

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: P258086

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P258086
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T2U-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 440mA 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: 9728 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

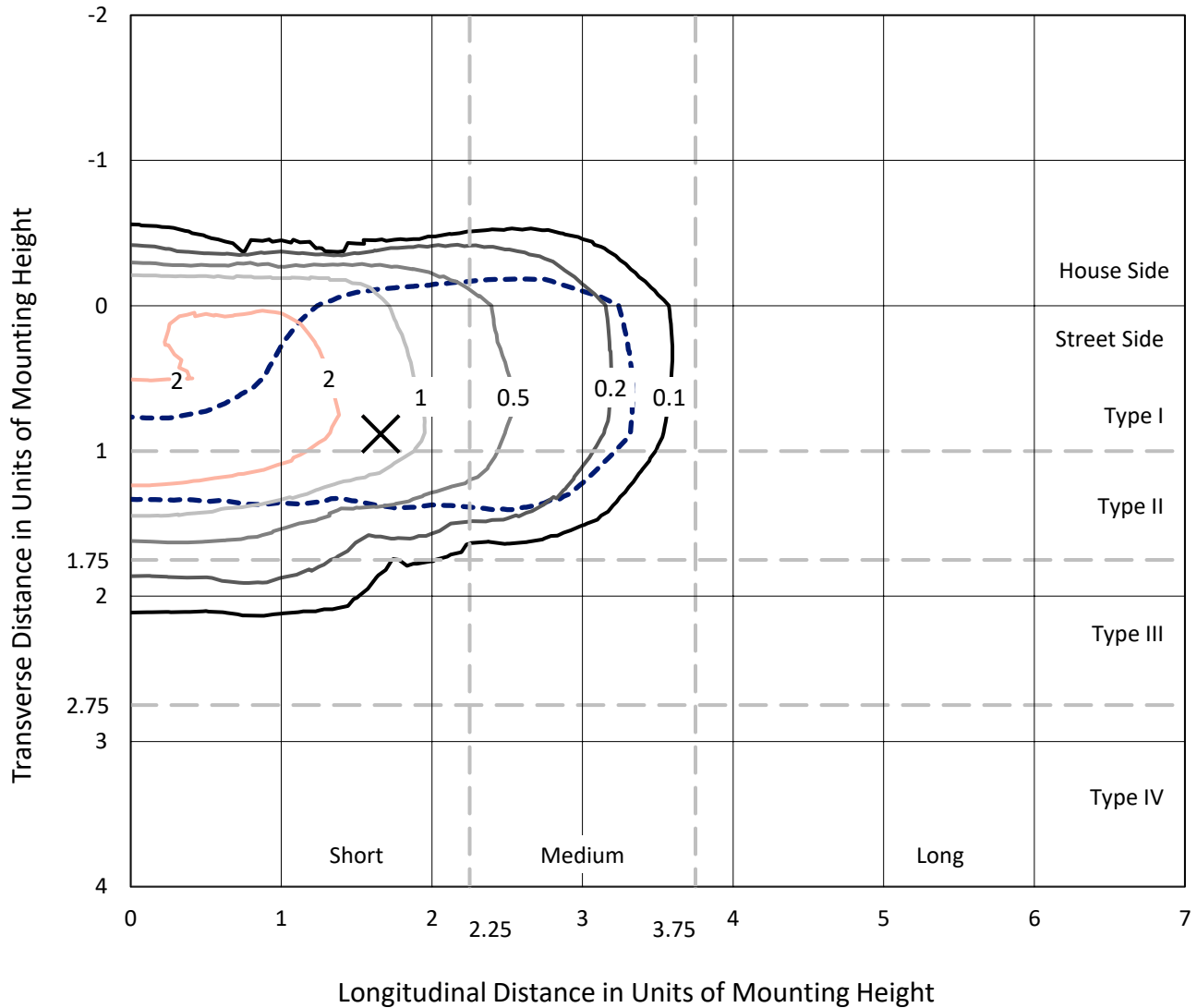
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

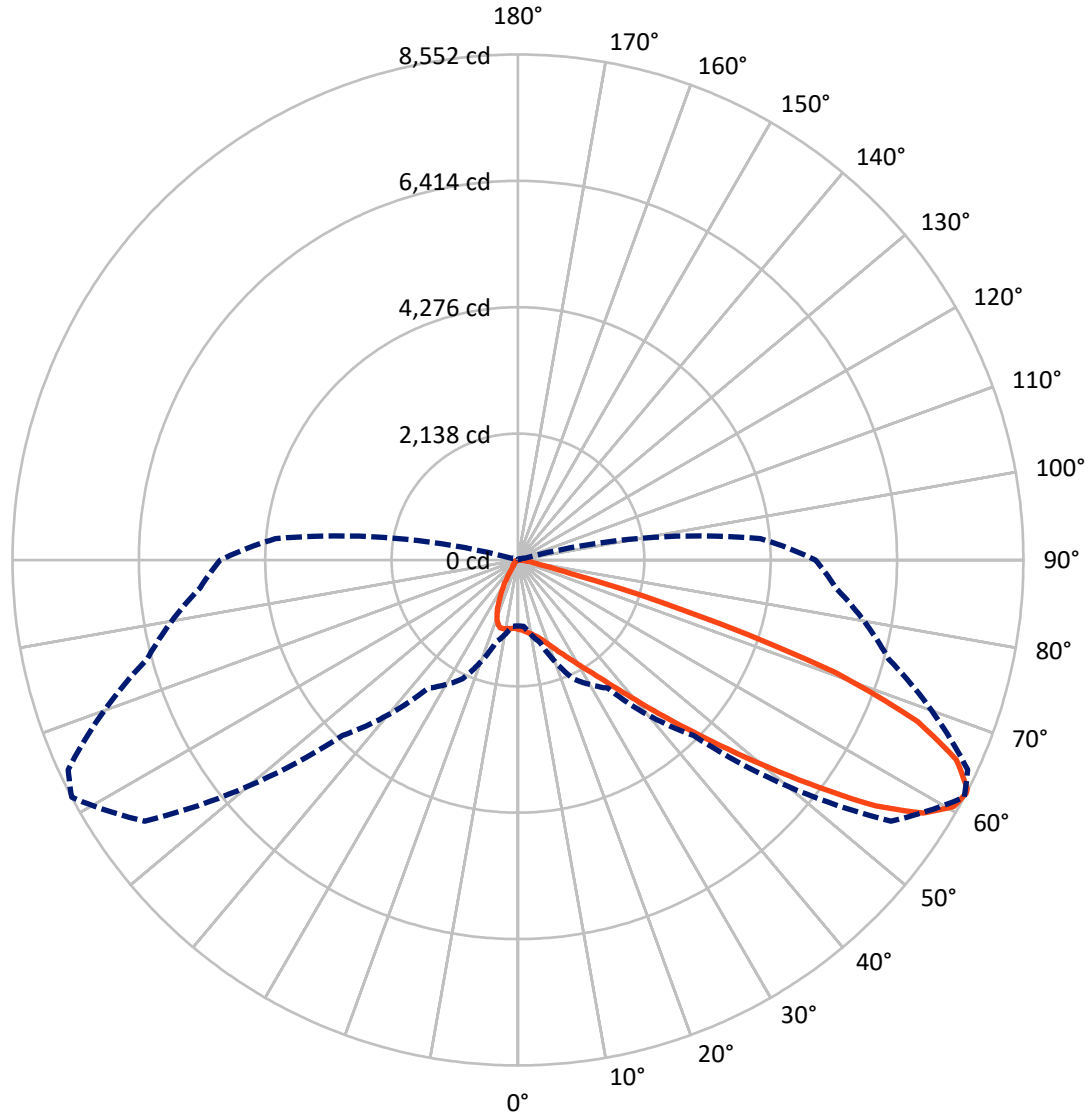
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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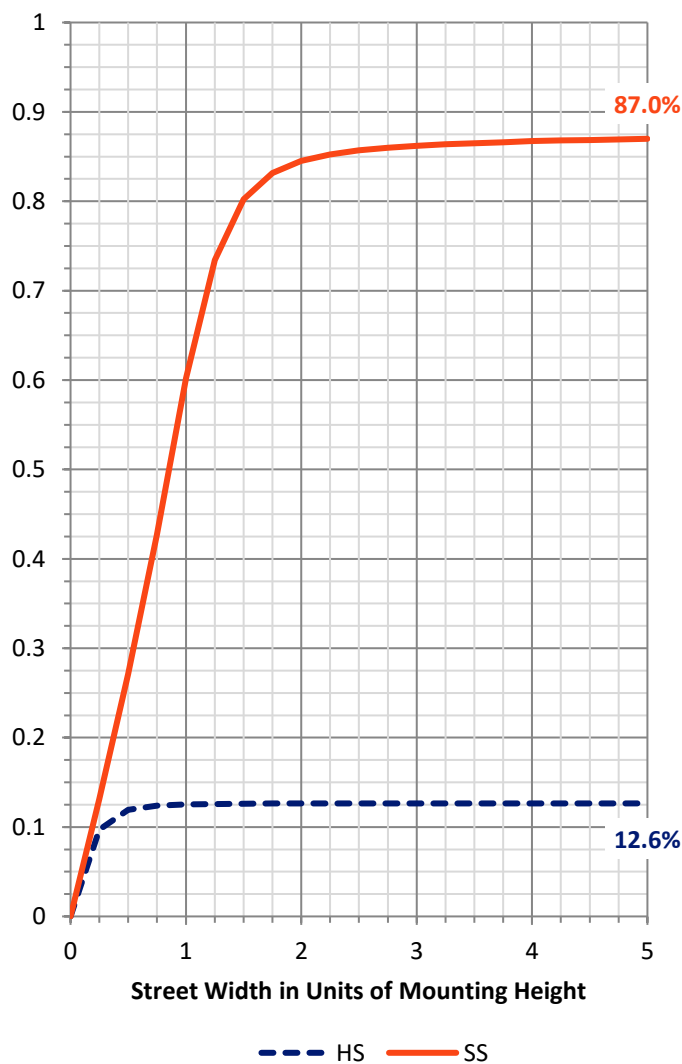
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1243.9	0.0	1243.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	8484.1	0.0	8484.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	9728.0	0.0	9728.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	1.2
10°-20°	314.9	3.2
20°-30°	528.9	5.4
30°-40°	1013.9	10.4
40°-50°	2070.8	21.3
50°-60°	2740.4	28.2
60°-70°	2128.9	21.9
70°-80°	768.4	7.9
80°-90°	49.0	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°	9728.0	100.0
0°-180°	9728.0	100.0

