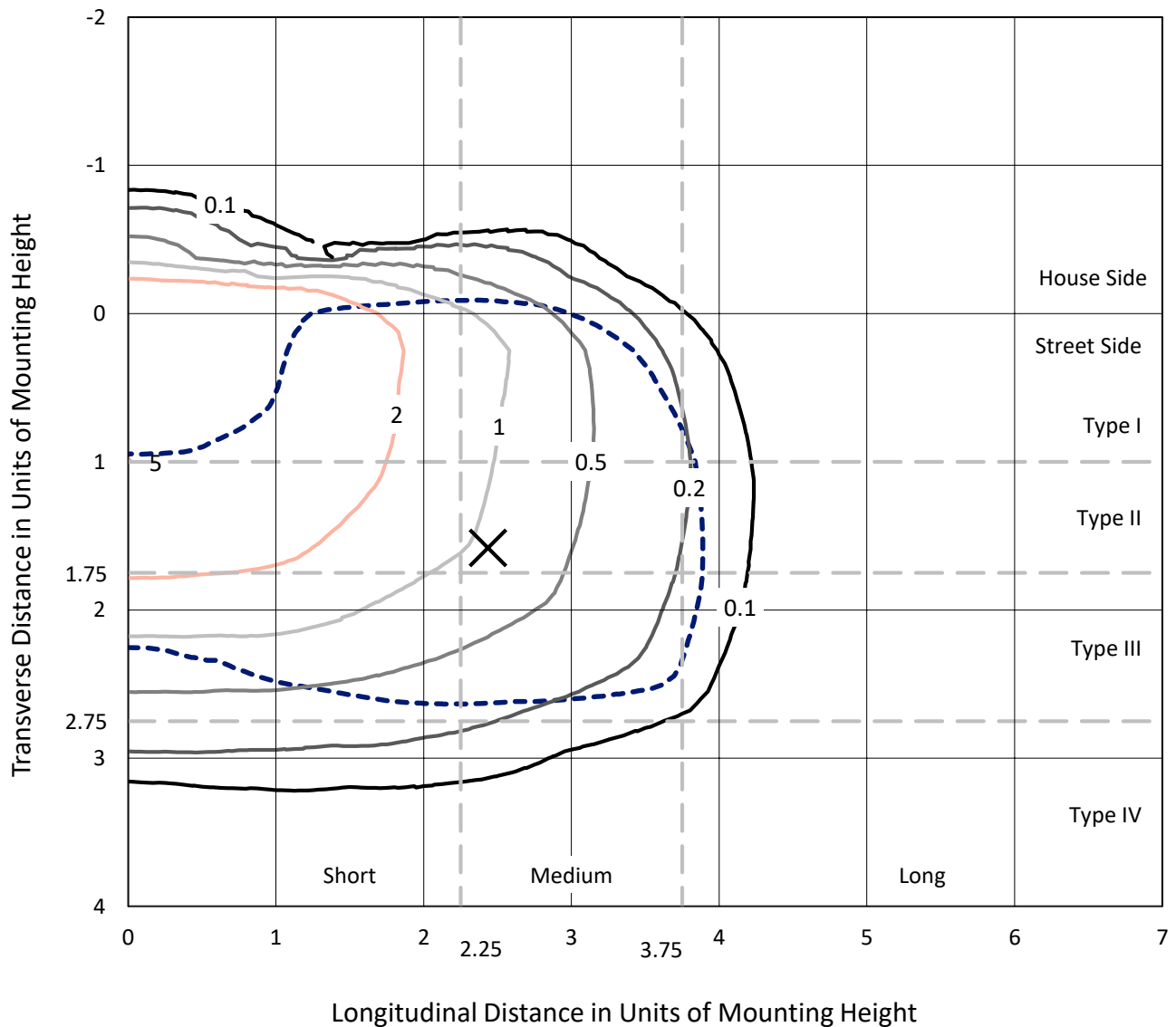
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P265658
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

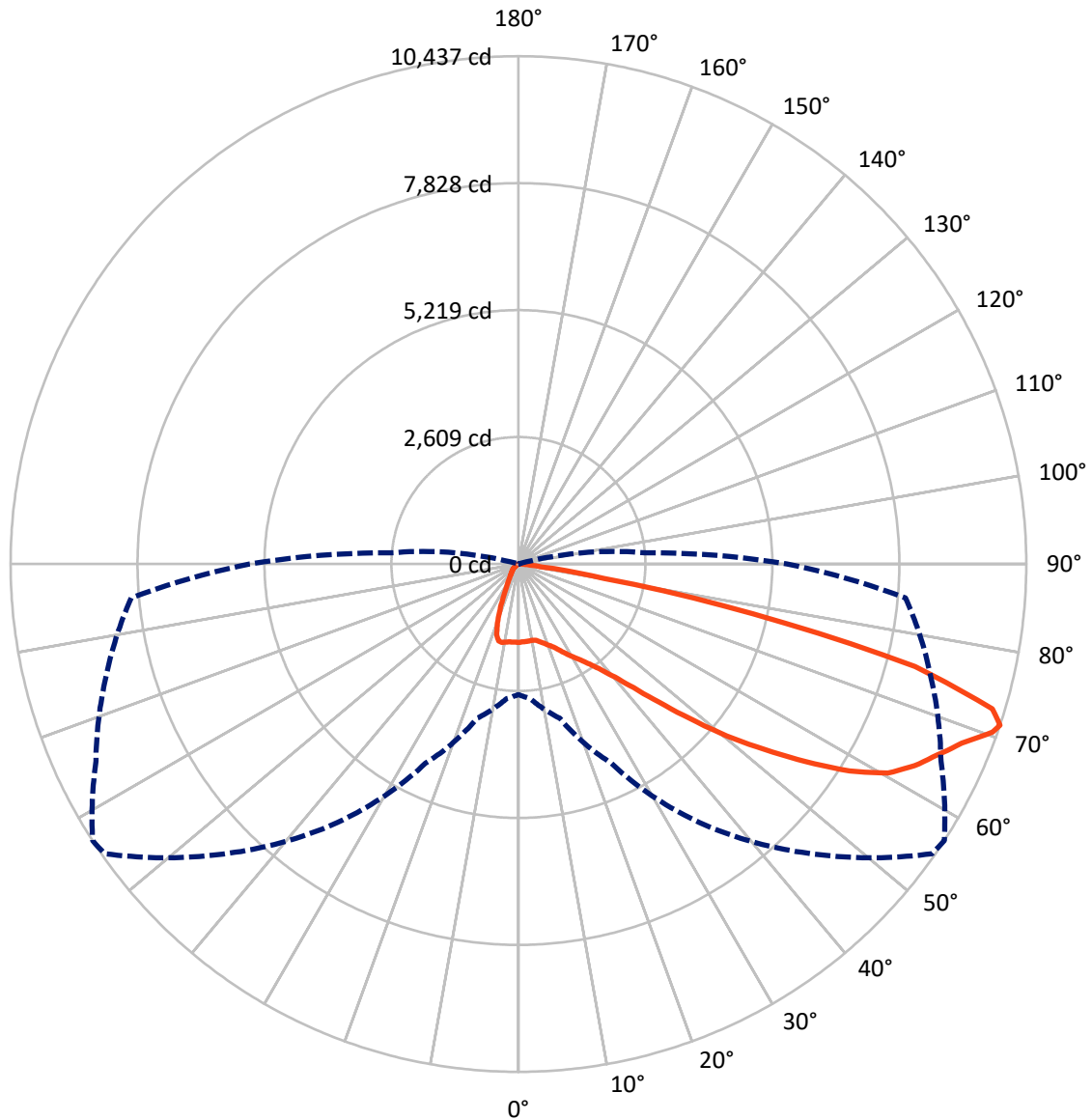


Based on 20 foot mounting height. Maximum calculated value = 5 fc
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P265658

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T3-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



REPORT NUMBER: P265658

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T3-7027-HSS

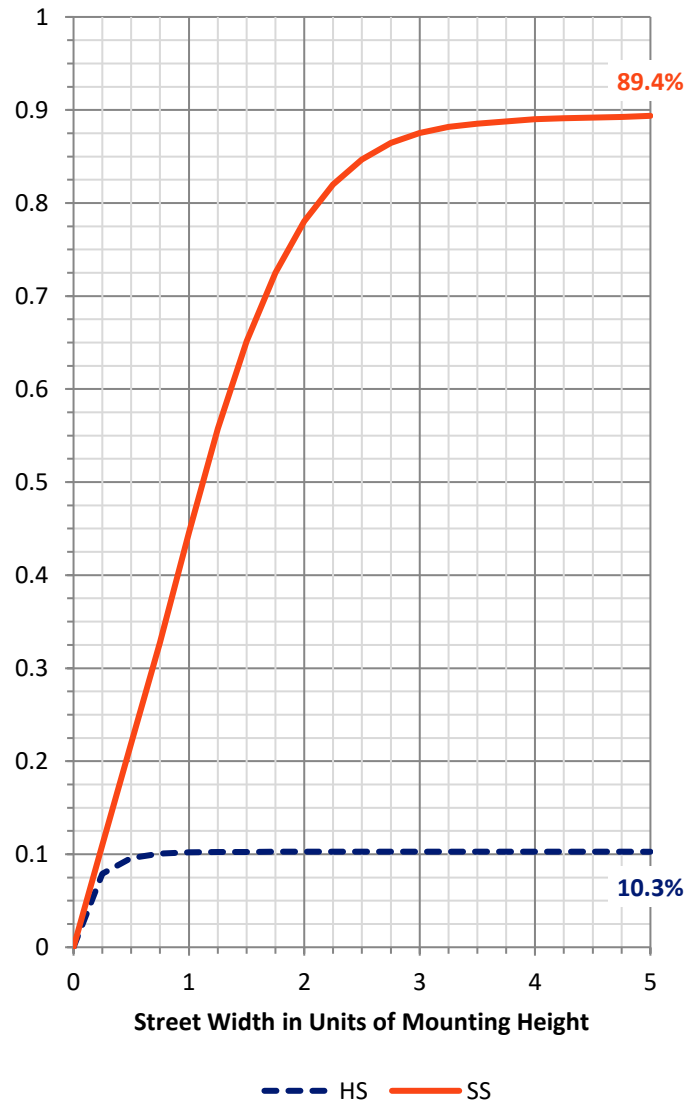
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1479.7	0.0	1479.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	12798.9	0.0	12798.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	14278.6	0.0	14278.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	1.1
10°-20°	405.2	2.8
20°-30°	632.1	4.4
30°-40°	1068.4	7.5
40°-50°	2075.1	14.5
50°-60°	3484.7	24.4
60°-70°	4158.6	29.1
70°-80°	2191.7	15.3
80°-90°	111.4	0.8
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°	14278.6	100.0
0°-180°	14278.6	100.0



REPORT NUMBER: P265658

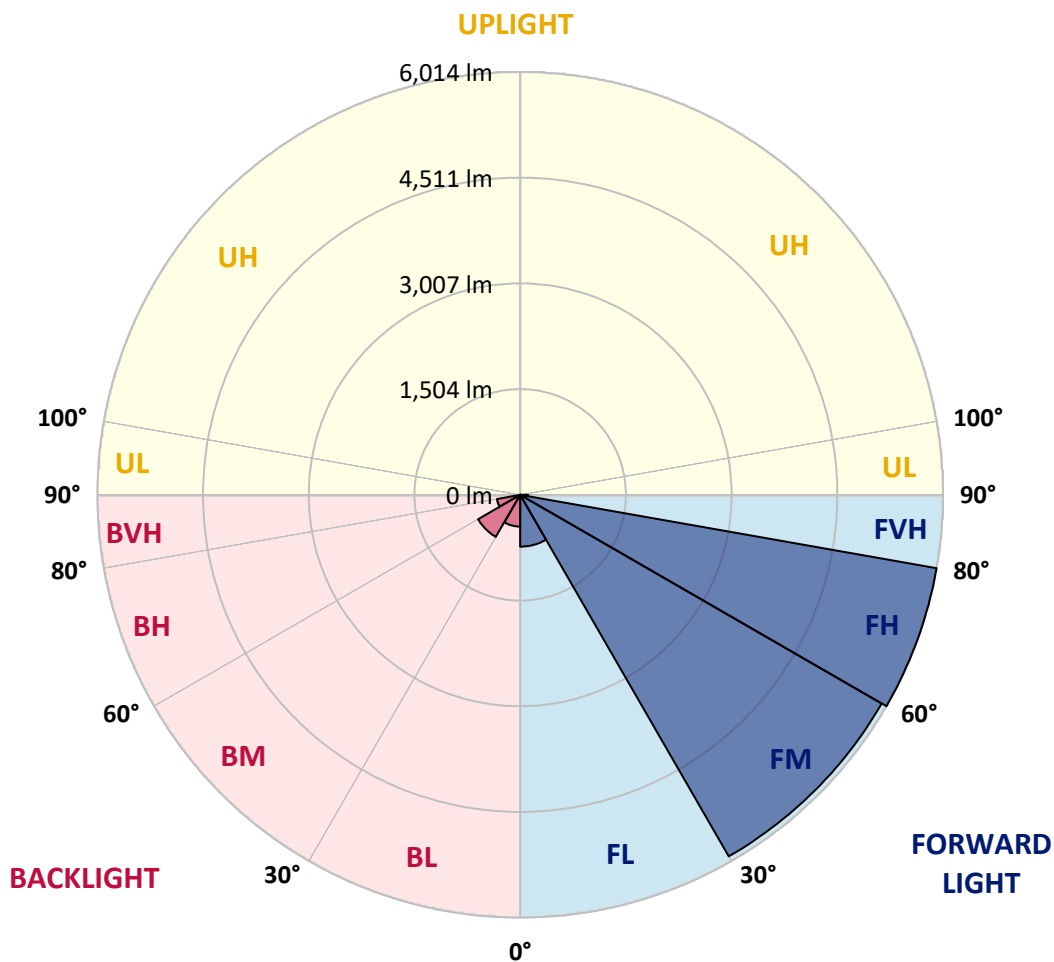
