

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: P265649

Luminaire Tested: **ARCH-L-AF72-170-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265649
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-AF72-170-D-U-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 750mA 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: 13944.9 lumens
Efficiency: N/A
Efficacy: 80.6 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 - G3

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: 28.75 FT

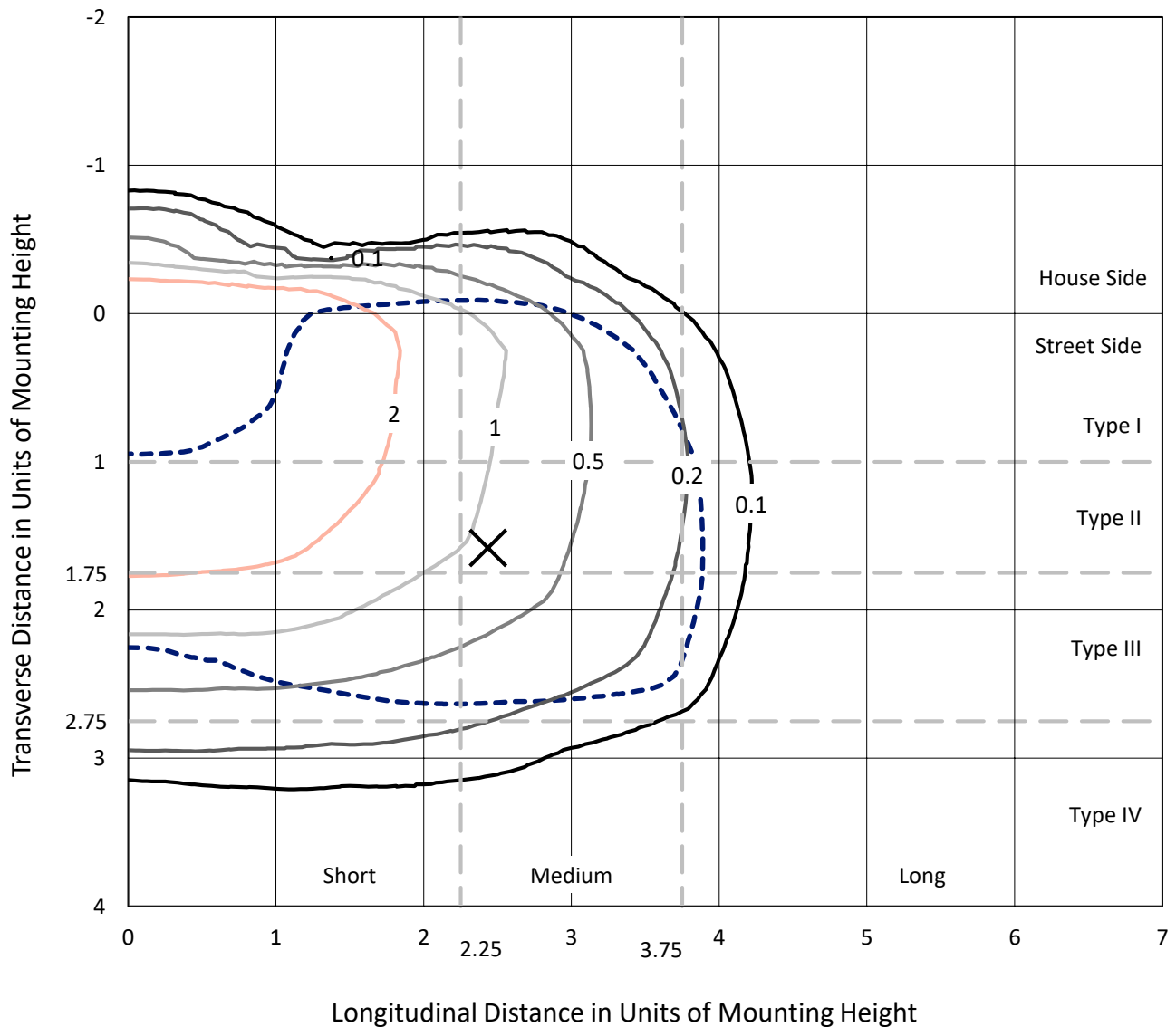


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

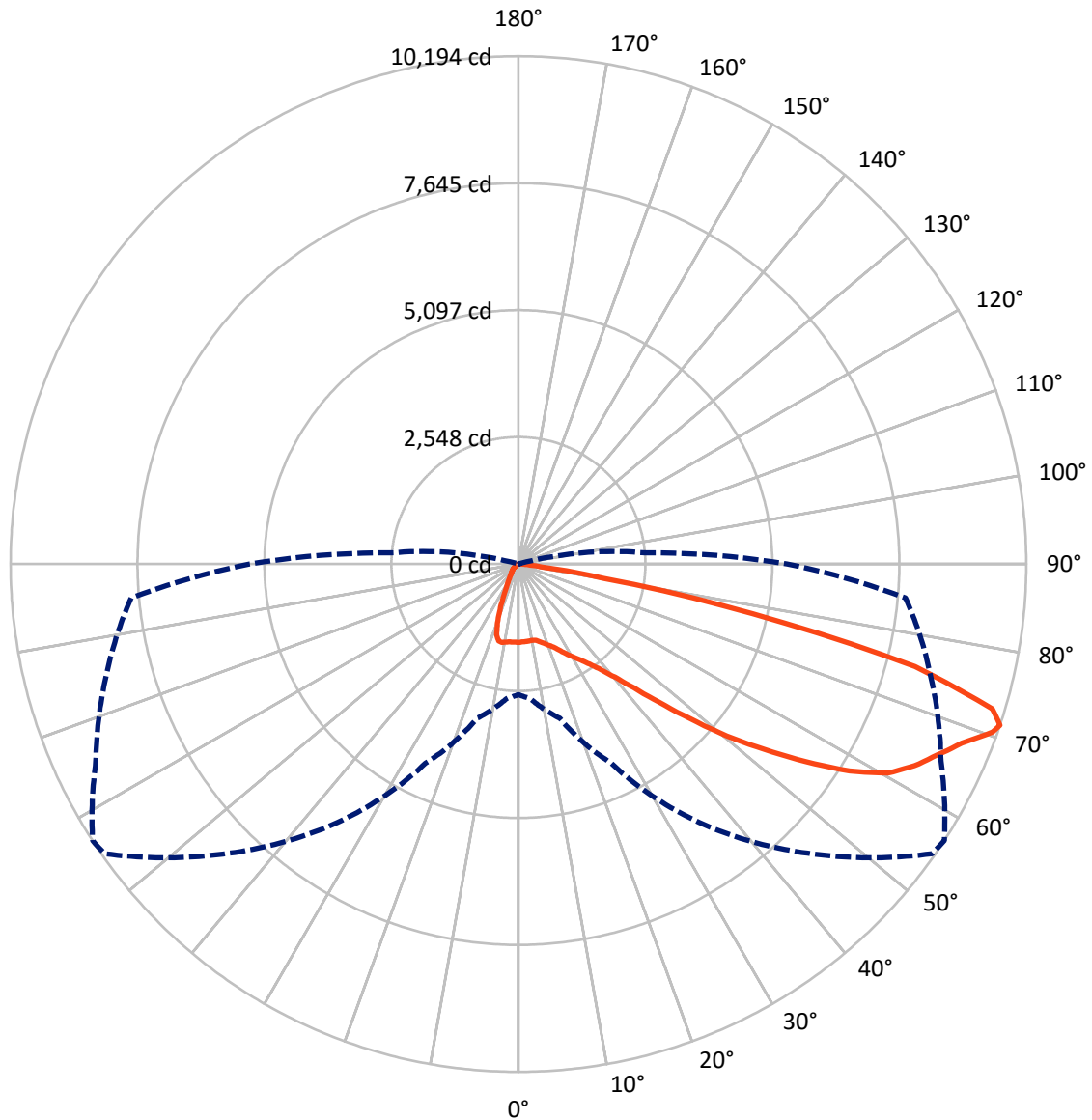


Based on 20 foot mounting height. Maximum calculated value = 4.9 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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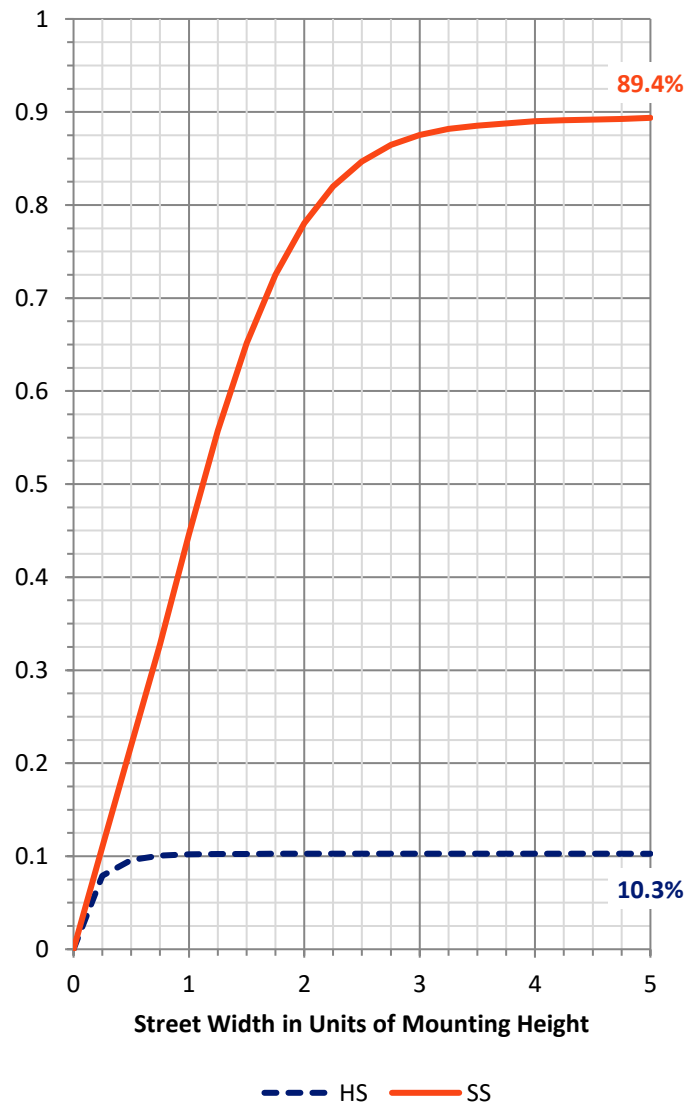
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1445.1	0.0	1445.1
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	12499.8	0.0	12499.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	13944.9	0.0	13944.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	1.1
10°-20°	395.7	2.8
20°-30°	617.3	4.4
30°-40°	1043.4	7.5
40°-50°	2026.6	14.5
