

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: P265622

Luminaire Tested: **ARCH-L-AF72-140-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265622
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-AF72-140-D-U-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 620mA 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: 12000.6 lumens
Efficiency: N/A
Efficacy: 83.9 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): 143
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

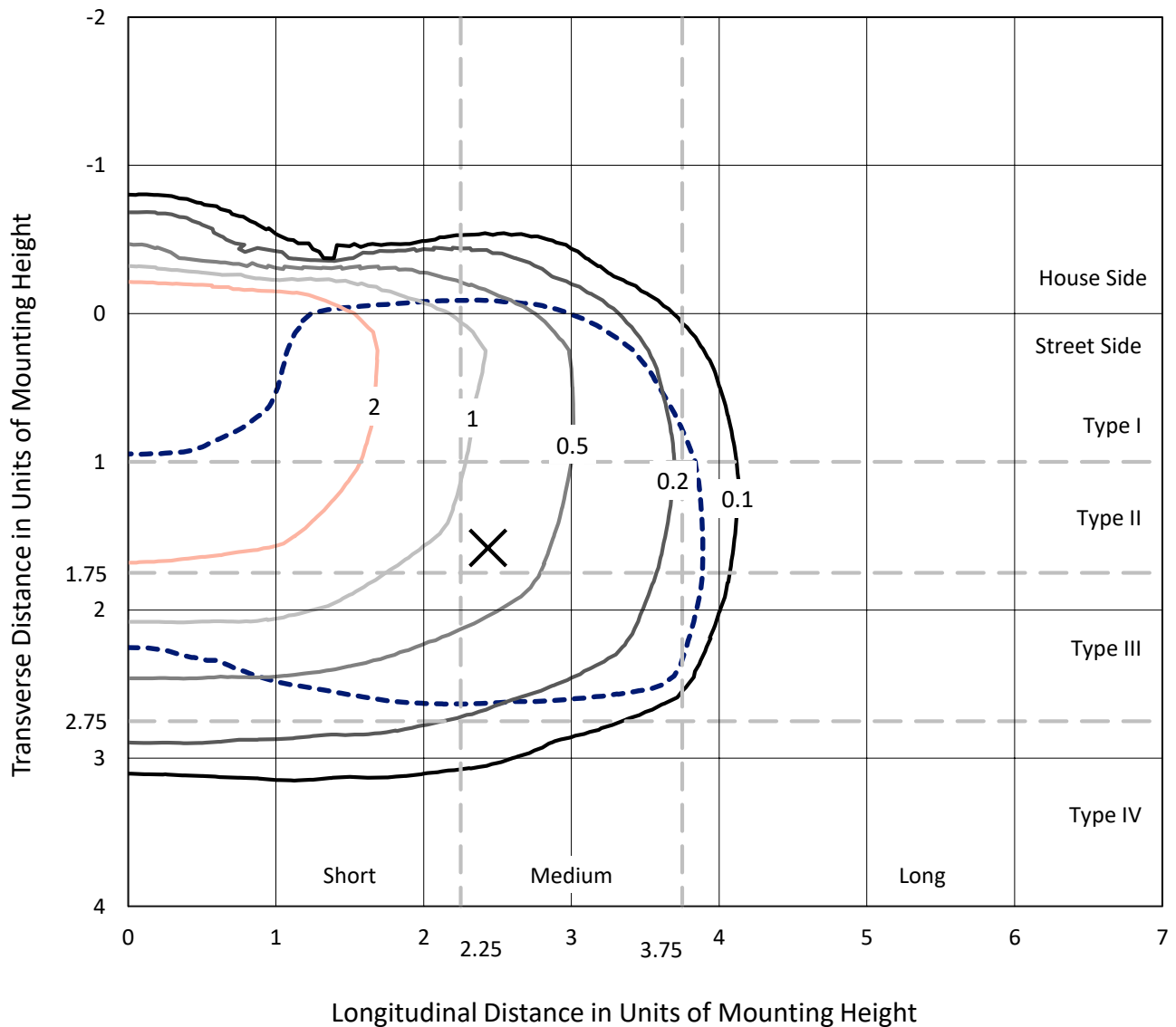


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

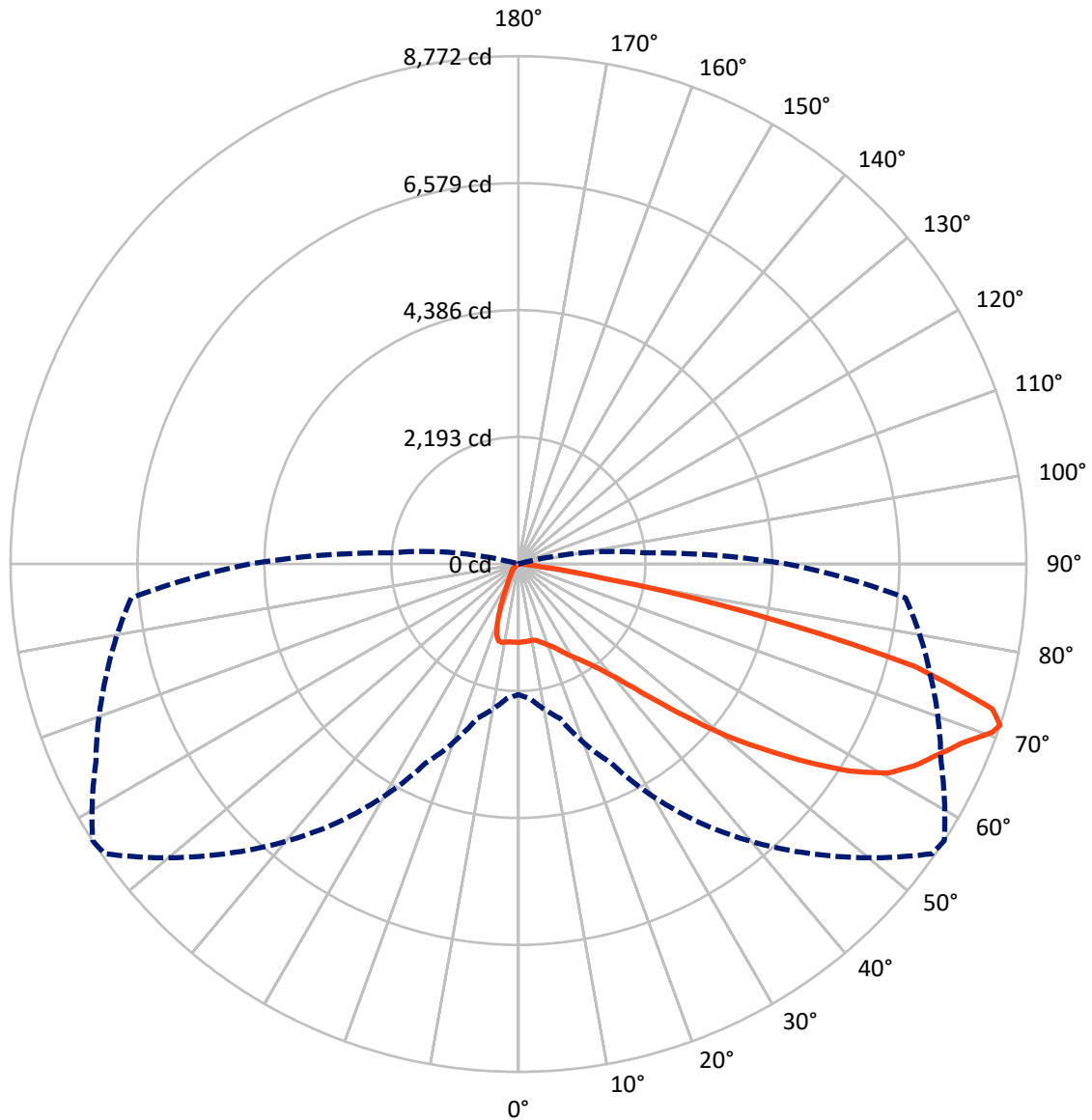


Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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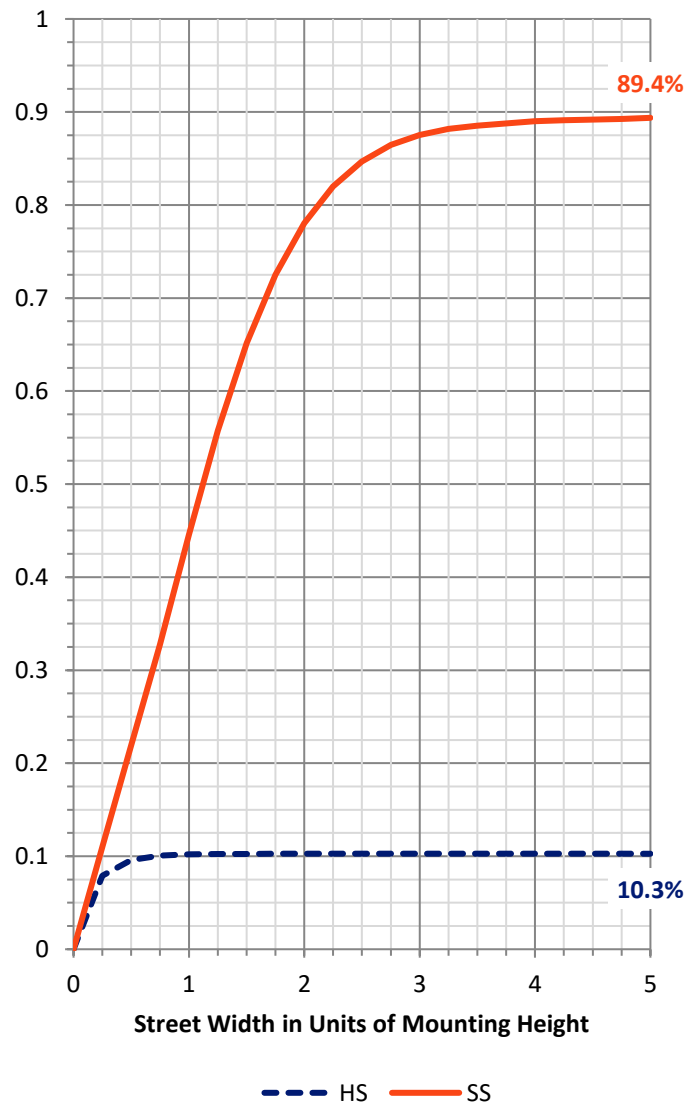
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1243.6	0.0	1243.6
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	10756.9	0.0	10756.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	12000.6	0.0	12000.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.4	1.1
10°-20°	340.6	2.8
20°-30°	531.3	4.4
30°-40°	897.9	7.5
40°-50°	1744.0	14.5
50°-60°	2928.7	24.4
60°-70°	3495.2	29.1
70°-80°	1842.0	15.3
