

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: P798983

Luminaire Tested: **ARCH1-50-727-U-T3**

Issue Date: 4/4/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P798983  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH1-50-727-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6233 lumens  
Efficiency: N/A  
Efficacy: 117.6 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

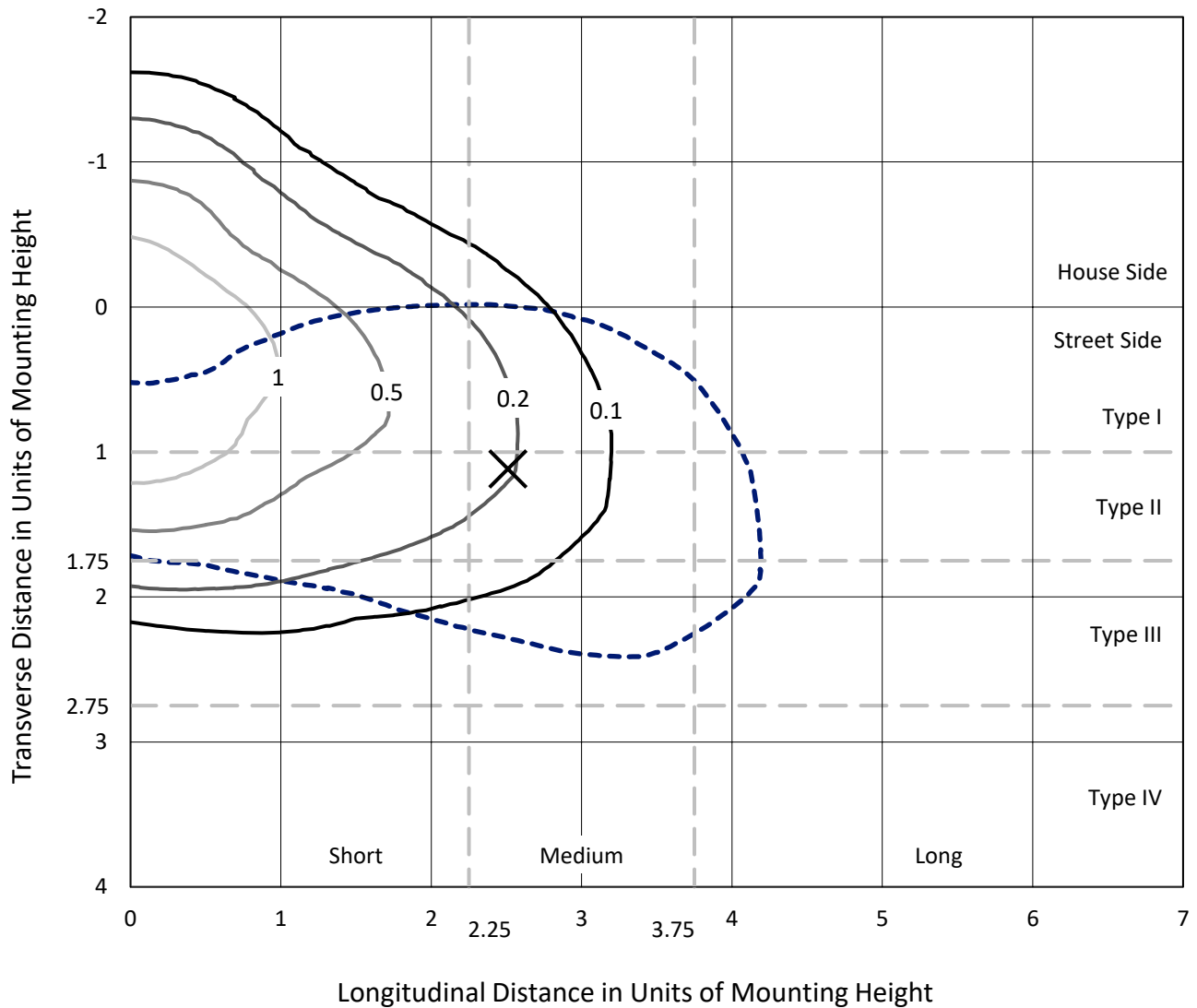
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

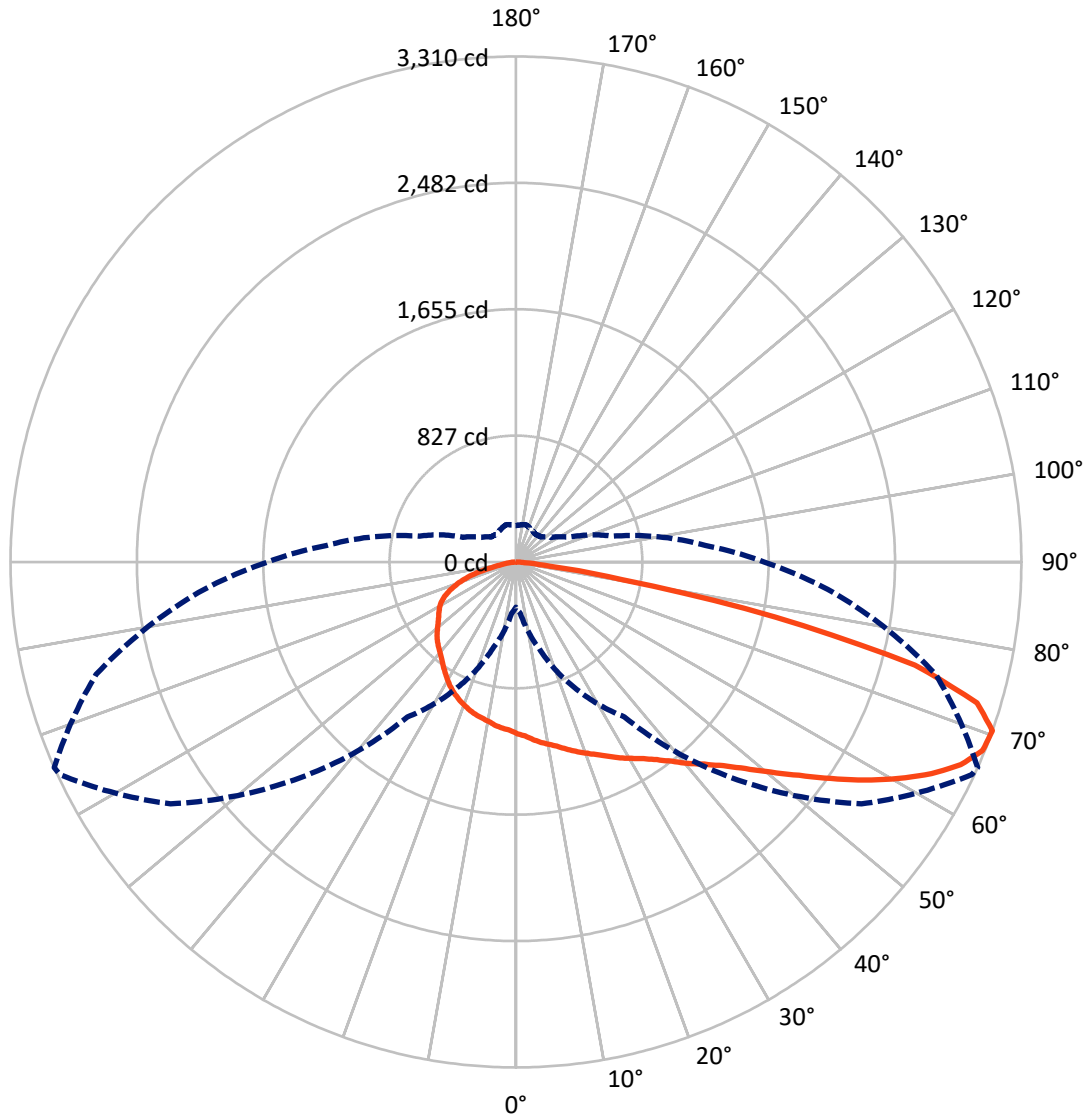
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1651.6	0.0	1651.6
	% Fixture	26.5	0.0	26.5
<b>Street Side</b>	Lumens	4581.4	0.0	4581.4
	% Fixture	73.5	0.0	73.5
<b>Total</b>	Lumens	6233.0	0.0	6233.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.1	1.7
10°-20°	324.2	5.2
20°-30°	543.5	8.7
30°-40°	813.8	13.1
40°-50°	1088.1	17.5
50°-60°	1270.4	20.4
60°-70°	1263.2	20.3
70°-80°	747.8	12.0
80°-90°	73.7	1.2
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°	6233.0	100.0
0°-180°	6233.0	100.0

**Coefficient of Utilization**

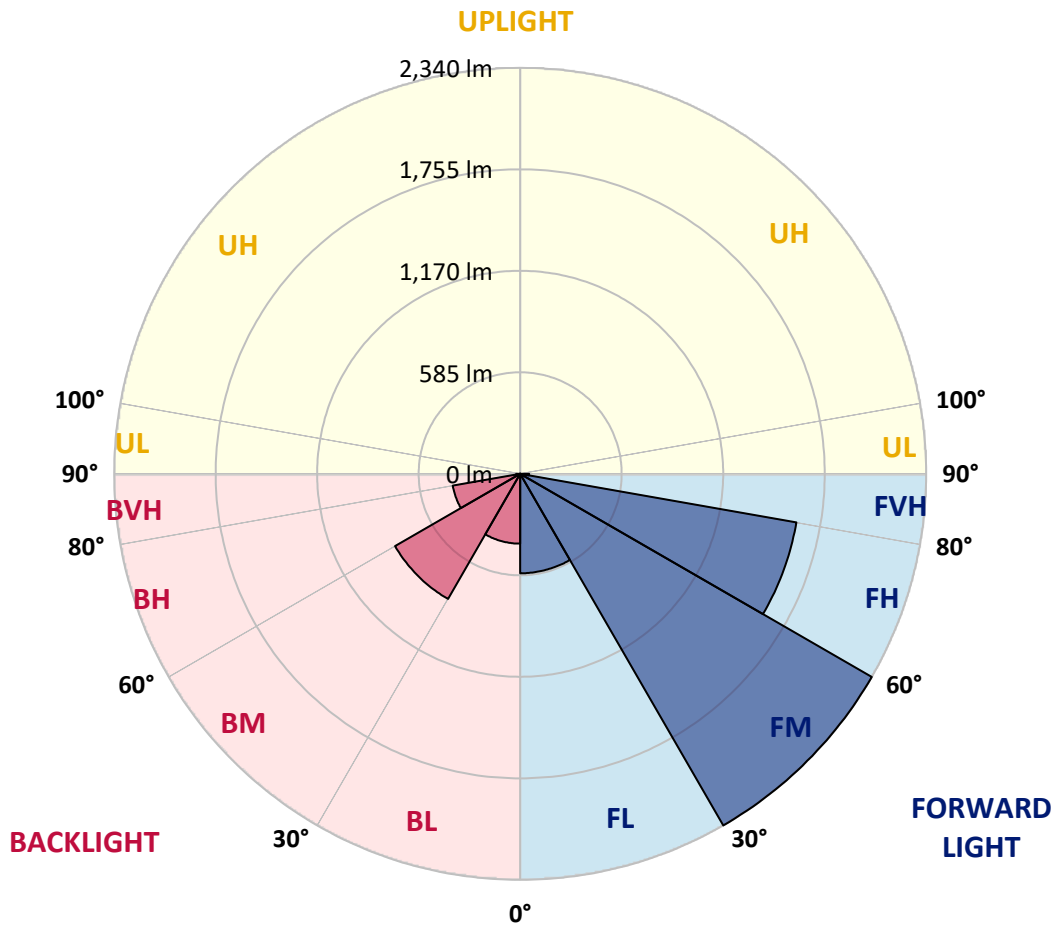


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	573.3	9.2			
FM (30°-60°)	2339.8	37.5			
FH (60°-80°)	1616.5	25.9			G1/1800
FVH (80°-90°)	51.8	0.8			G1/100
BL (0°-30°)	402.6	6.5	B1/500		
BM (30°-60°)	832.6	13.4	B1/1000		
BH (60°-80°)	394.5	6.3	B1/500		G1/500
