

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: P237462

Luminaire Tested: **ARCH-L-AF72-90-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237462
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-90-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 400mA 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: 9426 lumens
Efficiency: N/A
Efficacy: 101.4 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): 93
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

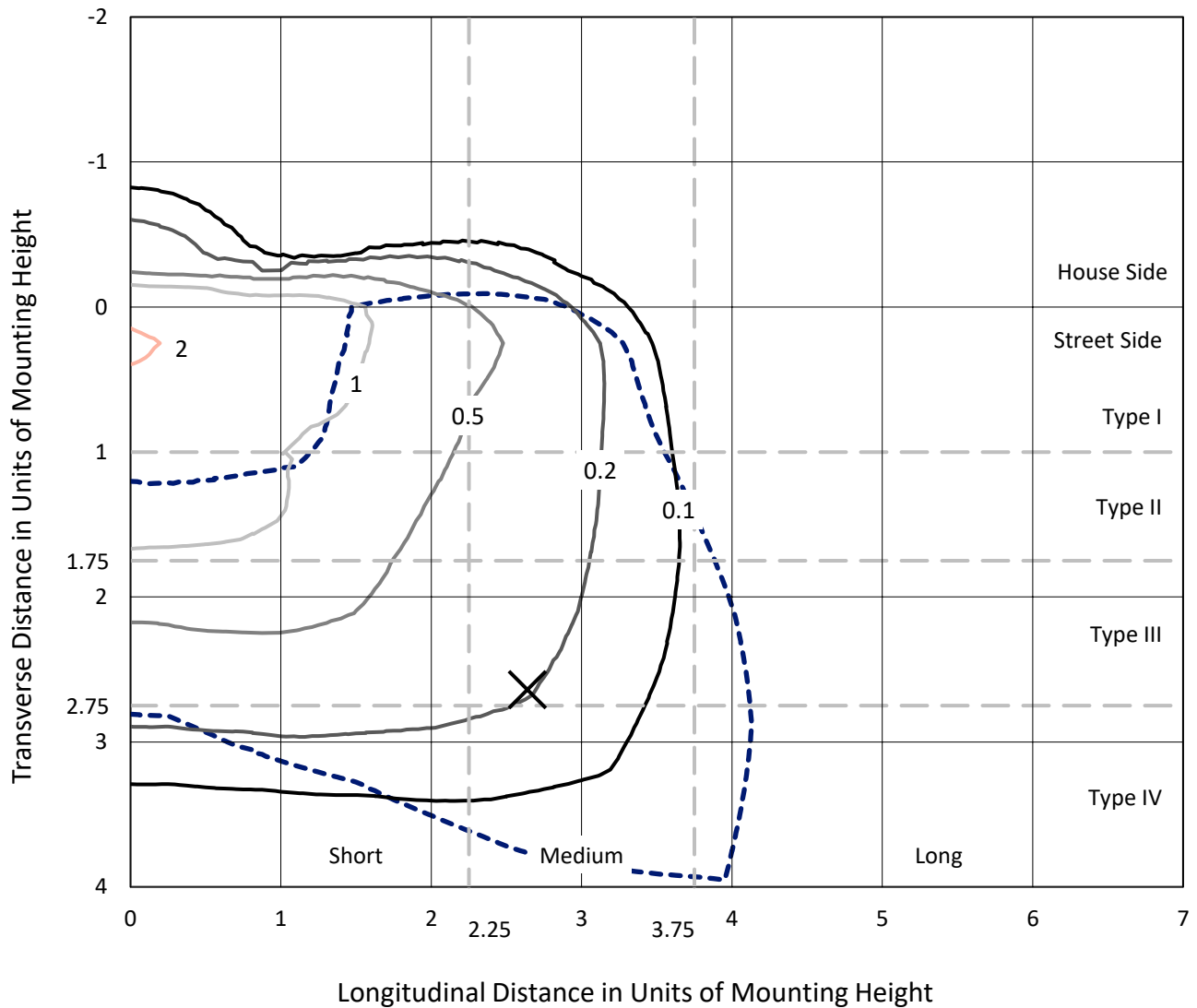


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Iso-Footcandle Lines of Horizontal Illumination

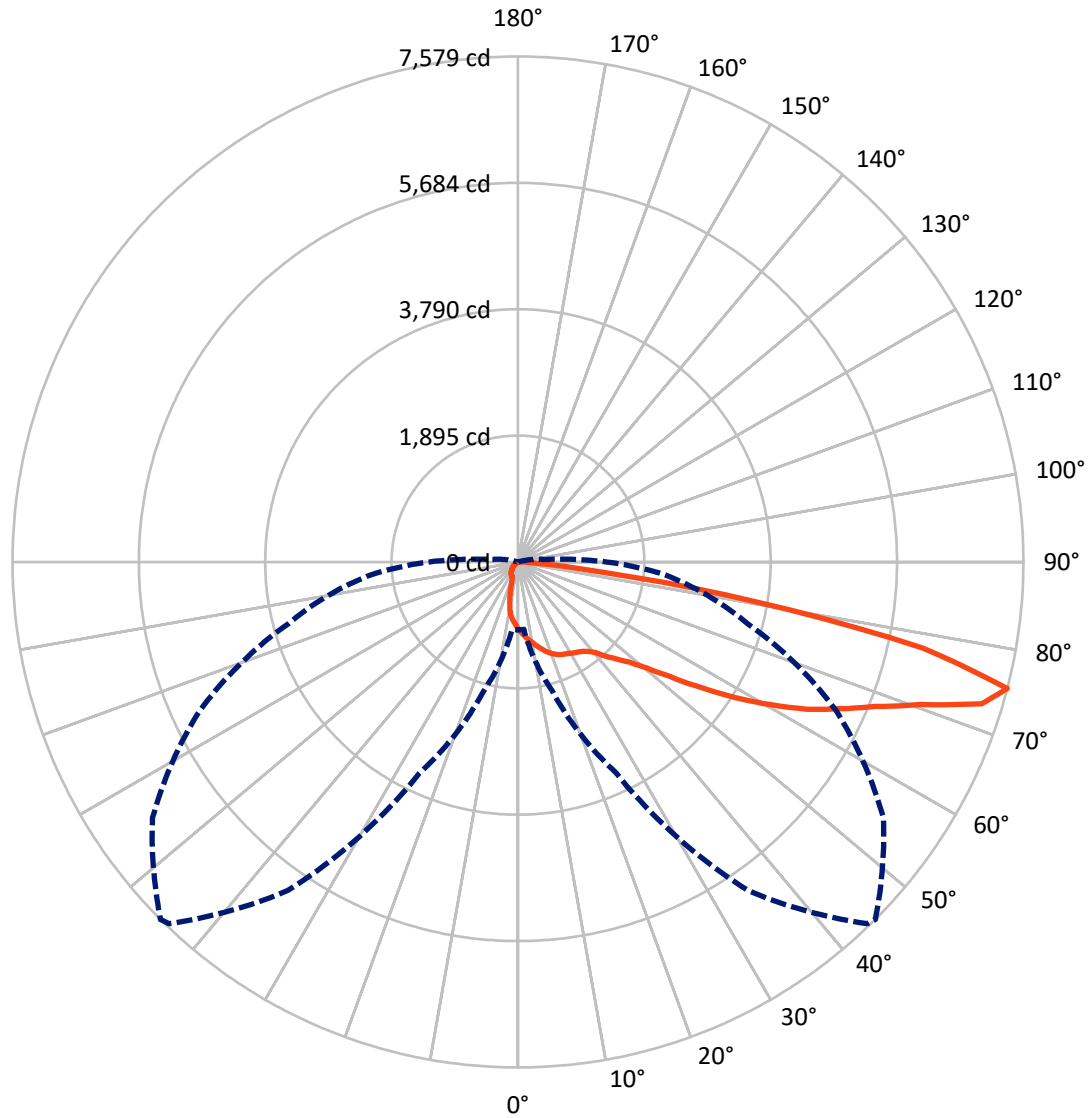
× Max cd
 - - - 1/2 Max cd



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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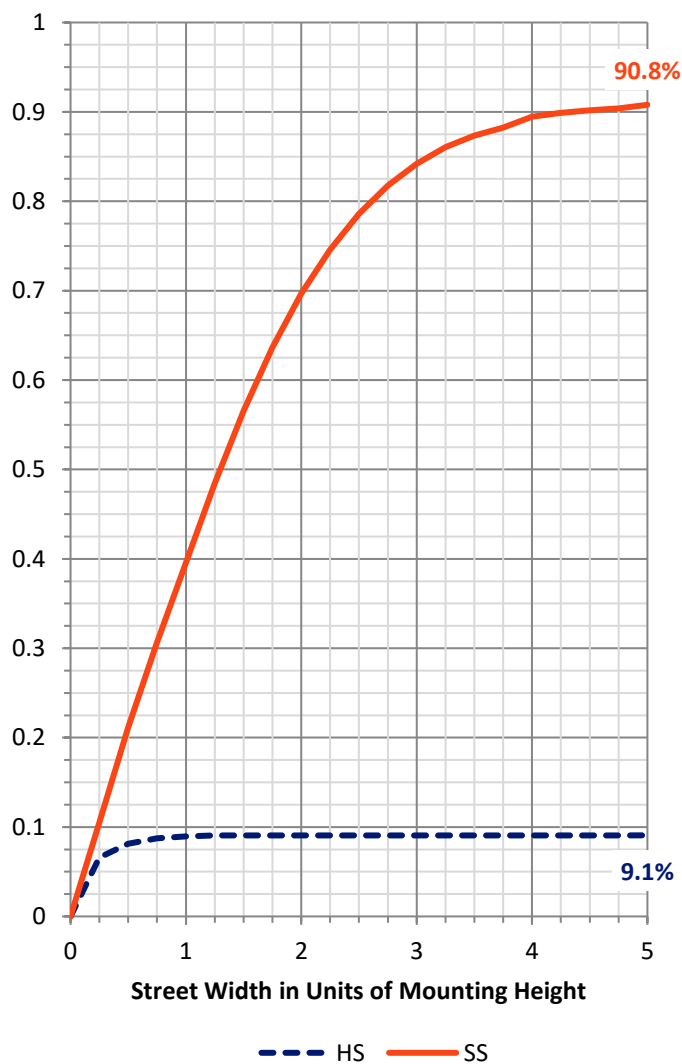
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	862.2	0.0	862.2
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	8563.8	0.0	8563.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	9426.0	0.0	9426.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.1	1.0
10°-20°	269.6	2.9
20°-30°	446.4	4.7
30°-40°	646.1	6.9
40°-50°	1057.9	11.2
