

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: P258071

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-150-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14164.8 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

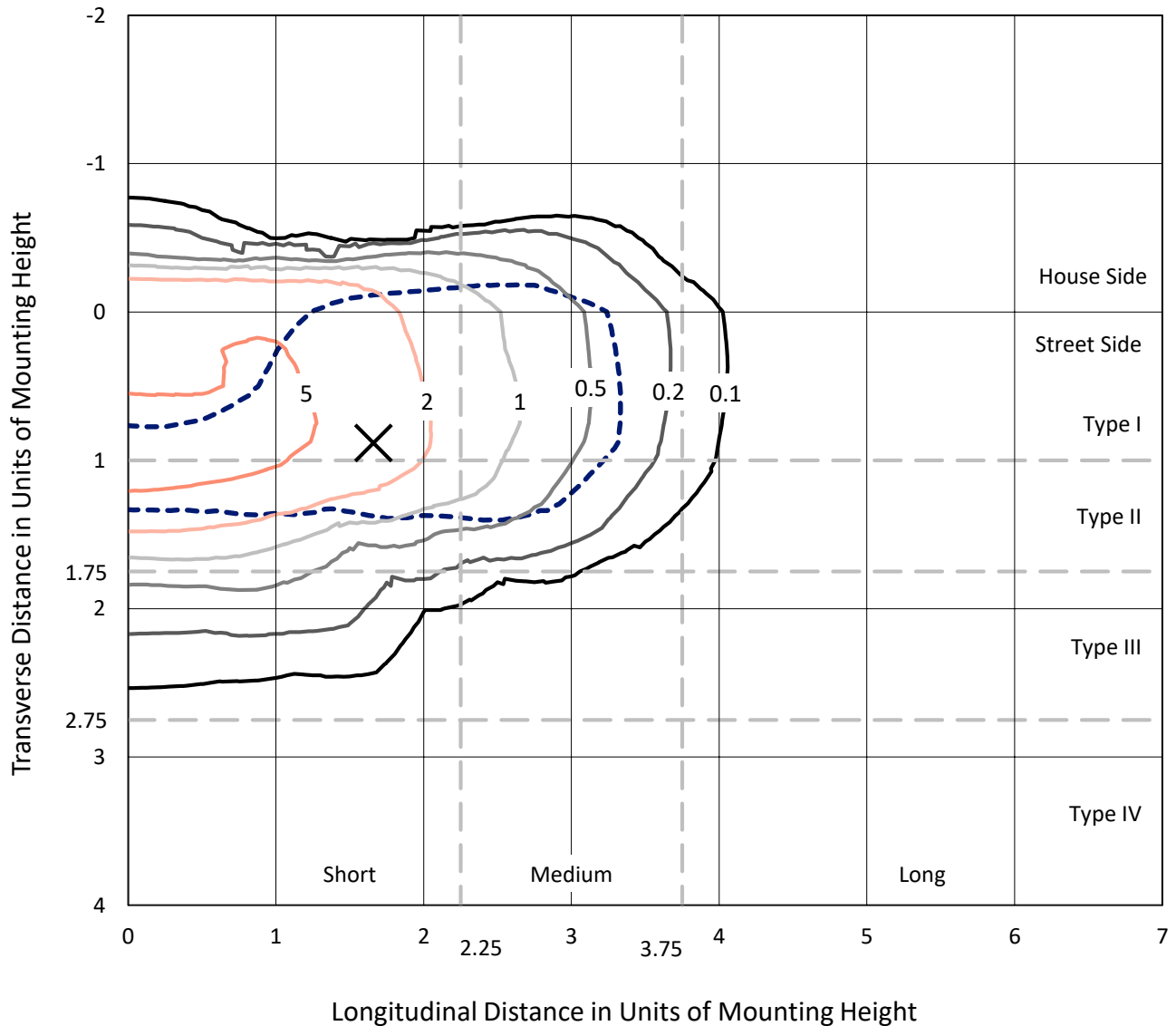
Input Watts (W): 153
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P258071
 CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