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	737.2	5.2			
FM	(30°-60°)	5937.2	41.6			
FH	(60°-80°)	6014.2	42.1			G3/7500
FVH	(80°-90°)	110.3	0.8			G2/225
BL	(0°-30°)	451.7	3.2	B1/500		
BM	(30°-60°)	690.9	4.8	B1/1000		
BH	(60°-80°)	336.0	2.4	B1/500		G1/500
BVH	(80°-90°)	1.1	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-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6
2.5°	1590.4	1590.4	1590.4	1593.8	1597.0	1597.0	1603.7	1600.4	1600.4	1600.4	1607.1
5°	1547.2	1550.5	1553.8	1560.4	1573.8	1583.7	1600.4	1600.4	1603.7	1610.4	1613.6
7.5°	1487.2	1490.6	1500.6	1513.9	1540.6	1563.8	1590.4	1597.0	1607.1	1623.6	1630.3
10°	1450.7	1457.3	1470.6	1487.2	1517.1	1547.2	1580.4	1590.4	1620.4	1650.2	1667.0
12.5°	1440.7	1444.0	1457.3	1483.9	1520.6	1557.1	1600.4	1610.4	1653.6	1700.2	1726.8
15°	1457.3	1460.6	1467.3	1497.2	1540.6	1587.0	1643.7	1657.0	1710.3	1763.5	1796.7
17.5°	1487.2	1487.2	1493.9	1520.6	1567.2	1620.4	1693.6	1713.4	1773.4	1833.4	1869.9
20°	1507.3	1507.3	1517.1	1543.8	1597.0	1667.0	1753.4	1780.0	1846.6	1913.1	1946.4
22.5°	1527.2	1530.5	1540.6	1570.4	1630.3	1726.8	1826.7	1853.3	1929.7	1999.6	2033.0
25°	1583.7	1580.4	1583.7	1610.4	1680.2	1800.1	1926.4	1959.7	2039.6	2116.0	2132.8