50°-60°	1885.0	20.0
60°-70°	2771.2	29.4
70°-80°	2090.6	22.2
80°-90°	164.0	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°	9426.0	100.0
0°-180°	9426.0	100.0

Coefficient of Utilization



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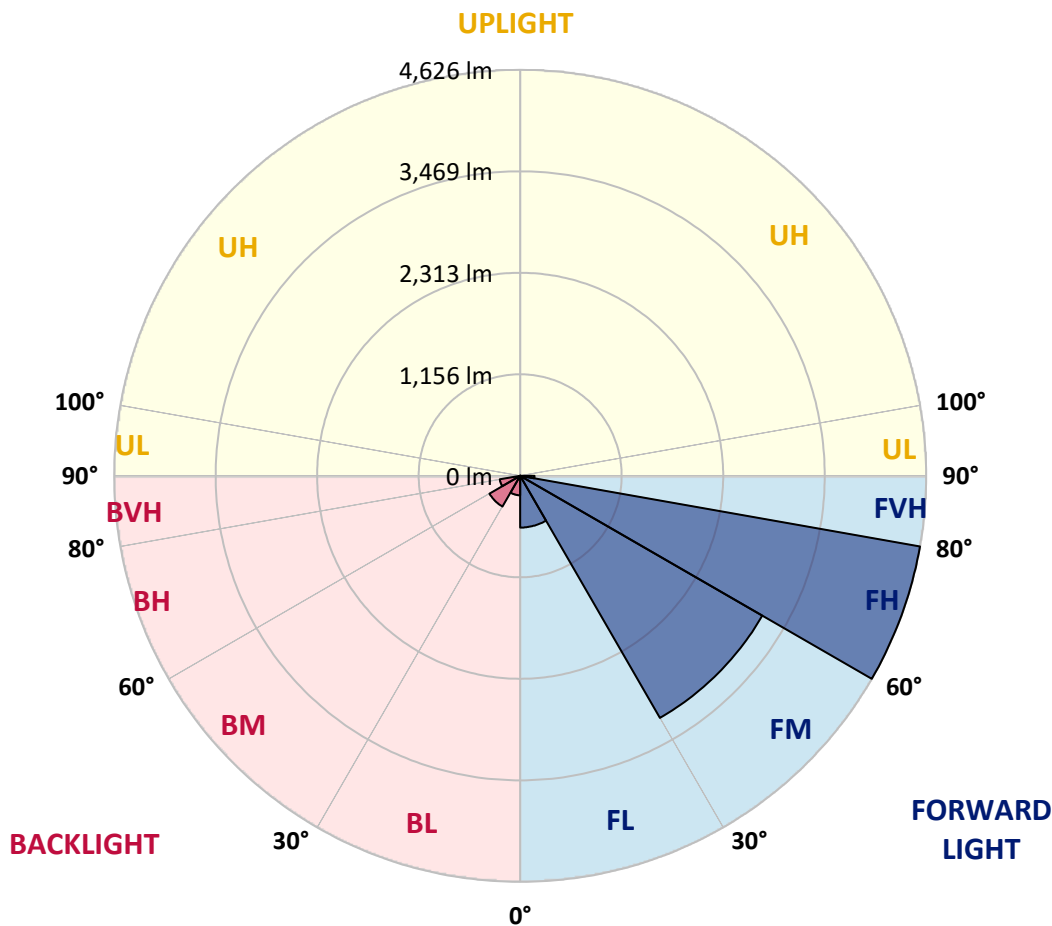
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	589.6	6.3			
FM (30°-60°)	3185.0	33.8			
FH (60°-80°)	4625.7	49.1			G2/5000
FVH (80°-90°)	163.6	1.7			G2/225
BL (0°-30°)	221.6	2.4	B1/500		
BM (30°-60°)	404.0	4.3	B1/1000		
BH (60°-80°)	236.2	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°	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2
2.5°	1095.1	1095.1	1092.9	1090.7	1079.5	1068.4	1066.2	1059.5	1039.4	1026.0	1012.6
5°	1186.6	1188.8	1184.4	1173.2	1148.7	1124.1	1121.9	1104.1	1066.2	1039.4	1010.4
7.5°	1273.6	1278.0	1266.9	1246.8	1217.8	1182.1	1179.9	1146.4	1097.4	1059.5	1017.1
10°	1347.2	1347.2	1331.6	1307.0	1275.8	1237.9	1233.4	1195.5	1139.8	1092.9	1037.2
12.5°	1427.5	1425.3	1403.0	1369.5	1333.8	1298.1	1295.9	1249.0	1195.5	1135.3	1066.2
15°	1501.1	1496.6	1467.6	1436.4	1398.5	1360.6	1358.3	1311.5	1255.7	1184.4	1108.5
17.5°	1541.2	1539.0	1512.2	1481.0	1449.8	1420.8	1418.6	1369.5	1309.3	1235.7	1150.9
