

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: P236950

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236950
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-AF72-170-D-U-T2R-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 750mA 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: 16965.8 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

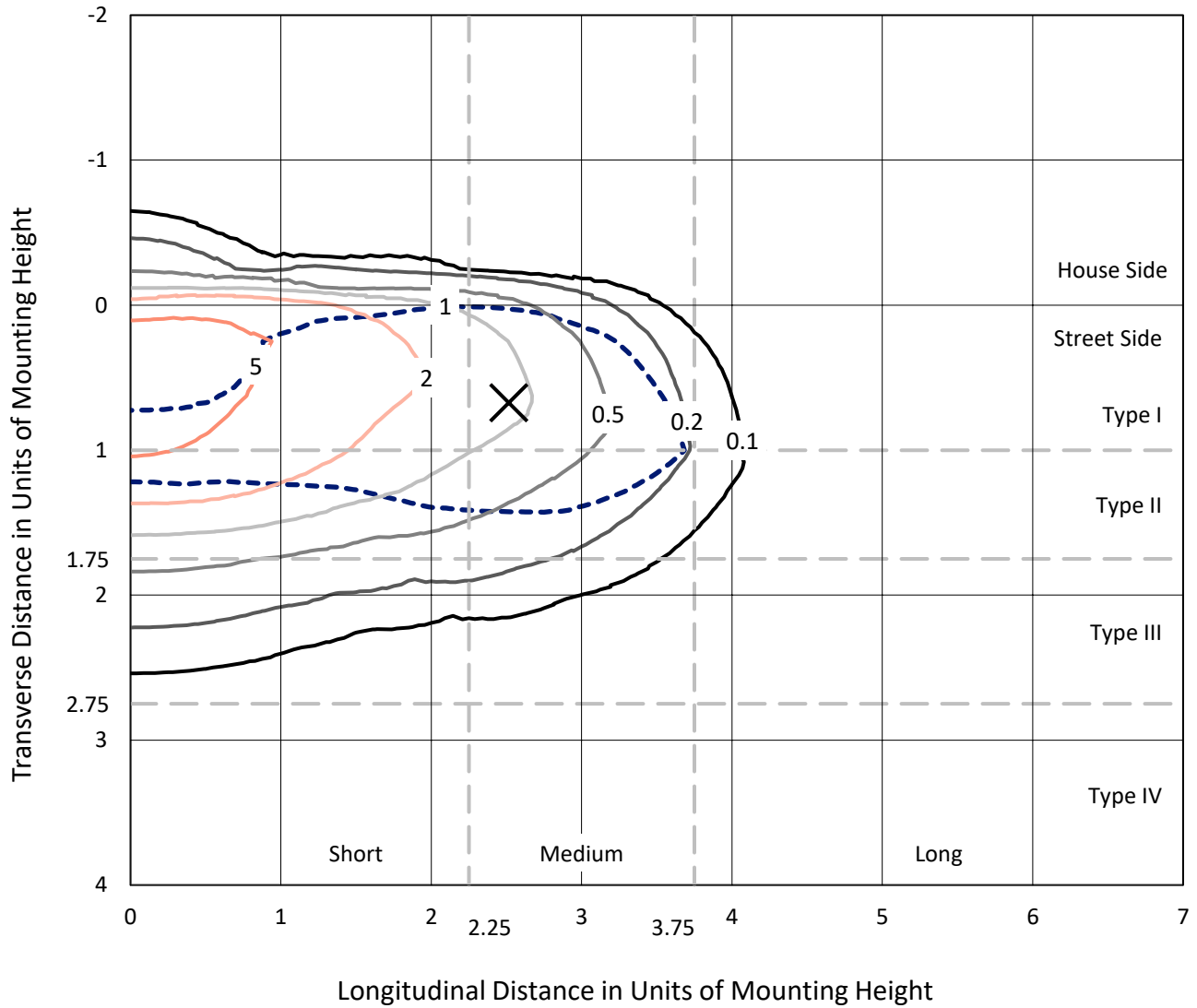
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

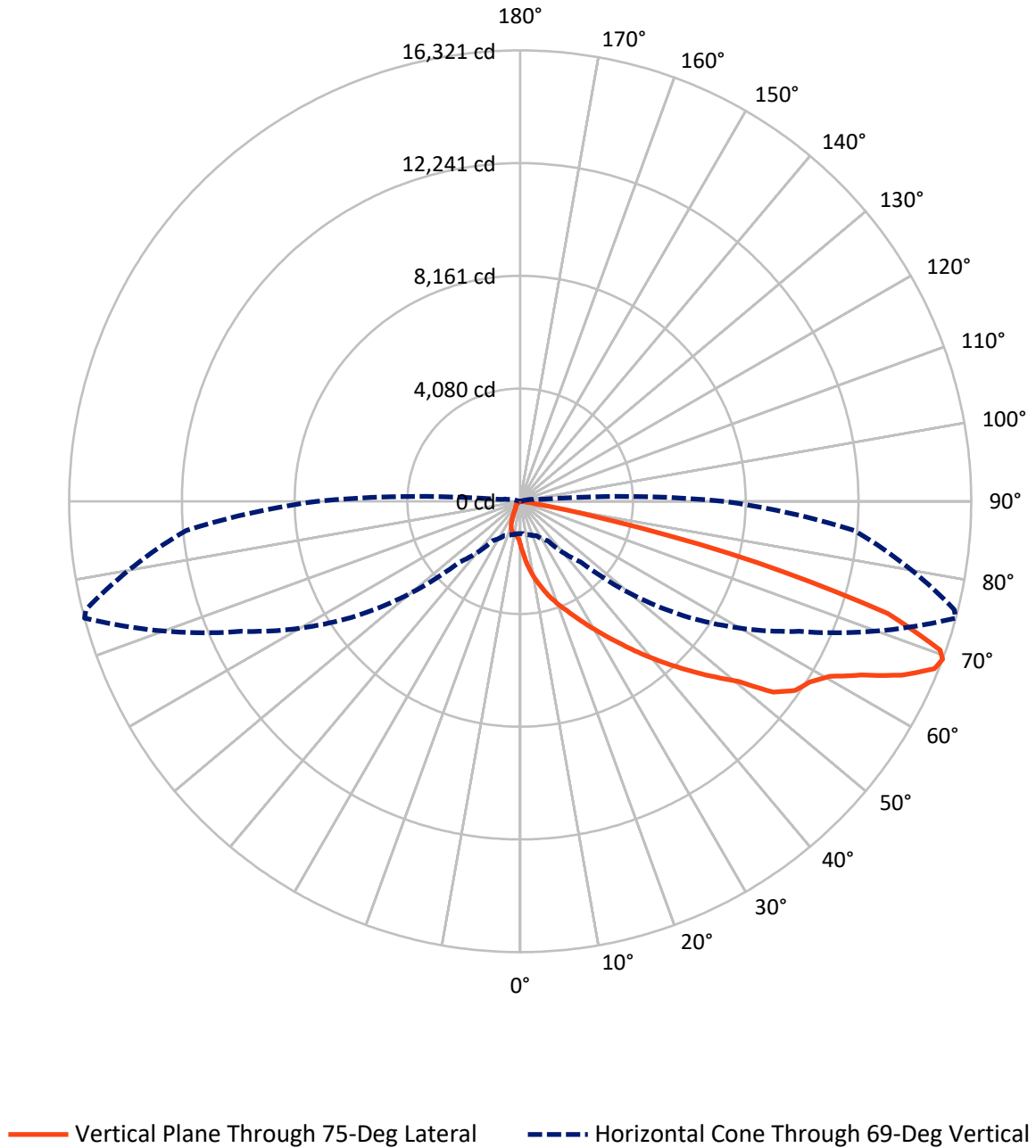
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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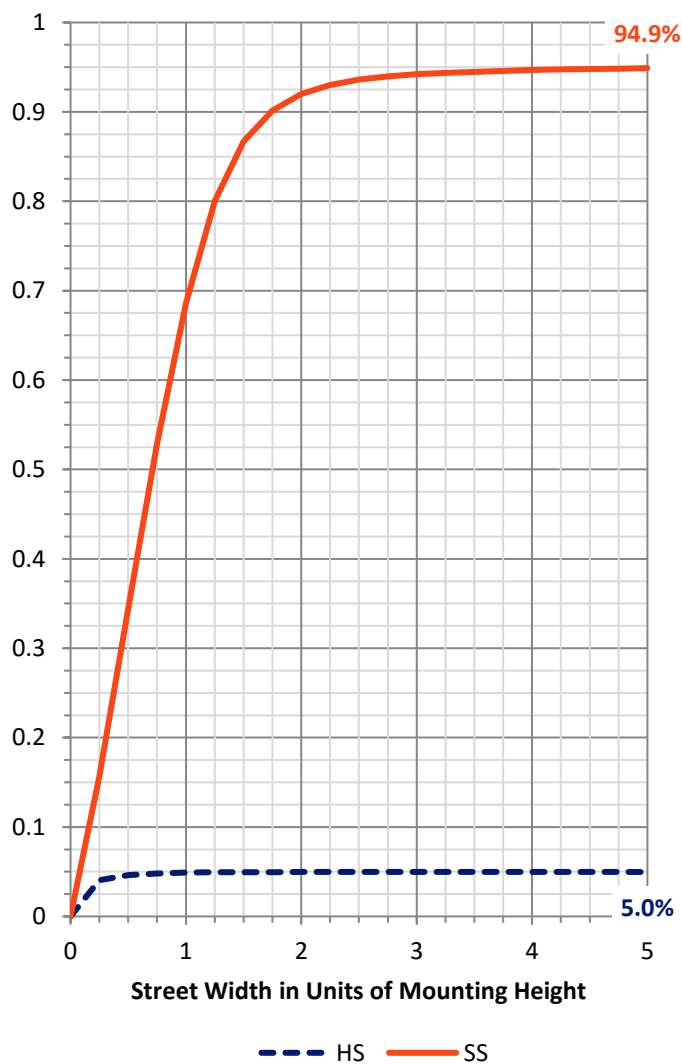
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	846.5	0.0	846.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	16119.3	0.0	16119.3
	% Fixture	95.0	0.0	95.0
Total	Lumens	16965.8	0.0	16965.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.1	1.1
10°-20°	658.1	3.9
20°-30°	1256.3	7.4
30°-40°	2253.7	13.3
40°-50°	3452.8	20.4
50°-60°	4013.0	23.7
60°-70°	3553.6	20.9
70°-80°	1532.8	9.0
80°-90°	61.4	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°	16965.8	100.0
0°-180°	16965.8	100.0