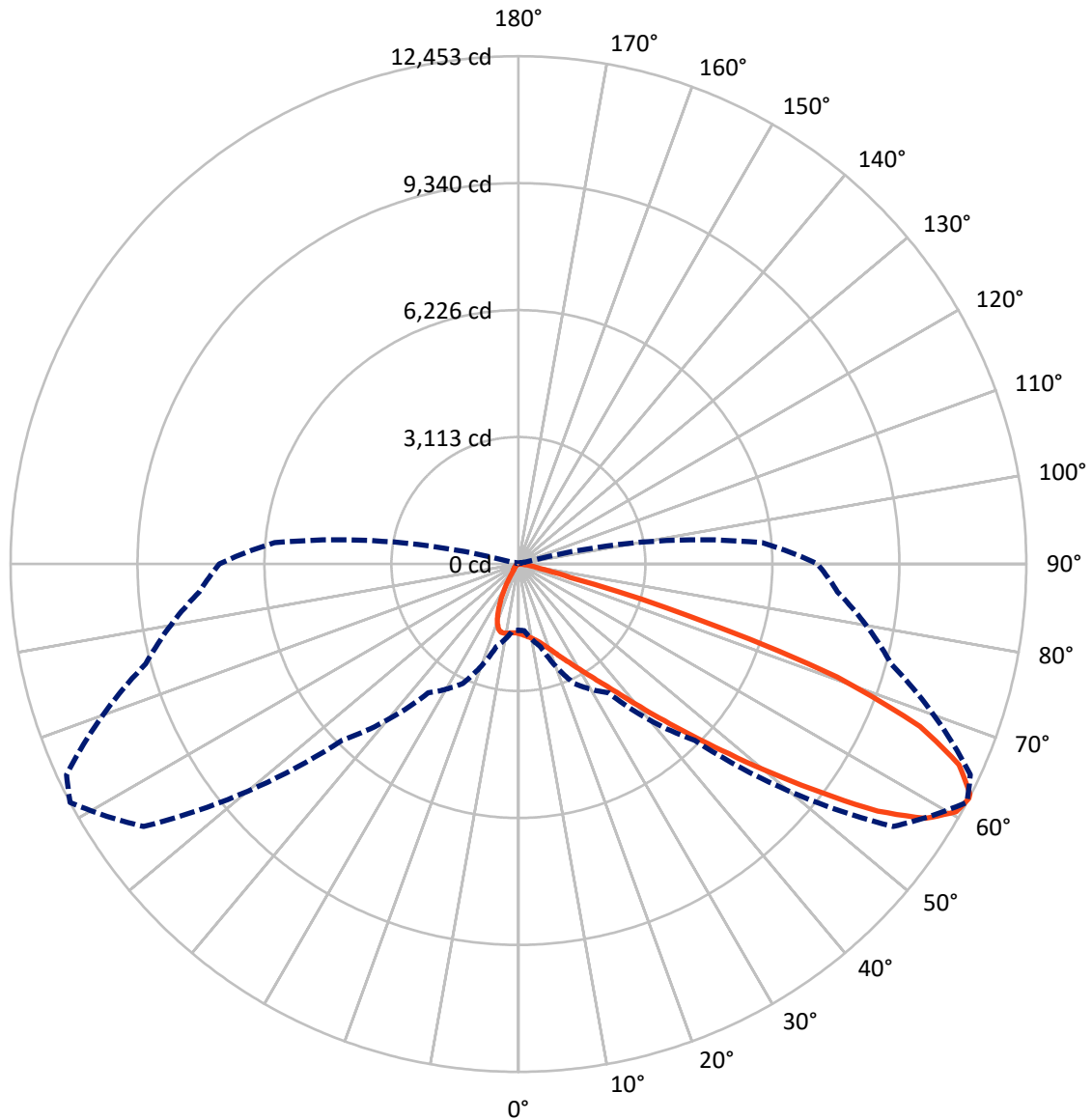
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.1 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P258071
CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

