

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: P265586

Luminaire Tested: **ARCH-L-AF72-100-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265586  
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-AF72-100-D-U-T3-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 440mA 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: 8932.5 lumens  
Efficiency: N/A  
Efficacy: 87.6 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 - G2

Input Watts (W): 102  
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

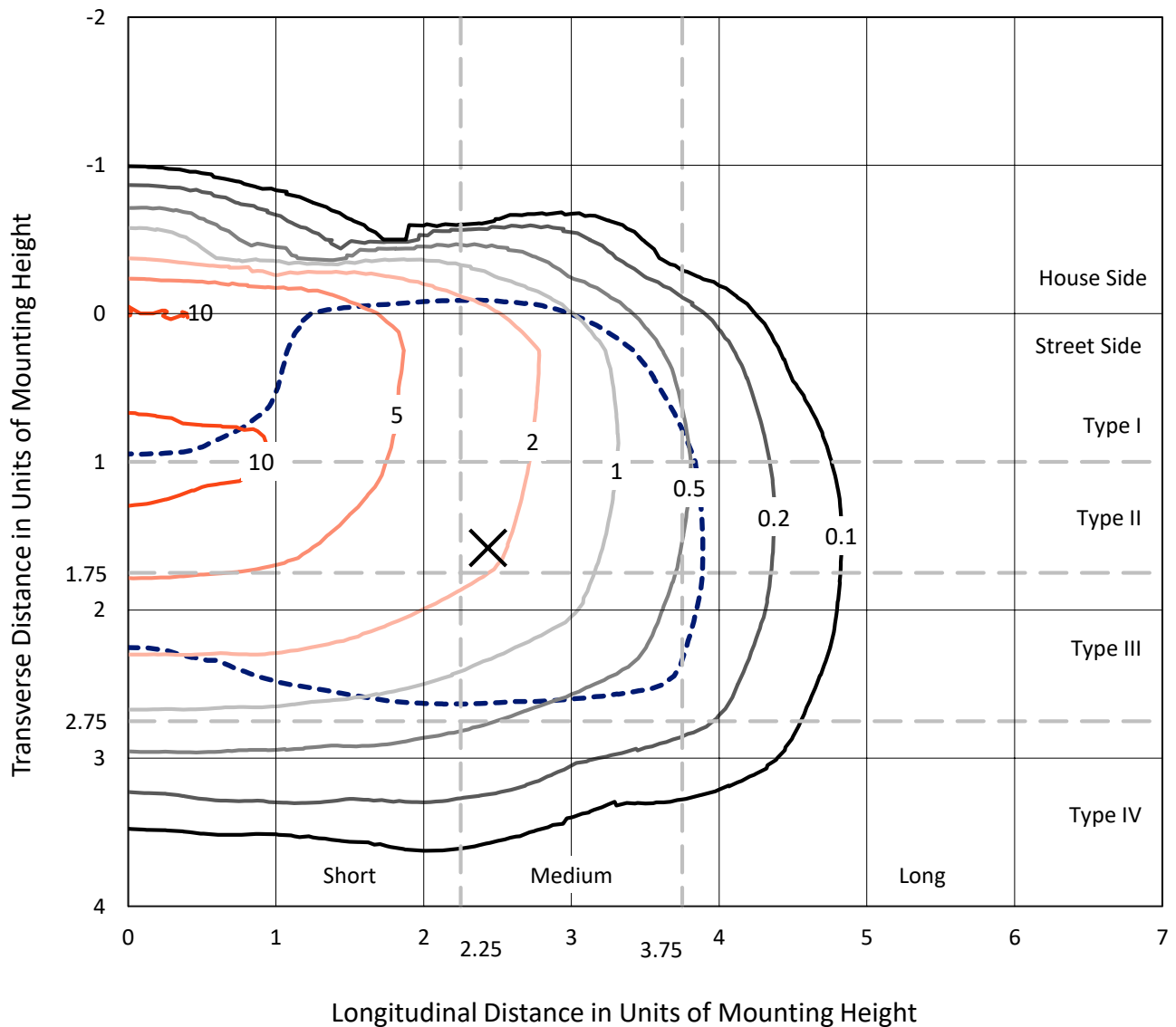


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

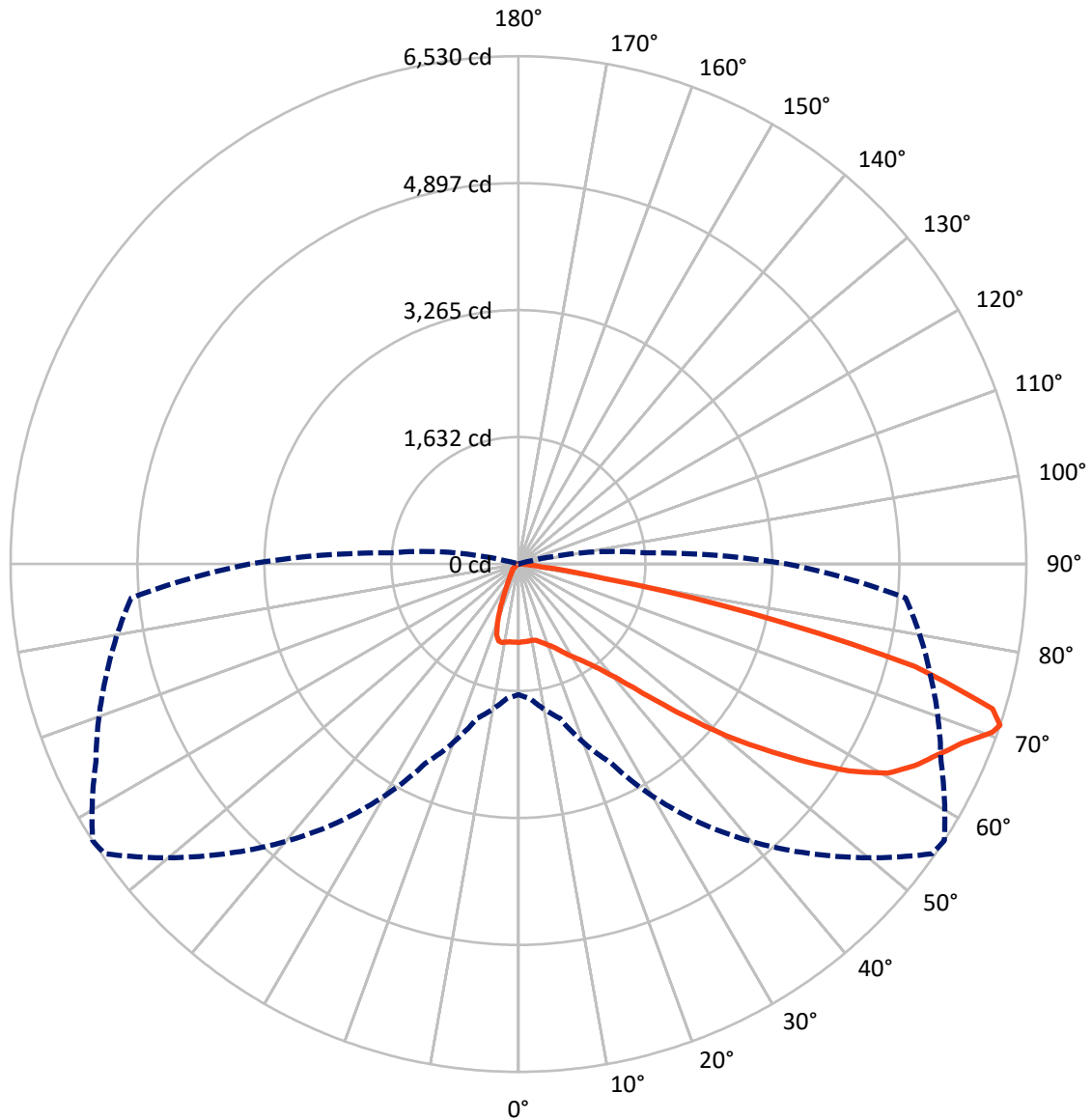


Based on 10 foot mounting height. Maximum calculated value = 12.6 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



