

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: P236961

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236961
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1180mA 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: 23264.6 lumens
Efficiency: N/A
Efficacy: 83.4 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

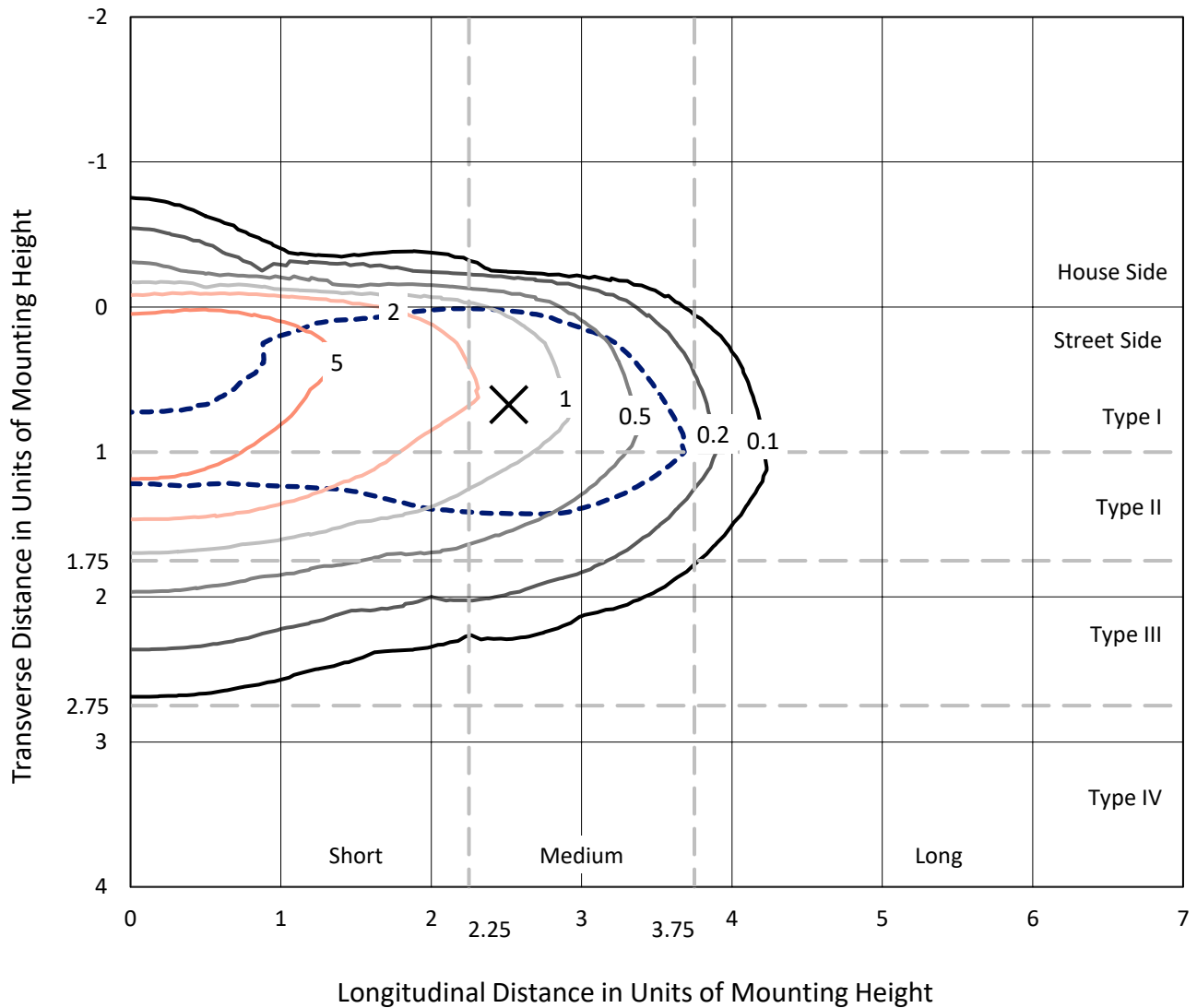
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

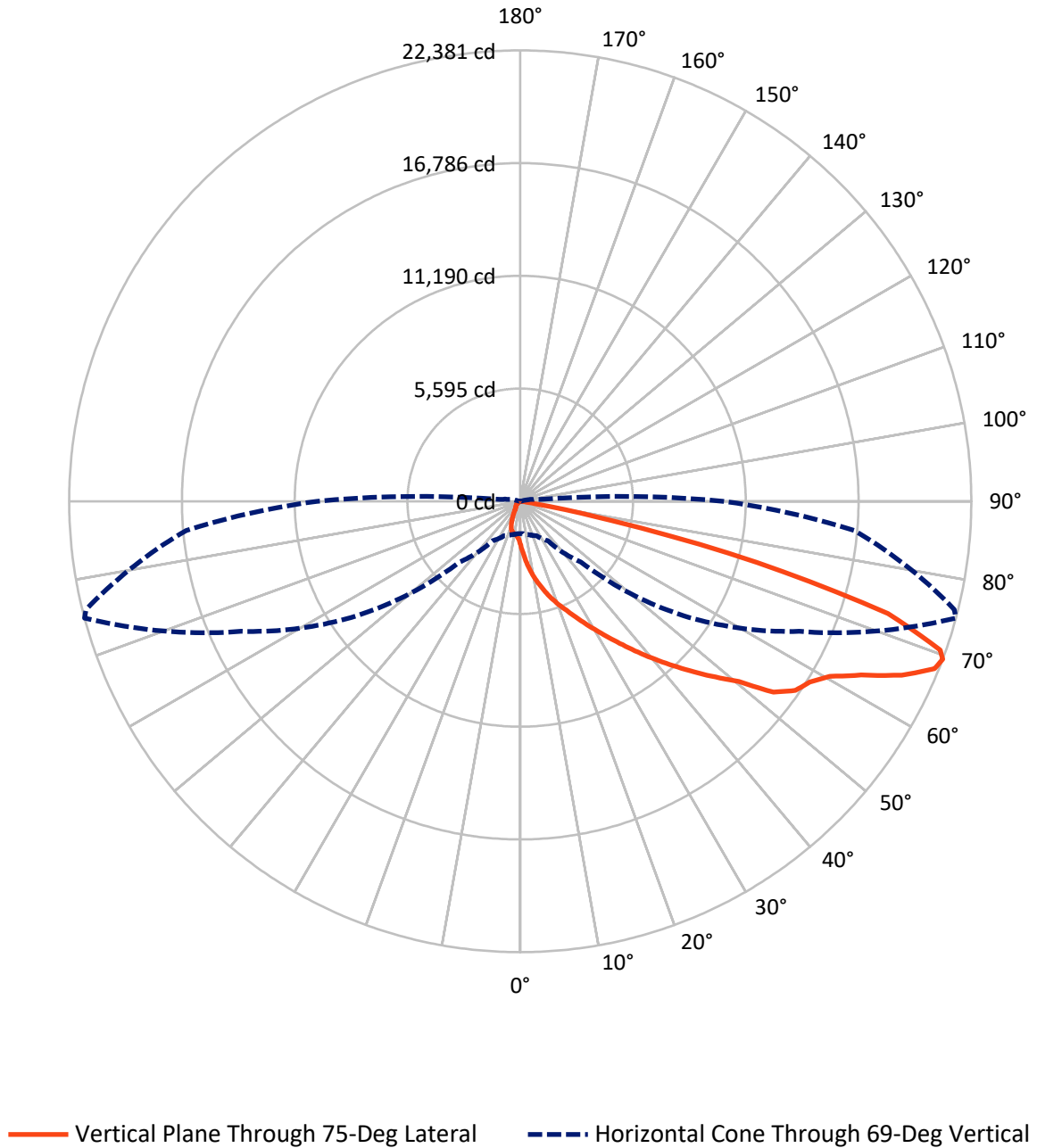
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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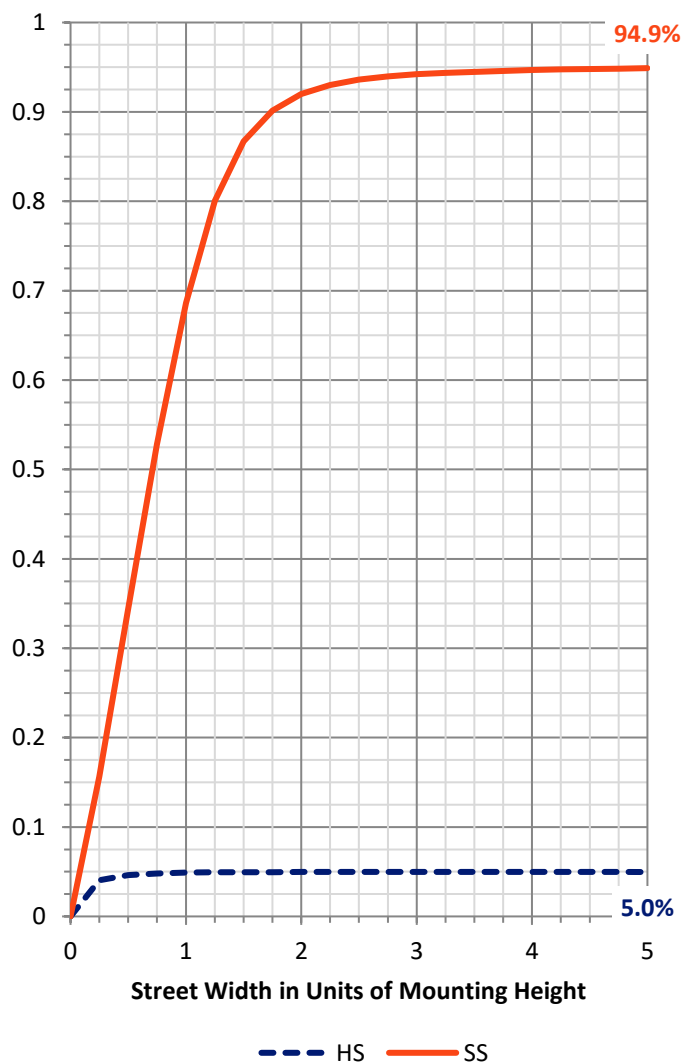
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1160.8	0.0	1160.8
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	22103.8	0.0	22103.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	23264.6	0.0	23264.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.4	1.1
10°-20°	902.4	3.9
20°-30°	1722.8	7.4
30°-40°	3090.4	13.3
40°-50°	4734.7	20.4
50°-60°	5502.9	23.7
60°-70°	4872.9	20.9
70°-80°	2101.9	9.0
80°-90°	84.2	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°	23264.6	100.0
0°-180°	23264.6	100.0

Coefficient of Utilization