Coefficient of Utilization



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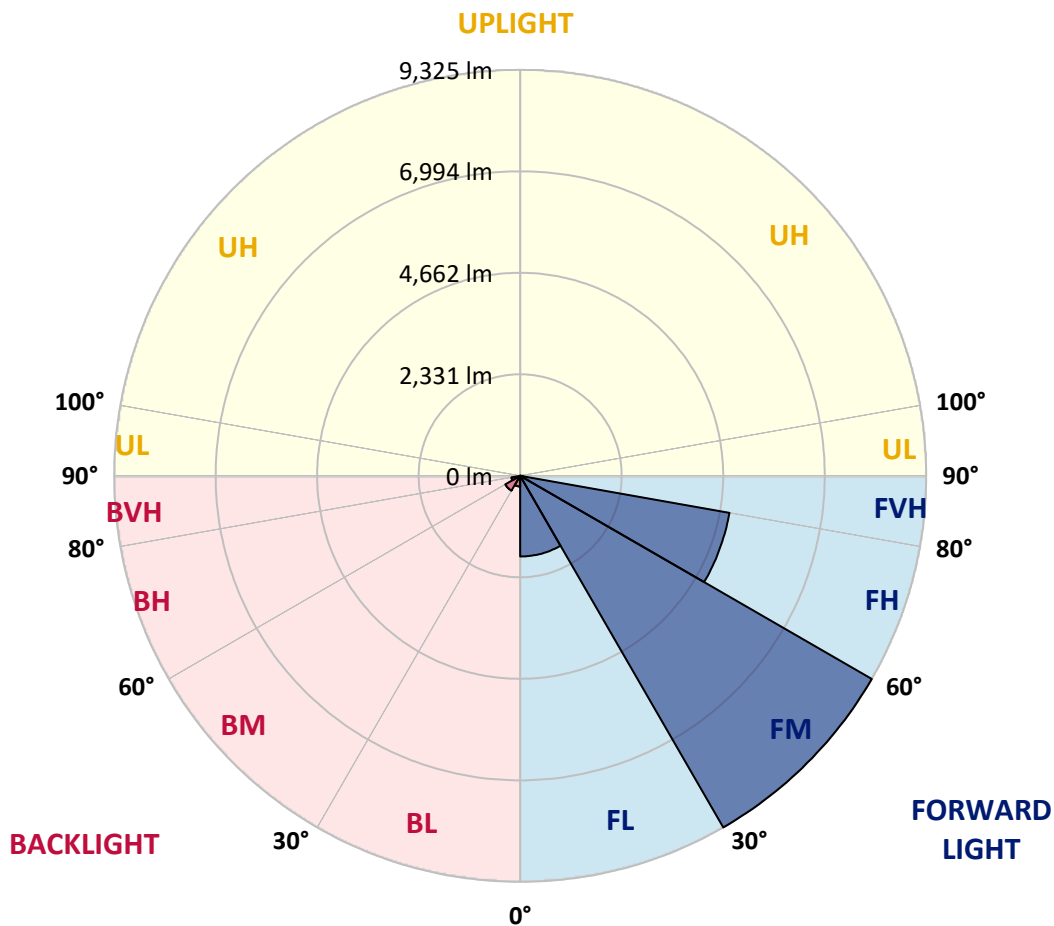
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1852.7	10.9			
FM (30°-60°)	9324.8	55.0			
FH (60°-80°)	4881.3	28.8			G2/5000
FVH (80°-90°)	60.5	0.4			G1/100
BL (0°-30°)	245.8	1.4	B1/500		
BM (30°-60°)	394.7	2.3	B1/1000		
BH (60°-80°)	205.1	1.2	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-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7
2.5°	2600.6	2574.9	2549.3	2519.9	2454.1	2340.6	2197.6	2043.8	1853.4	1820.4	1666.5
5°	3157.3	3146.3	3120.7	3080.3	3007.2	2882.6	2721.4	2494.4	2175.7	2120.7	1794.8
7.5°	3549.3	3541.8	3519.9	3472.4	3406.3	3281.8	3113.4	2867.9	2498.0	2435.7	1956.0
10°	3900.9	3897.2	3878.9	3834.9	3769.0	3633.5	3454.0	3197.6	2805.7	2736.1	2142.7
12.5°	4219.5	4223.2	4215.9	4193.9	4146.3	4018.1	3812.9	3534.5	3102.4	3025.5	2366.1
15°	4406.3	4417.4	4446.7	4490.5	4505.2	4402.7	4190.2	3882.5	3406.3	3340.5	2622.5
17.5°	4344.0	4355.1	4446.7	4596.7	4739.6	4754.3	4563.9	4212.2	3706.7	3640.8	2875.2
20°	4193.9	4208.5	4303.7	4508.9	4787.3	4981.3	4904.4	4571.2	3992.5	3911.8	3117.0
22.5°	4362.4	4362.4	4391.6	4516.2	4768.9	5072.9	5175.5	4930.1	4285.4	4186.6	3358.7
