

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: P237423

Luminaire Tested: **ARCH-L-AF72-100-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237423
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9816.9 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

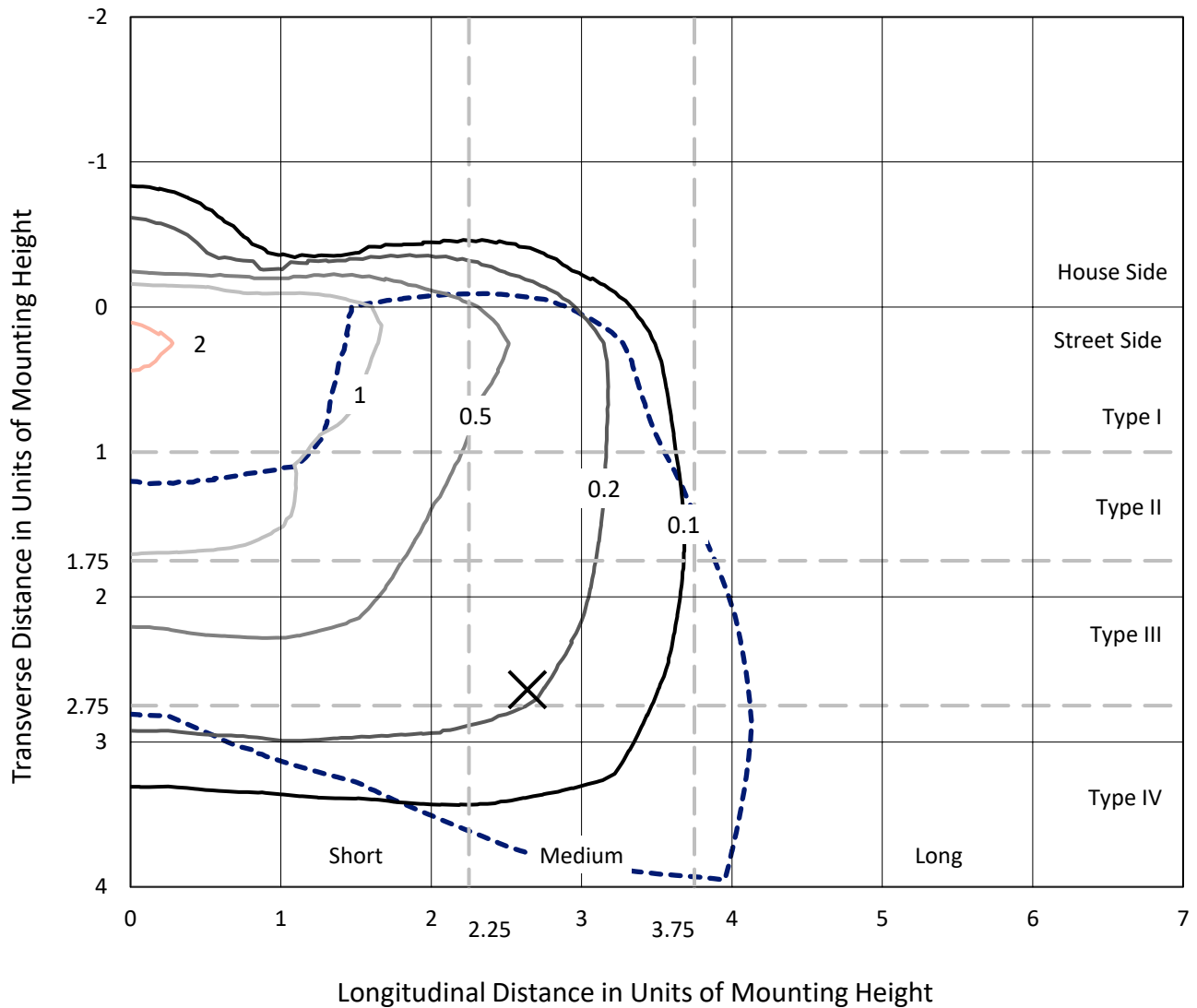
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

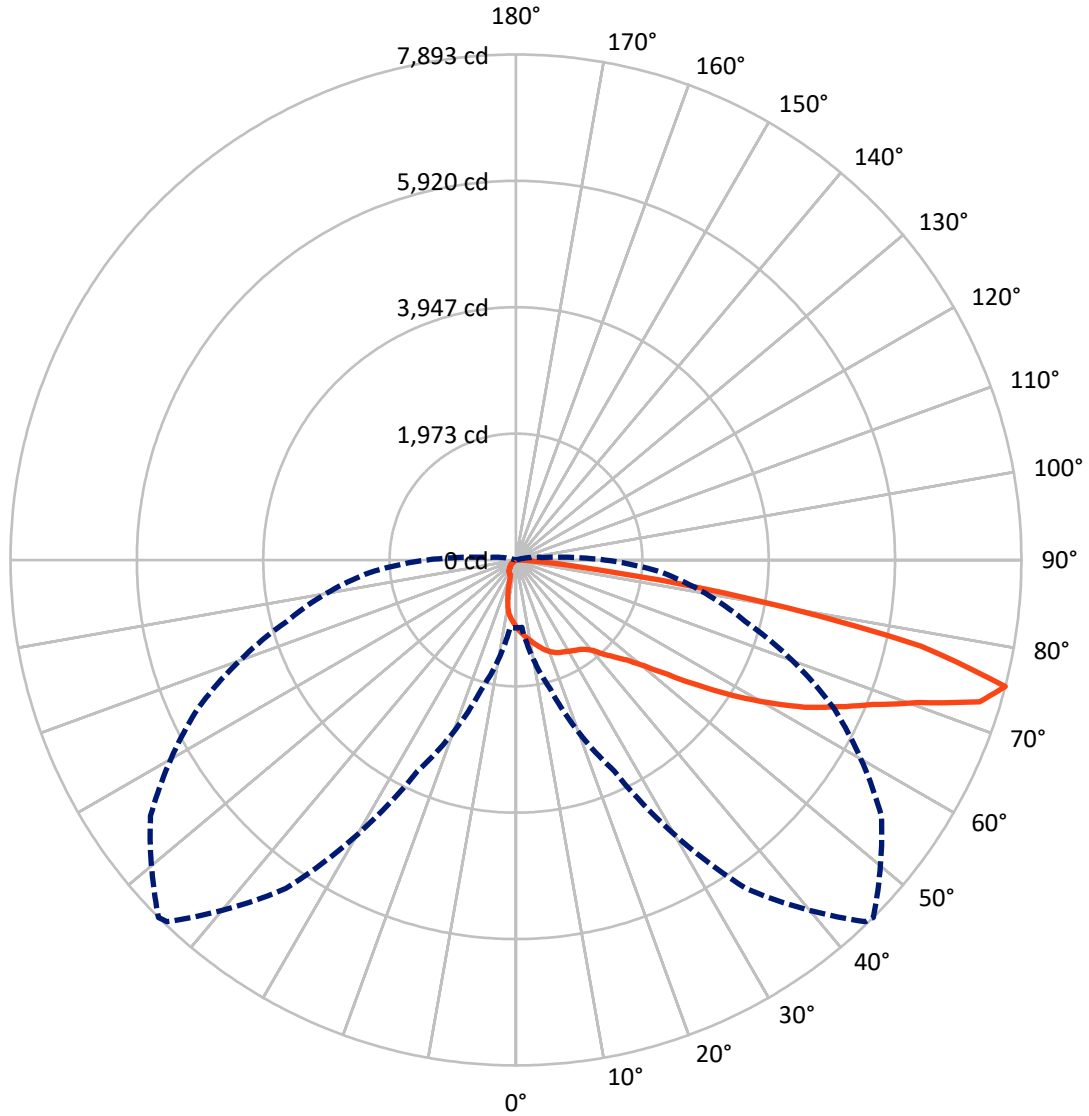
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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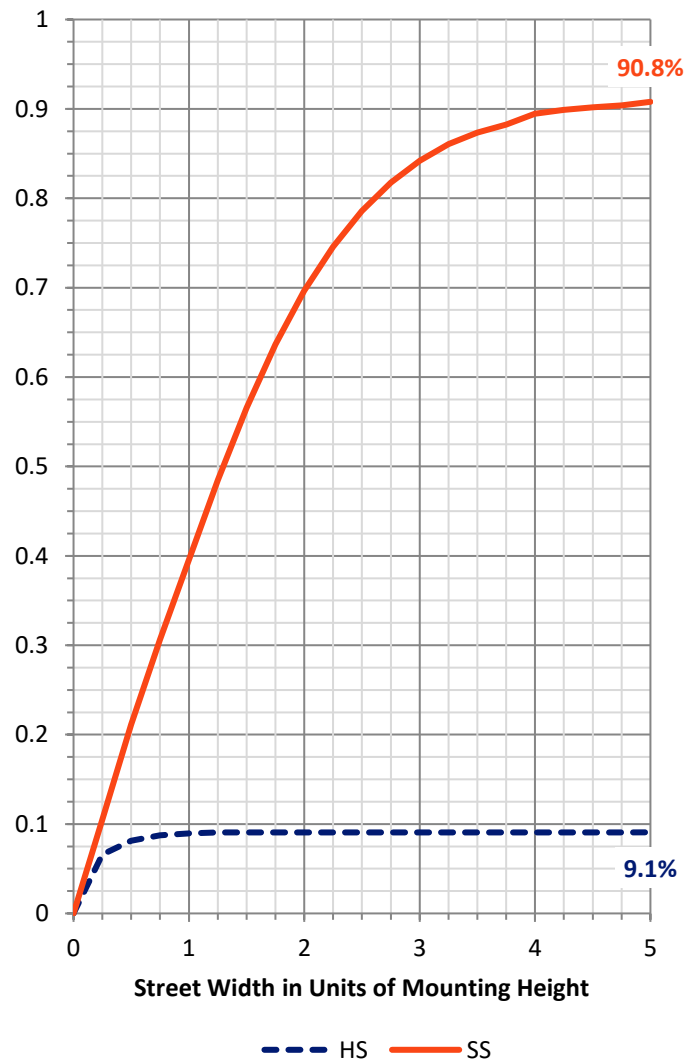
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	898.0	0.0	898.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	8919.0	0.0	8919.0
	% Fixture	90.9	0.0	90.9
Total	Lumens	9816.9	0.0	9816.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	1.0
10°-20°	280.7	2.9
20°-30°	464.9	4.7
30°-40°	672.9	6.9
40°-50°	1101.8	11.2
50°-60°	1963.2	20.0
60°-70°	2886.1	29.4
70°-80°	2177.3	22.2
80°-90°	170.8	1.7
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°	9816.9	100.0
0°-180°	9816.9	100.0

Coefficient of Utilization



