

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: P198887

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198887
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-SL4-7050-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 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: 9824 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 111
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

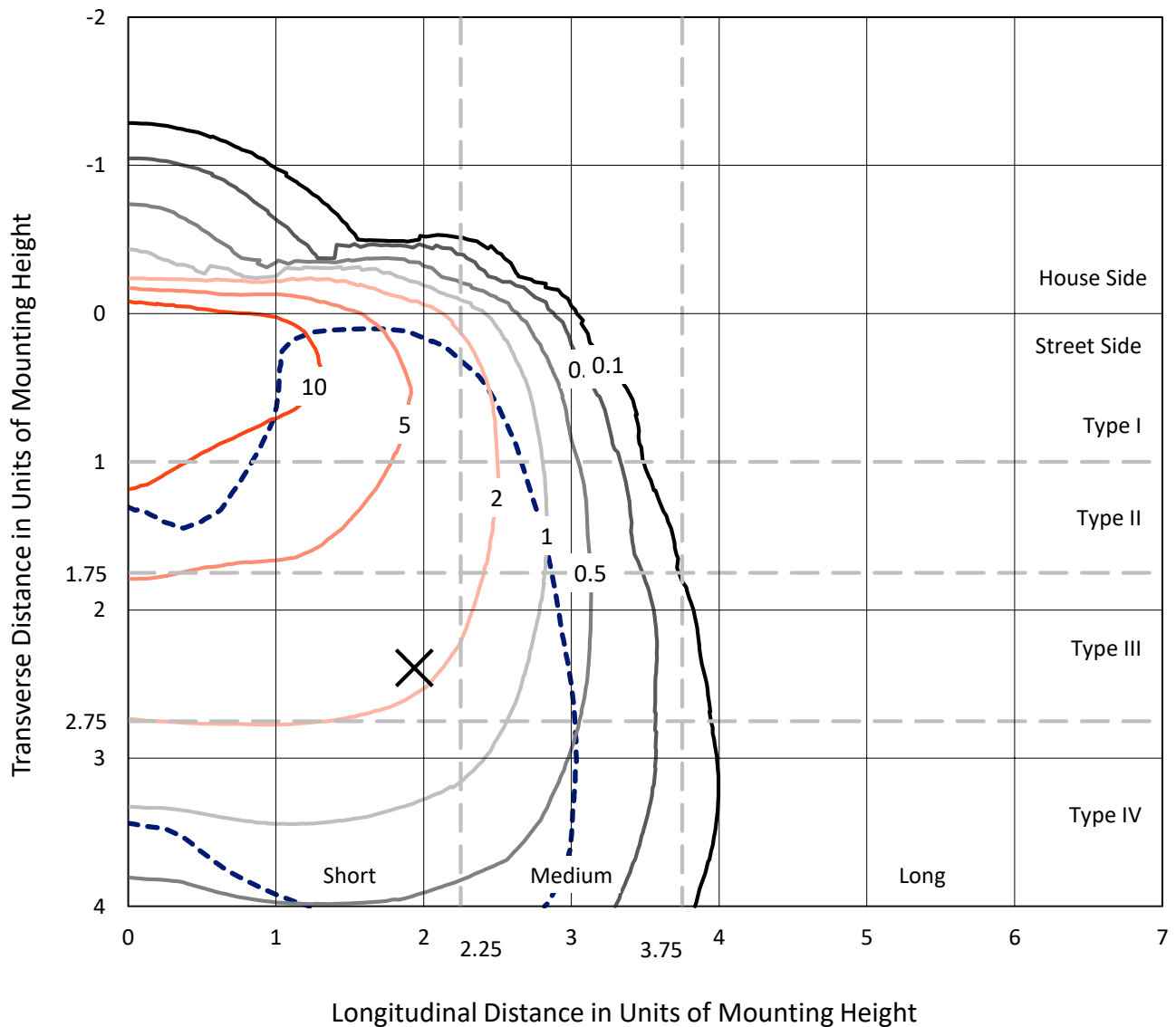


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

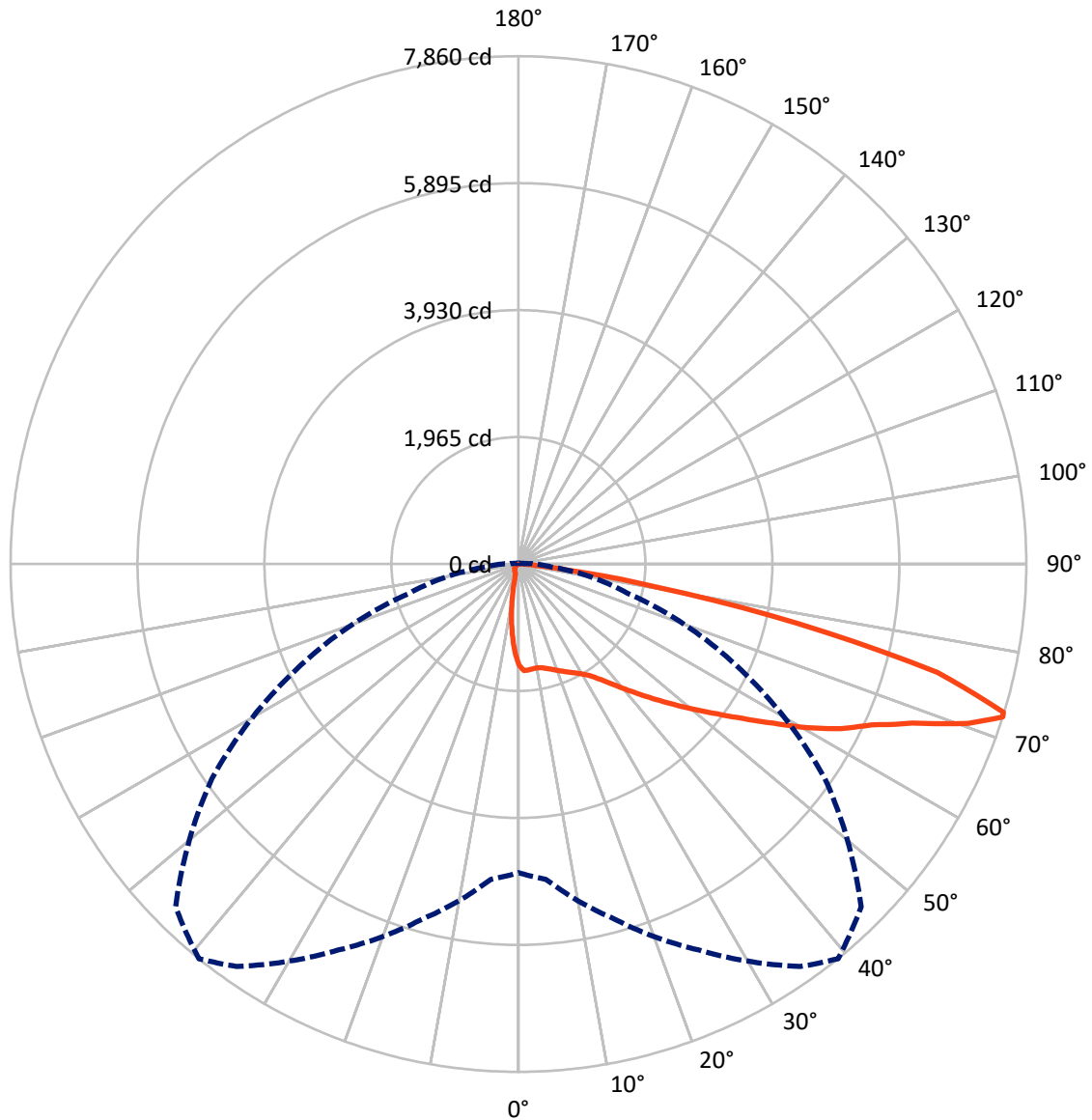


Based on 10 foot mounting height. Maximum calculated value = 16.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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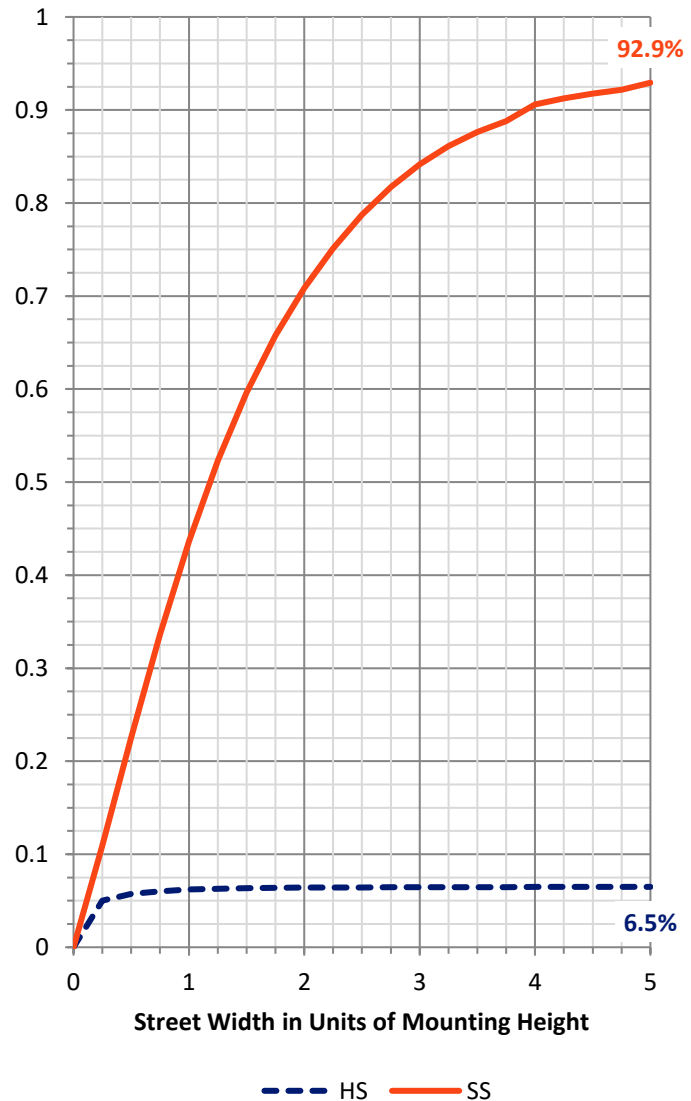
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	643.8	0.0	643.8
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	9180.2	0.0	9180.2
	% Fixture	93.4	0.0	93.4
Total	Lumens	9824.0	0.0	9824.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.9	1.3
10°-20°	309.6	3.2
20°-30°	514.2	5.2
30°-40°	819.6	8.3
40°-50°	1352.9	13.8
50°-60°	2043.1	20.8
60°-70°	2661.4	27.1
70°-80°	1798.3	18.3
80°-90°	197.0	2.0
