

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: P237225

Luminaire Tested: **ARCH-L-AF72-120-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237225
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-120-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 530mA 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: 12112 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G3

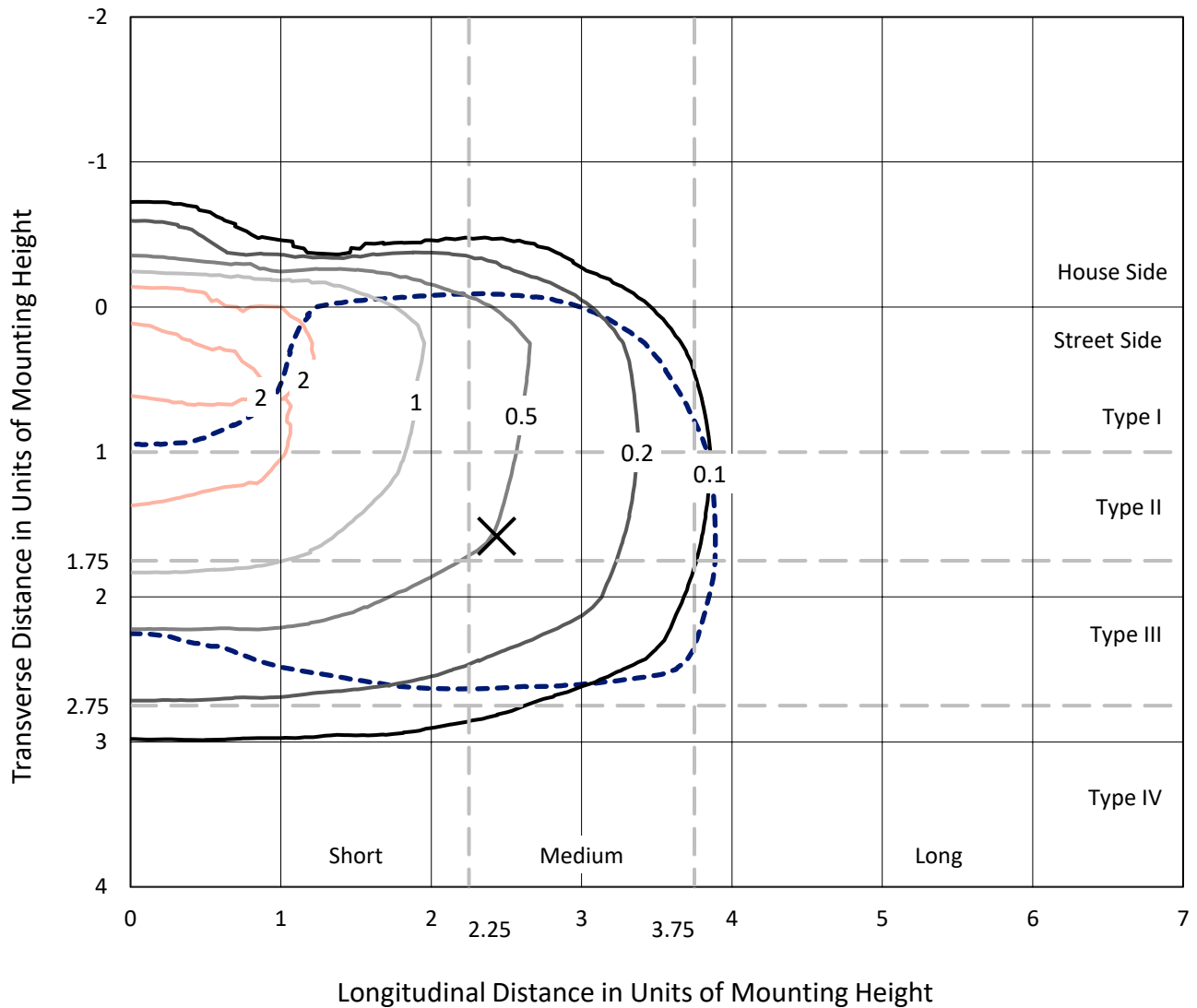
Input Watts (W): 123
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

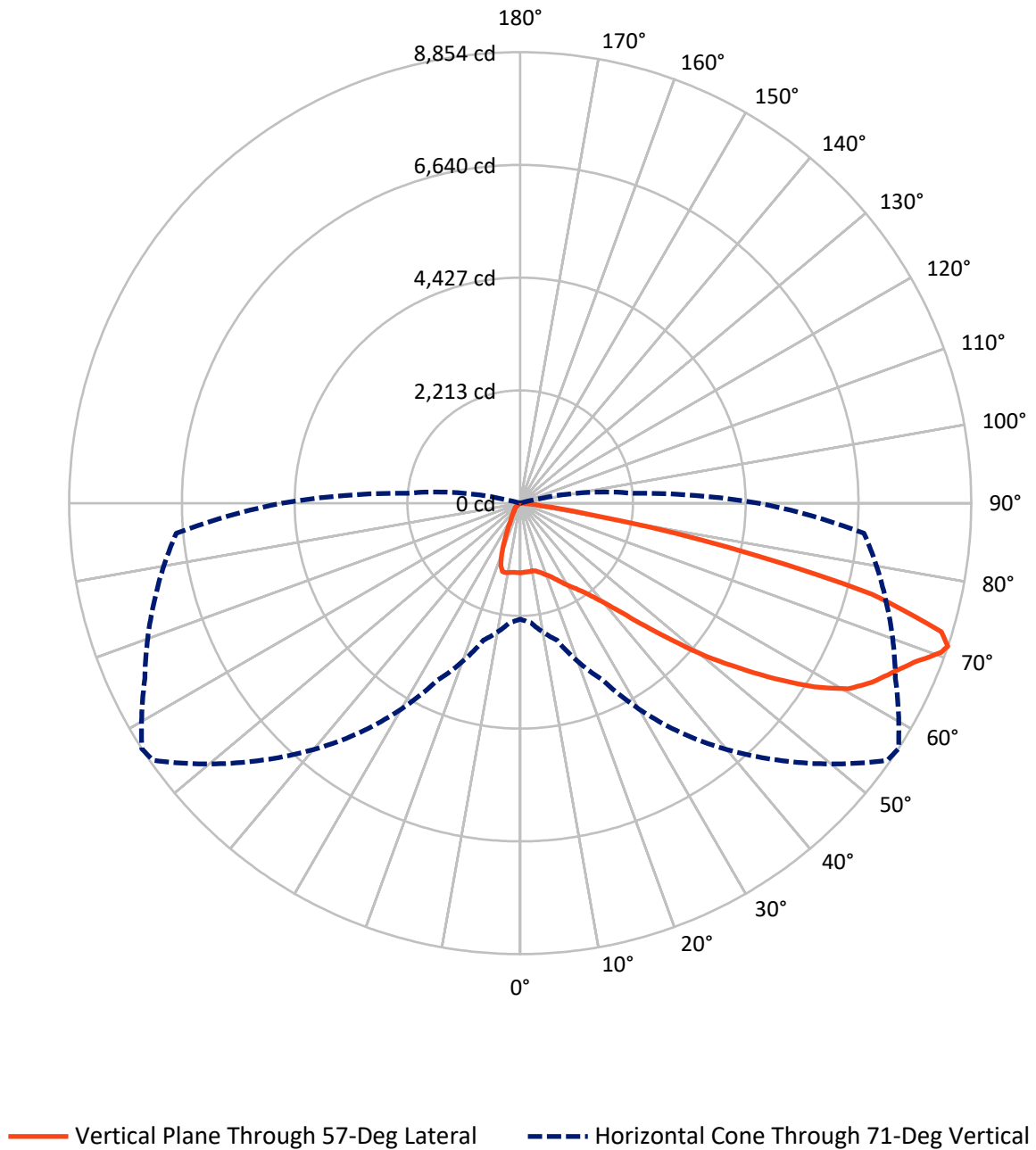
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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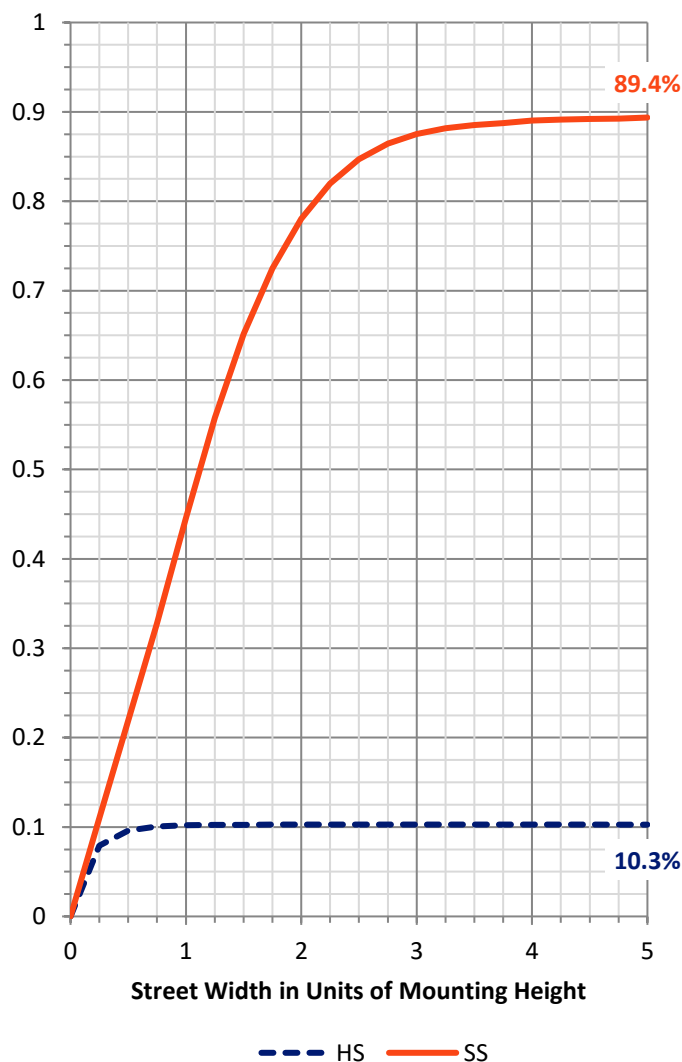
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1255.2	0.0	1255.2
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	10856.8	0.0	10856.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	12112.0	0.0	12112.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.6	1.1
10°-20°	343.7	2.8
20°-30°	536.2	4.4
30°-40°	906.3	7.5
40°-50°	1760.2	14.5
50°-60°	2955.9	24.4
60°-70°	3527.6	29.1
70°-80°	1859.1	15.3
80°-90°	94.5	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°	12112.0	100.0
