

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: P265739

Luminaire Tested: **ARCH-L-AF72-270-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265739
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-AF72-270-D-U-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1155mA 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: 18843.4 lumens
Efficiency: N/A
Efficacy: 69.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G4

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: 28.75 FT

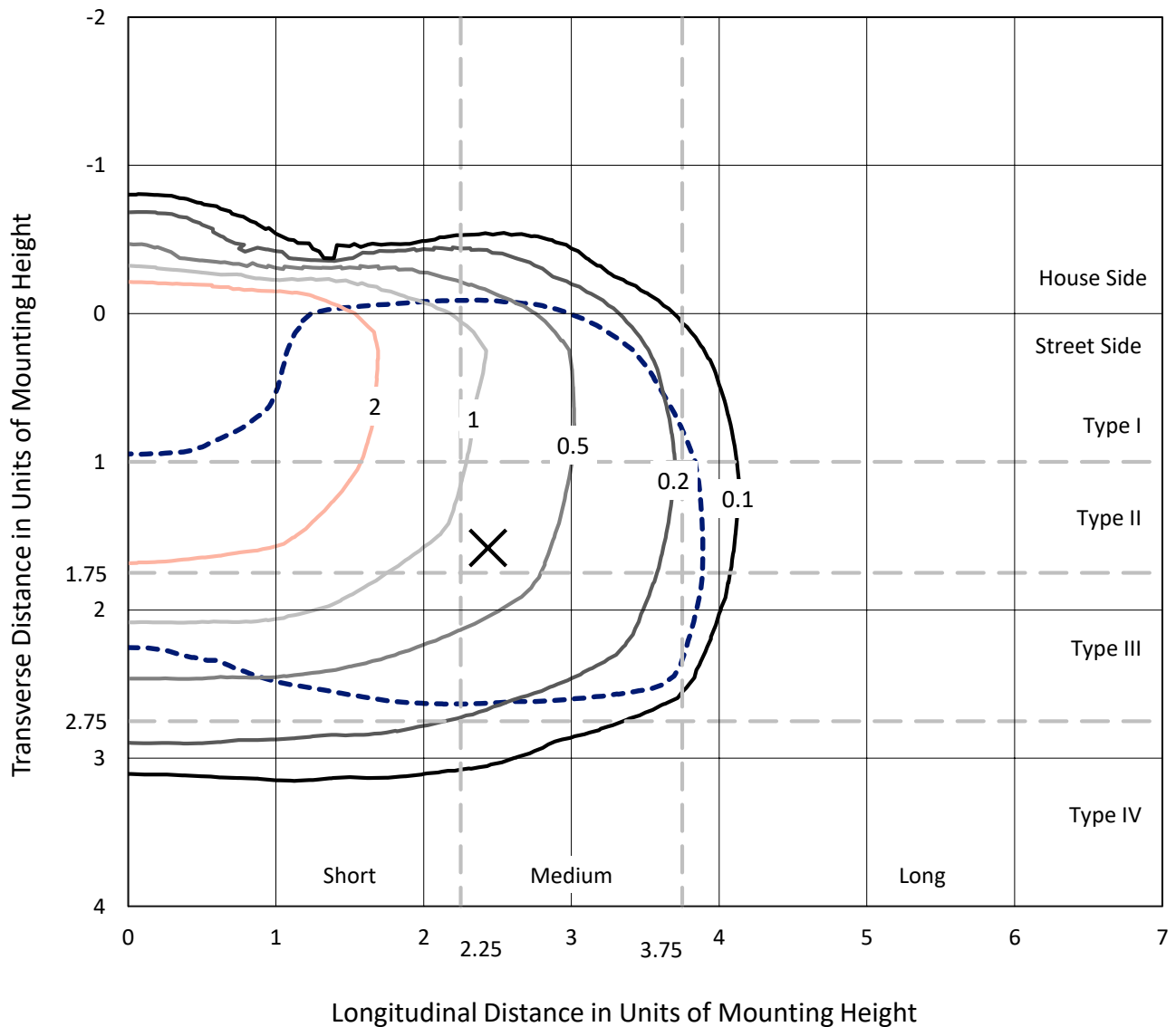


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

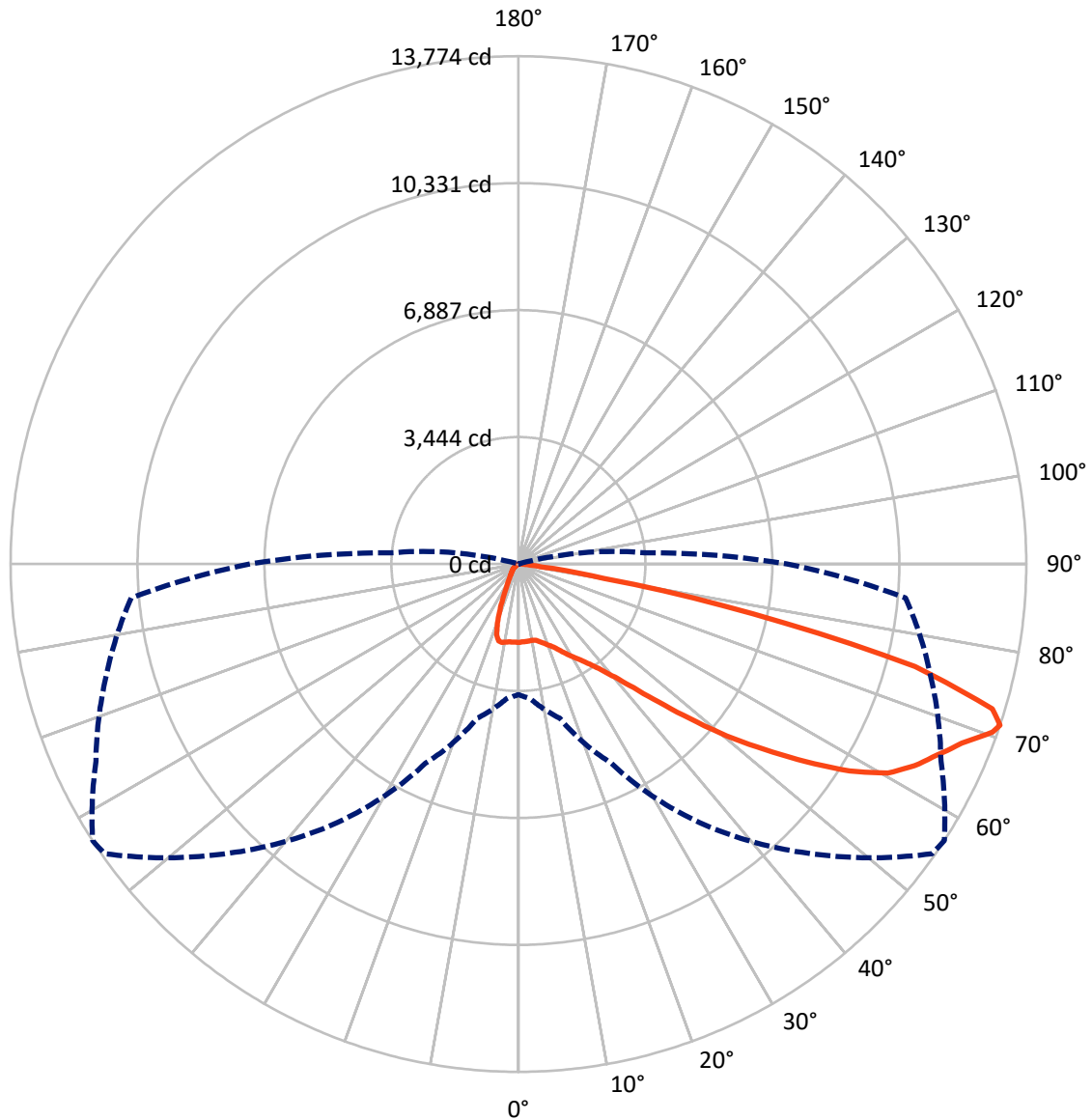


Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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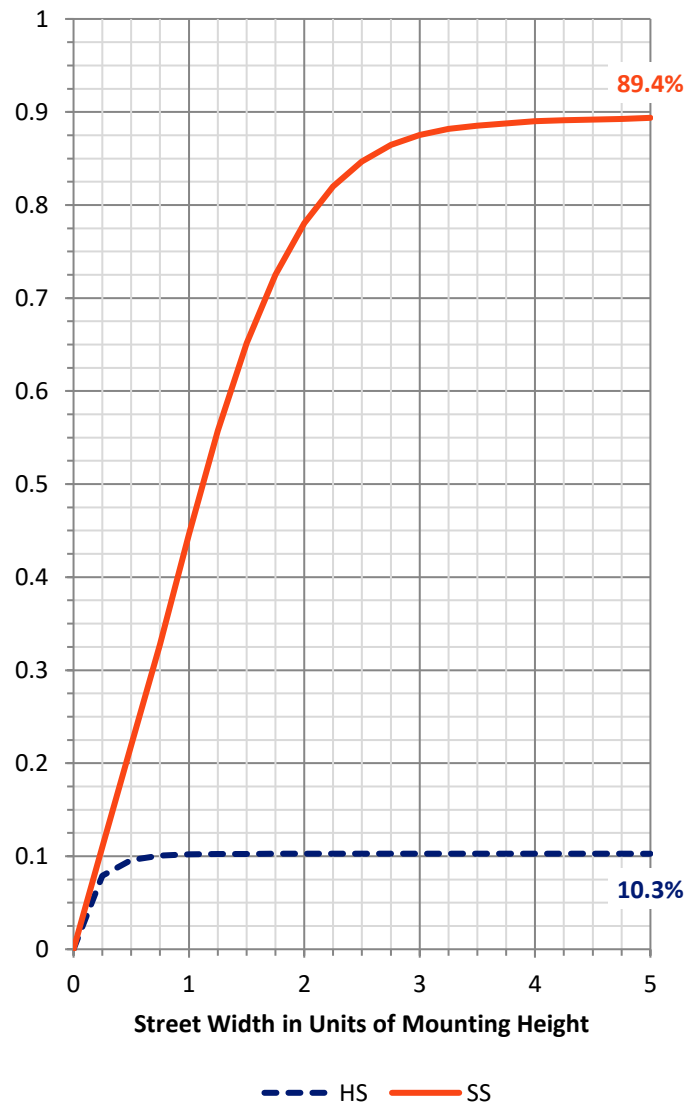
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1952.7	0.0	1952.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	16890.7	0.0	16890.7
	% Fixture	89.6	0.0	89.6
Total	Lumens	18843.4	0.0	18843.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.0	1.1
10°-20°	534.7	2.8
20°-30°	834.2	4.4
30°-40°	1409.9	7.5
40°-50°	2738.4	14.5
50°-60°	4598.7	24.4
60°-70°	5488.1	29.1
70°-80°	2892.3	15.3
