

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: P265640

Luminaire Tested: **ARCH-L-AF72-160-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265640
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-AF72-160-D-U-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 705mA 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: 13306.9 lumens
Efficiency: N/A
Efficacy: 82.1 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

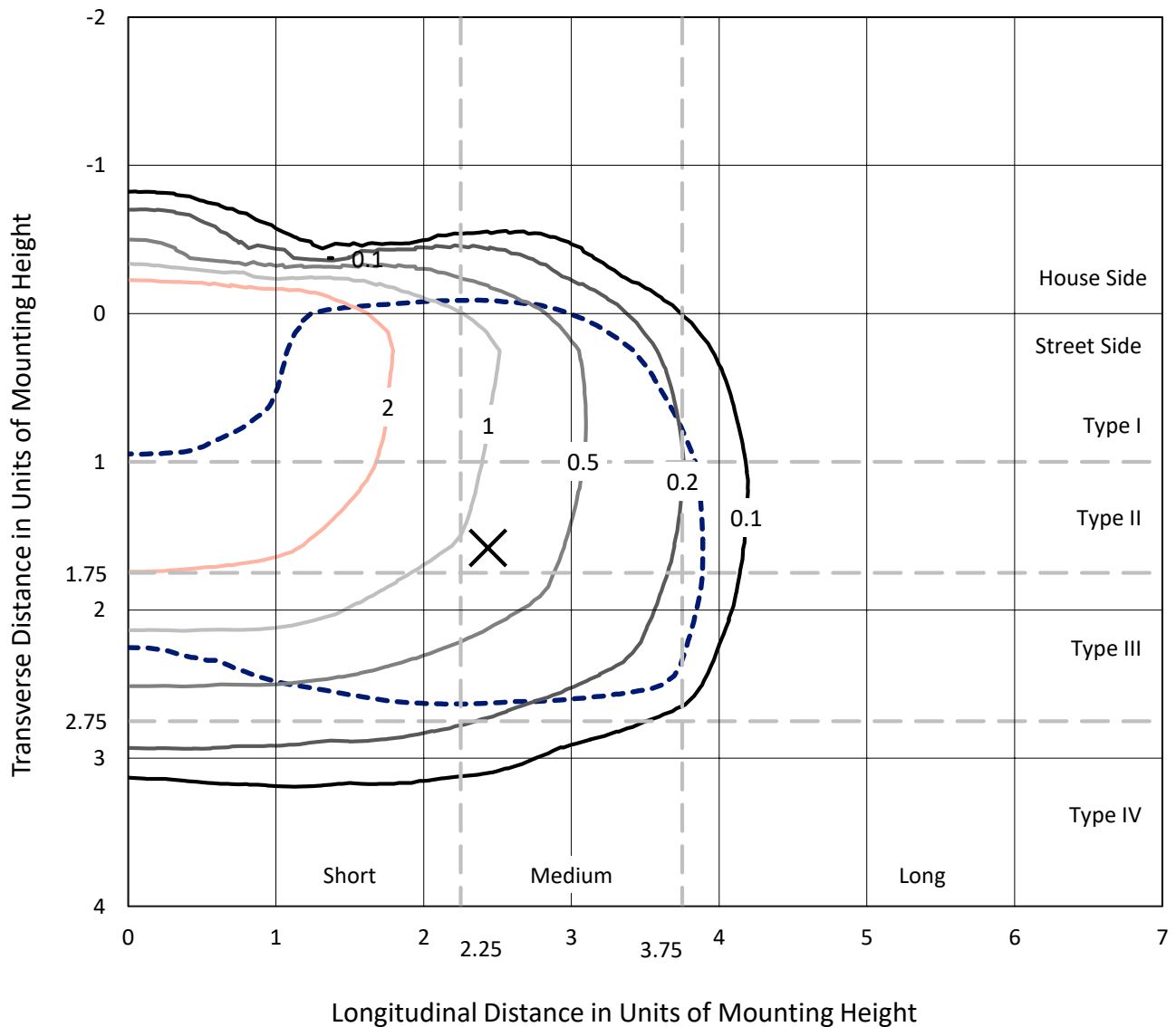
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

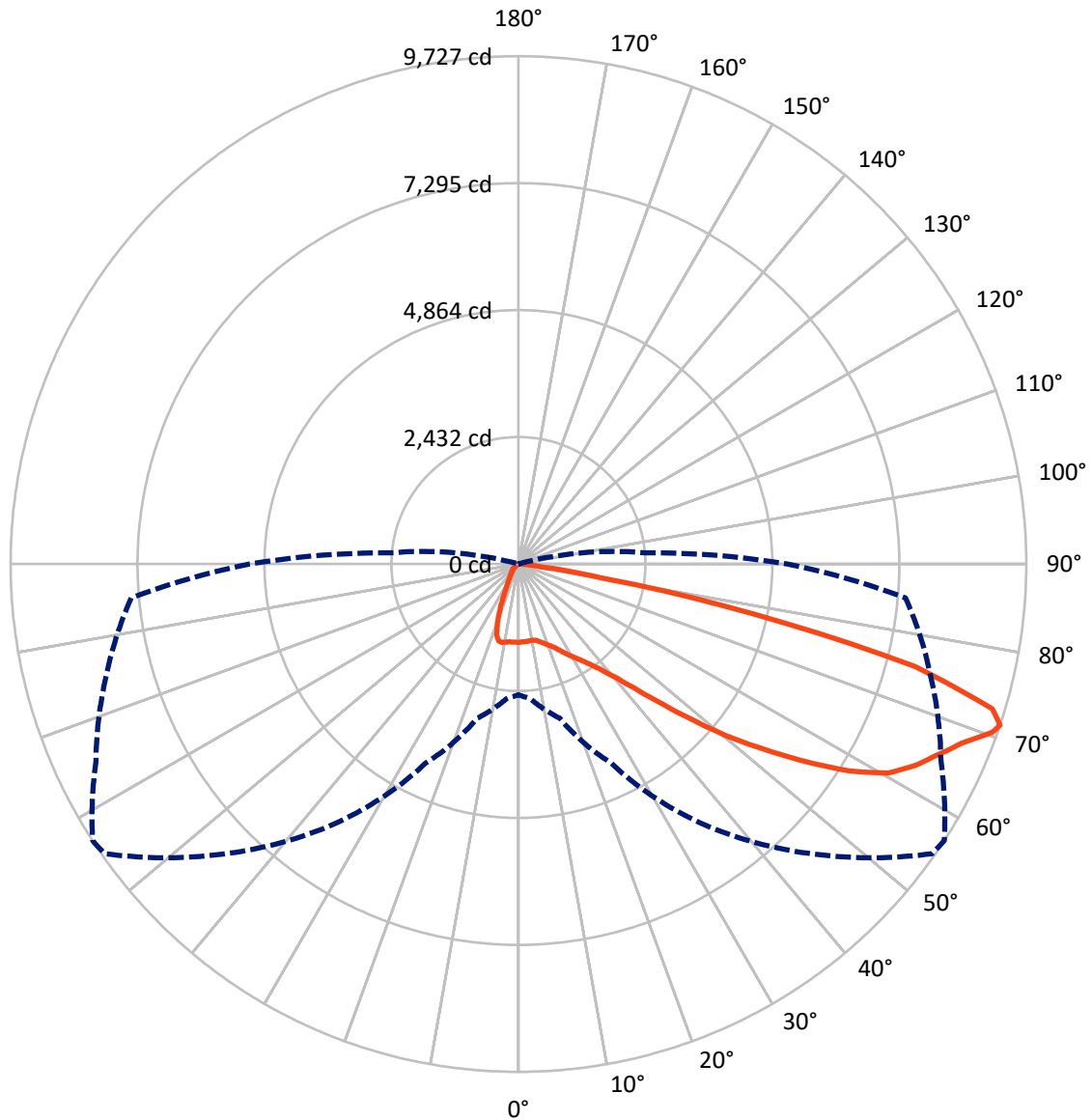


Based on 20 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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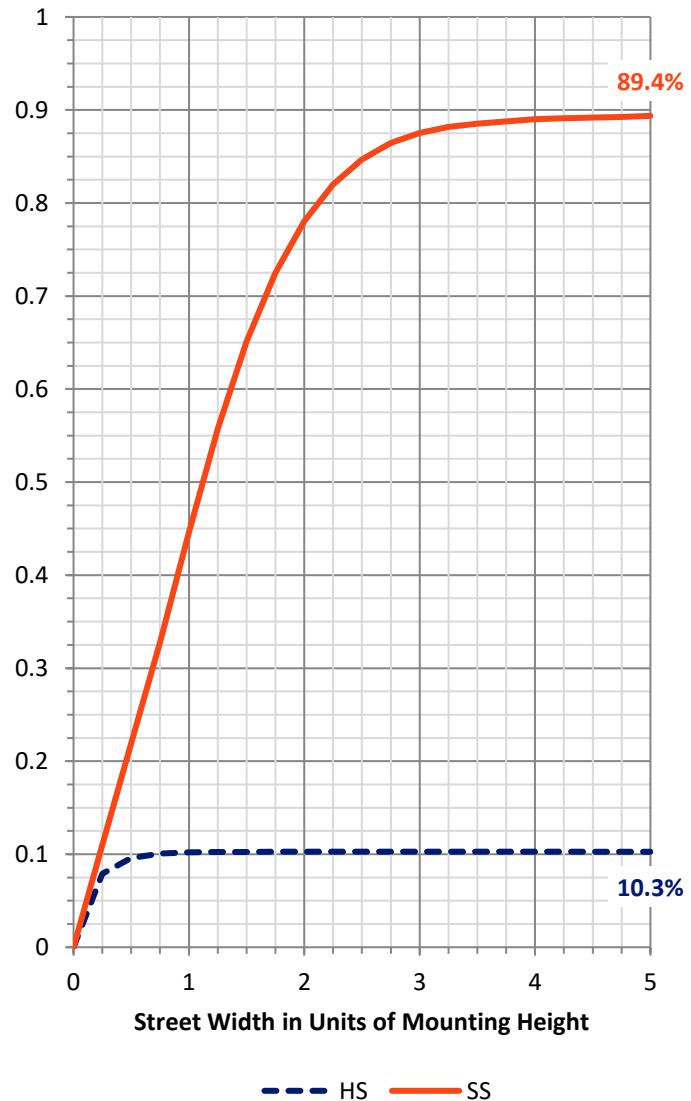
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1379.0	0.0	1379.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	11927.9	0.0	11927.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	13306.9	0.0	13306.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.2	1.1
10°-20°	377.6	2.8
20°-30°	589.1	4.4
30°-40°	995.7	7.5
40°-50°	1933.8	14.5
50°-60°	3247.5	24.4
60°-70°	3875.6	29.1
70°-80°	2042.5	15.3
80°-90°	103.8	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°	13306.9	100.0