REPORT NUMBER: P258071

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2U-HSS

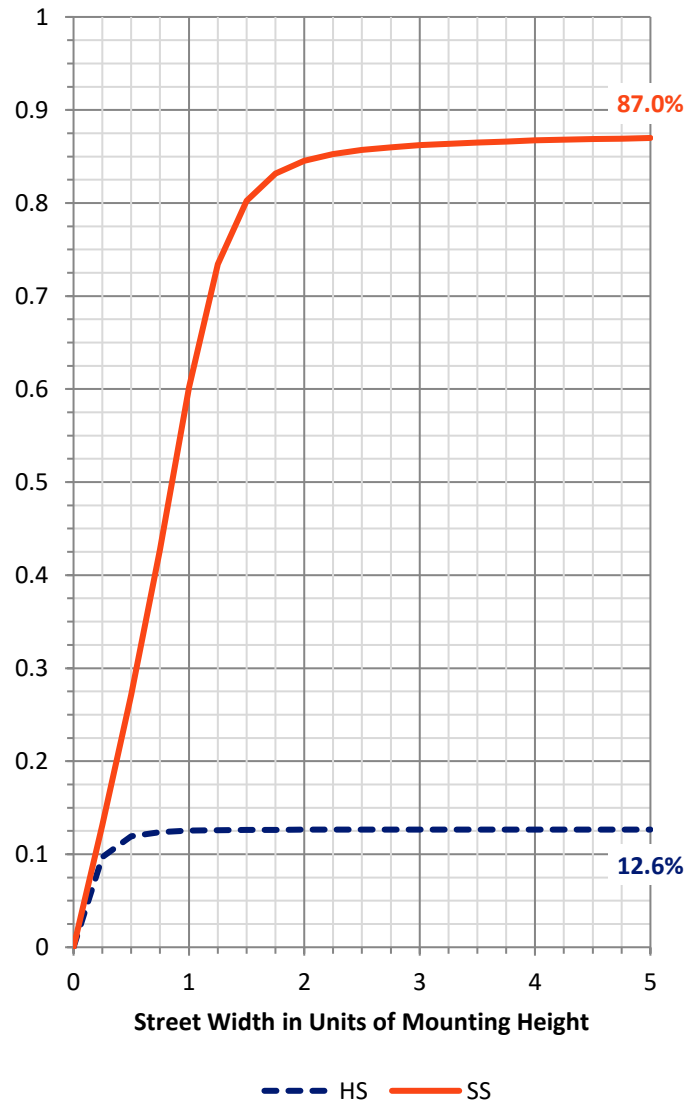
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1811.2	0.0	1811.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12353.6	0.0	12353.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	14164.8	0.0	14164.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	1.2
10°-20°	458.6	3.2
20°-30°	770.1	5.4
30°-40°	1476.3	10.4
40°-50°	3015.3	21.3
50°-60°	3990.3	28.2
60°-70°	3099.8	21.9
70°-80°	1118.9	7.9
80°-90°	71.3	0.5
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°	14164.8	100.0
0°-180°	14164.8	100.0