BVH (80°-90°)	21.9	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9
2.5°	1166.3	1164.4	1163.5	1159.8	1151.6	1155.2	1147.0	1141.5	1140.5	1127.7	1120.3
5°	1214.1	1213.1	1211.3	1205.8	1192.9	1194.8	1181.0	1170.9	1168.1	1147.9	1132.3
7.5°	1254.5	1252.7	1251.7	1244.4	1230.6	1229.7	1213.1	1198.4	1193.8	1166.3	1142.4
10°	1285.7	1283.0	1284.8	1277.5	1262.8	1260.0	1238.9	1219.6	1215.0	1180.1	1147.0
12.5°	1312.4	1310.6	1313.3	1306.9	1294.9	1292.2	1271.0	1246.2	1240.7	1200.3	1157.1
15°	1341.8	1335.4	1340.9	1338.1	1329.9	1328.9	1309.6	1282.1	1274.7	1226.0	1172.7
17.5°	1357.4	1353.8	1360.2	1361.1	1357.4	1363.9	1345.5	1312.4	1306.0	1249.9	1186.5
20°	1368.5	1362.9	1370.3	1375.8	1378.6	1391.4	1376.7	1344.6	1337.2	1272.9	1199.4
22.5°	1406.1	1394.2	1395.1	1398.8	1400.6	1419.0	1409.8	1378.6	1371.2	1301.4	1215.0
25°	1500.8	1476.9	1461.3	1450.3	1437.4	1453.0	1447.5	1417.2	1410.7	1335.4	1234.3
27.5°	1647.9	1617.5	1586.3	1554.1	1503.6	1497.1	1487.9	1460.4	1453.0	1369.4	1253.6
30°	1815.1	1784.8	1748.0	1696.6	1601.9	1552.3	1531.1	1500.8	1492.5	1399.7	1272.0
32.5°	1981.5	1954.8	1918.1	1855.6	1720.5	1619.4	1574.3	1543.1	1534.8	1432.8	1294.0
35°	2111.1	2094.5	2070.6	1992.5	1838.1	1698.4	1636.8	1599.1	1590.0	1485.2	1334.5
37.5°	2215.8	2203.9	2183.7	2101.9	1923.6	1777.4	1708.5	1665.3	1655.2	1542.2	1377.7
40°	2370.2	2339.0	2322.4	2203.9	1998.0	1849.1	1789.4	1744.4	1733.3	1602.8	1412.6