0°-180°	13306.9	100.0

Coefficient of Utilization



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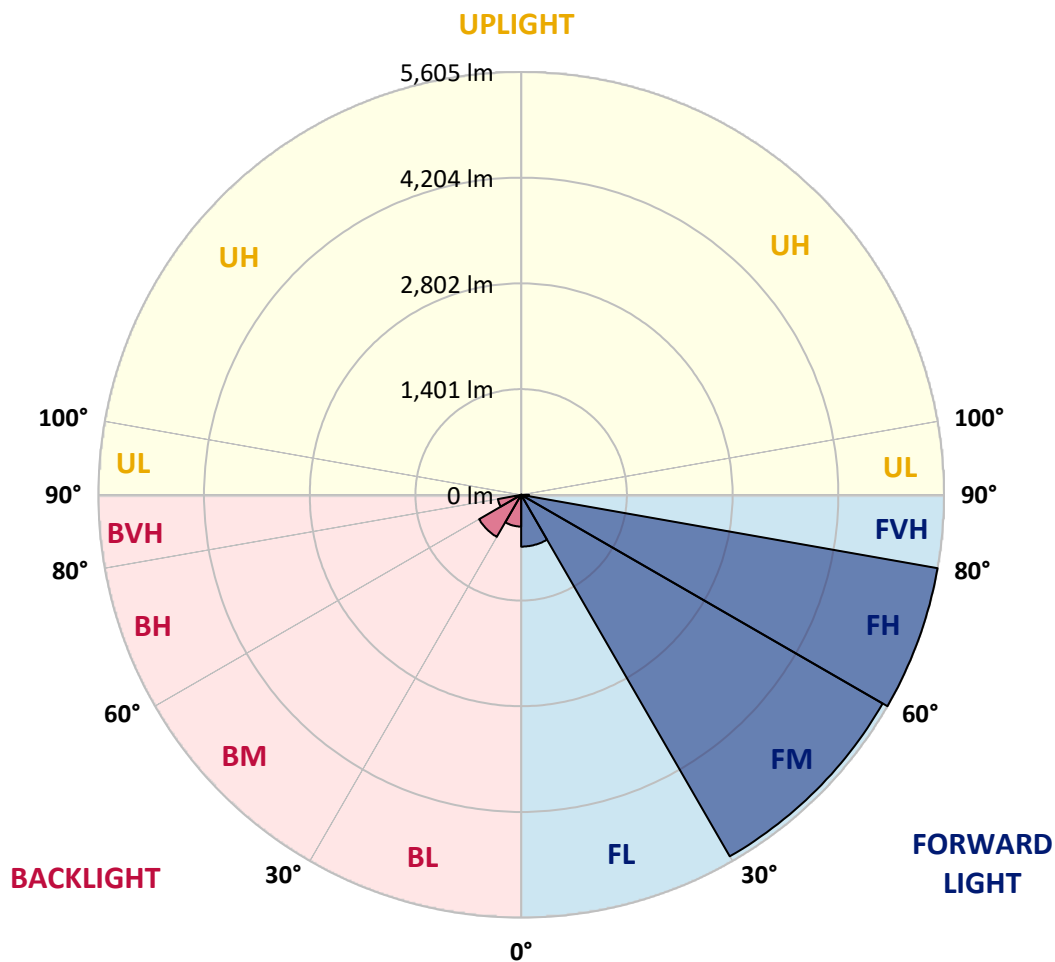
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	687.0	5.2			
FM	(30°-60°)	5533.1	41.6			
FH	(60°-80°)	5605.0	42.1			G3/7500
FVH	(80°-90°)	102.8	0.8			G2/225
BL	(0°-30°)	420.9	3.2	B1/500		
BM	(30°-60°)	643.9	4.8	B1/1000		
BH	(60°-80°)	313.2	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°	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9
2.5°	1482.2	1482.2	1482.2	1485.3	1488.4	1488.4	1494.6	1491.5	1491.5	1491.5	1497.7
5°	1441.9	1445.0	1448.1	1454.3	1466.7	1475.9	1491.5	1491.5	1494.6	1500.8	1503.9
7.5°	1386.1	1389.1	1398.4	1410.9	1435.8	1457.4	1482.2	1488.4	1497.7	1513.1	1519.5
10°	1351.9	1358.1	1370.5	1386.1	1413.9	1441.9	1473.0	1482.2	1510.1	1538.0	1553.4
12.5°	1342.6	1345.8	1358.1	1382.9	1417.0	1451.2	1491.5	1500.8	1541.1	1584.5	1609.4
15°	1358.1	1361.2	1367.5	1395.3	1435.8	1479.1	1531.8	1544.1	1593.9	1643.4	1674.4
17.5°	1386.1	1386.1	1392.3	1417.0	1460.5	1510.1	1578.3	1596.8	1652.7	1708.5	1742.6
20°	1404.7	1404.7	1413.9	1438.7	1488.4	1553.4	1634.1	1658.9	1721.0	1783.0	1813.9