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



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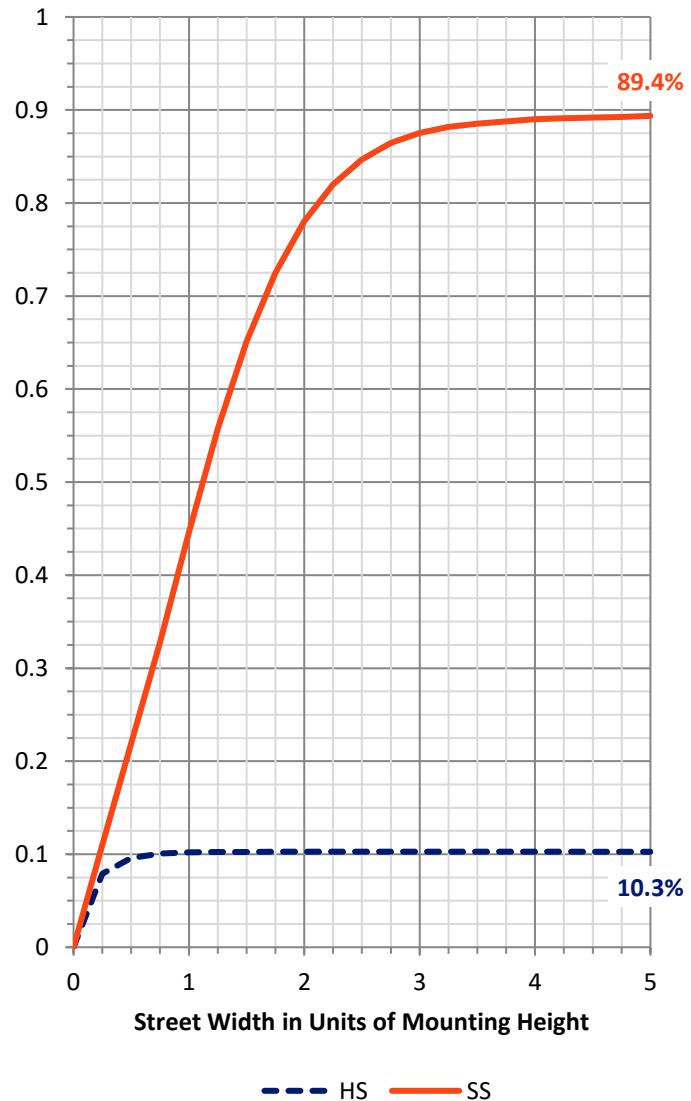
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	925.7	0.0	925.7
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	8006.8	0.0	8006.8
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	8932.5	0.0	8932.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.8	1.1
10°-20°	253.5	2.8
20°-30°	395.4	4.4
30°-40°	668.4	7.5
40°-50°	1298.1	14.5
50°-60°	2180.0	24.4
60°-70°	2601.6	29.1
70°-80°	1371.1	15.3
80°-90°	69.7	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°	8932.5	100.0
0°-180°	8932.5	100.0