50°-60°	3403.2	24.4
60°-70°	4061.4	29.1
70°-80°	2140.4	15.3
80°-90°	108.8	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°	13944.9	100.0
0°-180°	13944.9	100.0

Coefficient of Utilization



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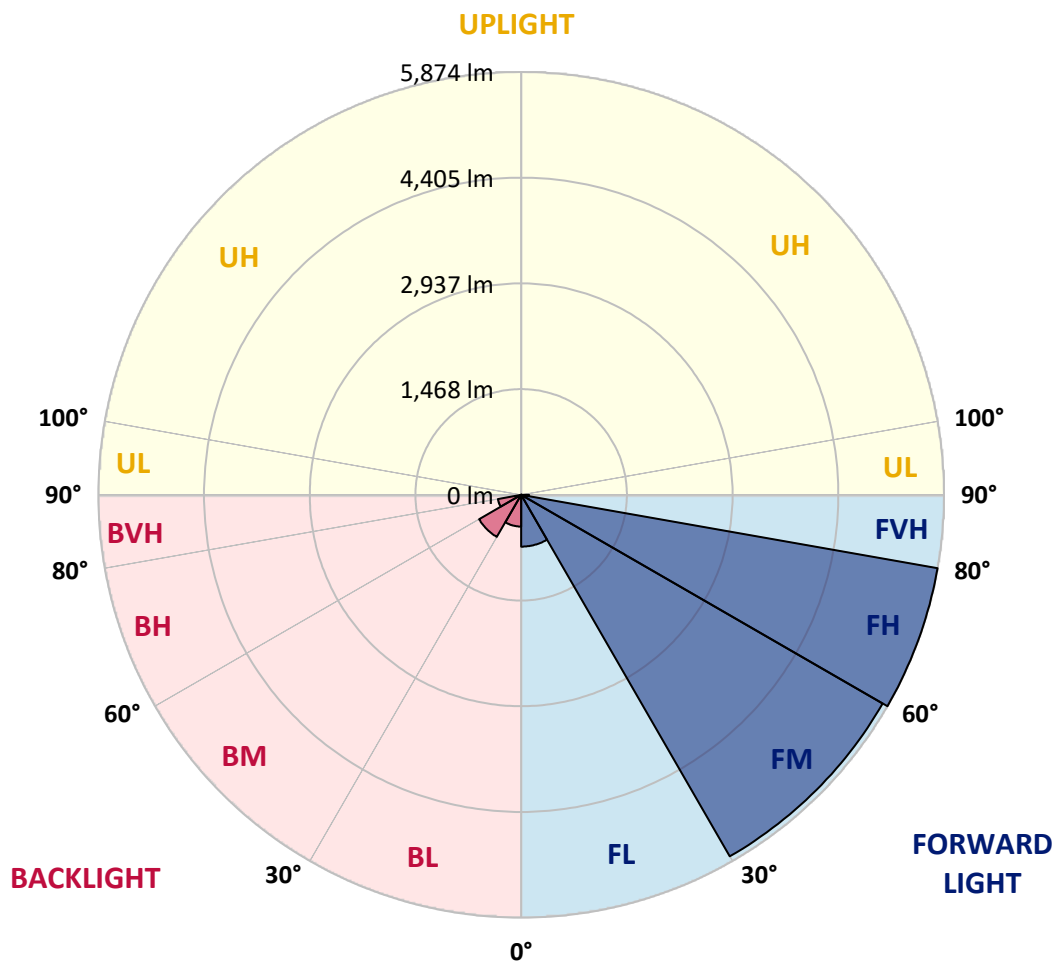
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	719.9	5.2			
FM	(30°-60°)	5798.4	41.6			
FH	(60°-80°)	5873.7	42.1			G3/7500
FVH	(80°-90°)	107.7	0.8			G2/225
BL	(0°-30°)	441.1	3.2	B1/500		
BM	(30°-60°)	674.8	4.8	B1/1000		
BH	(60°-80°)	328.2	2.4	B1/500		G1/500
BVH	(80°-90°)	1.0	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9
2.5°	1553.2	1553.2	1553.2	1556.6	1559.7	1559.7	1566.3	1563.1	1563.1	1563.1	1569.5
5°	1510.9	1514.3	1517.4	1524.0	1537.0	1546.7	1563.1	1563.1	1566.3	1572.8	1575.9
7.5°	1452.5	1455.8	1465.6	1478.5	1504.5	1527.3	1553.2	1559.7	1569.5	1585.8	1592.2
10°	1416.7	1423.3	1436.3	1452.5	1481.8	1510.9	1543.5	1553.2	1582.5	1611.6	1628.0
12.5°	1407.0	1410.2	1423.3	1449.2	1485.0	1520.7	1563.1	1572.8	1615.0	1660.4	1686.5
15°	1423.3	1426.5	1432.9	1462.3	1504.5	1549.9	1605.2	1618.2	1670.2	1722.2	1754.7
17.5°	1452.5	1452.5	1458.9	1485.0	1530.5	1582.5	1654.0	1673.5	1731.9	1790.4	1826.2