22.5°	1423.3	1426.4	1435.8	1463.6	1519.5	1609.4	1702.4	1727.1	1798.4	1863.5	1894.5
25°	1475.9	1473.0	1475.9	1500.8	1565.8	1677.6	1795.4	1826.3	1900.8	1972.0	1987.6
27.5°	1621.7	1615.5	1575.2	1559.6	1609.4	1748.8	1913.2	1944.2	2031.0	2102.4	2102.4
30°	1956.6	1944.2	1844.9	1717.9	1677.6	1813.9	2024.8	2068.3	2179.8	2241.9	2223.2
32.5°	2381.3	2353.5	2226.4	2009.2	1848.1	1900.8	2142.6	2192.3	2335.0	2387.7	2347.4
35°	2846.5	2843.4	2685.4	2406.2	2176.8	2080.7	2294.6	2353.5	2533.3	2579.8	2514.7
37.5°	3339.5	3351.9	3246.6	2862.0	2592.2	2375.2	2496.1	2564.3	2784.4	2840.4	2778.3
40°	3888.5	3885.3	3844.9	3389.1	3091.4	2793.8	2787.6	2849.7	3116.3	3203.1	3116.3
42.5°	4583.0	4576.8	4431.0	4021.7	3696.2	3339.5	3212.3	3234.1	3531.7	3674.4	3547.2
45°	5289.9	5246.6	5079.0	4725.7	4437.3	4015.6	3773.7	3773.7	4027.9	4223.3	4024.9
47.5°	5683.8	5640.4	5572.1	5376.7	5289.9	4818.6	4462.1	4418.7	4617.1	4815.5	4536.5
50°	6201.5	6201.5	6031.0	5956.7	6105.5	5773.6	5221.8	5178.3	5274.5	5432.6	5066.7
52.5°	6610.8	6536.4	6415.5	6480.6	6905.5	6753.5	5981.5	5897.7	5972.1	6012.4	5528.7
55°	6781.5	6710.1	6700.7	6939.5	7597.0	7386.0	6759.7	6685.2	6679.1	6480.6	5931.8
57.5°	6815.5	6753.5	6871.3	7289.9	8269.7	7903.9	7535.0	7479.1	7305.5	6809.3	6344.2