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°	9824.0	100.0
0°-180°	9824.0	100.0

Coefficient of Utilization



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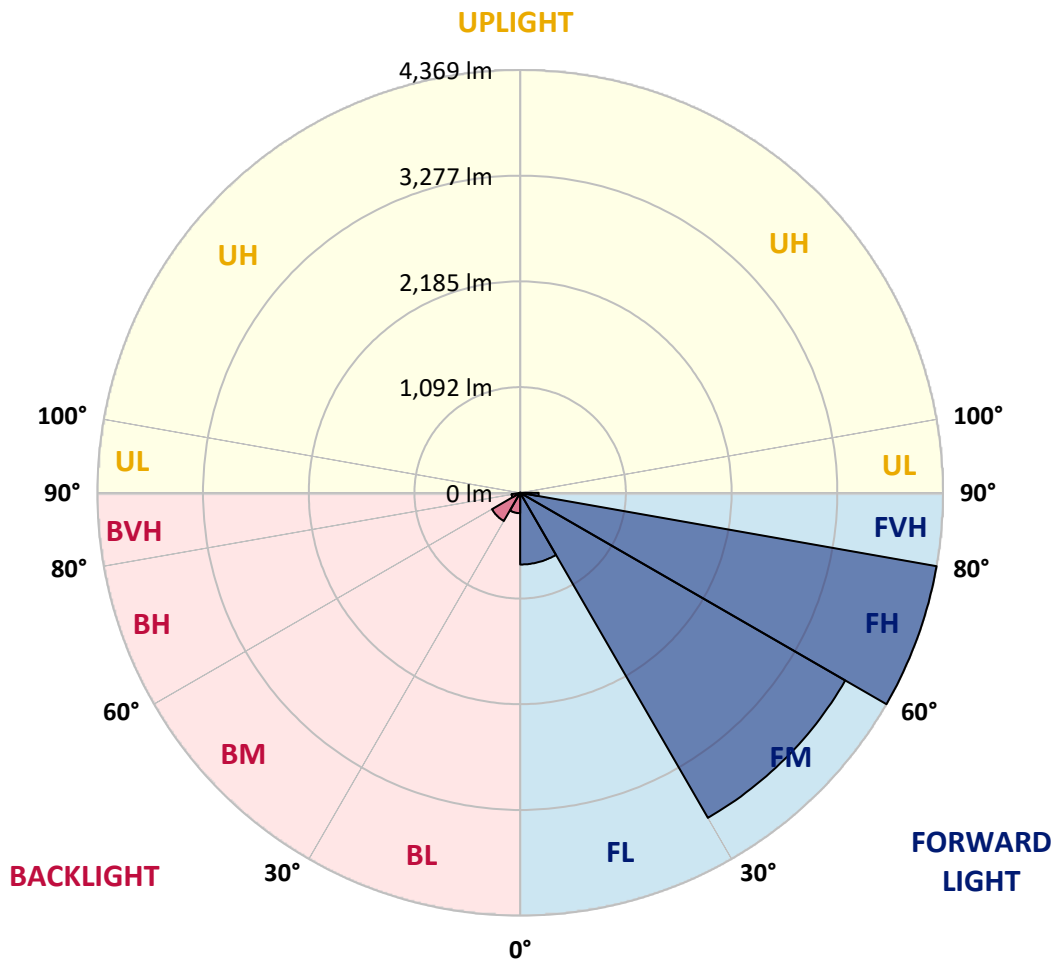
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	741.0	7.5			
FM	(30°-60°)	3878.6	39.5			
FH	(60°-80°)	4369.3	44.5			G2/5000
FVH	(80°-90°)	191.3	1.9			G2/225
BL	(0°-30°)	210.8	2.1	B1/500		
BM	(30°-60°)	336.9	3.4	B1/1000		
BH	(60°-80°)	90.5	0.9	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°	39°	45°	55°	65°	75°	85°
0°	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4
2.5°	1674.3	1677.4	1673.6	1666.6	1656.6	1650.4	1641.9	1623.4	1600.2	1580.1	1556.9
5°	1687.5	1689.0	1684.4	1671.2	1655.8	1647.3	1636.5	1616.4	1592.5	1564.7	1523.0
7.5°	1691.3	1690.6	1685.1	1668.9	1645.0	1634.2	1615.6	1590.9	1566.2	1540.7	1493.6
10°	1689.8	1689.8	1685.9	1670.5	1643.4	1633.4	1612.6	1586.3	1555.4	1529.9	1479.7
12.5°	1684.4	1687.5	1685.1	1676.7	1656.6	1648.9	1630.3	1604.1	1574.7	1548.5	1495.2
15°	1691.3	1696.0	1700.6	1697.5	1685.9	1679.0	1662.0	1635.0	1611.0	1583.2	1526.1
17.5°	1719.1	1729.2	1740.0	1740.8	1728.4	1716.0	1696.7	1668.9	1645.8	1620.3	1558.5
20°	1771.6	1779.4	1799.4	1803.3	1778.6	1760.8	1733.8	1701.4	1678.2	1656.6	1588.6