20°	1547.9	1550.2	1527.9	1501.1	1483.2	1467.6	1467.6	1423.0	1358.3	1280.3	1195.5
22.5°	1550.2	1556.9	1541.2	1505.6	1501.1	1503.3	1507.8	1472.1	1405.2	1331.6	1242.4
25°	1565.8	1574.7	1563.5	1521.2	1516.7	1532.3	1536.8	1521.2	1460.9	1387.3	1295.9
27.5°	1597.0	1605.9	1597.0	1543.5	1536.8	1552.4	1556.9	1565.8	1521.2	1440.9	1351.7
30°	1659.5	1661.7	1641.6	1574.7	1561.3	1581.4	1588.1	1612.6	1576.9	1492.2	1405.2
32.5°	1768.7	1746.4	1686.2	1597.0	1585.8	1608.2	1614.8	1641.6	1628.2	1541.2	1460.9
35°	1991.8	1875.8	1737.5	1628.2	1617.1	1639.4	1648.3	1686.2	1692.9	1610.4	1530.1
37.5°	1989.6	1884.7	1858.0	1688.4	1672.8	1688.4	1699.6	1746.4	1773.2	1701.8	1630.5
40°	2130.1	2085.5	2085.5	1802.2	1750.9	1773.2	1784.4	1831.2	1878.0	1822.3	1748.7
42.5°	2571.7	2542.7	2511.5	2020.8	1860.2	1922.6	1929.3	1958.3	2014.1	1996.2	1909.3
45°	3064.6	3037.9	2917.4	2391.0	2047.5	2058.7	2074.3	2121.2	2201.5	2234.9	2132.3
47.5°	3450.5	3423.7	3321.1	2837.1	2339.7	2241.6	2241.6	2333.0	2458.0	2542.7	2444.6
50°	3760.5	3729.3	3666.9	3312.2	2819.3	2504.8	2491.4	2598.5	2783.6	2915.2	2848.3
52.5°	4061.6	3970.2	3932.3	3802.9	3361.3	2886.2	2850.5	2926.3	3182.8	3345.7	3289.9