Coefficient of Utilization



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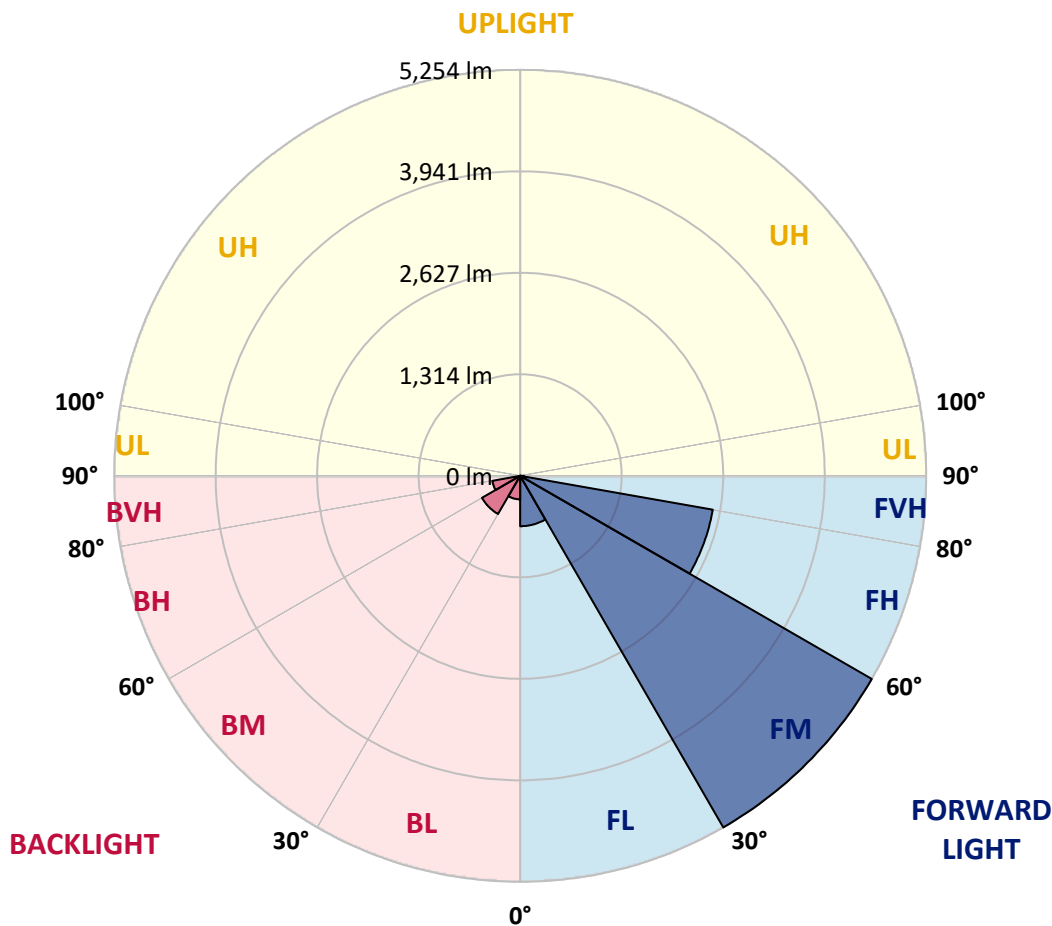
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	652.2	6.7			
FM (30°-60°)	5254.1	54.0			
FH (60°-80°)	2531.0	26.0			G2/5000
FVH (80°-90°)	46.8	0.5			G1/100
BL (0°-30°)	304.4	3.1	B1/500		
BM (30°-60°)	571.0	5.9	B1/1000		
BH (60°-80°)	366.3	3.8	B1/500		G1/500
BVH (80°-90°)	2.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9
2.5°	1203.0	1200.6	1198.2	1195.8	1195.8	1193.4	1191.0	1186.2	1181.4	1176.6	1174.3
5°	1224.5	1222.1	1219.7	1222.1	1219.7	1219.7	1217.3	1212.5	1207.7	1200.6	1193.4
7.5°	1241.2	1238.8	1236.4	1238.8	1241.2	1243.6	1246.0	1241.2	1238.8	1229.3	1222.1
10°	1262.7	1260.4	1258.0	1262.7	1262.7	1274.7	1277.1	1274.7	1272.3	1265.1	1253.2
12.5°	1293.8	1296.2	1296.2	1301.0	1305.8	1320.1	1324.9	1317.7	1317.7	1308.2	1293.8
15°	1351.2	1351.2	1351.2	1356.0	1358.4	1377.5	1382.3	1375.1	1379.9	1363.2	1348.8
17.5°	1406.2	1408.6	1413.4	1423.0	1423.0	1439.7	1449.3	1449.3	1458.9	1437.3	1418.2
20°	1461.2	1463.6	1470.8	1492.3	1492.3	1513.9	1530.6	1537.8	1547.3	1525.8	1492.3
22.5°	1521.0	1521.0	1533.0	1566.5	1559.3	1602.3	1633.4	1645.4	1655.0	1626.3	1573.6