0°-180°	12112.0	100.0

Coefficient of Utilization



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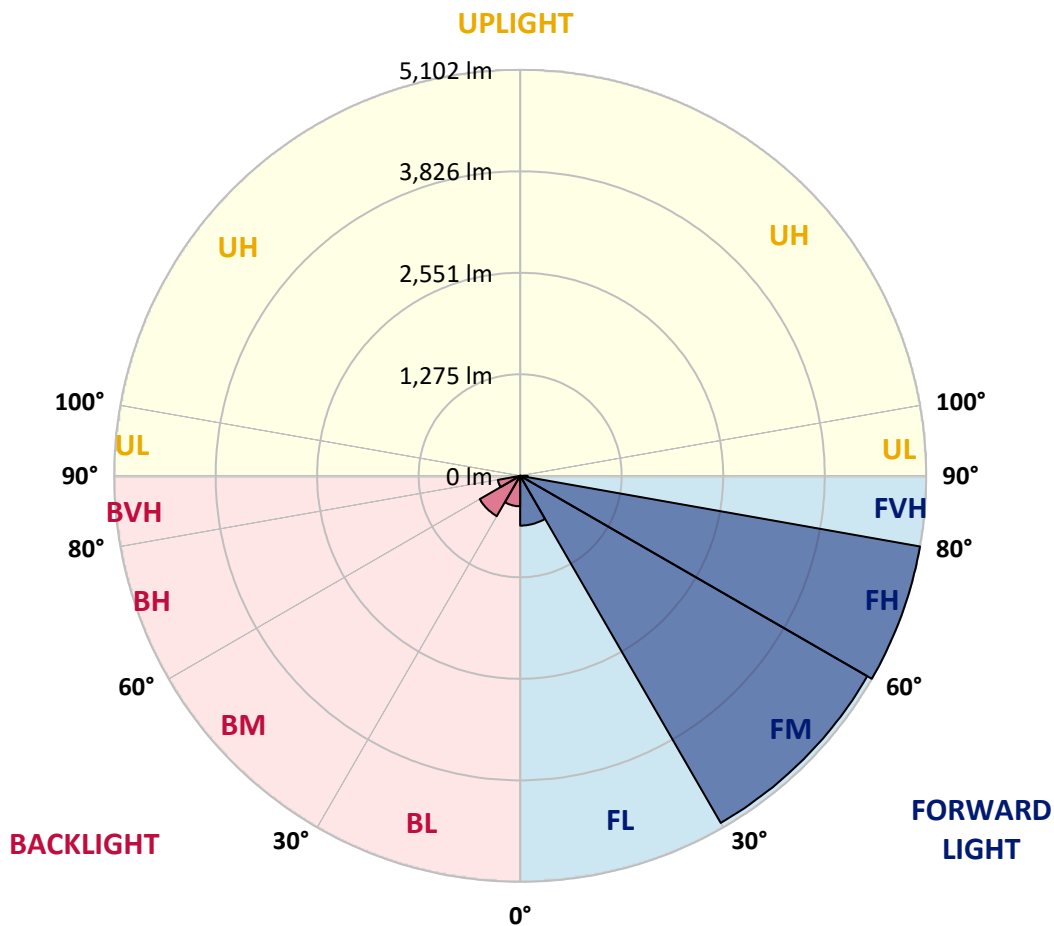
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	625.3	5.2			
FM (30°-60°)	5036.3	41.6			
FH (60°-80°)	5101.7	42.1			G3/7500
FVH (80°-90°)	93.6	0.8			G1/100
BL (0°-30°)	383.1	3.2	B1/500		
BM (30°-60°)	586.1	4.8	B1/1000		
BH (60°-80°)	285.0	2.4	B1/500		G1/500
BVH (80°-90°)	0.9	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°	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8
2.5°	1349.1	1349.1	1349.1	1351.9	1354.7	1354.7	1360.4	1357.6	1357.6	1357.6	1363.2
5°	1312.4	1315.2	1318.0	1323.7	1335.0	1343.4	1357.6	1357.6	1360.4	1366.0	1368.8
7.5°	1261.6	1264.4	1272.9	1284.2	1306.7	1326.5	1349.1	1354.7	1363.2	1377.3	1383.0
10°	1230.5	1236.2	1247.5	1261.6	1287.0	1312.4	1340.6	1349.1	1374.5	1399.9	1414.0
12.5°	1222.1	1224.9	1236.2	1258.8	1289.8	1320.9	1357.6	1366.0	1402.7	1442.2	1464.8
15°	1236.2	1239.0	1244.7	1270.1	1306.7	1346.3	1394.2	1405.5	1450.7	1495.8	1524.1
17.5°	1261.6	1261.6	1267.2	1289.8	1329.3	1374.5	1436.6	1453.5	1504.3	1555.1	1586.2
20°	1278.5	1278.5	1287.0	1309.6	1354.7	1414.0	1487.4	1510.0	1566.4	1622.9	1651.1
