

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: P400549

Luminaire Tested: **ARCH-L-PA3-90-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400549  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-830-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12296 lumens  
Efficiency: N/A  
Efficacy: 132.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

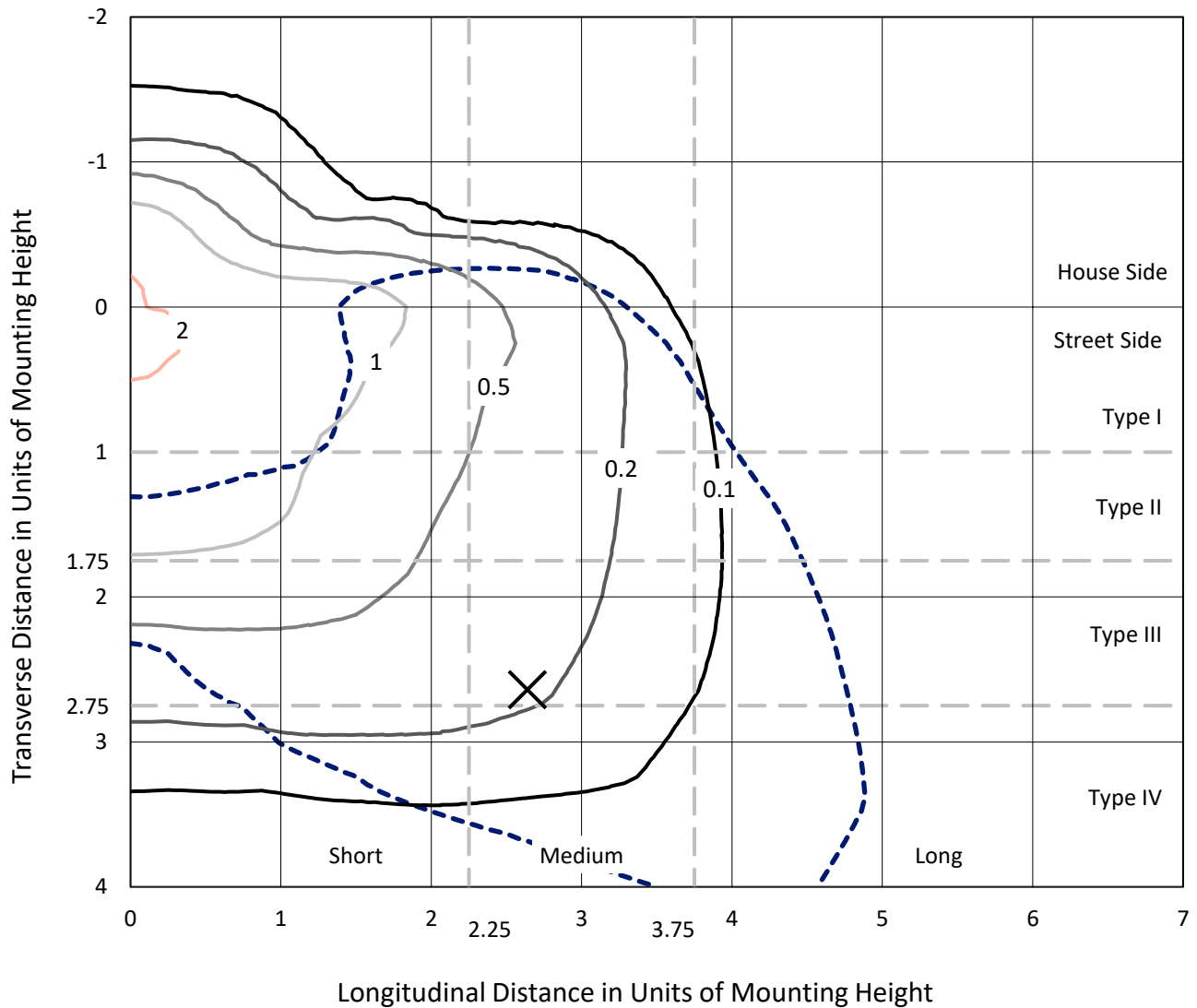
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

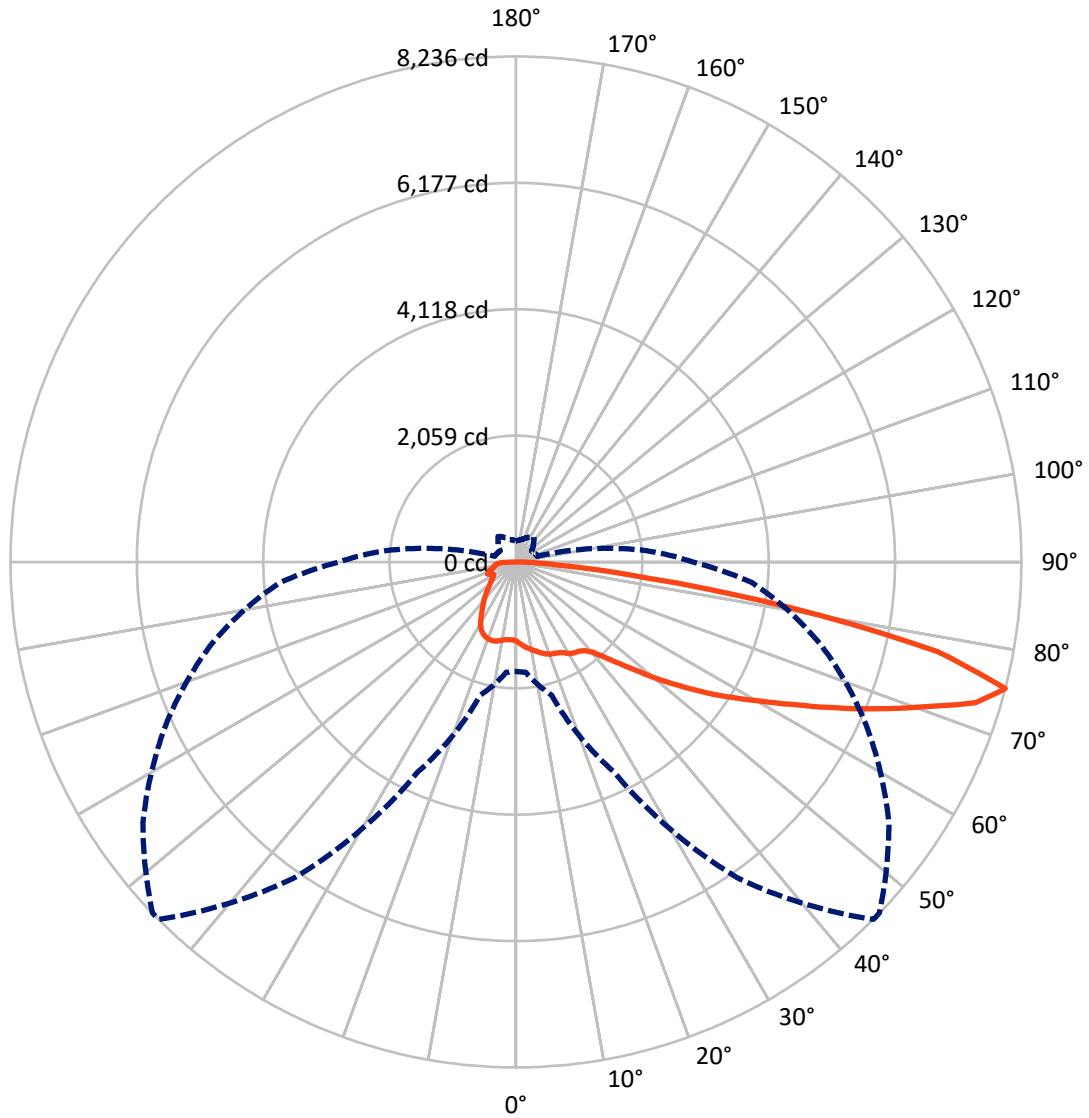
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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
<b>House Side</b>	Lumens	2717.4	0.0	2717.4
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	9578.6	0.0	9578.6
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	12296.0	0.0	12296.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.7	1.0
10°-20°	406.4	3.3
20°-30°	692.9	5.6
30°-40°	970.8	7.9
40°-50°	1426.3	11.6
50°-60°	2269.9	18.5
60°-70°	3229.0	26.3
70°-80°	2703.6	22.0
80°-90°	469.2	3.8
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°	12296.0	100.0
0°-180°	12296.0	100.0

**Coefficient of Utilization**



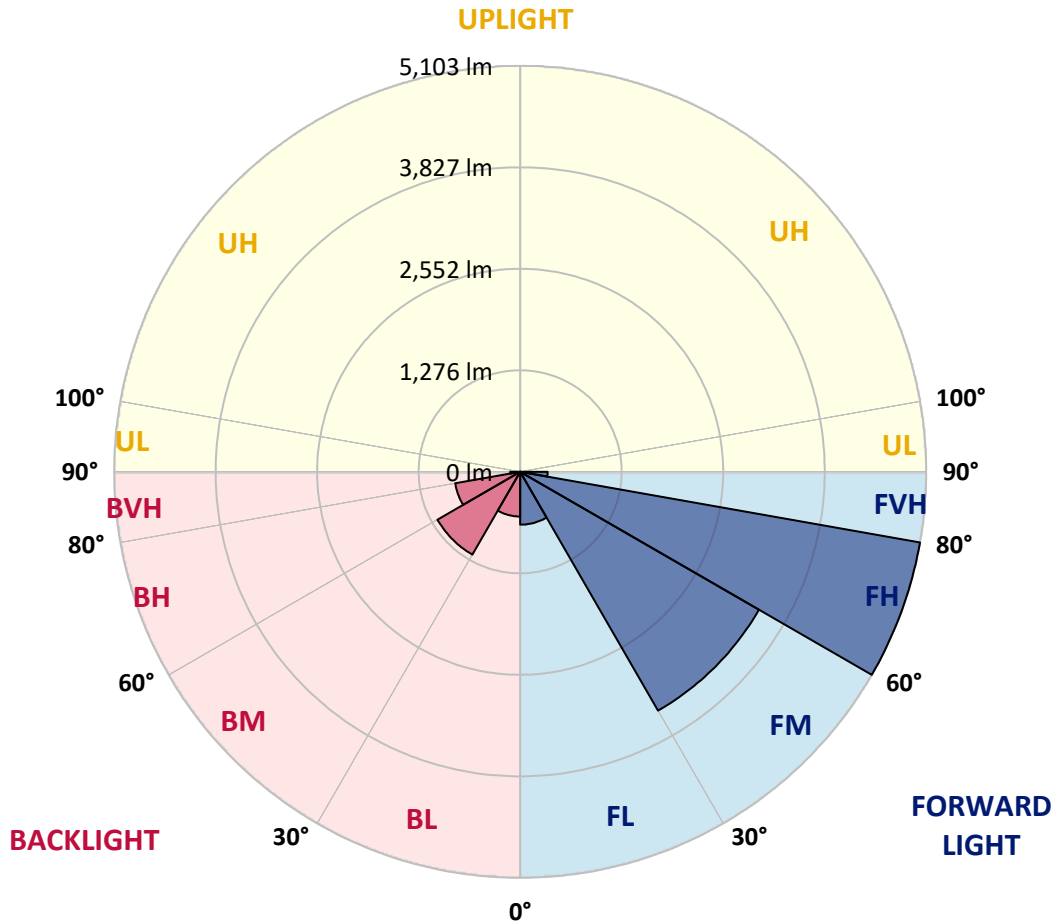
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	664.7	5.4			
FM (30°-60°)	3465.9	28.2			
FH (60°-80°)	5103.1	41.5			G3/7500
FVH (80°-90°)	345.0	2.8			G3/500
BL (0°-30°)	562.4	4.6	B2/1000		
BM (30°-60°)	1201.2	9.8	B2/2500		
BH (60°-80°)	829.5	6.7	B2/1000		G2/1000