55°	4262.4	4249.0	4208.9	4253.5	3930.0	3350.1	3318.9	3334.5	3655.7	3765.0	3695.8
57.5°	4449.7	4447.5	4536.7	4744.2	4550.1	3881.0	3831.9	3807.4	4112.9	4086.2	4146.4
60°	4681.7	4641.6	4849.0	5145.6	5118.9	4398.4	4342.7	4293.6	4463.1	4387.3	4686.2
62.5°	4692.9	4681.7	5103.3	5529.3	5683.2	4924.8	4860.1	4683.9	4768.7	4681.7	5201.4
65°	4266.8	4322.6	5210.3	5732.2	6156.0	5386.5	5308.5	5034.1	5040.8	4982.8	5808.1
67.5°	4170.9	4199.9	4915.9	5950.8	6497.3	5852.7	5779.1	5437.8	5357.5	5362.0	6167.2
70°	3932.3	3976.9	4550.1	5935.2	6767.2	6475.0	6401.4	6031.1	5837.1	5620.7	5890.6
72.5°	3004.4	3080.2	3834.1	5203.6	6693.6	7289.1	7269.0	6782.8	6028.9	5161.3	4456.4
75°	1017.1	1014.9	2014.1	3495.1	6013.3	7538.9	7579.1	6689.1	5259.4	3559.8	2212.6
77.5°	218.6	220.8	414.9	1416.3	3994.7	6053.4	6207.3	5045.3	3392.5	1585.8	506.3
80°	107.1	109.3	171.7	374.7	1597.0	3394.7	3635.6	2594.0	1253.5	316.7	84.8
82.5°	53.5	55.8	89.2	198.5	591.1	1206.7	1289.2	954.6	359.1	178.4	42.4
85°	20.1	20.1	44.6	118.2	269.9	283.3	347.9	276.6	216.4	145.0	11.2
87.5°	4.5	4.5	24.5	58.0	120.4	89.2	89.2	84.8	131.6	98.1	4.5
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°	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2	1008.2