22.5°	1295.5	1298.3	1306.7	1332.1	1383.0	1464.8	1549.5	1572.0	1637.0	1696.2	1724.5
25°	1343.4	1340.6	1343.4	1366.0	1425.3	1526.9	1634.1	1662.4	1730.1	1795.0	1809.1
27.5°	1476.1	1470.4	1433.8	1419.6	1464.8	1591.8	1741.4	1769.6	1848.6	1913.6	1913.6
30°	1780.9	1769.6	1679.3	1563.6	1526.9	1651.1	1843.0	1882.5	1984.1	2040.6	2023.6
32.5°	2167.6	2142.2	2026.4	1828.9	1682.1	1730.1	1950.2	1995.4	2125.2	2173.2	2136.5
35°	2590.9	2588.1	2444.2	2190.1	1981.3	1893.8	2088.5	2142.2	2305.9	2348.2	2288.9
37.5°	3039.7	3051.0	2955.0	2605.0	2359.5	2161.9	2272.0	2334.1	2534.5	2585.3	2528.8
40°	3539.2	3536.4	3499.7	3084.8	2813.9	2542.9	2537.3	2593.7	2836.5	2915.5	2836.5
42.5°	4171.4	4165.8	4033.1	3660.6	3364.2	3039.7	2924.0	2943.7	3214.7	3344.5	3228.8
45°	4814.9	4775.4	4623.0	4301.3	4038.8	3654.9	3434.8	3434.8	3666.2	3844.0	3663.4
47.5°	5173.4	5133.9	5071.8	4894.0	4814.9	4385.9	4061.4	4021.8	4202.5	4383.1	4129.1
50°	5644.7	5644.7	5489.5	5421.7	5557.2	5255.2	4752.8	4713.3	4800.8	4944.8	4611.7
52.5°	6017.2	5949.5	5839.4	5898.7	6285.4	6147.1	5444.3	5368.1	5435.8	5472.5	5032.2
55°	6172.5	6107.6	6099.1	6316.4	6914.8	6722.8	6152.7	6085.0	6079.3	5898.7	5399.2
57.5°	6203.5	6147.1	6254.3	6635.3	7527.2	7194.2	6858.3	6807.5	6649.5	6197.9	5774.5
