

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: P237000

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237000
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-270-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23703 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

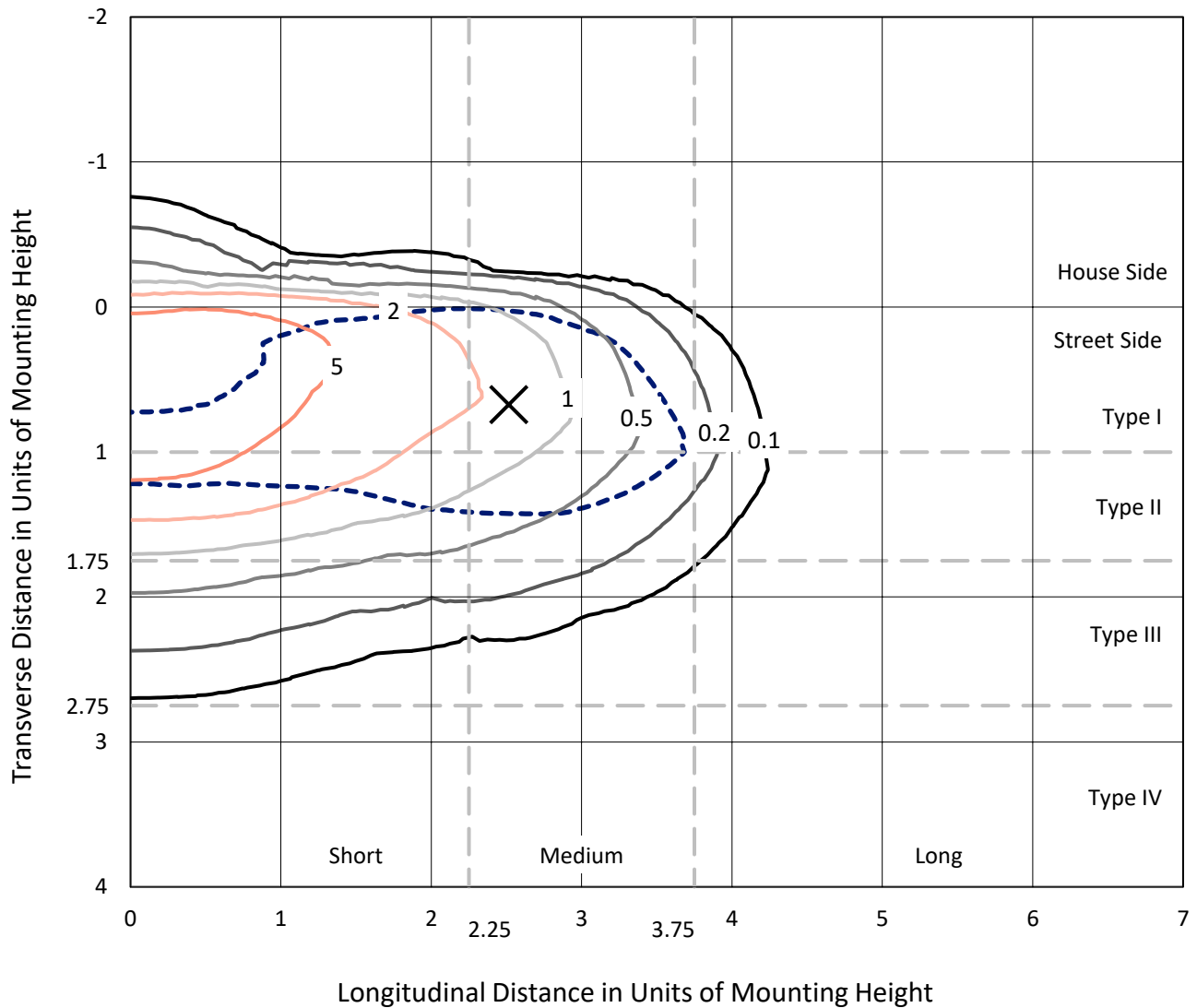
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

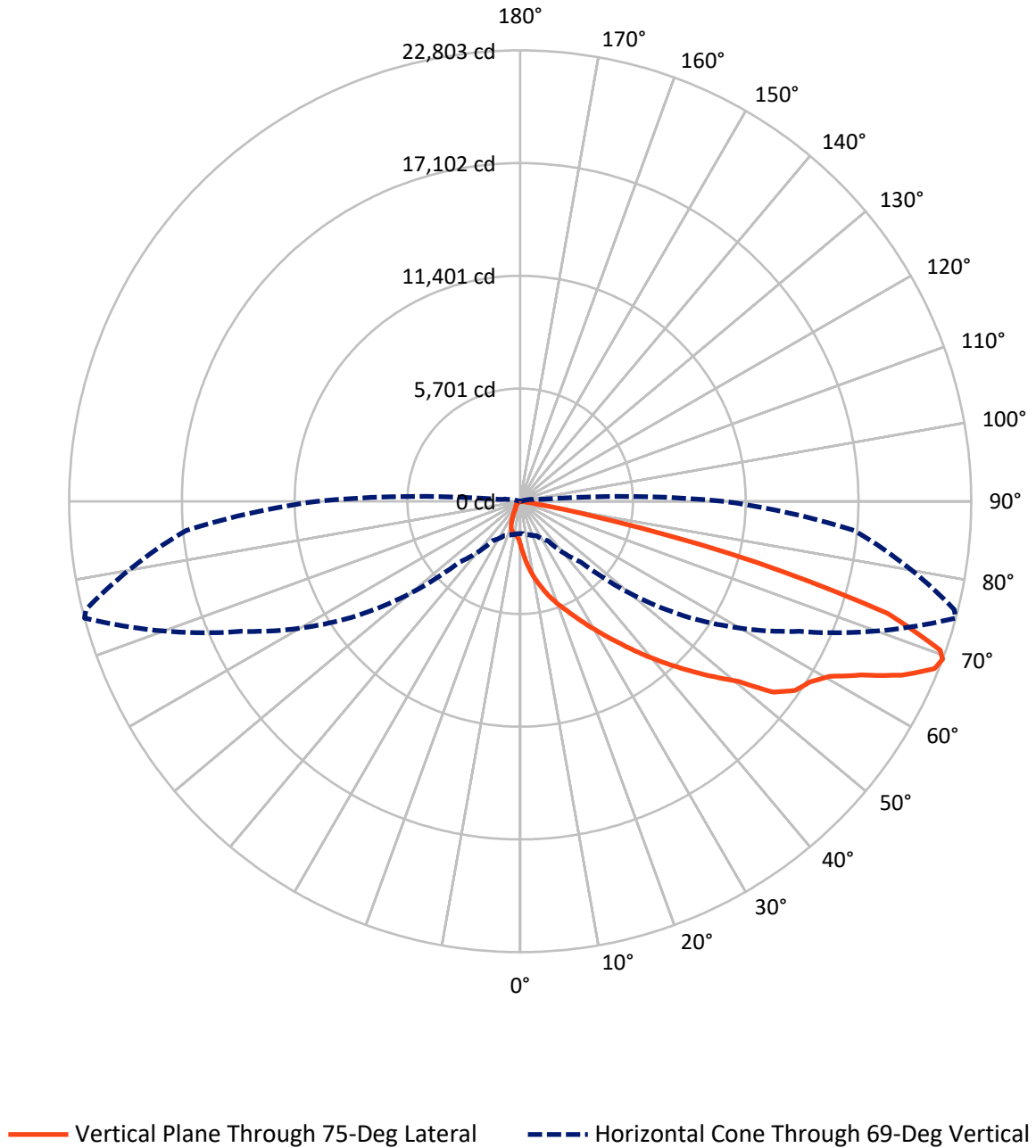
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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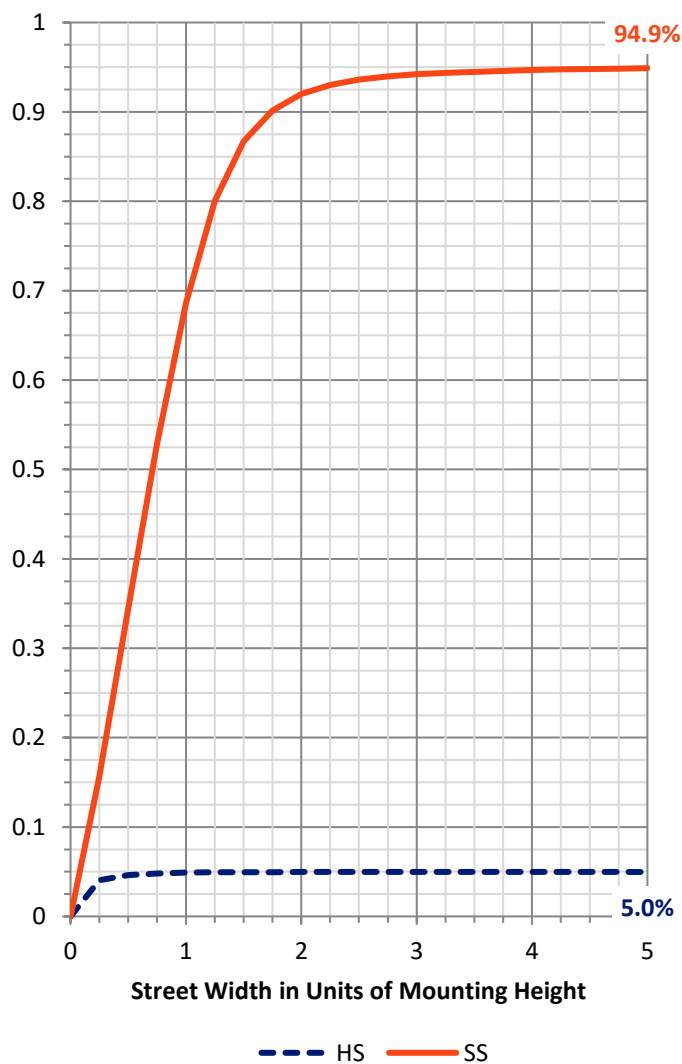
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1182.6	0.0	1182.6
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	22520.4	0.0	22520.4
	% Fixture	95.0	0.0	95.0
Total	Lumens	23703.0	0.0	23703.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	1.1
10°-20°	919.4	3.9
20°-30°	1755.3	7.4
30°-40°	3148.6	13.3
40°-50°	4823.9	20.4
50°-60°	5606.6	23.7
60°-70°	4964.7	20.9
70°-80°	2141.5	9.0
80°-90°	85.8	0.4
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°	23703.0	100.0
0°-180°	23703.0	100.0

Coefficient of Utilization



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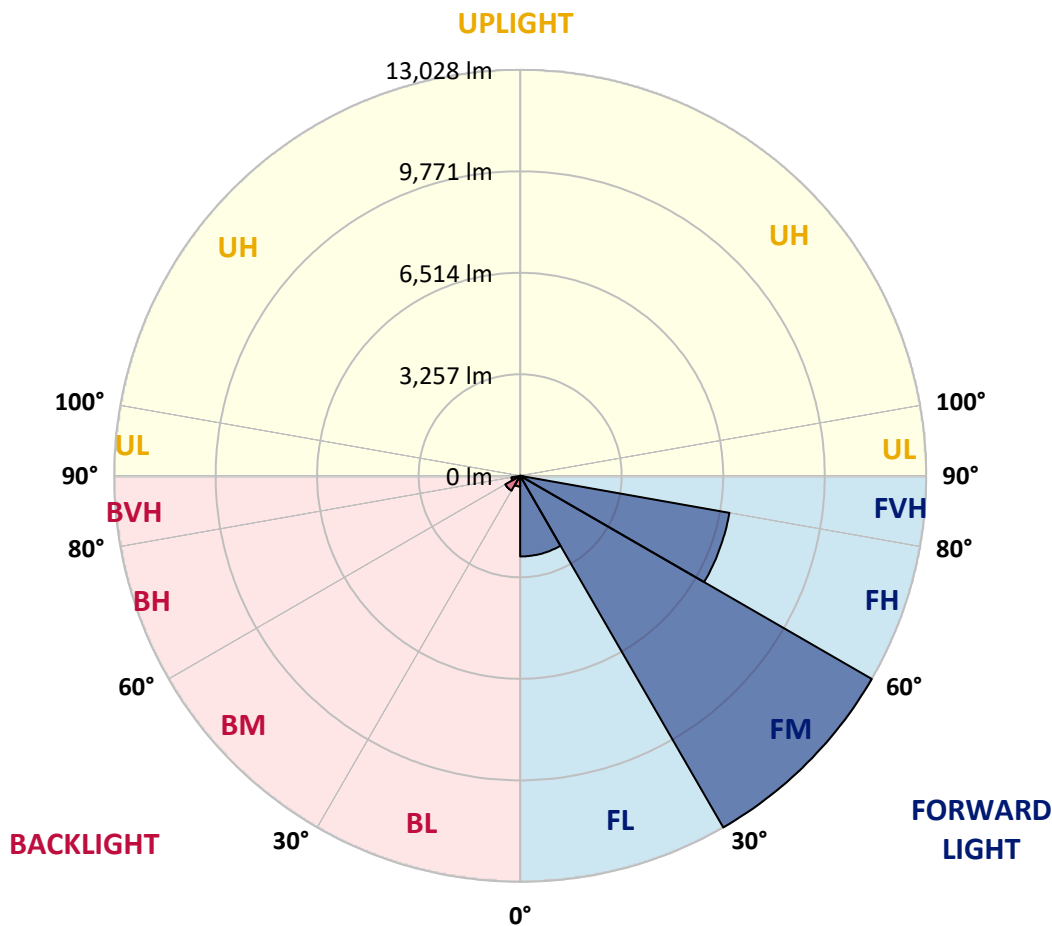
