

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: P799751

Luminaire Tested: **ARCH2-50-727-U-T3**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799751
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: ARCH2-50-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7435 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

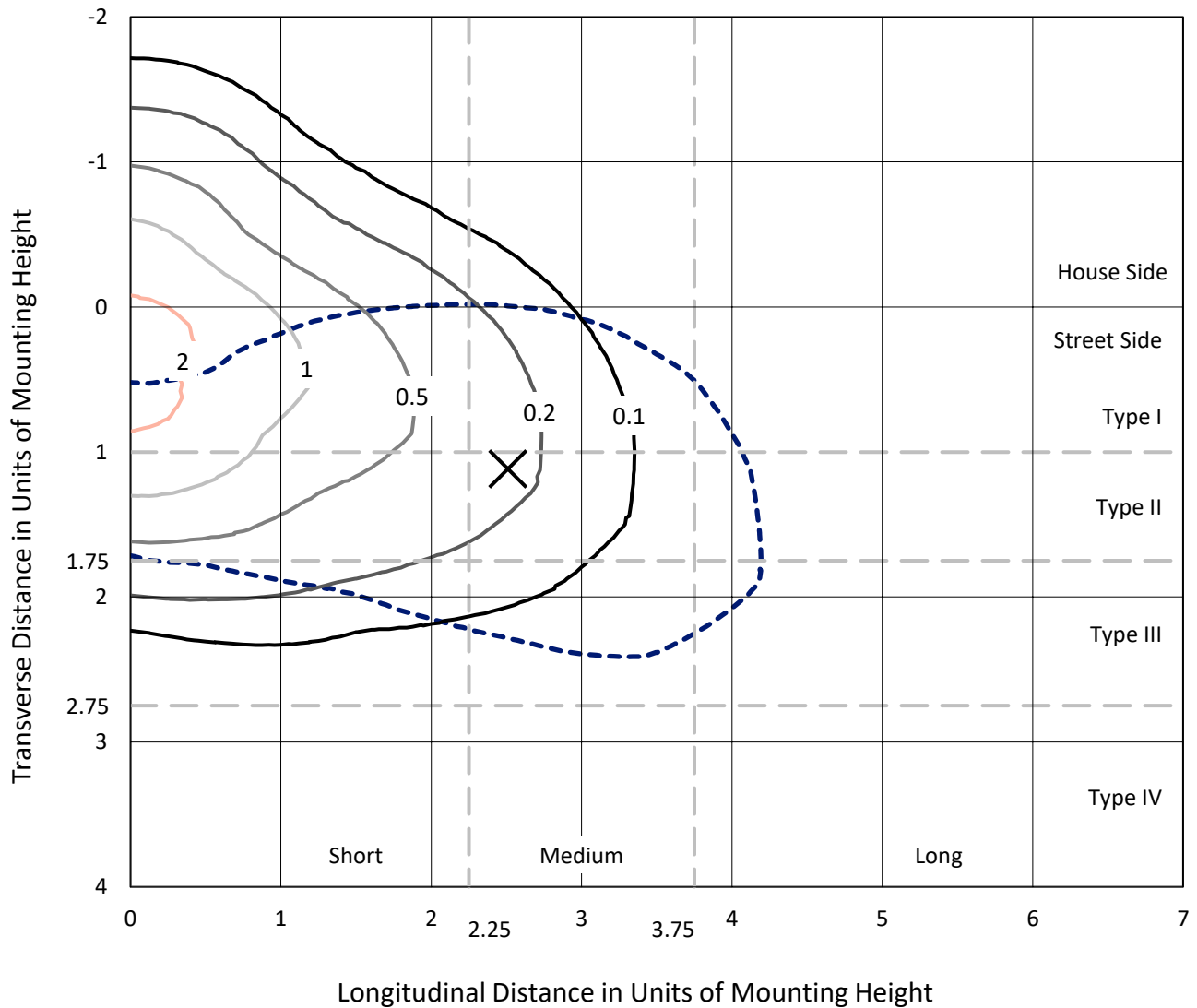
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

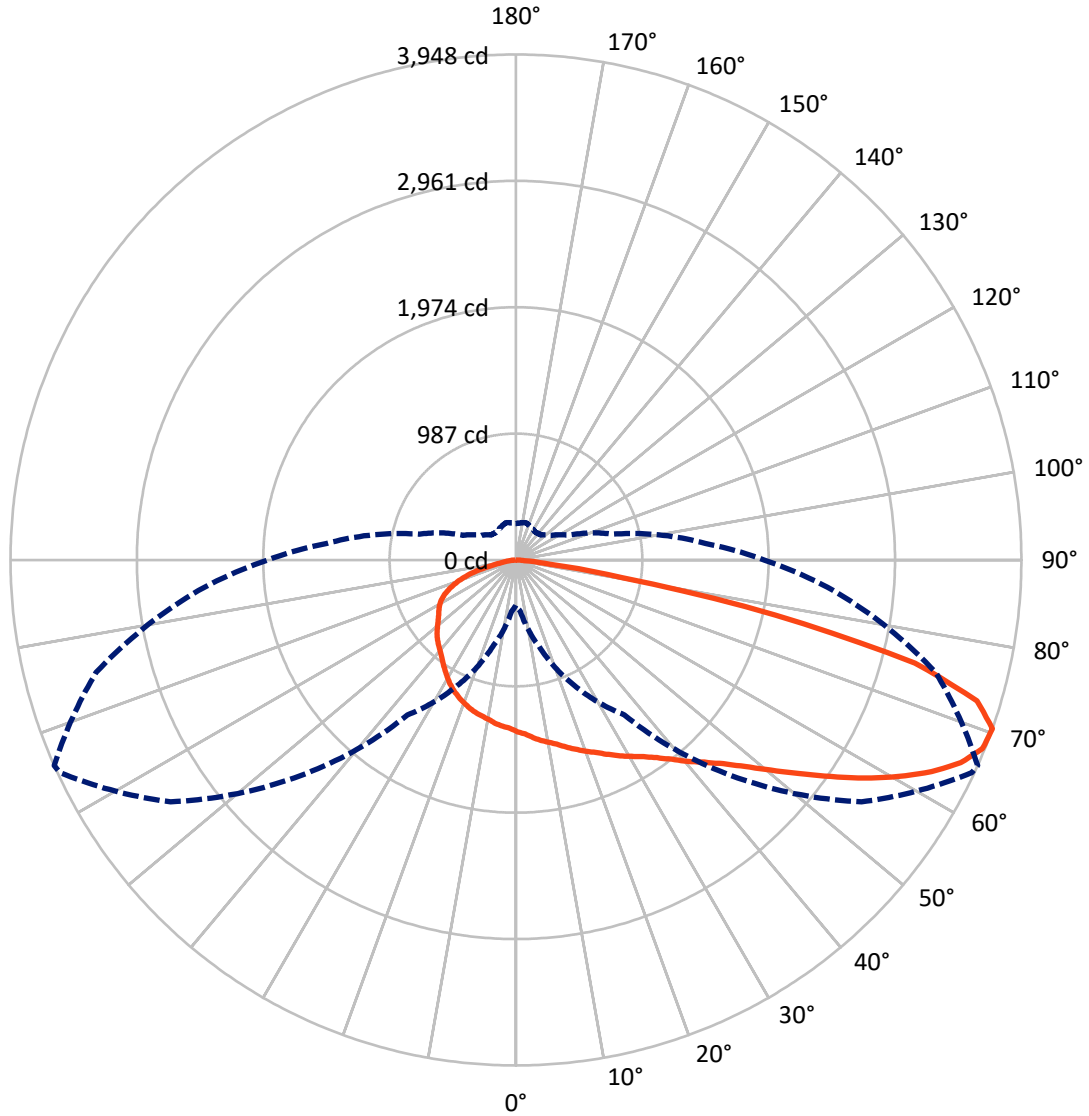
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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
House Side	Lumens	1970.1	0.0	1970.1
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	5464.9	0.0	5464.9
	% Fixture	73.5	0.0	73.5
Total	Lumens	7435.0	0.0	7435.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.9	1.7
10°-20°	386.8	5.2
20°-30°	648.3	8.7
30°-40°	970.8	13.1
40°-50°	1297.9	17.5
50°-60°	1515.4	20.4
60°-70°	1506.8	20.3
70°-80°	892.1	12.0
80°-90°	87.9	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°	7435.0	100.0
0°-180°	7435.0	100.0

Coefficient of Utilization



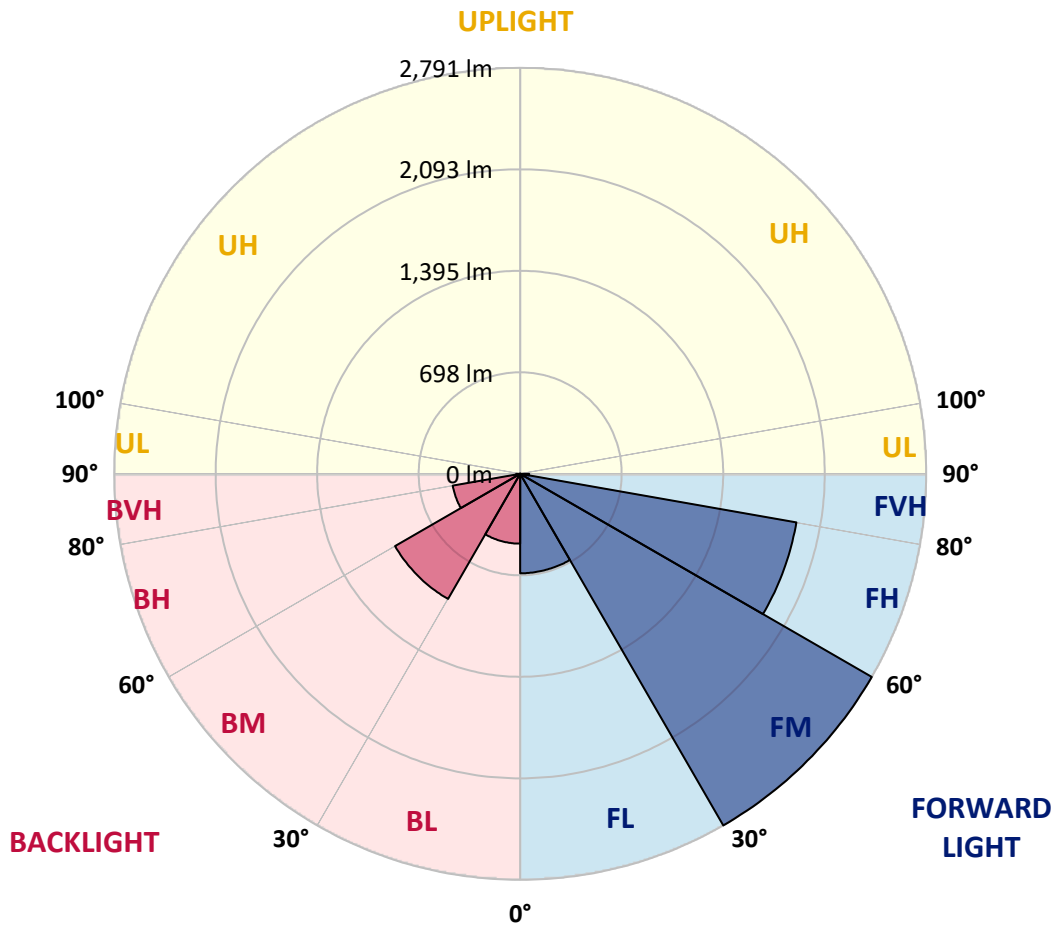
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	683.8	9.2			
FM (30°-60°)	2791.0	37.5			
FH (60°-80°)	1928.3	25.9			G2/5000
FVH (80°-90°)	61.8	0.8			G1/100
BL (0°-30°)	480.2	6.5	B1/500		
BM (30°-60°)	993.1	13.4	B1/1000		
BH (60°-80°)	470.6	6.3	B1/500		G1/500