60°	5941.0	5969.3	6228.9	6810.3	7888.5	7603.4	7453.8	7400.2	7036.1	6451.9	6192.2
62.5°	5402.0	5469.7	5955.2	6827.3	7755.8	7769.9	7784.0	7747.4	7335.3	6683.3	6612.8
65°	4764.1	4783.9	5368.1	6593.0	7524.4	7719.1	8026.8	8023.9	7563.9	6943.0	7086.9
67.5°	3925.9	3959.8	4465.0	5802.8	7061.5	7696.5	8345.7	8337.2	7823.6	7239.3	7369.2
70°	2921.1	2963.5	3372.7	4512.9	6028.5	7414.3	8763.4	8769.0	8097.3	7465.1	7174.4
71°	2277.6	2353.8	2782.8	3832.8	5500.8	7129.3	8802.9	8853.7	8128.4	7434.1	6773.6
72.5°	1117.7	1208.0	1747.0	2698.2	4527.0	6491.4	8543.3	8642.0	7933.6	7047.4	5791.5
75°	290.7	307.6	522.1	1103.5	2427.2	4301.3	6889.4	7140.5	6485.8	5365.3	3539.2
77.5°	183.5	189.1	245.5	429.0	908.8	1634.1	4047.2	4171.4	3705.7	2717.9	1247.5
80°	129.8	132.7	155.2	276.6	530.6	477.0	1456.3	1510.0	1340.6	719.7	223.0
82.5°	79.0	79.0	112.9	177.8	327.4	259.7	383.8	409.2	361.3	200.4	73.4
85°	45.2	48.0	70.6	121.4	155.2	127.0	143.9	152.4	155.2	132.7	31.0
87.5°	36.7	39.5	62.1	101.6	84.7	62.1	62.1	64.9	67.7	79.0	14.1
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°	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8	1368.8
2.5°	1363.2	1363.2	1366.0	1363.2	1363.2	1363.2	1366.0	1366.0	1366.0	1371.7	1374.5