22.5°	1849.6	1858.1	1874.4	1869.0	1827.3	1806.4	1772.4	1735.3	1711.4	1699.1	1623.4
25°	1967.8	1970.1	1974.0	1950.0	1881.3	1858.1	1816.4	1774.7	1755.4	1753.9	1672.8
27.5°	2106.8	2109.9	2092.9	2039.6	1941.6	1911.4	1864.3	1826.5	1817.2	1828.8	1735.3
30°	2265.9	2266.7	2219.6	2133.1	2011.1	1977.9	1929.2	1887.5	1896.0	1924.6	1815.7
32.5°	2428.9	2421.1	2356.3	2243.5	2106.1	2065.9	2024.2	1982.5	2007.2	2065.1	1933.1
35°	2577.9	2574.8	2498.4	2367.1	2229.6	2194.1	2164.0	2120.0	2160.1	2254.3	2092.9
37.5°	2727.0	2724.7	2637.4	2500.7	2381.8	2356.3	2333.9	2299.9	2365.5	2503.8	2306.8
40°	2891.5	2887.6	2780.3	2649.0	2558.6	2544.7	2531.6	2516.9	2628.9	2821.2	2573.3
42.5°	3094.6	3077.6	2931.6	2810.4	2753.2	2757.1	2757.9	2772.5	2947.9	3198.9	2887.6
45°	3327.8	3290.0	3083.8	2983.4	2967.2	2990.3	3013.5	3074.5	3319.3	3633.7	3235.1
47.5°	3554.1	3493.1	3259.1	3169.5	3202.7	3250.6	3306.2	3425.1	3736.4	4088.5	3550.2
50°	3748.7	3686.2	3432.9	3358.7	3464.5	3535.6	3634.4	3814.4	4176.6	4473.1	3748.7
52.5°	3901.6	3852.2	3616.7	3567.2	3754.9	3852.2	4007.4	4243.8	4592.1	4726.5	3887.7
55°	4014.4	3989.7	3792.7	3799.7	4077.7	4218.3	4411.4	4678.6	4942.7	4923.4	3992.0
57.5°	4141.8	4122.5	3977.3	4073.9	4466.2	4647.7	4870.9	5085.6	5197.6	5081.7	4093.9