25°	1611.9	1602.3	1611.9	1643.0	1638.2	1698.0	1755.4	1767.4	1779.3	1745.8	1666.9
27.5°	1784.1	1769.8	1736.3	1738.7	1738.7	1808.0	1889.3	1906.1	1913.2	1884.5	1786.5
30°	2128.5	2128.5	2004.1	1920.4	1865.4	1927.6	2042.4	2071.1	2080.7	2037.6	1908.5
32.5°	2728.8	2728.8	2499.2	2286.3	2078.3	2078.3	2209.8	2262.4	2272.0	2221.8	2071.1
35°	3494.1	3489.3	3144.9	2853.1	2446.6	2293.5	2405.9	2494.4	2523.1	2456.1	2281.5
37.5°	4307.2	4276.1	3905.4	3570.6	3013.4	2637.9	2671.4	2788.6	2814.9	2759.9	2554.2
40°	4967.3	4931.4	4632.5	4352.6	3745.2	3187.9	3054.0	3161.6	3192.7	3116.2	2879.4
42.5°	5565.2	5476.7	5271.0	5070.1	4587.0	4139.8	3563.4	3606.5	3640.0	3558.6	3245.3
45°	5998.0	5861.7	5756.5	5694.3	5438.4	5184.9	4223.5	4137.4	4149.4	4048.9	3644.7
47.5°	6010.0	5914.3	5923.9	6086.5	6191.7	6182.2	5082.1	4775.9	4730.5	4563.1	4070.4
50°	5436.0	5491.0	5665.6	6129.6	6698.8	7043.1	6103.3	5531.7	5395.4	5094.0	4493.7
52.5°	4479.4	4565.5	4893.1	5675.2	6772.9	7609.9	7162.7	6395.0	6151.1	5620.2	4819.0
55°	3508.4	3513.2	3857.6	4654.0	6277.8	7712.8	8009.3	7344.5	6971.4	6019.6	5034.2
57.5°	2413.1	2544.6	2982.3	3518.0	5161.0	7201.0	8327.4	8081.1	7600.4	6265.9	5184.9