5°	1368.8	1368.8	1368.8	1366.0	1363.2	1363.2	1368.8	1371.7	1371.7	1380.1	1380.1
7.5°	1383.0	1383.0	1377.3	1371.7	1366.0	1357.6	1360.4	1363.2	1360.4	1363.2	1363.2
10°	1414.0	1414.0	1405.5	1394.2	1377.3	1351.9	1318.0	1275.7	1236.2	1222.1	1216.4
12.5°	1464.8	1462.0	1445.0	1425.3	1388.6	1301.1	1174.1	1024.5	900.3	866.5	855.2
15°	1521.2	1515.6	1495.8	1462.0	1363.2	1131.8	866.5	674.5	556.0	527.8	522.1
17.5°	1580.5	1572.0	1543.8	1476.1	1247.5	841.1	558.8	423.4	358.4	352.8	355.6
20°	1642.6	1631.3	1591.8	1447.9	1007.6	561.6	361.3	327.4	321.7	321.7	324.6
22.5°	1713.2	1699.1	1645.4	1346.3	733.8	372.6	310.5	307.6	304.8	302.0	302.0
25°	1795.0	1778.1	1696.2	1162.8	505.2	304.8	296.3	287.9	282.2	276.6	273.8
27.5°	1893.8	1871.2	1735.7	937.0	347.1	285.1	279.4	265.3	254.0	242.7	242.7
30°	1992.6	1964.4	1724.5	705.6	282.2	265.3	254.0	237.1	220.1	208.9	206.0
32.5°	2097.0	2068.8	1651.1	474.2	256.8	242.7	228.6	203.2	183.5	169.3	166.5
35°	2252.2	2229.7	1507.1	313.3	231.4	214.5	194.7	169.3	143.9	129.8	127.0
37.5°	2483.7	2455.4	1329.3	239.9	203.2	177.8	160.9	132.7	107.2	93.1	90.3
40°	2794.1	2709.5	1117.7	211.7	177.8	146.8	124.2	96.0	76.2	67.7	67.7
42.5°	3155.4	2955.0	889.0	191.9	158.1	121.4	90.3	64.9	53.6	50.8	50.8