42.5°	2501.6	2478.7	2458.5	2294.9	2068.8	1910.7	1865.7	1824.3	1809.6	1662.6	1450.3
45°	2523.7	2532.9	2522.8	2339.9	2180.9	1971.4	1942.9	1916.2	1902.4	1743.4	1507.2
47.5°	2524.6	2524.6	2464.9	2365.6	2319.7	2039.4	2025.6	2034.8	2020.1	1846.4	1575.2
50°	2458.5	2470.4	2439.2	2372.1	2356.4	2107.4	2126.7	2176.3	2161.6	1955.7	1648.8
52.5°	2321.5	2361.0	2360.1	2362.0	2303.1	2165.3	2233.3	2346.3	2321.5	2078.9	1726.9
55°	2079.8	2158.8	2229.6	2290.3	2257.2	2200.2	2363.8	2527.4	2501.6	2216.7	1805.9
57.5°	1873.0	1923.6	2011.8	2183.7	2203.0	2230.5	2486.0	2716.7	2693.7	2369.3	1888.6
60°	1636.8	1706.7	1794.9	2039.4	2136.8	2270.0	2620.2	2901.4	2879.4	2523.7	1968.6
62.5°	1273.8	1363.9	1540.3	1817.9	2040.3	2294.9	2725.9	3064.1	3054.0	2669.8	2040.3
65°	887.8	967.8	1215.0	1545.8	1886.8	2283.8	2810.4	3209.3	3200.1	2789.3	2090.8
67.5°	518.3	611.2	890.6	1244.4	1615.7	2207.6	2838.0	3294.8	3294.8	2861.9	2104.6
70°	295.9	339.1	587.3	907.1	1238.9	1997.1	2760.8	3293.9	3309.5	2845.4	2047.6
72.5°	206.8	226.1	395.2	610.2	840.0	1615.7	2558.6	3134.9	3156.0	2689.1	1852.8
75°	160.8	174.6	278.5	416.3	529.4	1097.3	2116.6	2643.2	2699.2	2292.1	1498.0
77.5°	122.2	132.3	162.7	260.1	339.1	630.5	1397.0	1733.3	1737.0	1403.4	803.2
80°	89.1	99.3	108.4	159.0	180.1	295.0	527.5	724.2	704.0	679.2	434.7
82.5°	53.3	63.4	66.2	86.4	88.2	125.9	184.7	233.4	224.2	298.7	204.0
85°	23.0	32.2	34.0	39.5	37.7	51.5	73.5	61.6	55.1	63.4	44.1