BVH (80°-90°)	124.3	1.0			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3
2.5°	1365.3	1358.7	1355.4	1355.4	1342.3	1334.1	1332.4	1320.9	1311.1	1301.2	1293.0
5°	1444.1	1439.2	1429.4	1421.1	1403.1	1380.1	1376.8	1352.1	1327.5	1304.5	1284.8
7.5°	1516.4	1506.6	1495.1	1478.6	1449.1	1417.9	1412.9	1378.4	1343.9	1309.4	1283.1
10°	1577.2	1567.4	1550.9	1527.9	1490.1	1452.4	1447.4	1411.3	1375.1	1334.1	1296.3
12.5°	1634.7	1626.5	1601.9	1570.6	1526.3	1491.8	1486.9	1455.6	1417.9	1371.9	1322.6
15°	1684.0	1675.8	1649.5	1613.4	1562.4	1536.1	1529.6	1500.0	1462.2	1412.9	1362.0
17.5°	1708.7	1708.7	1680.7	1641.3	1593.6	1573.9	1569.0	1532.9	1498.4	1450.7	1399.8
20°	1716.9	1720.2	1700.4	1652.8	1611.7	1603.5	1598.6	1569.0	1529.6	1483.6	1435.9
22.5°	1721.8	1728.4	1711.9	1657.7	1623.2	1618.3	1615.0	1595.3	1564.1	1519.7	1472.1
25°	1738.2	1738.2	1726.7	1665.9	1638.0	1636.4	1636.4	1624.9	1603.5	1565.7	1518.1
27.5°	1762.9	1761.2	1746.4	1684.0	1670.9	1675.8	1674.2	1672.5	1657.7	1619.9	1569.0
30°	1803.9	1803.9	1787.5	1720.2	1711.9	1733.3	1734.9	1738.2	1715.2	1656.1	1615.0
32.5°	1866.4	1859.8	1843.4	1756.3	1743.2	1762.9	1766.2	1764.5	1744.8	1688.9	1669.2
35°	2058.6	2043.8	1984.7	1836.8	1771.1	1782.6	1784.2	1792.4	1795.7	1751.4	1741.5
37.5°	2395.4	2375.7	2285.3	2027.4	1859.8	1831.9	1830.2	1851.6	1869.7	1830.2	1830.2
40°	2761.8	2745.3	2692.8	2356.0	2024.1	1932.1	1925.5	1945.2	1968.2	1940.3	1948.5
42.5°	3077.2	3090.4	3095.3	2704.3	2270.5	2119.4	2101.3	2073.4	2109.5	2084.9	2117.7