60°	1580.8	1588.0	2097.4	2716.8	3513.2	5859.3	8133.7	8470.9	8109.8	6411.8	5287.7
62°	1114.5	1126.4	1442.1	2219.4	2647.5	4199.6	7705.6	8552.2	8396.8	6497.9	5395.4
62.5°	1033.2	1042.7	1308.2	2095.0	2487.2	3766.7	7552.5	8533.1	8439.8	6526.6	5433.6
65°	758.1	758.1	856.2	1439.7	1822.4	2035.2	6399.8	8152.8	8382.4	6756.2	5577.1
67.5°	585.9	590.7	624.2	887.3	1375.1	1234.0	4084.8	7296.6	7784.5	7095.8	5658.4
70°	504.6	502.2	526.1	588.3	992.5	820.3	1798.5	5694.3	6519.4	7009.7	5584.3
72.5°	373.1	375.5	430.5	516.6	691.2	533.3	813.1	3022.9	4228.3	5486.2	4785.5
75°	239.2	241.5	303.7	406.6	497.4	349.2	468.7	901.6	1731.5	3042.1	2927.3
77.5°	160.2	165.0	198.5	284.6	435.3	217.6	294.2	377.9	521.4	1140.8	1049.9
80°	107.6	107.6	126.8	191.3	275.0	181.8	157.8	251.1	270.2	354.0	177.0
82.5°	71.7	71.7	83.7	126.8	179.4	162.6	95.7	136.3	157.8	177.0	62.2
85°	43.0	43.0	57.4	78.9	117.2	90.9	62.2	76.5	81.3	112.4	33.5
87.5°	26.3	23.9	38.3	55.0	62.2	55.0	40.7	40.7	43.0	62.2	16.7
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°	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9	1171.9
2.5°	1169.5	1167.1	1164.7	1159.9	1152.7	1147.9	1143.2	1138.4	1133.6	1133.6	1140.8