80°-90°	147.0	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°	18843.4	100.0
0°-180°	18843.4	100.0



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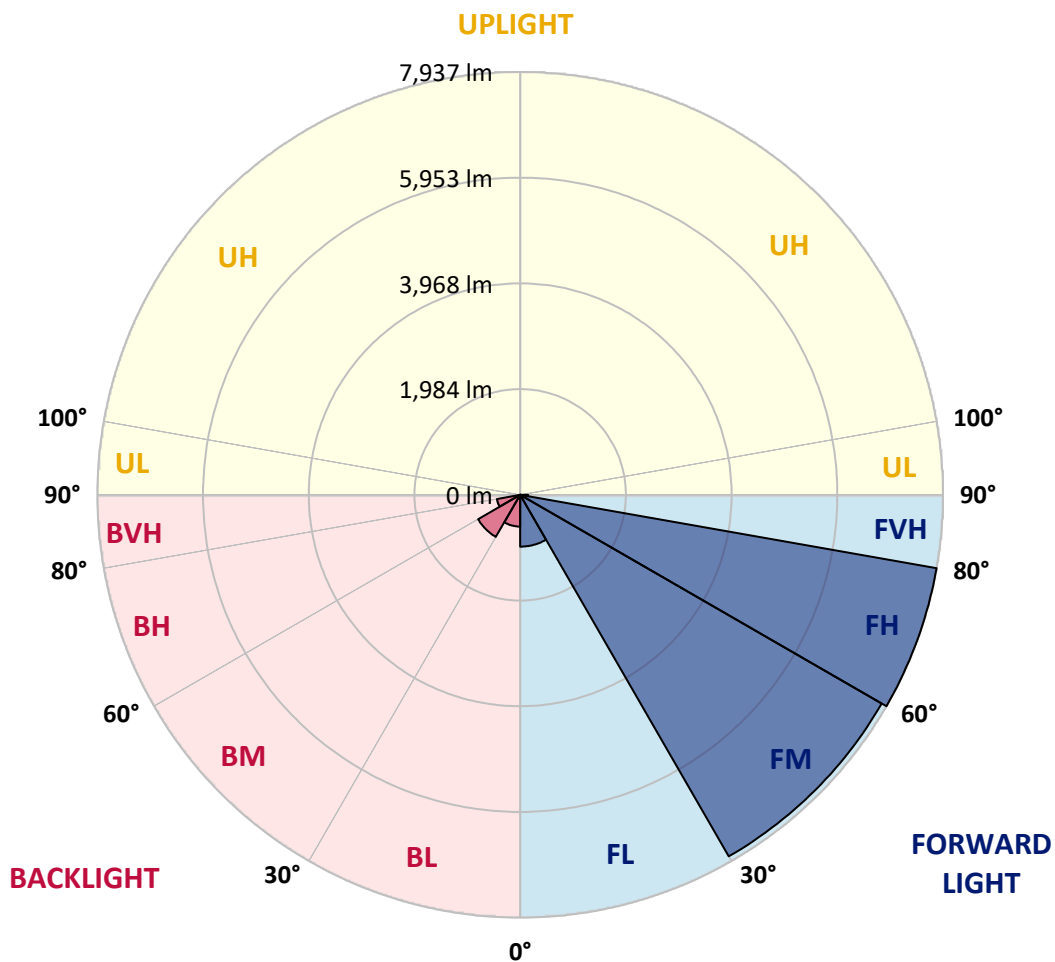
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	972.9	5.2			
FM	(30°-60°)	7835.3	41.6			
FH	(60°-80°)	7937.0	42.1			G4/12000
FVH	(80°-90°)	145.6	0.8			G2/225
BL	(0°-30°)	596.1	3.2	B2/1000		
BM	(30°-60°)	911.8	4.8	B1/1000		
BH	(60°-80°)	443.5	2.4	B1/500		G1/500
BVH	(80°-90°)	1.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6
2.5°	2098.9	2098.9	2098.9	2103.2	2107.7	2107.7	2116.4	2112.1	2112.1	2112.1	2120.8
5°	2041.8	2046.2	2050.7	2059.4	2076.9	2090.0	2112.1	2112.1	2116.4	2125.2	2129.6
7.5°	1962.7	1967.1	1980.4	1997.9	2033.0	2063.8	2098.9	2107.7	2120.8	2142.7	2151.5
10°	1914.5	1923.2	1940.8	1962.7	2002.2	2041.8	2085.7	2098.9	2138.3	2177.9	2199.9
12.5°	1901.3	1905.7	1923.2	1958.3	2006.6	2055.0	2112.1	2125.2	2182.3	2243.7	2278.9
15°	1923.2	1927.7	1936.3	1975.9	2033.0	2094.5	2169.0	2186.7	2256.9	2327.1	2371.0
17.5°	1962.7	1962.7	1971.5	2006.6	2068.1	2138.3	2235.0	2261.4	2340.4	2419.3	2467.7
20°	1989.0	1989.0	2002.2	2037.4	2107.7	2199.9	2314.0	2349.2	2436.9	2524.7	2568.8
22.5°	2015.4	2019.7	2033.0	2072.5	2151.5	2278.9	2410.6	2445.7	2546.8	2639.0	2682.9