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2588.4	10.9			
FM (30°-60°)	13027.8	55.0			
FH (60°-80°)	6819.7	28.8			G3/7500
FVH (80°-90°)	84.5	0.4			G1/100
BL (0°-30°)	343.5	1.4	B1/500		
BM (30°-60°)	551.4	2.3	B1/1000		
BH (60°-80°)	286.5	1.2	B1/500		G1/500
BVH (80°-90°)	1.2	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6
2.5°	3633.3	3597.5	3561.6	3520.7	3428.6	3270.0	3070.4	2855.5	2589.4	2543.3	2328.4
5°	4411.1	4395.8	4359.9	4303.6	4201.3	4027.3	3802.2	3484.9	3039.7	2962.9	2507.5
7.5°	4958.7	4948.4	4917.7	4851.2	4759.1	4585.1	4349.7	4006.8	3490.0	3403.0	2732.6
10°	5449.9	5444.8	5419.2	5357.8	5265.7	5076.4	4825.6	4467.4	3919.9	3822.6	2993.6
12.5°	5895.1	5900.2	5890.0	5859.3	5792.8	5613.7	5327.1	4938.2	4334.4	4226.9	3305.8
15°	6156.1	6171.5	6212.4	6273.8	6294.3	6151.0	5854.2	5424.3	4759.1	4667.0	3664.0
17.5°	6069.1	6084.5	6212.4	6422.2	6621.8	6642.3	6376.2	5884.9	5178.7	5086.6	4017.1
20°	5859.3	5879.8	6012.8	6299.4	6688.3	6959.5	6852.1	6386.4	5577.9	5465.3	4354.8
22.5°	6094.7	6094.7	6135.6	6309.6	6662.7	7087.5	7230.7	6887.9	5987.2	5849.1	4692.6
25°	6903.2	6887.9	6800.9	6729.2	6841.8	7220.5	7517.3	7399.6	6468.3	6309.6	5050.8