5°	1191.0	1183.8	1174.3	1164.7	1150.3	1140.8	1133.6	1124.0	1119.3	1119.3	1121.6
7.5°	1217.3	1210.1	1193.4	1176.6	1155.1	1138.4	1121.6	1100.1	1083.4	1076.2	1083.4
10°	1246.0	1236.4	1212.5	1186.2	1162.3	1119.3	1064.2	997.3	939.9	913.6	925.5
12.5°	1281.9	1269.9	1241.2	1205.3	1150.3	1045.1	908.8	753.3	655.3	609.8	619.4
15°	1334.5	1317.7	1277.1	1222.1	1100.1	872.9	650.5	471.1	380.3	342.0	346.8
17.5°	1396.7	1375.1	1320.1	1217.3	971.0	629.0	387.4	275.0	236.8	227.2	227.2
20°	1463.6	1434.9	1363.2	1181.4	774.9	394.6	241.5	210.5	196.1	188.9	188.9
22.5°	1533.0	1494.7	1399.1	1097.7	552.5	246.3	198.5	177.0	160.2	153.1	153.1
25°	1616.7	1566.5	1434.9	951.8	351.6	198.5	169.8	148.3	131.5	122.0	124.4
27.5°	1714.7	1650.2	1466.0	770.1	227.2	172.2	141.1	119.6	105.2	100.4	100.4
30°	1817.6	1741.1	1473.2	576.4	184.2	148.3	117.2	98.1	88.5	83.7	83.7
32.5°	1958.7	1858.2	1451.7	382.6	155.5	124.4	98.1	81.3	74.1	71.7	71.7
35°	2145.2	2011.3	1401.5	236.8	131.5	102.8	81.3	71.7	64.6	62.2	62.2
37.5°	2382.0	2224.2	1313.0	162.6	112.4	83.7	69.4	62.2	57.4	55.0	55.0
40°	2697.7	2482.4	1198.2	141.1	95.7	71.7	59.8	55.0	50.2	50.2	50.2
42.5°	3032.5	2795.7	1049.9	124.4	81.3	62.2	52.6	47.8	45.4	43.0	43.0