25°	4941.1	4930.1	4867.8	4816.5	4897.1	5168.2	5380.6	5296.4	4629.8	4516.2	3615.2
27.5°	5673.7	5724.9	5607.7	5420.9	5237.8	5355.1	5563.8	5659.0	5010.7	4893.5	3878.9
30°	6494.2	6516.1	6376.9	6127.8	5805.5	5692.0	5780.0	5970.4	5424.6	5296.4	4153.6
32.5°	7233.9	7215.7	7098.5	6838.4	6439.2	6193.8	6058.2	6219.4	5875.1	5728.6	4435.6
35°	7889.6	7904.3	7761.4	7461.1	7069.2	6809.1	6486.8	6501.5	6380.5	6212.1	4761.6
37.5°	8479.4	8453.7	8318.1	8017.9	7662.6	7380.5	7039.9	6794.5	6933.7	6757.8	5127.9
40°	8959.1	8933.5	8790.7	8497.6	8164.3	7933.6	7666.1	7186.4	7516.1	7314.6	5519.8
42.5°	9340.1	9310.7	9189.9	8907.9	8585.6	8380.4	8252.3	7669.9	8138.7	7937.2	5959.3
45°	9526.9	9501.3	9428.0	9215.6	8933.5	8754.1	8816.3	8226.5	8805.3	8636.8	6442.8
47.5°	9307.1	9296.1	9380.4	9343.8	9182.5	9087.3	9303.4	8834.6	9504.9	9340.1	6999.5
50°	8640.6	8658.8	8904.2	9208.3	9285.2	9398.7	9702.7	9475.6	10255.8	10079.9	7640.6
52.5°	6995.9	7120.4	7860.3	8592.9	9160.7	9589.1	10171.6	10391.3	11479.3	11307.0	8640.6
55°	5223.1	5274.4	6080.2	7332.9	8658.8	9574.5	10519.5	10929.8	12083.5	11907.7	8904.2
57.5°	4142.6	4160.9	4560.2	5838.5	7625.9	9244.9	10702.6	11123.9	12347.3	12200.8	9296.1