60°	4272.3	4278.5	4201.3	4405.9	4946.6	5147.4	5342.0	5395.3	5416.1	5242.3	4201.3
62.5°	4371.2	4397.5	4404.4	4764.3	5439.3	5610.7	5694.9	5657.1	5652.4	5457.8	4192.8
65°	4484.7	4553.5	4667.8	5157.4	5887.2	6000.0	6060.2	6115.0	5999.2	5521.9	3780.4
67.5°	4680.9	4789.0	5046.2	5639.3	6404.7	6571.5	6742.1	6684.2	6050.9	4870.9	2879.9
70°	4945.0	5077.1	5531.2	6268.7	7106.7	7386.2	7529.1	6638.7	5137.3	3365.7	1519.1
72°	4778.2	4897.9	5681.0	6590.0	7604.0	7860.4	7502.9	5790.7	3724.0	1744.6	508.9
72.5°	4616.0	4739.6	5633.1	6586.1	7653.5	7849.6	7332.2	5456.3	3295.4	1357.7	350.6
75°	3202.7	3358.7	4829.2	5920.4	6911.3	6695.8	5610.0	3303.9	1194.0	233.2	115.8
77.5°	1655.8	1776.3	2929.3	4183.5	4816.8	4411.4	3315.5	1433.4	330.5	123.6	76.5
80°	1026.4	1085.8	1370.1	2061.3	2502.2	2188.7	1462.7	579.2	211.6	73.4	61.0
82.5°	531.3	576.9	862.7	831.8	924.4	768.4	539.8	485.0	130.5	45.6	62.6
85°	174.5	185.4	529.8	553.0	395.4	265.7	239.4	462.6	37.8	29.3	53.3
87.5°	23.2	27.0	186.1	316.6	194.6	120.5	143.6	163.0	13.1	16.2	14.7
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°	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4	1572.4
2.5°	1541.5	1531.5	1499.8	1468.1	1431.8	1398.6	1372.4	1355.4	1363.1	1337.6	1341.5