25°	2090.0	2085.7	2090.0	2125.2	2217.5	2375.5	2542.4	2586.3	2691.6	2792.7	2814.6
27.5°	2296.4	2287.7	2230.6	2208.7	2278.9	2476.4	2709.2	2753.1	2876.1	2977.1	2977.1
30°	2770.6	2753.1	2612.6	2432.6	2375.5	2568.8	2867.3	2928.7	3086.8	3174.6	3148.3
32.5°	3372.2	3332.7	3152.7	2845.3	2617.0	2691.6	3034.1	3104.5	3306.3	3381.0	3323.9
35°	4030.9	4026.5	3802.5	3407.4	3082.4	2946.4	3249.3	3332.7	3587.4	3653.2	3561.1
37.5°	4728.9	4746.6	4597.3	4052.9	3670.8	3363.4	3534.7	3631.3	3943.0	4022.2	3934.2
40°	5506.3	5501.8	5444.7	4799.3	4377.7	3956.2	3947.4	4035.2	4412.8	4535.8	4412.8
42.5°	6489.7	6481.0	6274.7	5695.1	5234.0	4728.9	4548.9	4579.6	5001.3	5203.3	5023.2
45°	7491.0	7429.4	7192.3	6691.7	6283.5	5686.2	5343.7	5343.7	5703.8	5980.5	5699.4
47.5°	8048.5	7987.1	7890.5	7613.9	7491.0	6823.4	6318.6	6257.1	6538.0	6819.2	6423.9
50°	8781.8	8781.8	8540.4	8434.9	8645.7	8176.0	7394.3	7332.9	7469.0	7692.8	7174.8
52.5°	9361.4	9256.0	9084.7	9177.1	9778.6	9563.4	8470.1	8351.5	8457.0	8514.0	7829.0
55°	9602.9	9501.9	9488.7	9826.9	10757.7	10459.1	9572.2	9466.8	9458.1	9177.1	8399.8
57.5°	9651.2	9563.4	9730.4	10323.1	11710.6	11192.4	10670.0	10590.8	10345.1	9642.4	8983.8