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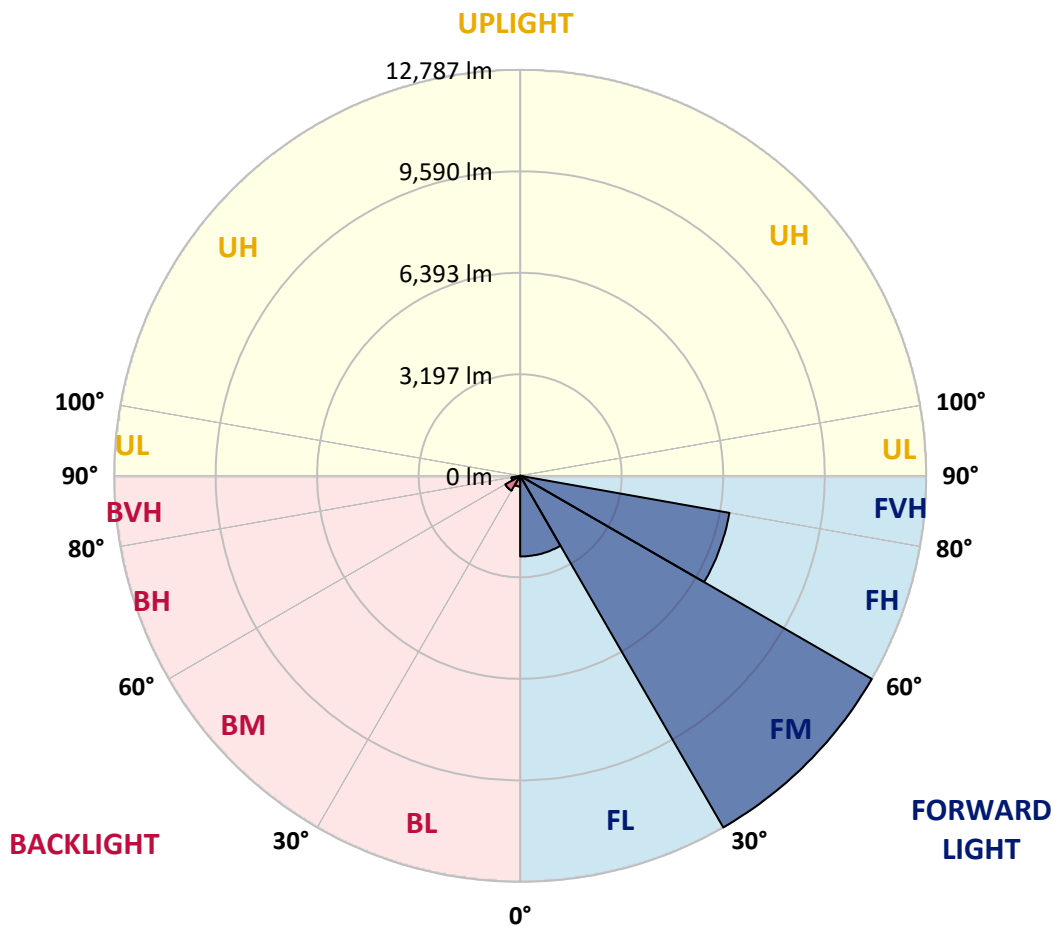
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2540.5	10.9			
FM (30°-60°)	12786.8	55.0			
FH (60°-80°)	6693.5	28.8			G3/7500
FVH (80°-90°)	83.0	0.4			G1/100
BL (0°-30°)	337.1	1.4	B1/500		
BM (30°-60°)	541.2	2.3	B1/1000		
BH (60°-80°)	281.2	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°	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8
2.5°	3566.1	3530.9	3495.7	3455.6	3365.1	3209.5	3013.6	2802.6	2541.5	2496.2	2285.2
5°	4329.5	4314.4	4279.2	4224.1	4123.6	3952.8	3731.9	3420.5	2983.5	2908.2	2461.1
7.5°	4867.0	4856.9	4826.7	4761.5	4671.1	4500.3	4269.2	3932.7	3425.5	3340.0	2682.1
10°	5349.2	5344.1	5319.0	5258.7	5168.3	4982.4	4736.4	4384.8	3847.3	3752.0	2938.2
12.5°	5786.1	5791.1	5781.0	5751.0	5685.7	5509.8	5228.6	4846.8	4254.2	4148.7	3244.7
15°	6042.2	6057.4	6097.5	6157.8	6177.8	6037.2	5746.0	5323.9	4671.1	4580.7	3596.2
17.5°	5956.9	5971.9	6097.5	6303.3	6499.3	6519.4	6258.3	5776.0	5083.0	4992.5	3942.7
20°	5751.0	5771.0	5901.6	6182.9	6564.7	6830.8	6725.4	6268.3	5474.7	5364.2	4274.2
22.5°	5982.0	5982.0	6022.2	6193.0	6539.5	6956.3	7097.1	6760.5	5876.5	5740.9	4605.8
25°	6775.5	6760.5	6675.0	6604.8	6715.3	7087.0	7378.3	7262.8	6348.6	6193.0	4957.3