2.5°	1005.9	997.0	981.4	965.8	954.6	941.2	934.6	927.9	925.6	923.4	927.9
5°	994.8	981.4	952.4	927.9	905.6	887.7	874.3	861.0	854.3	849.8	852.0
7.5°	994.8	974.7	932.3	894.4	858.7	820.8	782.9	753.9	731.6	718.2	720.4
10°	1005.9	979.2	923.4	872.1	805.2	724.9	642.4	579.9	537.5	513.0	513.0
12.5°	1030.5	994.8	925.6	845.3	731.6	591.1	466.2	390.3	359.1	341.3	343.5
15°	1063.9	1021.5	936.8	809.7	629.0	439.4	325.6	276.6	276.6	281.0	283.3
17.5°	1101.8	1055.0	945.7	756.1	497.4	314.5	256.5	252.0	258.7	269.9	269.9
20°	1139.8	1088.5	950.2	671.4	372.5	249.8	243.1	243.1	247.6	258.7	261.0
22.5°	1186.6	1130.8	945.7	566.5	278.8	236.4	234.2	234.2	234.2	247.6	247.6
25°	1235.7	1179.9	927.9	455.0	236.4	227.5	225.3	223.0	223.0	234.2	236.4
27.5°	1291.4	1231.2	885.5	347.9	223.0	218.6	216.4	211.9	211.9	220.8	220.8
30°	1347.2	1289.2	820.8	263.2	211.9	209.7	205.2	200.7	196.3	205.2	205.2
32.5°	1407.4	1349.4	736.0	209.7	196.3	196.3	194.0	187.4	182.9	187.4	189.6
35°	1487.7	1418.6	640.1	182.9	176.2	176.2	176.2	174.0	165.1	169.5	169.5
37.5°	1594.8	1514.5	528.6	169.5	160.6	156.1	156.1	156.1	149.4	151.7	151.7
40°	1730.8	1626.0	421.6	158.4	149.4	138.3	133.8	136.1	131.6	131.6	129.4