80°-90°	93.6	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°	12000.6	100.0
0°-180°	12000.6	100.0



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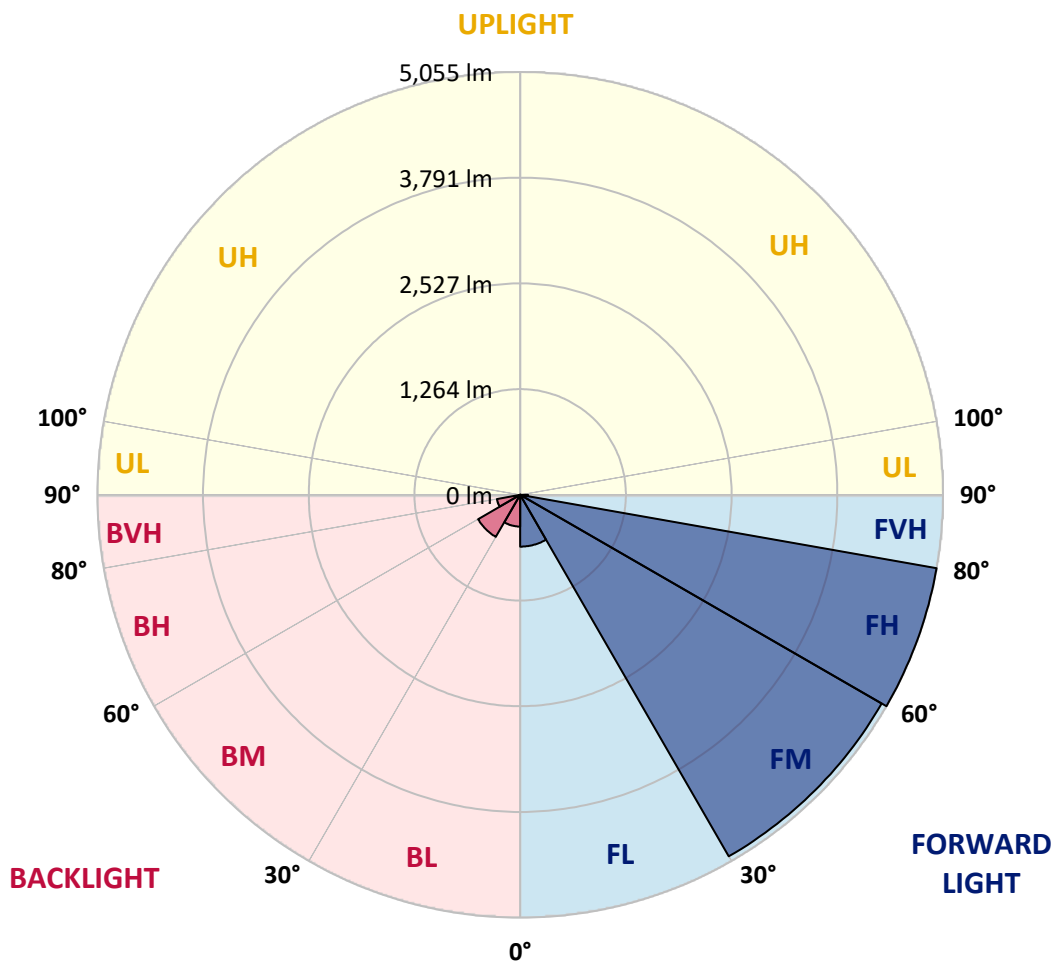
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	619.6	5.2			
FM	(30°-60°)	4989.9	41.6			
FH	(60°-80°)	5054.7	42.1			G3/7500
FVH	(80°-90°)	92.7	0.8			G1/100
BL	(0°-30°)	379.6	3.2	B1/500		
BM	(30°-60°)	580.7	4.8	B1/1000		
BH	(60°-80°)	282.4	2.4	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-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3
2.5°	1336.7	1336.7	1336.7	1339.5	1342.2	1342.2	1347.8	1345.0	1345.0	1345.0	1350.6
5°	1300.3	1303.1	1306.0	1311.5	1322.7	1331.1	1345.0	1345.0	1347.8	1353.4	1356.3
7.5°	1250.0	1252.7	1261.2	1272.4	1294.7	1314.3	1336.7	1342.2	1350.6	1364.6	1370.3
10°	1219.2	1224.7	1236.0	1250.0	1275.1	1300.3	1328.2	1336.7	1361.8	1387.1	1400.9
12.5°	1210.8	1213.6	1224.7	1247.1	1278.0	1308.7	1345.0	1353.4	1389.8	1428.9	1451.3
15°	1224.7	1227.7	1233.3	1258.3	1294.7	1333.9	1381.5	1392.6	1437.4	1482.1	1510.1
17.5°	1250.0	1250.0	1255.7	1278.0	1317.0	1361.8	1423.4	1440.2	1490.5	1540.9	1571.6
20°	1266.8	1266.8	1275.1	1297.5	1342.2	1400.9	1473.7	1496.0	1552.0	1608.0	1636.0