87.5°	5.5	9.2	9.2	10.1	8.3	12.9	13.8	10.1	9.2	11.0	11.0
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°	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9	1124.9
2.5°	1118.5	1115.7	1116.6	1101.0	1096.4	1091.8	1089.1	1087.2	1085.4	1088.2	1090.9
5°	1126.8	1120.3	1113.0	1090.0	1080.8	1070.7	1063.3	1056.9	1054.1	1054.1	1056.9
7.5°	1133.2	1122.2	1106.5	1076.2	1059.7	1045.9	1033.9	1025.7	1021.1	1021.1	1023.8
10°	1134.1	1118.5	1093.7	1056.9	1034.8	1014.6	1000.8	991.7	985.2	985.2	987.1
12.5°	1139.6	1118.5	1086.3	1042.2	1014.6	989.8	973.3	959.5	956.7	956.7	958.6
15°	1148.8	1123.1	1081.7	1029.3	996.2	967.8	949.4	934.7	929.2	932.8	933.8
17.5°	1157.1	1125.8	1073.4	1012.8	973.3	942.0	921.8	908.9	901.6	909.9	909.9
20°	1162.6	1125.8	1061.5	991.7	948.5	913.5	894.2	878.6	873.1	883.2	884.1
22.5°	1170.9	1124.9	1048.6	970.5	921.8	885.0	865.7	853.8	851.0	862.1	865.7
25°	1180.1	1126.8	1034.8	946.6	892.4	856.6	841.8	836.3	838.2	852.0	856.6
27.5°	1190.2	1130.4	1021.1	920.0	860.2	828.1	819.8	822.5	829.9	847.4	852.9
30°	1199.4	1131.3	1001.8	888.7	823.5	793.1	796.8	808.8	819.8	837.3	843.7
32.5°	1211.3	1132.3	981.5	854.7	783.9	761.9	778.4	797.7	808.8	825.3	832.7
35°	1240.7	1147.9	965.9	821.6	747.2	735.2	762.8	787.6	794.1	808.8	815.2
37.5°	1274.7	1173.6	957.6	787.6	711.3	708.6	743.5	768.3	770.2	779.4	785.8
40°	1295.9	1184.7	948.5	759.1	679.2	681.0	716.9	736.2	732.5	738.9	743.5