**Coefficient of Utilization**



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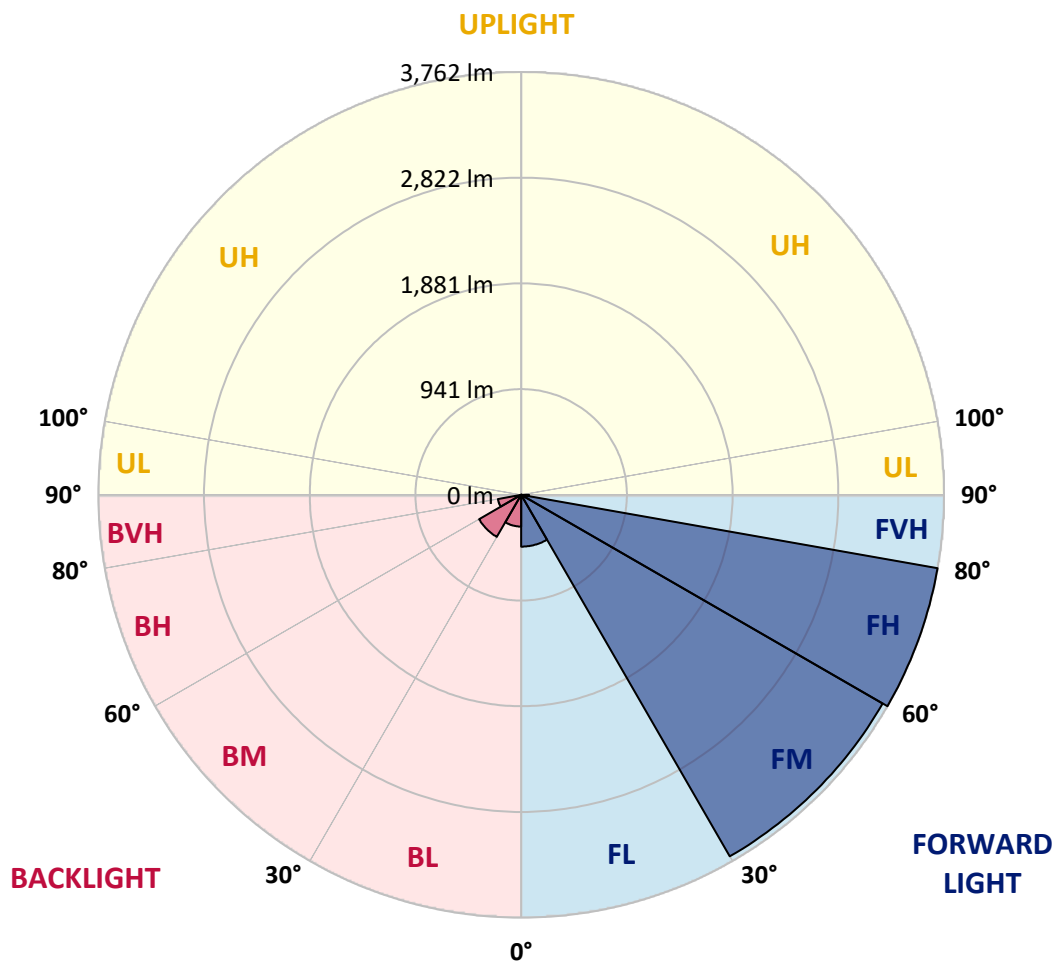
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	461.2	5.2			
FM	(30°-60°)	3714.2	41.6			
FH	(60°-80°)	3762.4	42.1			G2/5000
FVH	(80°-90°)	69.0	0.8			G1/100
BL	(0°-30°)	282.6	3.2	B1/500		
BM	(30°-60°)	432.2	4.8	B1/1000		
BH	(60°-80°)	210.2	2.4	B1/500		G1/500
BVH	(80°-90°)	0.7	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-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5
2.5°	995.0	995.0	995.0	996.9	999.0	999.0	1003.2	1001.3	1001.3	1001.3	1005.4
5°	967.8	970.0	972.1	976.2	984.5	990.8	1001.3	1001.3	1003.2	1007.4	1009.5
7.5°	930.5	932.5	938.6	947.1	963.7	978.3	995.0	999.0	1005.4	1015.8	1019.9
10°	907.5	911.7	920.0	930.5	949.1	967.8	988.7	995.0	1013.6	1032.4	1042.8
12.5°	901.3	903.3	911.7	928.3	951.2	974.1	1001.3	1007.4	1034.5	1063.7	1080.3
15°	911.7	913.8	917.9	936.7	963.7	992.8	1028.2	1036.6	1069.9	1103.2	1124.0
17.5°	930.5	930.5	934.5	951.2	980.4	1013.6	1059.5	1071.9	1109.3	1146.9	1169.8
20°	943.0	943.0	949.1	965.8	999.0	1042.8	1096.9	1113.5	1155.2	1196.8	1217.7
22.5°	955.3	957.5	963.7	982.4	1019.9	1080.3	1142.7	1159.4	1207.2	1251.0	1271.8
25°	990.8	988.7	990.8	1007.4	1051.1	1126.0	1205.2	1225.9	1276.0	1323.8	1334.3
27.5°	1088.6	1084.4	1057.3	1047.0	1080.3	1173.9	1284.2	1305.1	1363.4	1411.2	1411.2
30°	1313.4	1305.1	1238.5	1153.2	1126.0	1217.7	1359.1	1388.3	1463.2	1504.9	1492.4
32.5°	1598.5	1579.8	1494.5	1348.7	1240.6	1276.0	1438.2	1471.7	1567.4	1602.8	1575.6
35°	1910.8	1908.7	1802.4	1615.2	1461.2	1396.7	1540.2	1579.8	1700.5	1731.8	1688.1
37.5°	2241.7	2250.1	2179.3	1921.1	1740.0	1594.4	1675.6	1721.3	1869.2	1906.7	1865.1
40°	2610.1	2608.0	2581.0	2275.0	2075.3	1875.4	1871.2	1912.9	2091.9	2150.2	2091.9
42.5°	3076.3	3072.3	2974.4	2699.6	2481.1	2241.7	2156.4	2170.9	2370.7	2466.6	2381.1
45°	3551.0	3521.9	3409.3	3172.2	2978.6	2695.5	2533.1	2533.1	2703.8	2835.0	2701.7