22.5°	1283.6	1286.4	1294.7	1319.9	1370.3	1451.3	1535.3	1557.7	1621.9	1680.5	1708.5
25°	1331.1	1328.2	1331.1	1353.4	1412.1	1512.8	1619.1	1647.0	1714.1	1778.6	1792.5
27.5°	1462.5	1457.0	1420.6	1406.6	1451.3	1577.2	1725.4	1753.3	1831.6	1896.0	1896.0
30°	1764.5	1753.3	1663.8	1549.1	1512.8	1636.0	1826.1	1865.2	1965.9	2021.7	2004.9
32.5°	2147.6	2122.4	2007.8	1812.1	1666.6	1714.1	1932.3	1977.0	2105.6	2153.1	2116.9
35°	2567.0	2564.3	2421.7	2169.9	1963.1	1876.4	2069.3	2122.4	2284.7	2326.6	2268.0
37.5°	3011.7	3022.8	2927.8	2581.1	2337.7	2142.0	2251.2	2312.5	2511.1	2561.4	2505.6
40°	3506.7	3503.8	3467.5	3056.5	2788.0	2519.6	2513.9	2570.0	2810.3	2888.7	2810.3
42.5°	4133.0	4127.4	3996.0	3626.8	3333.3	3011.7	2897.0	2916.6	3185.1	3313.7	3199.0
45°	4770.5	4731.6	4580.5	4261.6	4001.6	3621.2	3403.1	3403.1	3632.4	3808.6	3629.7
47.5°	5125.8	5086.7	5025.1	4849.0	4770.5	4345.6	4024.0	3984.8	4163.9	4342.8	4091.2
50°	5592.8	5592.8	5439.0	5371.9	5506.2	5206.8	4709.2	4670.0	4756.6	4899.3	4569.3
52.5°	5962.0	5894.8	5785.8	5844.5	6227.6	6090.5	5394.2	5318.8	5385.9	5422.2	4986.0
55°	6115.8	6051.4	6043.0	6258.3	6851.2	6661.0	6096.1	6029.1	6023.5	5844.5	5349.4
57.5°	6146.5	6090.5	6196.8	6574.2	7458.0	7128.1	6795.1	6744.8	6588.3	6140.9	5721.5