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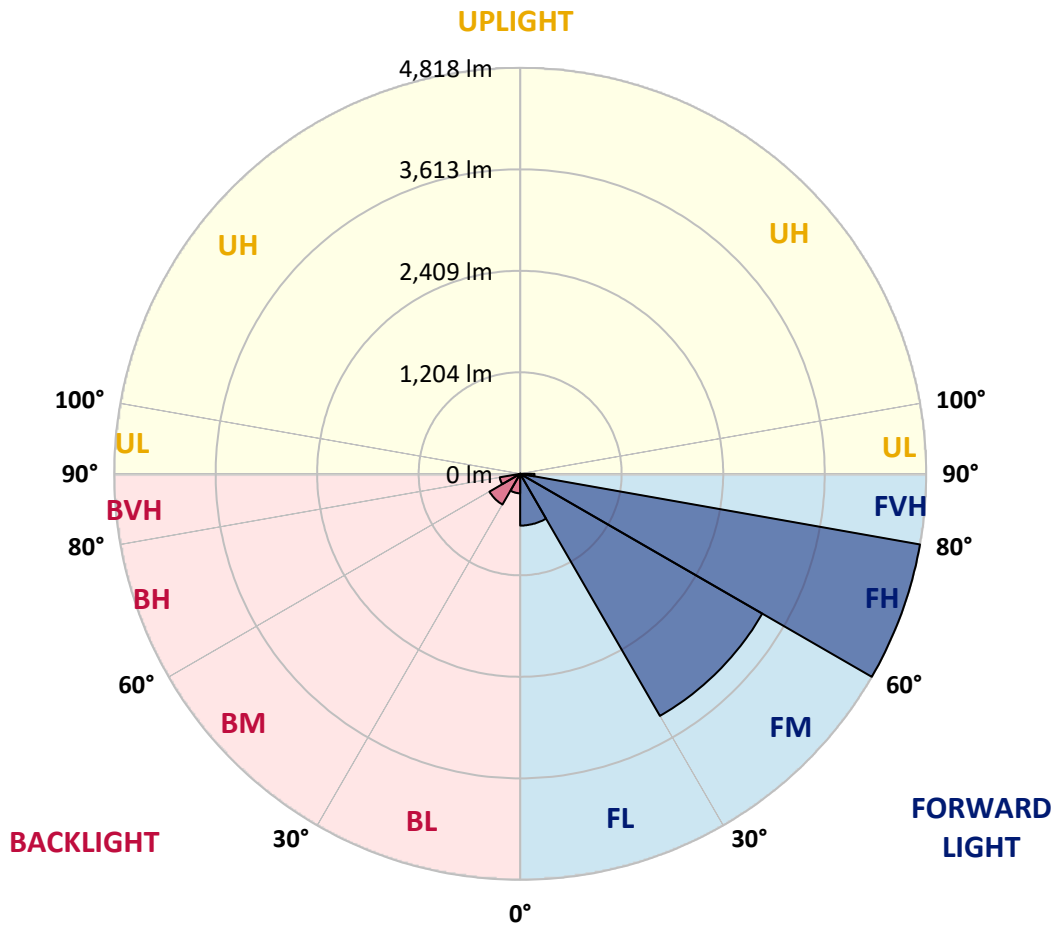
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	614.0	6.3			
FM (30°-60°)	3317.1	33.8			
FH (60°-80°)	4817.5	49.1			G2/5000
FVH (80°-90°)	170.3	1.7			G2/225
BL (0°-30°)	230.7	2.4	B1/500		
BM (30°-60°)	420.8	4.3	B1/1000		
BH (60°-80°)	245.9	2.5	B1/500		G1/500
BVH (80°-90°)	0.5	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0
2.5°	1140.5	1140.5	1138.3	1136.0	1124.3	1112.7	1110.4	1103.4	1082.5	1068.5	1054.6
5°	1235.8	1238.1	1233.5	1221.8	1196.3	1170.8	1168.4	1149.9	1110.4	1082.5	1052.2
7.5°	1326.4	1331.1	1319.5	1298.5	1268.3	1231.2	1228.8	1193.9	1142.9	1103.4	1059.3
10°	1403.1	1403.1	1386.8	1361.3	1328.7	1289.3	1284.6	1245.1	1187.0	1138.3	1080.1
12.5°	1486.7	1484.4	1461.2	1426.3	1389.1	1352.0	1349.7	1300.8	1245.1	1182.4	1110.4
15°	1563.4	1558.7	1528.5	1496.0	1456.5	1417.0	1414.7	1365.8	1307.9	1233.5	1154.6
17.5°	1605.1	1602.9	1575.0	1542.4	1510.0	1479.7	1477.4	1426.3	1363.5	1287.0	1198.7
20°	1612.1	1614.5	1591.3	1563.4	1544.8	1528.5	1528.5	1482.0	1414.7	1333.4	1245.1
22.5°	1614.5	1621.4	1605.1	1568.0	1563.4	1565.6	1570.3	1533.1	1463.4	1386.8	1293.8