45°	3539.2	3183.6	660.4	177.8	138.3	96.0	64.9	45.2	39.5	36.7	36.7
47.5°	3934.4	3369.9	460.0	160.9	115.7	73.4	45.2	33.9	28.2	25.4	25.4
50°	4304.1	3491.2	324.6	143.9	98.8	53.6	33.9	25.4	19.8	19.8	19.8
52.5°	4560.9	3480.0	234.3	124.2	76.2	36.7	22.6	16.9	16.9	16.9	16.9
55°	4786.7	3437.6	183.5	107.2	59.3	25.4	16.9	14.1	14.1	11.3	11.3
57.5°	4978.6	3369.9	155.2	87.5	42.3	19.8	11.3	11.3	8.5	8.5	8.5
60°	5142.3	3285.2	129.8	73.4	28.2	14.1	8.5	5.6	5.6	2.8	5.6
62.5°	5365.3	3231.6	112.9	56.4	19.8	8.5	5.6	2.8	2.8	0.0	0.0
65°	5529.0	3130.0	96.0	39.5	11.3	5.6	2.8	2.8	0.0	0.0	0.0
67.5°	5534.6	2946.5	70.6	22.6	8.5	5.6	2.8	0.0	0.0	0.0	0.0
70°	5088.7	2511.9	45.2	11.3	5.6	2.8	2.8	0.0	0.0	0.0	0.0
71°	4679.5	2224.0	36.7	8.5	5.6	2.8	0.0	0.0	0.0	0.0	0.0
72.5°	3855.3	1634.1	28.2	8.5	2.8	2.8	0.0	0.0	0.0	0.0	0.0
75°	2125.2	592.7	14.1	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	680.2	180.6	8.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	115.7	28.2	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.5	11.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.3	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	2.8	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)