27.5°	7926.7	7998.3	7834.6	7573.6	7317.7	7481.5	7773.2	7906.2	7000.5	6836.7	5419.2
30°	9073.0	9103.7	8909.2	8561.2	8110.9	7952.3	8075.1	8341.2	7578.7	7399.6	5803.0
32.5°	10106.7	10081.1	9917.3	9554.0	8996.2	8653.4	8464.0	8689.2	8208.1	8003.5	6197.0
35°	11022.7	11043.1	10843.6	10423.9	9876.4	9513.1	9062.7	9083.2	8914.3	8678.9	6652.5
37.5°	11846.5	11810.7	11621.4	11201.8	10705.4	10311.4	9835.4	9492.6	9687.0	9441.4	7164.2
40°	12516.9	12481.1	12281.5	11872.1	11406.5	11084.1	10710.5	10040.1	10500.7	10219.2	7711.8
42.5°	13049.1	13008.2	12839.3	12445.3	11994.9	11708.4	11529.3	10715.6	11370.6	11089.2	8325.8
45°	13310.1	13274.3	13171.9	12875.1	12481.1	12230.3	12317.3	11493.5	12302.0	12066.6	9001.3
47.5°	13003.1	12987.7	13105.4	13054.2	12829.1	12696.0	12997.9	12342.9	13279.4	13049.1	9779.2
50°	12071.7	12097.3	12440.2	12864.9	12972.3	13131.0	13555.7	13238.4	14328.4	14082.8	10674.7
52.5°	9774.0	9948.0	10981.7	12005.2	12798.4	13397.1	14210.7	14517.8	16037.6	15797.1	12071.7
55°	7297.3	7368.9	8494.7	10244.8	12097.3	13376.6	14696.9	15270.0	16882.0	16636.3	12440.2
57.5°	5787.7	5813.3	6371.0	8157.0	10654.2	12916.1	14952.7	15541.2	17250.4	17045.7	12987.7
60°	4544.2	4574.9	4979.1	6207.3	8622.6	11672.6	14584.3	15776.6	17971.9	17808.2	13944.6