BVH (80°-90°)	26.1	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-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8
2.5°	1391.2	1389.0	1387.9	1383.5	1373.6	1378.0	1368.2	1361.6	1360.5	1345.1	1336.4
5°	1448.2	1447.1	1444.9	1438.3	1423.0	1425.2	1408.7	1396.7	1393.4	1369.3	1350.6
7.5°	1496.4	1494.2	1493.1	1484.4	1467.9	1466.8	1447.1	1429.6	1424.1	1391.2	1362.7
10°	1533.7	1530.4	1532.6	1523.8	1506.3	1503.0	1477.8	1454.8	1449.3	1407.6	1368.2
12.5°	1565.5	1563.3	1566.6	1558.9	1544.7	1541.4	1516.2	1486.6	1480.0	1431.7	1380.2
15°	1600.6	1592.9	1599.5	1596.2	1586.3	1585.2	1562.2	1529.3	1520.5	1462.4	1398.9
17.5°	1619.2	1614.8	1622.5	1623.6	1619.2	1626.9	1605.0	1565.5	1557.8	1490.9	1415.3
20°	1632.4	1625.8	1634.6	1641.1	1644.4	1659.8	1642.2	1603.9	1595.1	1518.3	1430.6
22.5°	1677.3	1663.1	1664.2	1668.5	1670.7	1692.7	1681.7	1644.4	1635.7	1552.3	1449.3
25°	1790.2	1761.7	1743.1	1729.9	1714.6	1733.2	1726.6	1690.5	1682.8	1592.9	1472.3
27.5°	1965.6	1929.5	1892.2	1853.8	1793.5	1785.8	1774.9	1742.0	1733.2	1633.5	1495.3
30°	2165.2	2129.0	2085.1	2023.7	1910.8	1851.6	1826.4	1790.2	1780.4	1669.6	1517.3
32.5°	2363.6	2331.8	2287.9	2213.4	2052.2	1931.6	1877.9	1840.7	1830.8	1709.1	1543.6
35°	2518.2	2498.4	2469.9	2376.7	2192.6	2025.9	1952.5	1907.5	1896.6	1771.6	1591.8
37.5°	2643.1	2628.9	2604.8	2507.2	2294.5	2120.2	2038.0	1986.5	1974.4	1839.6	1643.3
40°	2827.3	2790.0	2770.3	2628.9	2383.3	2205.7	2134.5	2080.7	2067.6	1911.9	1685.0