60°	3252.5	3274.5	3563.9	4442.9	6171.8	8354.8	10438.9	11292.4	12863.6	12746.5	9981.1
62.5°	2531.0	2553.0	2728.8	3245.2	4629.8	6985.0	9907.8	11563.5	13845.4	13790.3	11102.0
65°	1959.6	1966.8	2087.8	2329.5	3270.9	5501.5	9259.5	11816.2	15171.2	15123.6	12010.3
67.5°	1446.8	1457.7	1542.0	1692.2	2208.6	3952.1	8197.2	11622.0	16171.1	16032.0	12340.0
69°	1168.4	1179.5	1252.6	1373.5	1743.4	3113.4	7226.6	11142.1	16321.3	16189.5	12131.2
70°	999.9	1007.3	1080.6	1183.1	1487.1	2644.5	6457.4	10728.2	16123.6	15995.3	11655.0
72.5°	641.1	677.6	750.8	816.8	985.3	1750.8	4358.7	8896.9	13911.2	13691.5	9127.6
75°	355.3	366.2	498.1	578.7	655.7	1139.1	2424.8	5549.2	8849.2	8695.4	4882.5
77.5°	293.1	300.4	351.6	439.6	439.6	637.3	915.7	2186.8	3366.1	3036.5	1322.2
80°	205.1	212.4	267.3	289.3	315.0	358.9	296.6	479.8	520.1	461.5	197.8
82.5°	142.8	150.1	183.1	238.0	252.7	168.5	110.0	142.8	150.1	150.1	76.9
85°	25.6	36.6	135.5	197.8	150.1	51.3	62.3	51.3	47.6	51.3	18.3
87.5°	0.0	0.0	84.2	95.3	80.7	22.0	25.6	18.3	11.0	14.6	7.3
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°	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7	1578.7