60°	9242.9	9286.8	9690.7	10595.2	12272.6	11829.2	11596.4	11512.9	10946.6	10037.7	9633.7
62.5°	8404.3	8509.6	9264.8	10621.6	12066.3	12088.2	12110.2	12053.1	11412.0	10397.7	10287.8
65°	7411.8	7442.5	8351.5	10257.1	11706.3	12009.3	12487.8	12483.3	11767.6	10801.7	11025.5
67.5°	6107.8	6160.4	6946.5	9027.7	10986.1	11974.0	12983.9	12970.7	12171.7	11262.7	11464.7
70°	4544.6	4610.6	5247.2	7021.2	9379.1	11535.0	13633.8	13642.6	12597.6	11613.9	11161.7
71°	3543.5	3662.0	4329.4	5962.9	8558.0	11091.5	13695.3	13774.3	12645.9	11565.7	10538.1
72.5°	1738.8	1879.3	2718.0	4197.7	7043.0	10099.1	13291.3	13445.0	12342.9	10964.2	9010.2
75°	452.2	478.5	812.2	1716.8	3776.1	6691.7	10718.2	11109.0	10090.3	8347.1	5506.3
77.5°	285.4	294.1	382.0	667.4	1413.9	2542.4	6296.6	6489.7	5765.3	4228.4	1940.8
80°	201.9	206.4	241.6	430.3	825.5	742.1	2265.7	2349.2	2085.7	1119.6	346.8
82.5°	123.0	123.0	175.7	276.6	509.3	404.0	597.2	636.7	562.0	311.7	114.2
85°	70.2	74.6	109.8	188.9	241.6	197.5	223.9	237.2	241.6	206.4	48.2
87.5°	57.1	61.4	96.6	158.1	131.7	96.6	96.6	101.0	105.5	123.0	22.0
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°	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6
2.5°	2120.8	2120.8	2125.2	2120.8	2120.8	2120.8	2125.2	2125.2	2125.2	2134.1	2138.3