42.5°	2984.1	2956.7	2932.6	2737.4	2467.7	2279.2	2225.5	2176.1	2158.6	1983.2	1729.9
45°	3010.4	3021.4	3009.3	2791.1	2601.5	2351.5	2317.5	2285.7	2269.3	2079.6	1797.9
47.5°	3011.5	3011.5	2940.2	2821.8	2767.0	2432.6	2416.2	2427.2	2409.6	2202.4	1879.0
50°	2932.6	2946.8	2909.5	2829.5	2810.9	2513.8	2536.8	2596.0	2578.5	2332.9	1966.7
52.5°	2769.2	2816.3	2815.3	2817.4	2747.3	2582.8	2664.0	2798.8	2769.2	2479.8	2059.9
55°	2480.9	2575.2	2659.6	2731.9	2692.5	2624.5	2819.6	3014.8	2984.1	2644.2	2154.2
57.5°	2234.2	2294.5	2399.8	2604.8	2627.8	2660.7	2965.4	3240.6	3213.2	2826.2	2252.9
60°	1952.5	2035.8	2141.0	2432.6	2548.9	2707.8	3125.5	3461.0	3434.6	3010.4	2348.2
62.5°	1519.4	1626.9	1837.4	2168.4	2433.7	2737.4	3251.6	3655.0	3642.9	3184.7	2433.7
65°	1059.0	1154.4	1449.3	1843.9	2250.7	2724.3	3352.4	3828.2	3817.3	3327.2	2494.0
67.5°	618.3	729.0	1062.3	1484.4	1927.3	2633.3	3385.3	3930.2	3930.2	3413.8	2510.5
70°	353.0	404.5	700.5	1082.0	1477.8	2382.2	3293.2	3929.1	3947.7	3394.1	2442.5
72.5°	246.7	269.7	471.4	727.9	1002.0	1927.3	3052.0	3739.4	3764.6	3207.7	2210.1
75°	191.8	208.3	332.2	496.6	631.5	1309.0	2524.7	3152.9	3219.8	2734.1	1786.9
77.5°	145.8	157.9	194.0	310.2	404.5	752.0	1666.3	2067.6	2072.0	1674.0	958.1
80°	106.3	118.4	129.4	189.7	214.9	351.9	629.3	863.9	839.8	810.2	518.5
82.5°	63.6	75.6	78.9	103.1	105.2	150.2	220.4	278.5	267.5	356.3	243.4
85°	27.4	38.4	40.6	47.1	44.9	61.4	87.7	73.5	65.8	75.6	52.6