27.5°	7780.1	7850.4	7689.6	7433.6	7182.3	7343.1	7629.3	7760.0	6871.0	6710.2	5319.0
30°	8905.1	8935.3	8744.4	8402.9	7960.8	7805.2	7925.7	8186.9	7438.6	7262.8	5695.6
32.5°	9919.7	9894.6	9733.9	9377.2	8829.8	8493.3	8307.4	8528.4	8056.3	7855.4	6082.5
35°	10818.8	10838.8	10643.0	10231.1	9693.7	9337.1	8895.2	8915.2	8749.5	8518.4	6529.5
37.5°	11627.4	11592.3	11406.4	10994.5	10507.4	10120.5	9653.5	9317.0	9507.8	9266.9	7031.7
40°	12285.4	12250.2	12054.3	11652.5	11195.5	10879.1	10512.4	9854.4	10306.4	10030.2	7569.2
42.5°	12807.7	12767.6	12601.9	12215.0	11773.1	11491.8	11316.0	10517.4	11160.3	10884.1	8171.8
45°	13063.9	13028.7	12928.3	12636.9	12250.2	12004.1	12089.5	11280.9	12074.5	11843.3	8834.8
47.5°	12762.6	12747.5	12863.0	12812.8	12591.8	12461.1	12757.5	12114.6	13033.7	12807.7	9598.3
50°	11848.4	11873.5	12210.0	12627.0	12732.4	12888.1	13304.9	12993.5	14063.5	13822.3	10477.2
52.5°	9593.3	9764.1	10778.7	11783.2	12561.6	13149.3	13947.9	14249.3	15741.0	15504.9	11848.4
55°	7162.3	7232.6	8337.6	10055.3	11873.5	13129.2	14425.1	14987.5	16569.7	16328.6	12210.0
57.5°	5680.6	5705.7	6253.2	8006.1	10457.1	12677.2	14676.1	15253.8	16931.4	16730.5	12747.5