62.5°	3536.1	3566.8	3812.4	4533.9	6468.3	9758.7	13842.3	16155.3	19343.4	19266.6	15510.5
65°	2737.8	2748.0	2916.9	3254.6	4569.7	7686.2	12936.5	16508.4	21195.8	21129.3	16779.6
67.5°	2021.3	2036.7	2154.4	2364.2	3085.7	5521.6	11452.5	16237.2	22592.9	22398.4	17240.2
69°	1632.4	1647.8	1750.1	1919.0	2435.8	4349.7	10096.4	15566.8	22802.7	22618.5	16948.5
70°	1397.0	1407.3	1509.6	1652.9	2077.6	3694.7	9021.8	14988.6	22526.3	22347.2	16283.2
72.5°	895.5	946.7	1049.0	1141.2	1376.6	2446.1	6089.6	12429.9	19435.5	19128.5	12752.3
75°	496.4	511.7	696.0	808.5	916.0	1591.5	3387.7	7752.7	12363.4	12148.5	6821.4
77.5°	409.4	419.6	491.3	614.1	614.1	890.4	1279.3	3055.0	4702.8	4242.2	1847.3
80°	286.6	296.8	373.6	404.3	440.1	501.5	414.5	670.4	726.7	644.8	276.3
82.5°	199.6	209.8	255.9	332.6	353.1	235.4	153.5	199.6	209.8	209.8	107.5
85°	35.8	51.2	189.3	276.3	209.8	71.6	87.0	71.6	66.5	71.6	25.6
87.5°	0.0	0.0	117.7	133.0	112.6	30.7	35.8	25.6	15.4	20.5	10.2
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°	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6	2205.6
2.5°	2220.9	2113.4	1929.2	1796.2	1683.6	1596.6	1560.8	1504.5	1463.5	1484.0	1458.4