27.5°	1740.1	1733.5	1690.3	1673.6	1726.8	1876.6	2052.8	2086.1	2179.3	2255.9	2255.9
30°	2099.5	2086.1	1979.7	1843.3	1800.1	1946.4	2172.7	2219.3	2339.0	2405.7	2385.5
32.5°	2555.3	2525.3	2389.0	2156.0	1983.0	2039.6	2299.1	2352.3	2505.5	2562.0	2518.7
35°	3054.3	3051.1	2881.4	2581.9	2335.8	2232.6	2462.2	2525.3	2718.4	2768.2	2698.4
37.5°	3583.3	3596.8	3483.5	3071.0	2781.5	2548.6	2678.3	2751.6	2987.9	3047.7	2981.1
40°	4172.3	4169.0	4125.7	3636.7	3317.3	2997.9	2991.1	3057.7	3343.9	3437.1	3343.9
42.5°	4917.6	4910.9	4754.5	4315.4	3966.0	3583.3	3446.9	3470.3	3789.7	3942.8	3806.3
45°	5676.2	5629.7	5449.9	5070.7	4761.2	4308.7	4049.2	4049.2	4322.0	4531.7	4318.7
47.5°	6098.8	6052.2	5978.9	5769.4	5676.2	5170.5	4787.8	4741.3	4954.2	5167.2	4867.7
50°	6654.5	6654.5	6471.4	6391.6	6551.2	6195.3	5603.0	5556.5	5659.6	5829.3	5436.6
52.5°	7093.6	7013.7	6884.0	6953.9	7409.7	7246.6	6418.2	6328.4	6408.1	6451.4	5932.4
55°	7276.6	7200.1	7190.2	7446.3	8151.7	7925.4	7253.4	7173.4	7166.8	6953.9	6364.9
57.5°	7313.2	7246.6	7373.1	7822.4	8873.6	8481.1	8085.1	8025.3	7838.9	7306.5	6807.4
60°	7003.7	7037.1	7343.1	8028.5	9299.6	8963.5	8787.2	8724.0	8294.7	7605.9	7299.8