45°	3313.8	3307.2	3397.6	3060.8	2589.3	2354.3	2329.7	2254.1	2300.1	2298.5	2370.8
47.5°	3565.2	3553.7	3591.5	3396.0	2952.4	2641.8	2604.1	2492.3	2561.3	2609.0	2728.9
50°	3803.4	3806.7	3819.8	3660.5	3346.7	2991.8	2944.1	2794.6	2893.2	2993.4	3162.7
52.5°	4113.9	4090.9	4074.5	3969.3	3788.6	3356.5	3325.3	3154.4	3292.4	3410.7	3635.8
55°	4385.0	4370.2	4360.4	4355.4	4158.3	3759.0	3726.2	3548.7	3747.5	3831.3	4163.2
57.5°	4674.2	4665.9	4718.5	4802.3	4723.4	4168.1	4133.6	3962.8	4184.6	4243.7	4734.9
60°	4886.1	4891.0	5035.6	5249.2	5195.0	4611.7	4570.7	4419.5	4610.1	4662.7	5306.7
62.5°	4887.7	4937.0	5272.2	5655.0	5717.4	5122.7	5075.0	4910.7	5047.1	5047.1	5819.3
65°	4421.1	4477.0	5229.5	5755.2	6246.4	5730.6	5684.6	5426.6	5477.6	5408.6	6300.7
67.5°	3956.2	4021.9	4730.0	5763.4	6617.8	6381.2	6327.0	5942.5	5855.4	5681.3	6637.5
70°	3647.3	3693.3	4284.8	5656.6	6841.2	7061.3	7020.3	6432.1	6152.8	5909.6	6566.8
72.5°	3070.7	3054.2	3619.4	5149.0	6966.1	7833.5	7799.0	6964.4	6410.7	5801.2	5600.8
75°	1782.6	1802.3	2245.9	3772.2	6279.3	8236.0	8232.8	7419.5	6297.4	5124.3	3859.3
77.5°	514.2	529.0	737.7	1657.7	3971.0	7025.2	7250.3	6785.3	5323.1	3652.3	2001.1
80°	225.1	236.6	320.4	552.0	1710.3	4588.7	4785.9	4588.7	3210.3	1675.8	785.3
82.5°	133.1	141.3	208.7	341.7	819.8	2183.5	2449.6	2139.1	1385.0	711.4	325.3
85°	75.6	78.9	119.9	216.9	515.9	764.0	857.6	803.4	675.2	404.2	170.9
87.5°	34.5	36.1	59.1	101.9	289.2	257.9	267.8	354.9	391.0	246.4	85.4