2.5°	1589.6	1512.7	1380.8	1285.7	1205.0	1142.8	1117.1	1076.9	1047.6	1062.2	1043.9
5°	1633.7	1498.1	1285.7	1150.1	1054.9	974.3	908.4	857.1	816.8	809.5	802.2
7.5°	1703.3	1509.1	1230.7	1062.2	919.3	794.9	692.2	615.3	556.7	556.7	534.8
10°	1798.4	1538.4	1197.7	974.3	761.9	593.4	490.8	417.6	388.3	384.6	377.3
12.5°	1930.3	1593.3	1172.2	860.8	593.4	432.2	370.0	344.2	333.3	329.6	326.0
15°	2109.8	1673.9	1142.8	721.5	450.4	355.3	329.6	307.7	296.6	293.1	289.3
17.5°	2281.9	1747.2	1080.6	578.7	366.2	322.4	293.1	274.7	260.0	256.4	256.4
20°	2443.0	1809.5	974.3	450.4	329.6	289.3	260.0	238.0	223.4	219.7	219.7
22.5°	2611.6	1860.6	842.4	366.2	300.4	256.4	227.0	205.1	190.4	186.9	183.1
25°	2791.0	1897.3	692.2	326.0	271.1	227.0	194.2	175.8	164.9	161.1	157.6
27.5°	2985.2	1911.9	549.5	296.6	238.0	197.8	168.5	150.1	142.8	139.2	139.2
30°	3161.0	1897.3	424.9	263.8	208.8	172.2	146.5	131.8	124.5	120.8	120.8
32.5°	3344.1	1860.6	340.7	234.5	183.1	146.5	124.5	113.5	110.0	106.2	106.2
35°	3538.3	1813.0	293.1	208.8	157.6	128.2	110.0	102.6	98.9	95.3	95.3
37.5°	3765.3	1754.4	267.3	186.9	139.2	113.5	95.3	91.6	88.0	88.0	88.0
40°	4021.8	1681.2	249.1	168.5	124.5	98.9	84.2	80.7	76.9	76.9	76.9