60°	6527.2	6558.2	6843.5	7482.3	8666.7	8353.5	8189.2	8130.3	7730.3	7088.4	6803.1
62.5°	5934.9	6009.3	6542.6	7500.8	8521.1	8536.5	8552.0	8511.7	8059.0	7342.7	7265.1
65°	5234.2	5255.9	5897.7	7243.5	8266.7	8480.7	8818.7	8815.5	8310.1	7628.0	7786.1
67.5°	4313.2	4350.4	4905.5	6375.2	7758.2	8455.8	9169.0	9159.7	8595.4	7953.6	8096.2
70°	3209.4	3255.8	3705.5	4958.1	6623.4	8145.8	9627.9	9634.1	8896.2	8201.5	7882.2
71°	2502.4	2586.1	3057.4	4210.9	6043.4	7832.6	9671.4	9727.1	8930.3	8167.5	7441.9
72.5°	1228.0	1327.2	1919.4	2964.3	4973.6	7131.9	9386.1	9494.6	8716.3	7742.8	6362.9
75°	319.3	338.0	573.7	1212.4	2666.7	4725.7	7568.9	7845.0	7125.6	5894.6	3888.5
77.5°	201.6	207.8	269.9	471.3	998.5	1795.4	4446.5	4583.0	4071.4	2986.1	1370.5
80°	142.7	145.7	170.6	303.8	582.9	524.0	1600.1	1658.9	1473.0	790.7	245.0
82.5°	86.9	86.9	124.1	195.3	359.7	285.3	421.8	449.6	397.0	220.2	80.6
85°	49.5	52.7	77.6	133.3	170.6	139.5	158.1	167.4	170.6	145.7	34.1
87.5°	40.3	43.4	68.2	111.6	93.1	68.2	68.2	71.3	74.4	86.9	15.5
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°	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9	1503.9
2.5°	1497.7	1497.7	1500.8	1497.7	1497.7	1497.7	1500.8	1500.8	1500.8	1506.9	1510.1