5°	2282.3	2093.0	1796.2	1606.8	1473.8	1361.2	1269.1	1197.4	1141.2	1130.9	1120.7
7.5°	2379.5	2108.3	1719.4	1484.0	1284.4	1110.5	967.2	859.7	777.8	777.8	747.1
10°	2512.6	2149.3	1673.4	1361.2	1064.4	829.0	685.7	583.4	542.4	537.3	527.1
12.5°	2696.8	2226.0	1637.5	1202.6	829.0	603.8	516.8	481.0	465.7	460.6	455.4
15°	2947.6	2338.6	1596.6	1008.1	629.4	496.4	460.6	429.9	414.5	409.4	404.3
17.5°	3188.1	2441.0	1509.6	808.5	511.7	450.3	409.4	383.8	363.3	358.2	358.2
20°	3413.2	2527.9	1361.2	629.4	460.6	404.3	363.3	332.6	312.2	307.0	307.0
22.5°	3648.6	2599.6	1177.0	511.7	419.6	358.2	317.3	286.6	266.1	261.0	255.9
25°	3899.4	2650.8	967.2	455.4	378.7	317.3	271.2	245.6	230.3	225.2	220.0
27.5°	4170.6	2671.2	767.6	414.5	332.6	276.3	235.4	209.8	199.6	194.5	194.5
30°	4416.2	2650.8	593.6	368.4	291.7	240.5	204.7	184.2	174.0	168.9	168.9
32.5°	4672.1	2599.6	475.9	327.5	255.9	204.7	174.0	158.6	153.5	148.4	148.4
35°	4943.3	2533.1	409.4	291.7	220.0	179.1	153.5	143.3	138.2	133.0	133.0
37.5°	5260.6	2451.2	373.6	261.0	194.5	158.6	133.0	127.9	122.8	122.8	122.8
40°	5618.8	2348.8	348.0	235.4	174.0	138.2	117.7	112.6	107.5	107.5	107.5
42.5°	5997.5	2231.1	322.4	209.8	153.5	117.7	102.3	102.3	97.2	97.2	92.1