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°	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3	1291.3
2.5°	1289.7	1284.8	1274.9	1271.6	1266.7	1268.3	1270.0	1270.0	1271.6	1266.7	1266.7
5°	1276.6	1268.3	1258.5	1258.5	1258.5	1271.6	1283.1	1289.7	1293.0	1293.0	1289.7
7.5°	1271.6	1261.8	1250.3	1253.6	1256.8	1273.3	1294.6	1316.0	1322.6	1322.6	1319.3
10°	1281.5	1271.6	1263.4	1268.3	1276.6	1289.7	1306.1	1325.9	1342.3	1343.9	1342.3
12.5°	1304.5	1293.0	1284.8	1294.6	1304.5	1312.7	1320.9	1329.1	1350.5	1353.8	1353.8
15°	1342.3	1330.8	1320.9	1329.1	1332.4	1332.4	1332.4	1332.4	1353.8	1357.1	1357.1
17.5°	1380.1	1370.2	1360.4	1362.0	1352.1	1339.0	1334.1	1332.4	1343.9	1353.8	1355.4
20°	1416.2	1408.0	1398.1	1381.7	1357.1	1332.4	1324.2	1324.2	1330.8	1345.6	1345.6
22.5°	1455.6	1445.8	1429.4	1391.6	1350.5	1316.0	1307.8	1312.7	1320.9	1340.6	1339.0
25°	1500.0	1486.9	1458.9	1388.3	1329.1	1288.1	1289.7	1304.5	1319.3	1340.6	1340.6
27.5°	1549.3	1531.2	1475.4	1362.0	1281.5	1242.1	1256.8	1291.3	1312.7	1335.7	1339.0
30°	1603.5	1587.1	1488.5	1316.0	1204.3	1168.1	1204.3	1260.1	1293.0	1314.4	1319.3
32.5°	1669.2	1656.1	1500.0	1256.8	1104.1	1072.8	1125.4	1194.4	1247.0	1271.6	1276.6
35°	1751.4	1738.2	1514.8	1189.5	1010.4	977.5	1025.2	1095.8	1164.8	1196.1	1205.9
37.5°	1858.2	1838.4	1527.9	1117.2	931.5	893.8	916.8	980.8	1043.3	1086.0	1097.5
40°	1994.5	1963.3	1539.4	1035.1	862.5	819.8	828.0	859.3	895.4	933.2	948.0