62.5°	6368.3	6448.2	7020.4	8048.5	9143.2	9159.7	9176.5	9133.2	8647.4	7878.9	7795.6
65°	5616.4	5639.6	6328.4	7772.3	8870.4	9099.9	9462.6	9459.2	8916.9	8184.9	8354.6
67.5°	4628.2	4668.1	5263.7	6840.8	8324.8	9073.3	9838.5	9828.5	9223.0	8534.3	8687.4
70°	3443.7	3493.6	3976.0	5320.2	7106.9	8740.6	10331.0	10337.6	9545.7	8800.4	8457.8
71°	2685.0	2775.0	3280.6	4518.4	6484.8	8404.5	10377.6	10437.4	9582.4	8763.9	7985.4
72.5°	1317.5	1424.1	2059.5	3180.8	5336.8	7652.7	10071.4	10187.9	9352.9	8308.1	6827.5
75°	342.8	362.6	615.5	1300.9	2861.5	5070.7	8121.8	8417.8	7646.0	6325.1	4172.3
77.5°	216.2	222.9	289.4	505.7	1071.4	1926.4	4771.2	4917.6	4368.6	3204.2	1470.6
80°	153.0	156.3	183.0	326.1	625.5	562.2	1716.8	1780.0	1580.4	848.4	262.8
82.5°	93.2	93.2	133.0	209.7	385.9	306.1	452.4	482.4	425.8	236.3	86.4
85°	53.2	56.6	83.2	143.1	183.0	149.7	169.7	179.8	183.0	156.3	36.7
87.5°	43.3	46.6	73.2	119.7	99.8	73.2	73.2	76.5	79.9	93.2	16.6
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°	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6	1613.6
2.5°	1607.1	1607.1	1610.4	1607.1	1607.1	1607.1	1610.4	1610.4	1610.4	1616.9	1620.4
5°	1613.6	1613.6	1613.6	1610.4	1607.1	1607.1	1613.6	1616.9	1616.9	1627.0	1627.0