87.5°	6.6	11.0	11.0	12.1	9.9	15.3	16.4	12.1	11.0	13.2	13.2
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°	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8	1341.8
2.5°	1334.2	1330.9	1332.0	1313.3	1307.9	1302.4	1299.1	1296.9	1294.7	1298.0	1301.3
5°	1344.0	1336.4	1327.6	1300.2	1289.2	1277.2	1268.4	1260.7	1257.4	1257.4	1260.7
7.5°	1351.7	1338.6	1319.9	1283.7	1264.0	1247.6	1233.3	1223.4	1218.0	1218.0	1221.3
10°	1352.8	1334.2	1304.6	1260.7	1234.4	1210.3	1193.9	1182.9	1175.2	1175.2	1177.4
12.5°	1359.4	1334.2	1295.8	1243.2	1210.3	1180.7	1161.0	1144.5	1141.2	1141.2	1143.4
15°	1370.4	1339.7	1290.3	1227.8	1188.4	1154.4	1132.5	1114.9	1108.3	1112.7	1113.8
17.5°	1380.2	1342.9	1280.5	1208.1	1161.0	1123.7	1099.6	1084.2	1075.5	1085.3	1085.3
20°	1386.8	1342.9	1266.2	1182.9	1131.4	1089.7	1066.7	1048.0	1041.5	1053.5	1054.6
22.5°	1396.7	1341.8	1250.9	1157.7	1099.6	1055.7	1032.7	1018.4	1015.2	1028.3	1032.7
25°	1407.6	1344.0	1234.4	1129.2	1064.5	1021.7	1004.2	997.6	999.8	1016.3	1021.7
27.5°	1419.7	1348.4	1218.0	1097.4	1026.1	987.7	977.9	981.2	989.9	1010.8	1017.3
30°	1430.6	1349.5	1194.9	1060.1	982.3	946.1	950.5	964.7	977.9	998.7	1006.4
32.5°	1444.9	1350.6	1170.8	1019.5	935.1	908.8	928.6	951.6	964.7	984.5	993.2
35°	1480.0	1369.3	1152.2	980.1	891.3	877.0	909.9	939.5	947.2	964.7	972.4
37.5°	1520.5	1400.0	1142.3	939.5	848.5	845.2	886.9	916.5	918.7	929.6	937.3
40°	1545.8	1413.1	1131.4	905.5	810.2	812.3	855.1	878.1	873.7	881.4	886.9