42.5°	4292.8	1597.0	230.7	150.1	110.0	84.2	73.2	73.2	69.6	69.6	65.9
45°	4596.7	1512.7	212.4	131.8	95.3	73.2	62.3	58.6	58.6	54.9	54.9
47.5°	4955.8	1435.7	194.2	117.2	84.2	62.3	54.9	51.3	47.6	43.9	43.9
50°	5461.3	1428.4	172.2	102.6	76.9	51.3	43.9	40.3	36.6	33.0	33.0
52.5°	5963.1	1362.6	146.5	84.2	62.3	43.9	33.0	29.3	25.6	25.6	22.0
55°	6076.6	1252.6	128.2	73.2	47.6	33.0	25.6	18.3	18.3	14.6	14.6
57.5°	6325.7	1201.5	110.0	58.6	36.6	25.6	14.6	11.0	11.0	11.0	11.0
60°	6816.4	1186.8	95.3	51.3	25.6	18.3	11.0	7.3	7.3	3.8	3.8
62.5°	7494.1	1172.2	80.7	43.9	18.3	11.0	7.3	3.8	0.0	0.0	0.0
65°	7867.6	1073.2	65.9	33.0	14.6	11.0	3.8	0.0	0.0	0.0	0.0
67.5°	7768.8	886.4	58.6	22.0	11.0	7.3	3.8	0.0	0.0	0.0	0.0
69°	7354.9	747.3	47.6	18.3	11.0	7.3	3.8	0.0	0.0	0.0	0.0
70°	6856.8	644.6	43.9	14.6	7.3	3.8	3.8	0.0	0.0	0.0	0.0
72.5°	4867.8	336.9	29.3	11.0	7.3	3.8	0.0	0.0	0.0	0.0	0.0
75°	2274.6	150.1	18.3	7.3	3.8	3.8	0.0	0.0	0.0	0.0	0.0
77.5°	501.8	69.6	11.0	7.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	95.3	25.6	7.3	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.0	11.0	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	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)