7.5°	1630.3	1630.3	1623.6	1616.9	1610.4	1600.4	1603.7	1607.1	1603.7	1607.1	1607.1
10°	1667.0	1667.0	1657.0	1643.7	1623.6	1593.8	1553.8	1503.9	1457.3	1440.7	1434.1
12.5°	1726.8	1723.5	1703.5	1680.2	1637.0	1533.9	1384.1	1207.9	1061.3	1021.5	1008.2
15°	1793.3	1786.6	1763.5	1723.5	1607.1	1334.3	1021.5	795.2	655.5	622.2	615.5
17.5°	1863.3	1853.3	1820.0	1740.1	1470.6	991.5	658.7	499.1	422.6	415.8	419.1
20°	1936.4	1923.1	1876.6	1706.9	1187.7	662.1	425.8	385.9	379.4	379.4	382.6
22.5°	2019.6	2003.0	1939.8	1587.0	865.1	439.2	366.0	362.6	359.3	356.0	356.0
25°	2116.0	2096.1	1999.6	1370.9	595.5	359.3	349.4	339.4	332.7	326.1	322.8
27.5°	2232.6	2206.0	2046.2	1104.6	409.3	336.1	329.4	312.8	299.4	286.1	286.1
30°	2349.0	2315.7	2033.0	831.8	332.7	312.8	299.4	279.6	259.5	246.2	242.9
32.5°	2472.1	2438.9	1946.4	558.9	302.8	286.1	269.5	239.6	216.2	199.7	196.3
35°	2655.1	2628.5	1776.8	369.4	272.8	252.9	229.5	199.7	169.7	153.0	149.7
37.5°	2927.9	2894.7	1567.2	282.7	239.6	209.7	189.6	156.3	126.4	109.9	106.4
40°	3293.9	3194.2	1317.5	249.5	209.7	173.1	146.5	113.1	89.8	79.9	79.9
42.5°	3719.8	3483.5	1048.1	226.3	186.3	143.1	106.4	76.5	63.2	59.8	59.8