42.5°	1571.0	1417.5	1108.3	877.0	774.0	776.2	809.1	825.5	827.7	844.1	851.8
45°	1613.7	1429.6	1083.1	850.7	741.1	733.4	753.1	775.1	803.6	835.4	844.1
47.5°	1670.7	1454.8	1056.8	818.9	709.3	684.1	691.8	730.1	759.7	789.3	794.8
50°	1728.8	1480.0	1032.7	780.6	677.5	631.5	634.7	669.8	693.9	717.0	720.3
52.5°	1785.8	1501.9	1011.9	744.4	641.3	569.0	582.1	618.3	634.7	645.7	649.0
55°	1842.8	1520.5	993.2	713.7	599.7	519.6	531.7	565.7	582.1	587.6	589.8
57.5°	1902.0	1542.5	979.0	687.4	552.5	475.8	483.5	507.6	522.9	529.5	527.3
60°	1951.4	1561.1	971.3	660.0	505.4	435.2	433.0	455.0	476.9	483.5	481.3
62.5°	1989.8	1573.2	959.2	624.9	463.7	394.7	383.7	412.2	435.2	439.6	442.9
65°	2010.6	1574.3	929.6	579.9	421.0	350.8	343.1	371.6	385.9	390.3	390.3
67.5°	2007.3	1556.7	871.5	519.6	381.5	311.3	304.8	322.3	343.1	346.4	343.1
70°	1939.3	1484.4	778.4	456.1	334.4	276.3	264.2	281.7	301.5	289.4	283.9
72.5°	1746.4	1296.9	641.3	385.9	281.7	232.4	226.9	244.5	245.6	247.8	242.3
75°	1378.0	965.8	480.2	300.4	228.0	195.1	194.0	190.8	195.1	203.9	197.3
77.5°	723.5	482.4	259.8	184.2	165.5	156.8	149.1	148.0	161.2	166.6	160.1
80°	392.5	270.8	149.1	110.7	100.9	102.0	111.8	109.6	123.9	127.2	121.7
82.5°	171.0	128.3	73.5	66.9	66.9	65.8	69.1	76.7	92.1	92.1	73.5
85°	37.3	31.8	28.5	32.9	37.3	37.3	37.3	37.3	26.3	14.3	9.9
87.5°	12.1	12.1	12.1	13.2	14.3	14.3	12.1	8.8	5.5	1.1	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)