25°	1630.7	1640.0	1628.4	1584.3	1579.6	1595.8	1600.5	1584.3	1521.6	1444.9	1349.7
27.5°	1663.3	1672.5	1663.3	1607.5	1600.5	1616.8	1621.4	1630.7	1584.3	1500.6	1407.7
30°	1728.3	1730.5	1709.7	1640.0	1626.1	1647.0	1653.9	1679.6	1642.2	1554.1	1463.4
32.5°	1842.1	1818.8	1756.2	1663.3	1651.7	1674.8	1681.8	1709.7	1695.7	1605.1	1521.6
35°	2074.4	1953.5	1809.6	1695.7	1684.1	1707.4	1716.7	1756.2	1763.1	1677.1	1593.5
37.5°	2072.1	1962.9	1935.0	1758.5	1742.2	1758.5	1770.1	1818.8	1846.7	1772.4	1698.1
40°	2218.4	2172.0	2172.0	1877.0	1823.5	1846.7	1858.4	1907.1	1956.0	1897.9	1821.3
42.5°	2678.4	2648.1	2615.6	2104.6	1937.3	2002.4	2009.4	2039.6	2097.7	2079.1	1988.4
45°	3191.8	3163.8	3038.4	2490.2	2132.5	2144.1	2160.4	2209.1	2292.8	2327.5	2220.7
47.5°	3593.6	3565.7	3458.9	2954.8	2436.8	2334.6	2334.6	2429.8	2560.0	2648.1	2546.0
50°	3916.5	3883.9	3818.9	3449.6	2936.3	2608.7	2594.7	2706.3	2899.0	3036.1	2966.4
52.5°	4230.1	4134.8	4095.4	3960.6	3500.6	3005.9	2968.7	3047.7	3314.8	3484.4	3426.4
55°	4439.2	4425.2	4383.4	4429.9	4093.1	3489.0	3456.5	3472.8	3807.3	3921.1	3849.1
57.5°	4634.3	4631.9	4724.9	4940.9	4738.8	4041.9	3990.8	3965.2	4283.5	4255.6	4318.4