20°	1472.1	1472.1	1481.8	1507.7	1559.7	1628.0	1712.4	1738.5	1803.4	1868.5	1901.0
22.5°	1491.5	1494.8	1504.5	1533.8	1592.2	1686.5	1783.9	1809.9	1884.6	1952.9	1985.4
25°	1546.7	1543.5	1546.7	1572.8	1640.9	1758.0	1881.4	1913.8	1991.9	2066.6	2082.9
27.5°	1699.5	1692.9	1650.7	1634.5	1686.5	1832.7	2004.8	2037.4	2128.4	2203.2	2203.2
30°	2050.4	2037.4	1933.4	1800.3	1758.0	1901.0	2121.8	2167.4	2284.4	2349.3	2329.8
32.5°	2495.6	2466.3	2333.1	2105.6	1936.7	1991.9	2245.4	2297.3	2446.9	2502.0	2459.7
35°	2983.0	2979.8	2814.0	2521.6	2281.2	2180.4	2404.7	2466.3	2654.9	2703.5	2635.3
37.5°	3499.6	3512.6	3402.2	2999.3	2716.6	2489.1	2615.9	2687.3	2918.1	2976.5	2911.4
40°	4074.8	4071.6	4029.3	3551.7	3239.6	2927.8	2921.3	2986.2	3265.7	3356.6	3265.7
42.5°	4802.7	4796.2	4643.5	4214.6	3873.3	3499.6	3366.4	3389.1	3701.1	3850.7	3717.4
45°	5543.6	5498.0	5322.5	4952.1	4649.9	4208.0	3954.6	3954.6	4221.0	4425.8	4217.8
47.5°	5956.2	5910.8	5839.3	5634.6	5543.6	5049.6	4675.9	4630.5	4838.5	5046.4	4753.9
50°	6498.9	6498.9	6320.1	6242.2	6398.2	6050.4	5472.0	5426.7	5527.4	5693.1	5309.6
52.5°	6927.8	6849.8	6723.2	6791.4	7236.6	7077.2	6268.3	6180.5	6258.4	6300.7	5793.8
55°	7106.5	7031.8	7022.1	7272.3	7961.1	7740.2	7083.9	7005.8	6999.4	6791.4	6216.2