42.5°	2186.8	2124.3	1541.1	948.0	791.9	752.5	749.2	759.0	759.0	759.0	764.0
45°	2454.5	2336.3	1544.4	865.8	719.6	678.5	668.7	665.4	640.7	593.1	589.8
47.5°	2793.0	2613.9	1559.1	796.8	644.0	607.9	594.7	581.6	535.6	486.3	476.5
50°	3226.7	2935.9	1588.7	731.1	580.0	555.3	538.9	507.7	456.7	418.9	409.1
52.5°	3726.2	3318.7	1616.7	662.1	532.3	515.9	496.2	458.4	404.2	381.2	377.9
55°	4299.6	3745.9	1672.5	601.3	491.2	479.7	461.7	425.5	384.4	368.0	366.4
57.5°	4886.1	4224.0	1751.4	547.1	451.8	445.2	445.2	414.0	387.7	381.2	381.2
60°	5451.3	4634.7	1690.6	496.2	415.7	418.9	450.2	442.0	422.2	430.4	435.4
62.5°	5889.9	4876.2	1371.9	455.1	389.4	418.9	499.5	499.5	476.5	473.2	473.2
65°	6077.2	4873.0	964.4	423.9	379.5	460.0	557.0	530.7	469.9	446.9	442.0
67.5°	6029.6	4659.4	665.4	402.5	376.2	502.7	583.2	509.3	440.3	420.6	405.8
70°	5610.6	4207.6	512.6	382.8	371.3	484.7	575.0	484.7	417.3	399.2	386.1
72.5°	4526.3	3374.6	425.5	363.1	351.6	448.5	547.1	461.7	399.2	379.5	366.4
75°	2886.6	2122.7	359.8	336.8	313.8	402.5	509.3	438.7	379.5	353.2	343.4
77.5°	1388.3	915.1	313.8	305.6	282.6	372.9	471.5	409.1	353.2	331.9	325.3
80°	561.9	418.9	272.7	274.4	259.6	354.9	445.2	381.2	326.9	303.9	292.4
82.5°	292.4	243.2	230.0	236.6	236.6	338.4	425.5	358.2	303.9	294.1	256.3
85°	157.7	151.2	177.4	190.6	205.4	305.6	395.9	333.5	277.7	238.2	230.0
87.5°	77.2	98.6	100.2	115.0	142.9	244.8	333.5	279.3	231.7	192.2	188.9
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)