60°	4875.9	4834.0	5050.1	5359.0	5331.2	4580.9	4522.8	4471.7	4648.2	4569.2	4880.5
62.5°	4887.5	4875.9	5314.9	5758.6	5918.9	5129.0	5061.8	4878.2	4966.5	4875.9	5417.2
65°	4443.8	4501.9	5426.5	5970.0	6411.4	5609.9	5528.6	5243.0	5249.9	5189.5	6048.9
67.5°	4343.9	4374.0	5119.8	6197.6	6766.8	6095.5	6018.8	5663.4	5579.8	5584.3	6423.0
70°	4095.4	4141.8	4738.8	6181.4	7047.9	6743.6	6666.9	6281.4	6079.1	5853.9	6134.9
72.5°	3128.9	3208.0	3993.2	5419.5	6971.2	7591.5	7570.5	7064.1	6278.9	5375.3	4641.3
75°	1059.3	1057.0	2097.7	3640.1	6262.6	7851.6	7893.4	6966.6	5477.5	3707.3	2304.4
77.5°	227.7	230.0	432.1	1475.1	4160.4	6304.5	6464.8	5254.5	3533.2	1651.7	527.2
80°	111.6	113.8	178.8	390.3	1663.3	3535.5	3786.4	2701.6	1305.5	329.9	88.3
82.5°	55.7	58.1	92.9	206.7	615.5	1256.7	1342.7	994.3	374.0	185.8	44.1
85°	20.9	20.9	46.4	123.1	281.2	295.0	362.4	288.0	225.3	151.0	11.6
87.5°	4.7	4.7	25.5	60.4	125.4	92.9	92.9	88.3	137.0	102.1	4.7
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°	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0	1050.0
2.5°	1047.7	1038.4	1022.1	1005.8	994.3	980.3	973.3	966.4	964.0	961.7	966.4