5°	2129.6	2129.6	2129.6	2125.2	2120.8	2120.8	2129.6	2134.1	2134.1	2147.2	2147.2
7.5°	2151.5	2151.5	2142.7	2134.1	2125.2	2112.1	2116.4	2120.8	2116.4	2120.8	2120.8
10°	2199.9	2199.9	2186.7	2169.0	2142.7	2103.2	2050.7	1984.6	1923.2	1901.3	1892.5
12.5°	2278.9	2274.5	2248.2	2217.5	2160.3	2024.2	1826.7	1594.0	1400.6	1347.9	1330.5
15°	2366.8	2358.0	2327.1	2274.5	2120.8	1760.8	1347.9	1049.4	865.0	821.1	812.2
17.5°	2458.9	2445.7	2401.9	2296.4	1940.8	1308.6	869.4	658.6	557.7	548.9	553.3
20°	2555.5	2537.9	2476.4	2252.5	1567.5	873.8	562.0	509.3	500.5	500.5	504.9
22.5°	2665.4	2643.4	2559.9	2094.5	1141.7	579.5	483.0	478.5	474.2	469.9	469.9
25°	2792.7	2766.3	2639.0	1809.0	785.9	474.2	461.0	447.9	439.1	430.3	425.9
27.5°	2946.4	2911.1	2700.5	1457.8	540.2	443.6	434.7	412.7	395.2	377.6	377.6
30°	3100.1	3056.0	2682.9	1097.6	439.1	412.7	395.2	368.8	342.6	324.9	320.5
32.5°	3262.5	3218.5	2568.8	737.7	399.6	377.6	355.6	316.2	285.4	263.5	259.2
35°	3504.0	3468.9	2344.8	487.4	360.0	333.7	303.0	263.5	223.9	201.9	197.5
37.5°	3864.0	3820.1	2068.1	373.2	316.2	276.6	250.3	206.4	166.8	144.8	140.6
40°	4347.0	4215.2	1738.8	329.3	276.6	228.3	193.1	149.3	118.5	105.5	105.5
42.5°	4909.1	4597.3	1383.1	298.5	245.9	188.9	140.6	101.0	83.5	79.1	79.1