57.5°	7142.3	7077.2	7200.8	7639.5	8666.3	8282.8	7896.2	7837.7	7655.7	7135.7	6648.4
60°	6840.1	6872.7	7171.6	7840.9	9082.3	8754.1	8581.8	8520.1	8100.8	7428.3	7129.3
62.5°	6219.4	6297.5	6856.4	7860.3	8929.5	8945.7	8962.0	8919.7	8445.3	7694.7	7613.5
65°	5485.1	5507.8	6180.5	7590.7	8663.1	8887.2	9241.5	9238.2	8708.4	7993.7	8159.3
67.5°	4520.0	4559.0	5140.6	6680.9	8130.1	8861.2	9608.6	9598.8	9007.5	8334.8	8484.3
70°	3363.2	3411.9	3883.2	5195.8	6940.8	8536.4	10089.6	10096.1	9322.7	8594.9	8260.2
71°	2622.3	2710.0	3204.0	4412.7	6333.2	8208.2	10135.0	10193.5	9358.5	8559.1	7798.6
72.5°	1286.8	1390.8	2011.5	3106.5	5212.1	7473.8	9836.1	9949.8	9134.2	8113.9	6667.8
75°	334.7	354.2	601.1	1270.6	2794.5	4952.1	7931.9	8221.1	7467.3	6177.3	4074.8
77.5°	211.2	217.7	282.6	493.9	1046.3	1881.4	4659.7	4802.7	4266.5	3129.2	1436.3
80°	149.5	152.7	178.8	318.4	610.8	549.1	1676.7	1738.5	1543.5	828.5	256.7
82.5°	91.0	91.0	130.0	204.8	376.8	299.0	442.0	471.3	415.9	230.8	84.5
85°	52.0	55.2	81.2	139.7	178.8	146.2	165.6	175.4	178.8	152.7	35.8
87.5°	42.2	45.5	71.4	117.0	97.5	71.4	71.4	74.6	78.1	91.0	16.3
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°	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9	1575.9
2.5°	1569.5	1569.5	1572.8	1569.5	1569.5	1569.5	1572.8	1572.8	1572.8	1579.2	1582.5