5°	1036.0	1022.1	991.8	966.4	943.1	924.6	910.5	896.7	889.7	885.0	887.4
7.5°	1036.0	1015.1	971.0	931.6	894.3	854.9	815.4	785.1	762.0	748.0	750.3
10°	1047.7	1019.8	961.7	908.3	838.6	755.0	669.0	603.9	559.9	534.3	534.3
12.5°	1073.3	1036.0	964.0	880.4	762.0	615.5	485.5	406.6	374.0	355.4	357.8
15°	1108.0	1063.9	975.6	843.3	655.1	457.6	339.1	288.0	288.0	292.7	295.0
17.5°	1147.5	1098.7	985.0	787.4	518.0	327.6	267.1	262.4	269.5	281.2	281.2
20°	1187.0	1133.6	989.6	699.3	388.0	260.1	253.2	253.2	257.9	269.5	271.8
22.5°	1235.8	1177.7	985.0	590.0	290.4	246.3	243.8	243.8	243.8	257.9	257.9
25°	1287.0	1228.8	966.4	473.8	246.3	237.0	234.6	232.2	232.2	243.8	246.3
27.5°	1345.0	1282.2	922.2	362.4	232.2	227.7	225.3	220.7	220.7	230.0	230.0
30°	1403.1	1342.7	854.9	274.1	220.7	218.4	213.7	209.0	204.5	213.7	213.7
32.5°	1465.8	1405.4	766.6	218.4	204.5	204.5	202.1	195.1	190.4	195.1	197.4
35°	1549.4	1477.4	666.7	190.4	183.5	183.5	183.5	181.2	171.9	176.6	176.6
37.5°	1661.0	1577.2	550.5	176.6	167.2	162.6	162.6	162.6	155.5	158.0	158.0
40°	1802.6	1693.4	439.0	165.0	155.5	144.0	139.5	141.7	137.0	137.0	134.7