REPORT NUMBER: P258071

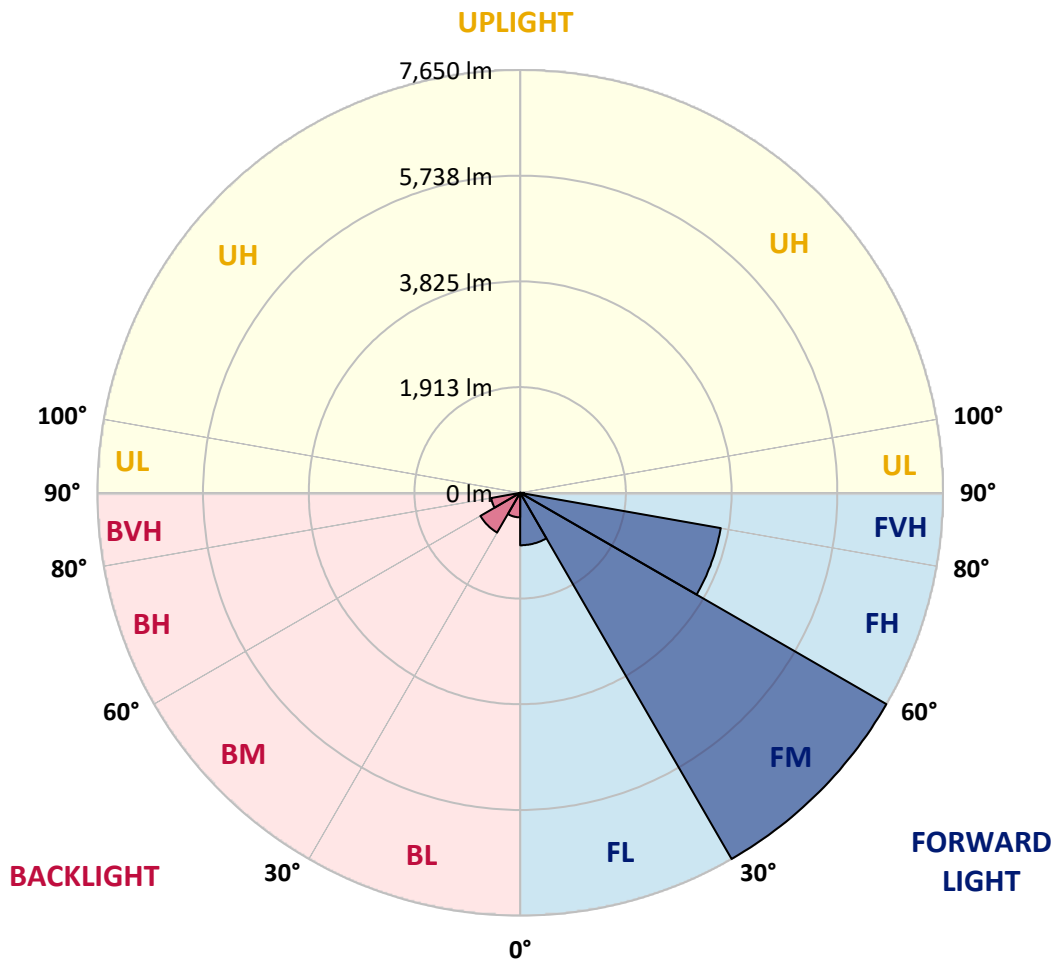
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	949.6	6.7			
FM	(30°-60°)	7650.4	54.0			
FH	(60°-80°)	3685.4	26.0			G2/5000
FVH	(80°-90°)	68.2	0.5			G1/100
BL	(0°-30°)	443.3	3.1	B1/500		
BM	(30°-60°)	831.5	5.9	B1/1000		
BH	(60°-80°)	533.3	3.8	B2/1000		G2/1000
BVH	(80°-90°)	3.1	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-G2