5°	1503.9	1503.9	1503.9	1500.8	1497.7	1497.7	1503.9	1506.9	1506.9	1516.2	1516.2
7.5°	1519.5	1519.5	1513.1	1506.9	1500.8	1491.5	1494.6	1497.7	1494.6	1497.7	1497.7
10°	1553.4	1553.4	1544.1	1531.8	1513.1	1485.3	1448.1	1401.5	1358.1	1342.6	1336.5
12.5°	1609.4	1606.2	1587.7	1565.8	1525.6	1429.5	1290.0	1125.5	989.2	951.9	939.5
15°	1671.3	1665.1	1643.4	1606.2	1497.7	1243.4	951.9	741.1	610.8	579.9	573.7
17.5°	1736.5	1727.1	1696.1	1621.7	1370.5	924.0	613.9	465.1	393.7	387.6	390.8
20°	1804.7	1792.3	1748.8	1590.7	1107.0	617.0	397.0	359.7	353.6	353.6	356.5
22.5°	1882.2	1866.7	1807.7	1479.1	806.1	409.3	341.0	338.0	334.9	331.7	331.7
25°	1972.0	1953.5	1863.5	1277.5	555.1	334.9	325.5	316.3	310.1	303.8	300.8
27.5°	2080.7	2055.9	1907.0	1029.5	381.4	313.1	307.0	291.5	279.1	266.6	266.6
30°	2189.2	2158.2	1894.5	775.1	310.1	291.5	279.1	260.5	241.9	229.4	226.4
32.5°	2304.0	2272.9	1813.9	520.9	282.2	266.6	251.2	223.3	201.6	186.0	183.0
35°	2474.4	2449.6	1655.8	344.2	254.3	235.6	213.9	186.0	158.1	142.7	139.5
37.5°	2728.7	2697.7	1460.5	263.6	223.3	195.3	176.7	145.7	117.9	102.3	99.3
40°	3069.8	2976.8	1228.0	232.5	195.3	161.2	136.5	105.5	83.7	74.4	74.4
42.5°	3466.6	3246.6	976.7	210.8	173.6	133.3	99.3	71.3	58.8	55.9	55.9