5°	1575.9	1575.9	1575.9	1572.8	1569.5	1569.5	1575.9	1579.2	1579.2	1589.0	1589.0
7.5°	1592.2	1592.2	1585.8	1579.2	1572.8	1563.1	1566.3	1569.5	1566.3	1569.5	1569.5
10°	1628.0	1628.0	1618.2	1605.2	1585.8	1556.6	1517.4	1468.8	1423.3	1407.0	1400.5
12.5°	1686.5	1683.2	1663.8	1640.9	1598.8	1498.1	1351.8	1179.6	1036.6	997.6	984.6
15°	1751.4	1745.0	1722.2	1683.2	1569.5	1303.0	997.6	776.7	640.1	607.7	601.1
17.5°	1819.6	1809.9	1777.4	1699.5	1436.3	968.4	643.4	487.4	412.7	406.2	409.4
20°	1891.2	1878.1	1832.7	1667.0	1160.0	646.6	415.9	376.8	370.5	370.5	373.6
22.5°	1972.4	1956.1	1894.4	1549.9	844.9	428.9	357.4	354.2	351.0	347.7	347.7
25°	2066.6	2047.1	1952.9	1338.7	581.7	351.0	341.1	331.5	324.9	318.4	315.1
27.5°	2180.4	2154.3	1998.4	1078.9	399.7	328.2	321.8	305.5	292.5	279.5	279.5
30°	2294.1	2261.7	1985.4	812.3	324.9	305.5	292.5	272.9	253.4	240.4	237.2
32.5°	2414.4	2381.9	1901.0	545.9	295.7	279.5	263.3	234.0	211.2	194.9	191.7
35°	2593.0	2567.0	1735.2	360.7	266.4	246.9	224.1	194.9	165.6	149.5	146.2
37.5°	2859.6	2827.1	1530.5	276.1	234.0	204.8	185.2	152.7	123.4	107.3	103.9
40°	3217.0	3119.5	1286.8	243.7	204.8	169.1	143.0	110.5	87.8	78.1	78.1
42.5°	3632.8	3402.2	1023.6	221.0	181.9	139.7	103.9	74.6	61.8	58.5	58.5