60°	5886.5	5914.4	6171.6	6747.7	7816.0	7533.5	7385.2	7332.1	6971.3	6392.6	6135.2
62.5°	5352.3	5419.4	5900.3	6764.4	7684.6	7698.5	7712.4	7676.0	7267.7	6621.9	6552.0
65°	4720.4	4739.8	5318.8	6532.4	7455.2	7648.1	7953.0	7950.1	7494.3	6879.1	7021.7
67.5°	3889.8	3923.3	4424.0	5749.3	6996.5	7625.7	8268.9	8260.5	7751.6	7172.7	7301.3
70°	2894.2	2936.2	3341.7	4471.5	5973.1	7346.1	8682.7	8688.3	8022.9	7396.5	7108.4
71°	2256.7	2332.2	2757.3	3797.4	5450.1	7063.6	8722.0	8772.3	8053.6	7365.7	6711.3
72.5°	1107.4	1196.8	1730.9	2673.4	4485.3	6431.7	8464.6	8562.6	7860.7	6982.5	5738.3
75°	288.0	304.9	517.3	1093.3	2404.9	4261.6	6826.0	7074.8	6426.0	5315.9	3506.7
77.5°	181.7	187.3	243.4	425.1	900.5	1619.1	4010.0	4133.0	3671.6	2692.8	1236.0
80°	128.6	131.4	153.8	274.1	525.7	472.6	1442.9	1496.0	1328.2	713.1	221.0
82.5°	78.3	78.3	111.8	176.2	324.4	257.3	380.3	405.5	358.0	198.5	72.8
85°	44.7	47.5	69.9	120.3	153.8	125.9	142.7	151.1	153.8	131.4	30.7
87.5°	36.3	39.2	61.5	100.7	83.9	61.5	61.5	64.3	67.2	78.3	14.0
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°	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3	1356.3
2.5°	1350.6	1350.6	1353.4	1350.6	1350.6	1350.6	1353.4	1353.4	1353.4	1359.0	1361.8