47.5°	3815.3	3786.1	3740.4	3609.2	3551.0	3234.5	2995.2	2966.1	3099.3	3232.6	3045.2
50°	4162.8	4162.8	4048.4	3998.4	4098.3	3875.6	3505.1	3476.0	3540.6	3646.7	3401.2
52.5°	4437.6	4387.7	4306.6	4350.2	4635.4	4533.3	4015.2	3958.9	4008.9	4035.9	3711.3
55°	4552.2	4504.2	4498.1	4658.3	5099.6	4958.0	4537.6	4487.7	4483.4	4350.2	3981.7
57.5°	4575.1	4533.3	4612.4	4893.4	5551.3	5305.6	5057.9	5020.4	4903.8	4570.8	4258.7
60°	4381.5	4402.2	4593.8	5022.6	5817.7	5607.4	5497.1	5457.6	5189.1	4758.2	4566.8
62.5°	3984.0	4033.8	4391.9	5035.0	5719.8	5730.3	5740.7	5713.6	5409.8	4928.9	4876.9
65°	3513.5	3528.1	3958.9	4862.3	5549.1	5692.7	5919.7	5917.6	5578.2	5120.3	5226.5
67.5°	2895.2	2920.3	3292.8	4279.4	5207.8	5676.1	6154.8	6148.5	5769.8	5338.9	5434.7
70°	2154.2	2185.5	2487.3	3328.2	4446.0	5468.0	6462.9	6467.1	5971.8	5505.4	5291.0
71°	1679.7	1736.0	2052.3	2826.5	4056.7	5257.7	6492.1	6529.5	5994.6	5482.5	4995.5
72.5°	824.3	890.8	1288.3	1989.8	3338.6	4787.3	6300.5	6373.5	5851.0	5197.4	4271.1
75°	214.3	226.9	385.1	813.9	1790.1	3172.2	5080.9	5266.0	4783.1	3956.9	2610.1
77.5°	135.3	139.4	181.1	316.5	670.2	1205.2	2984.8	3076.3	2733.0	2004.5	920.0
80°	95.8	97.8	114.4	203.9	391.3	351.7	1074.1	1113.5	988.7	530.8	164.4
82.5°	58.3	58.3	83.3	131.2	241.5	191.5	283.1	301.8	266.4	147.9	54.1
85°	33.2	35.5	52.0	89.6	114.4	93.7	106.2	112.4	114.4	97.8	22.8
87.5°	27.0	29.1	45.9	74.9	62.4	45.9	45.9	47.9	49.9	58.3	10.4
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°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5	1009.5
2.5°	1005.4	1005.4	1007.4	1005.4	1005.4	1005.4	1007.4	1007.4	1007.4	1011.6	1013.6
5°	1009.5	1009.5	1009.5	1007.4	1005.4	1005.4	1009.5	1011.6	1011.6	1017.8	1017.8
7.5°	1019.9	1019.9	1015.8	1011.6	1007.4	1001.3	1003.2	1005.4	1003.2	1005.4	1005.4
10°	1042.8	1042.8	1036.6	1028.2	1015.8	996.9	972.1	940.9	911.7	901.3	897.0
12.5°	1080.3	1078.1	1065.7	1051.1	1024.1	959.6	865.8	755.6	663.9	639.1	630.7
15°	1122.0	1117.8	1103.2	1078.1	1005.4	834.6	639.1	497.5	410.0	389.2	385.1