45°	4074.8	3665.4	760.3	204.8	159.2	110.5	74.6	52.0	45.5	42.2	42.2
47.5°	4529.8	3879.8	529.7	185.2	133.2	84.5	52.0	38.9	32.5	29.3	29.3
50°	4955.4	4019.6	373.6	165.6	113.7	61.8	38.9	29.3	22.7	22.7	22.7
52.5°	5251.1	4006.6	269.8	143.0	87.8	42.2	26.1	19.6	19.6	19.6	19.6
55°	5511.1	3957.8	211.2	123.4	68.2	29.3	19.6	16.3	16.3	12.9	12.9
57.5°	5732.1	3879.8	178.8	100.7	48.8	22.7	12.9	12.9	9.7	9.7	9.7
60°	5920.5	3782.4	149.5	84.5	32.5	16.3	9.7	6.5	6.5	3.2	6.5
62.5°	6177.3	3720.6	130.0	64.9	22.7	9.7	6.5	3.2	3.2	0.0	0.0
65°	6365.7	3603.6	110.5	45.5	12.9	6.5	3.2	3.2	0.0	0.0	0.0
67.5°	6372.1	3392.4	81.2	26.1	9.7	6.5	3.2	0.0	0.0	0.0	0.0
70°	5858.7	2892.1	52.0	12.9	6.5	3.2	3.2	0.0	0.0	0.0	0.0
71°	5387.6	2560.6	42.2	9.7	6.5	3.2	0.0	0.0	0.0	0.0	0.0
72.5°	4438.7	1881.4	32.5	9.7	3.2	3.2	0.0	0.0	0.0	0.0	0.0
75°	2446.9	682.4	16.3	6.5	3.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	783.1	208.0	9.7	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	133.2	32.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.5	12.9	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.9	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	3.2	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)