42.5°	1995.4	1818.8	329.9	155.5	146.3	130.1	120.8	118.4	113.8	111.6	111.6
45°	2271.8	1972.2	237.0	146.3	139.5	113.8	104.6	97.6	86.0	79.0	79.0
47.5°	2629.6	2146.4	176.6	137.0	132.4	99.9	88.3	74.3	58.1	53.4	53.4
50°	3066.3	2341.5	148.7	123.1	120.8	88.3	69.7	48.7	32.6	27.9	30.1
52.5°	3491.4	2525.1	132.4	109.2	106.8	76.7	51.2	25.5	13.9	13.9	13.9
55°	3849.1	2655.1	120.8	97.6	92.9	60.4	27.9	11.6	7.0	7.0	7.0
57.5°	4172.1	2729.6	109.2	86.0	74.3	41.8	11.6	4.7	4.7	2.3	2.3
60°	4467.1	2773.6	95.3	74.3	58.1	23.3	4.7	2.3	2.3	0.0	0.0
62.5°	4757.3	2806.1	81.3	60.4	44.1	9.3	2.3	2.3	0.0	0.0	0.0
65°	4978.1	2794.6	65.0	48.7	27.9	4.7	2.3	0.0	0.0	0.0	0.0
67.5°	4971.1	2636.5	48.7	37.1	13.9	2.3	0.0	0.0	0.0	0.0	0.0
70°	4446.1	2220.7	32.6	23.3	4.7	2.3	0.0	0.0	0.0	0.0	0.0
72.5°	3154.6	1423.9	20.9	13.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	1389.1	432.1	11.6	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	271.8	99.9	7.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	65.0	11.6	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	27.9	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	2.3	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)