45°	4172.3	3753.1	778.7	209.7	163.0	113.1	76.5	53.2	46.6	43.3	43.3
47.5°	4638.0	3972.7	542.3	189.6	136.5	86.4	53.2	40.0	33.2	30.0	30.0
50°	5073.9	4115.8	382.6	169.7	116.4	63.2	40.0	30.0	23.3	23.3	23.3
52.5°	5376.7	4102.5	276.1	146.5	89.8	43.3	26.6	19.9	19.9	19.9	19.9
55°	5643.0	4052.6	216.2	126.4	69.9	30.0	19.9	16.6	16.6	13.4	13.4
57.5°	5869.2	3972.7	183.0	103.1	49.9	23.3	13.4	13.4	10.1	10.1	10.1
60°	6062.2	3872.9	153.0	86.4	33.2	16.6	10.1	6.6	6.6	3.4	6.6
62.5°	6325.1	3809.6	133.0	66.6	23.3	10.1	6.6	3.4	3.4	0.0	0.0
65°	6518.0	3689.9	113.1	46.6	13.4	6.6	3.4	3.4	0.0	0.0	0.0
67.5°	6524.7	3473.6	83.2	26.6	10.1	6.6	3.4	0.0	0.0	0.0	0.0
70°	5998.9	2961.3	53.2	13.4	6.6	3.4	3.4	0.0	0.0	0.0	0.0
71°	5516.5	2621.9	43.3	10.1	6.6	3.4	0.0	0.0	0.0	0.0	0.0
72.5°	4545.0	1926.4	33.2	10.1	3.4	3.4	0.0	0.0	0.0	0.0	0.0
75°	2505.5	698.7	16.6	6.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	801.8	213.0	10.1	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	136.5	33.2	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.6	13.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.4	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	3.4	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)