60°	4460.1	4490.2	4887.0	6092.6	8463.1	11456.7	14314.5	15484.8	17639.6	17478.8	13686.7
62.5°	3470.6	3500.7	3741.9	4450.0	6348.6	9578.2	13586.3	15856.5	18985.6	18910.3	15223.6
65°	2687.1	2697.2	2862.9	3194.4	4485.2	7544.1	12697.2	16203.0	20803.8	20738.5	16469.3
67.5°	1983.9	1999.0	2114.5	2320.4	3028.6	5419.5	11240.7	15936.9	22174.9	21984.2	16921.3
69°	1602.2	1617.2	1717.8	1883.5	2390.8	4269.2	9909.7	15279.0	22380.8	22200.1	16635.0
70°	1371.2	1381.2	1481.7	1622.3	2039.3	3626.4	8854.9	14711.3	22109.7	21933.9	15982.0
72.5°	879.0	929.1	1029.7	1120.0	1351.1	2400.9	5976.9	12200.0	19076.0	18774.7	12516.4
75°	487.2	502.3	683.1	793.6	899.1	1562.1	3325.0	7609.4	12134.7	11923.8	6695.2
77.5°	401.8	411.9	482.2	602.7	602.7	874.0	1255.6	2998.5	4615.7	4163.8	1813.1
80°	281.3	291.2	366.7	396.8	431.9	492.2	406.9	658.0	713.3	632.8	271.2
82.5°	195.9	206.0	251.1	326.4	346.6	231.1	150.7	195.9	206.0	206.0	105.4
85°	35.2	50.3	185.8	271.2	206.0	70.4	85.3	70.4	65.3	70.4	25.1
87.5°	0.0	0.0	115.5	130.6	110.5	30.1	35.2	25.1	15.1	20.1	10.1
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°	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8	2164.8
2.5°	2179.8	2074.4	1893.6	1762.9	1652.4	1567.1	1532.0	1476.6	1436.4	1456.5	1431.4