42.5°	1317.0	1188.3	929.2	735.2	648.8	650.7	678.3	692.0	693.9	707.7	714.1
45°	1352.8	1198.4	908.0	713.2	621.3	614.8	631.4	649.8	673.7	700.3	707.7
47.5°	1400.6	1219.6	886.0	686.5	594.6	573.5	579.9	612.1	636.9	661.7	666.3
50°	1449.3	1240.7	865.7	654.4	568.0	529.4	532.1	561.5	581.8	601.1	603.8
52.5°	1497.1	1259.1	848.3	624.0	537.6	477.0	488.0	518.3	532.1	541.3	544.1
55°	1544.9	1274.7	832.7	598.3	502.7	435.6	445.7	474.2	488.0	492.6	494.4
57.5°	1594.5	1293.1	820.7	576.2	463.2	398.9	405.3	425.5	438.4	443.9	442.1
60°	1635.9	1308.7	814.3	553.3	423.7	364.9	363.0	381.4	399.8	405.3	403.5
62.5°	1668.1	1318.8	804.2	523.9	388.8	330.9	321.7	345.6	364.9	368.5	371.3
65°	1685.5	1319.8	779.4	486.2	352.9	294.1	287.7	311.6	323.5	327.2	327.2
67.5°	1682.8	1305.0	730.6	435.6	319.8	261.0	255.5	270.2	287.7	290.4	287.7
70°	1625.8	1244.4	652.5	382.3	280.3	231.6	221.5	236.2	252.7	242.6	238.0
72.5°	1464.0	1087.2	537.6	323.5	236.2	194.8	190.2	204.9	205.9	207.7	203.1
75°	1155.2	809.7	402.5	251.8	191.2	163.6	162.7	159.9	163.6	170.9	165.4
77.5°	606.6	404.4	217.8	154.4	138.8	131.4	125.0	124.1	135.1	139.7	134.2
80°	329.0	227.0	125.0	92.8	84.6	85.5	93.7	91.9	103.9	106.6	102.0
82.5°	143.4	107.5	61.6	56.1	56.1	55.1	57.9	64.3	77.2	77.2	61.6
85°	31.2	26.7	23.9	27.6	31.2	31.2	31.2	31.2	22.1	11.9	8.3
87.5°	10.1	10.1	10.1	11.0	11.9	11.9	10.1	7.4	4.6	0.9	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)