5°	1497.5	1472.0	1402.5	1327.6	1246.5	1170.8	1110.6	1065.8	1057.3	1018.7	1020.2
7.5°	1455.0	1413.3	1300.5	1177.0	1042.6	933.7	834.9	748.4	717.5	685.8	667.3
10°	1431.8	1374.7	1214.8	1034.9	845.7	685.8	546.8	437.9	392.3	359.1	342.9
12.5°	1438.8	1363.1	1150.7	905.9	657.2	454.1	308.9	229.4	201.6	186.1	180.7
15°	1462.0	1365.4	1092.8	780.0	478.1	274.9	181.5	155.2	152.9	152.1	151.4
17.5°	1483.6	1367.7	1031.8	648.7	319.7	175.3	146.0	143.6	143.6	143.6	143.6
20°	1506.0	1368.5	964.6	511.3	210.1	143.6	137.5	135.9	137.5	137.5	137.5
22.5°	1532.2	1373.9	899.7	377.7	155.2	135.2	131.3	130.5	131.3	131.3	130.5
25°	1564.7	1385.5	829.4	270.3	140.6	129.7	125.9	125.1	125.9	125.1	125.1
27.5°	1607.9	1400.9	747.6	193.8	134.4	124.3	120.5	120.5	120.5	119.7	119.7
30°	1663.5	1419.5	637.9	152.9	128.2	118.9	115.8	115.8	115.1	114.3	114.3
32.5°	1743.1	1449.6	518.2	138.2	121.3	112.0	108.9	109.7	108.9	108.1	107.3
35°	1855.8	1496.7	400.0	130.5	114.3	105.0	101.9	101.9	101.9	100.4	100.4
37.5°	2015.7	1568.5	299.7	122.8	107.3	98.1	94.2	94.2	93.4	91.9	92.7
40°	2213.4	1658.9	217.0	115.8	100.4	90.4	87.3	85.7	84.2	82.6	82.6
42.5°	2451.3	1746.9	163.0	108.9	93.4	84.2	80.3	78.8	75.7	74.1	73.4