Type II Short





REPORT NUMBER: P258071

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4
2.5°	1751.6	1748.1	1744.6	1741.2	1741.2	1737.7	1734.2	1727.3	1720.3	1713.3	1709.9
5°	1782.9	1779.4	1775.9	1779.4	1775.9	1775.9	1772.5	1765.5	1758.6	1748.1	1737.7
7.5°	1807.3	1803.9	1800.4	1803.9	1807.3	1810.8	1814.3	1807.3	1803.9	1790.0	1779.4
10°	1838.7	1835.2	1831.7	1838.7	1838.7	1856.0	1859.5	1856.0	1852.6	1842.1	1824.7
12.5°	1884.0	1887.4	1887.4	1894.4	1901.4	1922.2	1929.2	1918.7	1918.7	1904.8	1884.0
15°	1967.5	1967.5	1967.5	1974.5	1978.0	2005.8	2012.8	2002.3	2009.3	1984.9	1964.1
17.5°	2047.6	2051.1	2058.1	2072.0	2072.0	2096.3	2110.2	2110.2	2124.3	2092.9	2065.0
20°	2127.7	2131.2	2141.6	2173.0	2173.0	2204.4	2228.7	2239.1	2253.0	2221.7	2173.0
22.5°	2214.8	2214.8	2232.2	2280.9	2270.4	2333.1	2378.5	2395.9	2409.8	2367.9	2291.4
25°	2347.1	2333.1	2347.1	2392.4	2385.4	2472.5	2556.0	2573.4	2590.8	2542.1	2427.2
27.5°	2597.8	2576.9	2528.1	2531.6	2531.6	2632.7	2751.0	2775.4	2785.8	2744.1	2601.3
30°	3099.2	3099.2	2918.2	2796.3	2716.2	2806.8	2973.9	3015.7	3029.6	2967.0	2778.8
32.5°	3973.3	3973.3	3639.0	3329.1	3026.1	3026.1	3217.7	3294.3	3308.2	3235.1	3015.7
35°	5087.6	5080.7	4579.2	4154.4	3562.4	3339.5	3503.2	3632.1	3673.8	3576.3	3322.1
37.5°	6271.6	6226.4	5686.6	5199.1	4387.7	3841.0	3889.8	4060.4	4098.7	4018.6	3719.1
40°	7232.8	7180.5	6745.2	6337.8	5453.4	4641.9	4446.9	4603.6	4648.9	4537.5	4192.7
42.5°	8103.3	7974.5	7675.0	7382.5	6679.1	6027.8	5188.6	5251.3	5300.1	5181.7	4725.5
45°	8733.6	8535.2	8382.0	8291.4	7918.8	7549.7	6149.8	6024.4	6041.9	5895.6	5307.1
47.5°	8751.0	8611.8	8625.7	8862.5	9015.7	9001.8	7399.9	6954.2	6888.0	6644.3	5926.9
50°	7915.3	7995.4	8249.6	8925.1	9753.9	10255.4	8886.9	8054.6	7856.1	7417.3	6543.3
52.5°	6522.3	6647.7	7124.9	8263.5	9862.0	11080.7	10429.5	9311.7	8956.5	8183.4	7016.8
55°	5108.5	5115.6	5617.0	6776.5	9141.1	11230.5	11662.3	10694.2	10150.9	8764.9	7330.3
57.5°	3513.6	3705.2	4342.4	5122.5	7514.8	10485.2	12125.4	11766.7	11066.8	9123.7	7549.7
60°	2301.8	2312.3	3054.0	3956.0	5115.6	8531.7	11843.3	12334.3	11808.5	9336.1	7699.4
62°	1622.8	1640.2	2099.8	3231.6	3854.9	6115.0	11220.0	12452.8	12226.4	9461.5	7856.1
62.5°	1504.4	1518.3	1904.8	3050.5	3621.7	5484.7	10997.1	12424.9	12289.1	9503.2	7911.8
65°	1103.9	1103.9	1246.7	2096.3	2653.5	2963.5	9318.7	11871.2	12205.5	9837.5	8120.8
67.5°	853.1	860.1	908.9	1292.0	2002.3	1796.9	5947.8	10624.6	11334.9	10332.0	8239.2
70°	734.8	731.3	766.1	856.6	1445.1	1194.4	2618.7	8291.4	9492.8	10206.7	8131.2
72.5°	543.3	546.8	626.9	752.2	1006.4	776.5	1184.0	4401.7	6156.7	7988.4	6968.1
75°	348.2	351.7	442.2	592.0	724.4	508.4	682.5	1312.9	2521.2	4429.5	4262.3
77.5°	233.3	240.3	289.0	414.4	633.8	316.9	428.3	550.2	759.1	1661.1	1528.7
80°	156.7	156.7	184.5	278.5	400.5	264.6	229.9	365.6	393.5	515.4	257.7
82.5°	104.4	104.4	121.8	184.5	261.2	236.8	139.3	198.5	229.9	257.7	90.5
85°	62.7	62.7	83.6	114.9	170.6	132.4	90.5	111.4	118.4	163.7	48.8
87.5°	38.3	34.8	55.8	80.1	90.5	80.1	59.2	59.2	62.7	90.5	24.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P258071