42.5°	1916.0	1746.4	316.7	149.4	140.5	124.9	116.0	113.8	109.3	107.1	107.1
45°	2181.4	1893.6	227.5	140.5	133.8	109.3	100.4	93.7	82.5	75.8	75.8
47.5°	2524.9	2060.9	169.5	131.6	127.1	95.9	84.8	71.4	55.8	51.3	51.3
50°	2944.2	2248.3	142.7	118.2	116.0	84.8	66.9	46.8	31.2	26.8	29.0
52.5°	3352.4	2424.5	127.1	104.8	102.6	73.6	49.1	24.5	13.4	13.4	13.4
55°	3695.8	2549.4	116.0	93.7	89.2	58.0	26.8	11.2	6.7	6.7	6.7
57.5°	4005.9	2620.8	104.8	82.5	71.4	40.1	11.2	4.5	4.5	2.2	2.2
60°	4289.1	2663.2	91.4	71.4	55.8	22.3	4.5	2.2	2.2	0.0	0.0
62.5°	4568.0	2694.4	78.1	58.0	42.4	8.9	2.2	2.2	0.0	0.0	0.0
65°	4779.8	2683.2	62.5	46.8	26.8	4.5	2.2	0.0	0.0	0.0	0.0
67.5°	4773.2	2531.6	46.8	35.7	13.4	2.2	0.0	0.0	0.0	0.0	0.0
70°	4269.1	2132.3	31.2	22.3	4.5	2.2	0.0	0.0	0.0	0.0	0.0
72.5°	3028.9	1367.3	20.1	13.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	1333.8	414.9	11.2	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	261.0	95.9	6.7	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	62.5	11.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.8	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.7	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	2.2	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)