45°	2717.7	1840.4	135.2	100.4	85.7	77.2	74.1	71.1	67.2	64.9	64.1
47.5°	2942.4	1897.5	120.5	91.9	78.0	70.3	67.2	62.6	57.9	56.4	56.4
50°	3077.6	1873.6	108.1	83.4	70.3	63.3	59.5	53.3	50.2	48.7	47.9
52.5°	3153.3	1802.5	98.1	76.5	63.3	55.6	50.2	44.8	43.2	41.7	41.7
55°	3205.0	1699.8	87.3	69.5	57.1	48.7	42.5	38.6	37.1	36.3	35.5
57.5°	3254.5	1574.7	77.2	63.3	51.0	43.2	36.3	34.8	31.7	30.9	30.9
60°	3269.1	1402.5	68.0	56.4	45.6	37.8	31.7	29.3	26.3	25.5	25.5
62.5°	3082.2	1116.0	60.2	47.9	40.2	32.4	27.8	24.7	21.6	21.6	21.6
65°	2575.6	757.6	51.7	41.7	35.5	27.8	23.9	20.1	18.5	18.5	18.5
67.5°	1794.0	422.4	44.0	35.5	30.1	23.2	20.1	17.0	16.2	17.0	17.0
70°	808.6	167.6	37.1	29.3	24.7	19.3	17.0	14.7	16.2	16.2	16.2
72°	242.5	89.6	30.9	23.9	20.1	17.0	14.7	13.9	15.4	16.2	16.2
72.5°	179.9	80.3	29.3	23.2	20.1	16.2	13.9	13.9	15.4	16.2	16.2
75°	92.7	54.8	22.4	17.0	14.7	13.1	11.6	13.1	15.4	15.4	15.4
77.5°	72.6	44.8	18.5	13.1	12.4	11.6	10.8	12.4	13.9	13.9	13.9
80°	68.0	29.3	14.7	12.4	10.8	10.0	10.0	10.8	12.4	13.1	13.1
82.5°	68.7	23.9	13.1	11.6	10.0	9.3	9.3	10.0	11.6	12.4	12.4
85°	44.0	16.2	11.6	10.0	9.3	8.5	8.5	9.3	10.8	11.6	11.6
87.5°	14.7	12.4	10.0	9.3	7.7	7.7	7.7	7.7	9.3	10.0	10.8
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)