5°	2240.2	2054.3	1762.9	1577.1	1446.5	1336.0	1245.7	1175.3	1120.0	1110.0	1099.9
7.5°	2335.5	2069.4	1687.6	1456.5	1260.7	1089.9	949.3	843.8	763.4	763.4	733.3
10°	2466.1	2109.5	1642.3	1336.0	1044.7	813.7	673.0	572.6	532.4	527.4	517.4
12.5°	2647.0	2184.8	1607.2	1180.3	813.7	592.6	507.3	472.1	457.0	452.0	447.0
15°	2893.0	2295.3	1567.1	989.5	617.8	487.2	452.0	421.8	406.9	401.8	396.8
17.5°	3129.0	2395.8	1481.7	793.6	502.3	442.0	401.8	376.7	356.6	351.6	351.6
20°	3350.1	2481.2	1336.0	617.8	452.0	396.8	356.6	326.4	306.4	301.3	301.3
22.5°	3581.2	2551.5	1155.2	502.3	411.9	351.6	311.4	281.3	261.1	256.1	251.1
25°	3827.3	2601.7	949.3	447.0	371.7	311.4	266.1	241.1	226.0	221.0	216.0
27.5°	4093.5	2621.7	753.4	406.9	326.4	271.2	231.1	206.0	195.9	190.8	190.8
30°	4334.6	2601.7	582.7	361.6	286.3	236.1	200.9	180.9	170.8	165.7	165.7
32.5°	4585.7	2551.5	467.1	321.4	251.1	200.9	170.8	155.7	150.7	145.7	145.7
35°	4851.8	2486.2	401.8	286.3	216.0	175.8	150.7	140.6	135.6	130.6	130.6
37.5°	5163.3	2405.9	366.7	256.1	190.8	155.7	130.6	125.5	120.5	120.5	120.5
40°	5514.9	2305.4	341.6	231.1	170.8	135.6	115.5	110.5	105.4	105.4	105.4
42.5°	5886.6	2189.9	316.5	206.0	150.7	115.5	100.4	100.4	95.4	95.4	90.3