5°	1356.3	1356.3	1356.3	1353.4	1350.6	1350.6	1356.3	1359.0	1359.0	1367.4	1367.4
7.5°	1370.3	1370.3	1364.6	1359.0	1353.4	1345.0	1347.8	1350.6	1347.8	1350.6	1350.6
10°	1400.9	1400.9	1392.6	1381.5	1364.6	1339.5	1306.0	1263.9	1224.7	1210.8	1205.3
12.5°	1451.3	1448.5	1431.8	1412.1	1375.8	1289.2	1163.2	1015.1	892.0	858.5	847.3
15°	1507.3	1501.6	1482.1	1448.5	1350.6	1121.4	858.5	668.2	550.9	523.0	517.3
17.5°	1565.9	1557.7	1529.6	1462.5	1236.0	833.3	553.6	419.5	355.1	349.5	352.3
20°	1627.5	1616.3	1577.2	1434.6	998.2	556.5	358.0	324.4	318.8	318.8	321.7
22.5°	1697.3	1683.5	1630.3	1333.9	727.1	369.2	307.6	304.9	302.0	299.2	299.2
25°	1778.6	1761.8	1680.5	1152.0	500.5	302.0	293.7	285.2	279.6	274.1	271.3
27.5°	1876.4	1854.0	1719.7	928.4	344.0	282.4	276.9	262.8	251.6	240.4	240.4
30°	1974.3	1946.3	1708.5	699.2	279.6	262.8	251.6	234.8	218.1	206.9	204.2
32.5°	2077.7	2049.8	1636.0	469.9	254.5	240.4	226.6	201.3	181.7	167.8	165.0
35°	2231.5	2209.1	1493.3	310.5	229.2	212.4	193.0	167.8	142.7	128.6	125.9
37.5°	2460.7	2432.9	1317.0	237.7	201.3	176.2	159.4	131.4	106.3	92.3	89.6
40°	2768.4	2684.6	1107.4	209.8	176.2	145.4	123.1	95.1	75.5	67.2	67.2
42.5°	3126.3	2927.8	880.9	190.1	156.7	120.3	89.6	64.3	53.1	50.3	50.3