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4
2.5°	1702.8	1699.3	1695.8	1688.9	1678.5	1671.5	1664.5	1657.6	1650.6	1650.6	1661.1
5°	1734.2	1723.8	1709.9	1695.8	1675.0	1661.1	1650.6	1636.7	1629.8	1629.8	1633.2
7.5°	1772.5	1762.0	1737.7	1713.3	1681.9	1657.6	1633.2	1601.8	1577.5	1567.1	1577.5
10°	1814.3	1800.4	1765.5	1727.3	1692.4	1629.8	1549.7	1452.1	1368.5	1330.2	1347.6
12.5°	1866.5	1849.1	1807.3	1755.1	1675.0	1521.7	1323.3	1096.9	954.1	888.0	901.9
15°	1943.1	1918.7	1859.5	1779.4	1601.8	1271.0	947.2	686.0	553.7	498.0	504.9
17.5°	2033.6	2002.3	1922.2	1772.5	1413.8	915.8	564.2	400.5	344.7	330.8	330.8
20°	2131.2	2089.4	1984.9	1720.3	1128.3	574.6	351.7	306.5	285.5	275.1	275.1
22.5°	2232.2	2176.4	2037.1	1598.4	804.4	358.6	289.0	257.7	233.3	222.9	222.9
25°	2354.0	2280.9	2089.4	1386.0	511.9	289.0	247.2	215.9	191.5	177.6	181.1
27.5°	2496.8	2402.8	2134.7	1121.3	330.8	250.7	205.4	174.1	153.2	146.3	146.3
30°	2646.6	2535.1	2145.1	839.2	268.1	215.9	170.6	142.8	128.9	121.8	121.8
32.5°	2852.0	2705.8	2113.7	557.2	226.4	181.1	142.8	118.4	107.9	104.4	104.4
35°	3123.7	2928.6	2040.7	344.7	191.5	149.8	118.4	104.4	94.0	90.5	90.5
37.5°	3468.4	3238.6	1911.8	236.8	163.7	121.8	101.0	90.5	83.6	80.1	80.1
40°	3928.0	3614.6	1744.6	205.4	139.3	104.4	87.1	80.1	73.1	73.1	73.1
42.5°	4415.6	4070.8	1528.7	181.1	118.4	90.5	76.6	69.7	66.2	62.7	62.7
45°	4948.3	4537.5	1260.6	160.2	101.0	80.1	69.7	59.2	55.8	55.8	55.8
47.5°	5477.7	5018.0	968.1	139.3	87.1	69.7	59.2	52.3	48.8	45.3	45.3
50°	6020.9	5453.4	710.4	121.8	76.6	62.7	52.3	45.3	38.3	34.8	34.8
52.5°	6414.4	5714.5	518.8	104.4	66.2	52.3	41.8	34.8	27.8	24.3	24.3
55°	6703.5	5874.7	379.6	87.1	59.2	45.3	34.8	27.8	20.9	20.9	17.4
57.5°	6929.8	5951.3	285.5	76.6	52.3	38.3	27.8	20.9	17.4	13.9	13.9
60°	7103.9	5954.8	212.5	62.7	45.3	31.3	20.9	13.9	10.4	10.4	10.4
62°	7333.7	6000.0	174.1	52.3	41.8	27.8	17.4	10.4	7.0	3.5	3.5
62.5°	7399.9	6017.4	167.2	52.3	38.3	24.3	13.9	10.4	7.0	3.5	3.5
65°	7706.4	6048.8	128.9	41.8	31.3	20.9	10.4	7.0	0.0	0.0	0.0
67.5°	7984.9	6000.0	94.0	31.3	24.3	13.9	10.4	3.5	0.0	0.0	0.0
70°	7957.1	5665.7	66.2	20.9	17.4	10.4	7.0	0.0	0.0	0.0	0.0
72.5°	6557.2	4241.5	45.3	17.4	10.4	7.0	3.5	0.0	0.0	0.0	0.0
75°	3959.4	1856.0	31.3	10.4	10.4	7.0	3.5	0.0	0.0	0.0	0.0
77.5°	1298.9	672.1	20.9	7.0	7.0	3.5	3.5	0.0	0.0	0.0	0.0
80°	212.5	111.4	10.4	7.0	7.0	3.5	3.5	0.0	0.0	0.0	0.0
82.5°	66.2	27.8	7.0	7.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0
85°	24.3	10.4	7.0	7.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0
87.5°	10.4	7.0	7.0	7.0	3.5	3.5	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)