45°	3398.4	3116.2	865.7	110.0	69.4	55.0	47.8	40.7	38.3	38.3	38.3
47.5°	3761.9	3446.2	664.9	95.7	59.8	47.8	40.7	35.9	33.5	31.1	31.1
50°	4135.0	3745.2	487.9	83.7	52.6	43.0	35.9	31.1	26.3	23.9	23.9
52.5°	4405.3	3924.6	356.3	71.7	45.4	35.9	28.7	23.9	19.1	16.7	16.7
55°	4603.8	4034.6	260.7	59.8	40.7	31.1	23.9	19.1	14.3	14.3	12.0
57.5°	4759.2	4087.2	196.1	52.6	35.9	26.3	19.1	14.3	12.0	9.6	9.6
60°	4878.8	4089.6	145.9	43.0	31.1	21.5	14.3	9.6	7.2	7.2	7.2
62°	5036.6	4120.7	119.6	35.9	28.7	19.1	12.0	7.2	4.8	2.4	2.4
62.5°	5082.1	4132.6	114.8	35.9	26.3	16.7	9.6	7.2	4.8	2.4	2.4
65°	5292.5	4154.1	88.5	28.7	21.5	14.3	7.2	4.8	0.0	0.0	0.0
67.5°	5483.8	4120.7	64.6	21.5	16.7	9.6	7.2	2.4	0.0	0.0	0.0
70°	5464.7	3891.1	45.4	14.3	12.0	7.2	4.8	0.0	0.0	0.0	0.0
72.5°	4503.3	2912.9	31.1	12.0	7.2	4.8	2.4	0.0	0.0	0.0	0.0
75°	2719.2	1274.7	21.5	7.2	7.2	4.8	2.4	0.0	0.0	0.0	0.0
77.5°	892.1	461.6	14.3	4.8	4.8	2.4	2.4	0.0	0.0	0.0	0.0
80°	145.9	76.5	7.2	4.8	4.8	2.4	2.4	0.0	0.0	0.0	0.0
82.5°	45.4	19.1	4.8	4.8	2.4	2.4	0.0	0.0	0.0	0.0	0.0
85°	16.7	7.2	4.8	4.8	2.4	2.4	0.0	0.0	0.0	0.0	0.0
87.5°	7.2	4.8	4.8	4.8	2.4	2.4	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)