45°	6422.2	2113.4	296.8	184.2	133.0	102.3	87.0	81.9	81.9	76.8	76.8
47.5°	6923.7	2006.0	271.2	163.8	117.7	87.0	76.8	71.6	66.5	61.4	61.4
50°	7629.9	1995.7	240.5	143.3	107.5	71.6	61.4	56.3	51.2	46.1	46.1
52.5°	8331.0	1903.6	204.7	117.7	87.0	61.4	46.1	40.9	35.8	35.8	30.7
55°	8489.6	1750.1	179.1	102.3	66.5	46.1	35.8	25.6	25.6	20.5	20.5
57.5°	8837.6	1678.5	153.5	81.9	51.2	35.8	20.5	15.4	15.4	15.4	15.4
60°	9523.3	1658.0	133.0	71.6	35.8	25.6	15.4	10.2	10.2	5.1	5.1
62.5°	10470.0	1637.5	112.6	61.4	25.6	15.4	10.2	5.1	0.0	0.0	0.0
65°	10992.0	1499.4	92.1	46.1	20.5	15.4	5.1	0.0	0.0	0.0	0.0
67.5°	10853.8	1238.4	81.9	30.7	15.4	10.2	5.1	0.0	0.0	0.0	0.0
69°	10275.5	1043.9	66.5	25.6	15.4	10.2	5.1	0.0	0.0	0.0	0.0
70°	9579.6	900.6	61.4	20.5	10.2	5.1	5.1	0.0	0.0	0.0	0.0
72.5°	6800.9	470.8	40.9	15.4	10.2	5.1	0.0	0.0	0.0	0.0	0.0
75°	3177.8	209.8	25.6	10.2	5.1	5.1	0.0	0.0	0.0	0.0	0.0
77.5°	701.1	97.2	15.4	10.2	5.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	133.0	35.8	10.2	5.1	5.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.1	15.4	5.1	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.4	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.1	0.0	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)