17.5°	1165.6	1159.4	1138.5	1088.6	920.0	620.3	412.1	312.3	264.3	260.1	262.2
20°	1211.5	1203.1	1173.9	1067.7	743.1	414.2	266.4	241.5	237.3	237.3	239.4
22.5°	1263.5	1253.0	1213.5	992.8	541.1	274.7	229.0	226.9	224.8	222.7	222.7
25°	1323.8	1311.3	1251.0	857.5	372.5	224.8	218.6	212.3	208.1	203.9	201.8
27.5°	1396.7	1379.9	1280.1	691.1	255.9	210.3	206.2	195.7	187.3	179.0	179.0
30°	1469.4	1448.6	1271.8	520.4	208.1	195.7	187.3	174.8	162.4	154.0	152.0
32.5°	1546.5	1525.7	1217.7	349.7	189.5	179.0	168.6	149.8	135.3	124.9	122.8
35°	1661.0	1644.3	1111.6	231.0	170.7	158.2	143.5	124.9	106.2	95.8	93.7
37.5°	1831.6	1810.9	980.4	177.0	149.8	131.2	118.7	97.8	79.1	68.7	66.7
40°	2060.6	1998.2	824.3	156.1	131.2	108.2	91.5	70.7	56.2	49.9	49.9
42.5°	2327.1	2179.3	655.7	141.6	116.6	89.6	66.7	47.9	39.5	37.5	37.5
45°	2610.1	2347.9	487.1	131.2	102.0	70.7	47.9	33.2	29.1	27.0	27.0
47.5°	2901.5	2485.3	339.3	118.7	85.2	54.1	33.2	25.0	20.8	18.8	18.8
50°	3174.3	2574.7	239.4	106.2	72.9	39.5	25.0	18.8	14.6	14.6	14.6
52.5°	3363.7	2566.5	172.7	91.5	56.2	27.0	16.7	12.4	12.4	12.4	12.4
55°	3530.1	2535.1	135.3	79.1	43.7	18.8	12.4	10.4	10.4	8.4	8.4
57.5°	3671.7	2485.3	114.4	64.5	31.3	14.6	8.4	8.4	6.3	6.3	6.3
60°	3792.5	2422.8	95.8	54.1	20.8	10.4	6.3	4.1	4.1	2.1	4.1
62.5°	3956.9	2383.3	83.3	41.6	14.6	6.3	4.1	2.1	2.1	0.0	0.0
65°	4077.5	2308.4	70.7	29.1	8.4	4.1	2.1	2.1	0.0	0.0	0.0
67.5°	4081.7	2173.0	52.0	16.7	6.3	4.1	2.1	0.0	0.0	0.0	0.0
70°	3752.8	1852.5	33.2	8.4	4.1	2.1	2.1	0.0	0.0	0.0	0.0
71°	3451.1	1640.1	27.0	6.3	4.1	2.1	0.0	0.0	0.0	0.0	0.0
72.5°	2843.2	1205.2	20.8	6.3	2.1	2.1	0.0	0.0	0.0	0.0	0.0
75°	1567.4	437.1	10.4	4.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	501.7	133.2	6.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	85.2	20.8	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.1	8.4	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.4	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	2.1	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)