45°	5506.3	4953.0	1027.5	276.6	215.1	149.3	101.0	70.2	61.4	57.1	57.1
47.5°	6121.0	5242.8	715.7	250.3	180.0	114.2	70.2	52.7	43.8	39.5	39.5
50°	6696.1	5431.6	504.9	223.9	153.7	83.5	52.7	39.5	30.7	30.7	30.7
52.5°	7095.7	5414.1	364.4	193.1	118.5	57.1	35.2	26.3	26.3	26.3	26.3
55°	7446.9	5348.1	285.4	166.8	92.2	39.5	26.3	22.0	22.0	17.5	17.5
57.5°	7745.5	5242.8	241.6	136.2	65.8	30.7	17.5	17.5	13.1	13.1	13.1
60°	8000.2	5111.0	201.9	114.2	43.8	22.0	13.1	8.8	8.8	4.4	8.8
62.5°	8347.1	5027.6	175.7	87.9	30.7	13.1	8.8	4.4	4.4	0.0	0.0
65°	8601.8	4869.5	149.3	61.4	17.5	8.8	4.4	4.4	0.0	0.0	0.0
67.5°	8610.7	4584.1	109.8	35.2	13.1	8.8	4.4	0.0	0.0	0.0	0.0
70°	7916.9	3907.9	70.2	17.5	8.8	4.4	4.4	0.0	0.0	0.0	0.0
71°	7280.1	3460.0	57.1	13.1	8.8	4.4	0.0	0.0	0.0	0.0	0.0
72.5°	5998.1	2542.4	43.8	13.1	4.4	4.4	0.0	0.0	0.0	0.0	0.0
75°	3306.3	922.1	22.0	8.8	4.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1058.3	281.0	13.1	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	180.0	43.8	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	61.4	17.5	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.5	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.8	4.4	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)