45°	6303.3	2074.4	291.2	180.9	130.6	100.4	85.3	80.5	80.5	75.4	75.4
47.5°	6795.6	1968.9	266.1	160.7	115.5	85.3	75.4	70.4	65.3	60.3	60.3
50°	7488.7	1958.8	236.1	140.6	105.4	70.4	60.3	55.2	50.3	45.3	45.3
52.5°	8176.9	1868.5	200.9	115.5	85.3	60.3	45.3	40.2	35.2	35.2	30.1
55°	8332.5	1717.8	175.8	100.4	65.3	45.3	35.2	25.1	25.1	20.1	20.1
57.5°	8674.1	1647.4	150.7	80.5	50.3	35.2	20.1	15.1	15.1	15.1	15.1
60°	9347.1	1627.3	130.6	70.4	35.2	25.1	15.1	10.1	10.1	5.0	5.0
62.5°	10276.4	1607.2	110.5	60.3	25.1	15.1	10.1	5.0	0.0	0.0	0.0
65°	10788.6	1471.6	90.3	45.3	20.1	15.1	5.0	0.0	0.0	0.0	0.0
67.5°	10653.0	1215.5	80.5	30.1	15.1	10.1	5.0	0.0	0.0	0.0	0.0
69°	10085.5	1024.7	65.3	25.1	15.1	10.1	5.0	0.0	0.0	0.0	0.0
70°	9402.5	884.0	60.3	20.1	10.1	5.0	5.0	0.0	0.0	0.0	0.0
72.5°	6675.0	462.0	40.2	15.1	10.1	5.0	0.0	0.0	0.0	0.0	0.0
75°	3119.1	206.0	25.1	10.1	5.0	5.0	0.0	0.0	0.0	0.0	0.0
77.5°	688.2	95.4	15.1	10.1	5.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	130.6	35.2	10.1	5.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.3	15.1	5.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.1	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.0	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)