45°	3888.5	3497.7	725.7	195.3	152.0	105.5	71.3	49.5	43.4	40.3	40.3
47.5°	4322.6	3702.4	505.4	176.7	127.1	80.6	49.5	37.2	31.0	27.8	27.8
50°	4728.7	3835.8	356.5	158.1	108.5	58.8	37.2	27.8	21.6	21.6	21.6
52.5°	5010.8	3823.2	257.4	136.5	83.7	40.3	24.9	18.7	18.7	18.7	18.7
55°	5258.9	3776.7	201.6	117.9	65.0	27.8	18.7	15.5	15.5	12.3	12.3
57.5°	5469.8	3702.4	170.6	96.1	46.5	21.6	12.3	12.3	9.3	9.3	9.3
60°	5649.6	3609.3	142.7	80.6	31.0	15.5	9.3	6.2	6.2	3.1	6.2
62.5°	5894.6	3550.5	124.1	62.1	21.6	9.3	6.2	3.1	3.1	0.0	0.0
65°	6074.5	3438.8	105.5	43.4	12.3	6.2	3.1	3.1	0.0	0.0	0.0
67.5°	6080.6	3237.2	77.6	24.9	9.3	6.2	3.1	0.0	0.0	0.0	0.0
70°	5590.7	2759.8	49.5	12.3	6.2	3.1	3.1	0.0	0.0	0.0	0.0
71°	5141.1	2443.4	40.3	9.3	6.2	3.1	0.0	0.0	0.0	0.0	0.0
72.5°	4235.7	1795.4	31.0	9.3	3.1	3.1	0.0	0.0	0.0	0.0	0.0
75°	2335.0	651.2	15.5	6.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	747.3	198.4	9.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	127.1	31.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.4	12.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.3	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.2	3.1	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)