45°	3506.7	3154.3	654.3	176.2	137.0	95.1	64.3	44.7	39.2	36.3	36.3
47.5°	3898.1	3338.9	455.8	159.4	114.7	72.8	44.7	33.5	27.9	25.2	25.2
50°	4264.4	3459.2	321.7	142.7	97.8	53.1	33.5	25.2	19.6	19.6	19.6
52.5°	4519.0	3448.0	232.1	123.1	75.5	36.3	22.4	16.8	16.8	16.8	16.8
55°	4742.7	3406.1	181.7	106.3	58.7	25.2	16.8	14.0	14.0	11.1	11.1
57.5°	4932.9	3338.9	153.8	86.6	42.0	19.6	11.1	11.1	8.4	8.4	8.4
60°	5094.9	3255.0	128.6	72.8	27.9	14.0	8.4	5.6	5.6	2.8	5.6
62.5°	5315.9	3201.9	111.8	56.0	19.6	8.4	5.6	2.8	2.8	0.0	0.0
65°	5478.1	3101.2	95.1	39.2	11.1	5.6	2.8	2.8	0.0	0.0	0.0
67.5°	5483.8	2919.4	69.9	22.4	8.4	5.6	2.8	0.0	0.0	0.0	0.0
70°	5041.8	2488.8	44.7	11.1	5.6	2.8	2.8	0.0	0.0	0.0	0.0
71°	4636.4	2203.5	36.3	8.4	5.6	2.8	0.0	0.0	0.0	0.0	0.0
72.5°	3819.9	1619.1	27.9	8.4	2.8	2.8	0.0	0.0	0.0	0.0	0.0
75°	2105.6	587.2	14.0	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	673.9	178.9	8.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	114.7	27.9	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.2	11.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.1	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	2.8	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)