

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: P799767

Luminaire Tested: **ARCH2-50-730-U-T3**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799767
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: ARCH2-50-730-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7704 lumens
Efficiency: N/A
Efficacy: 142.7 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

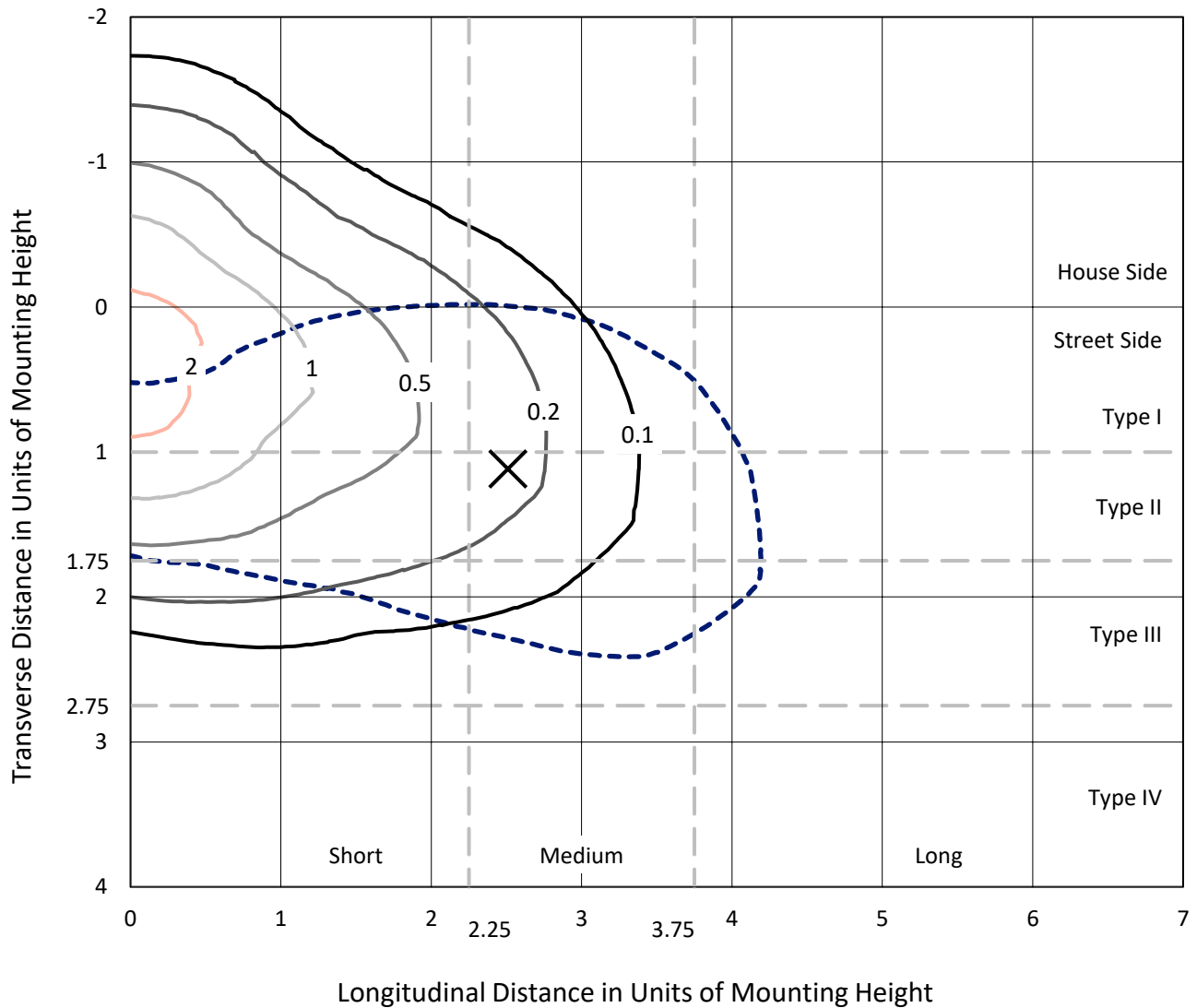
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

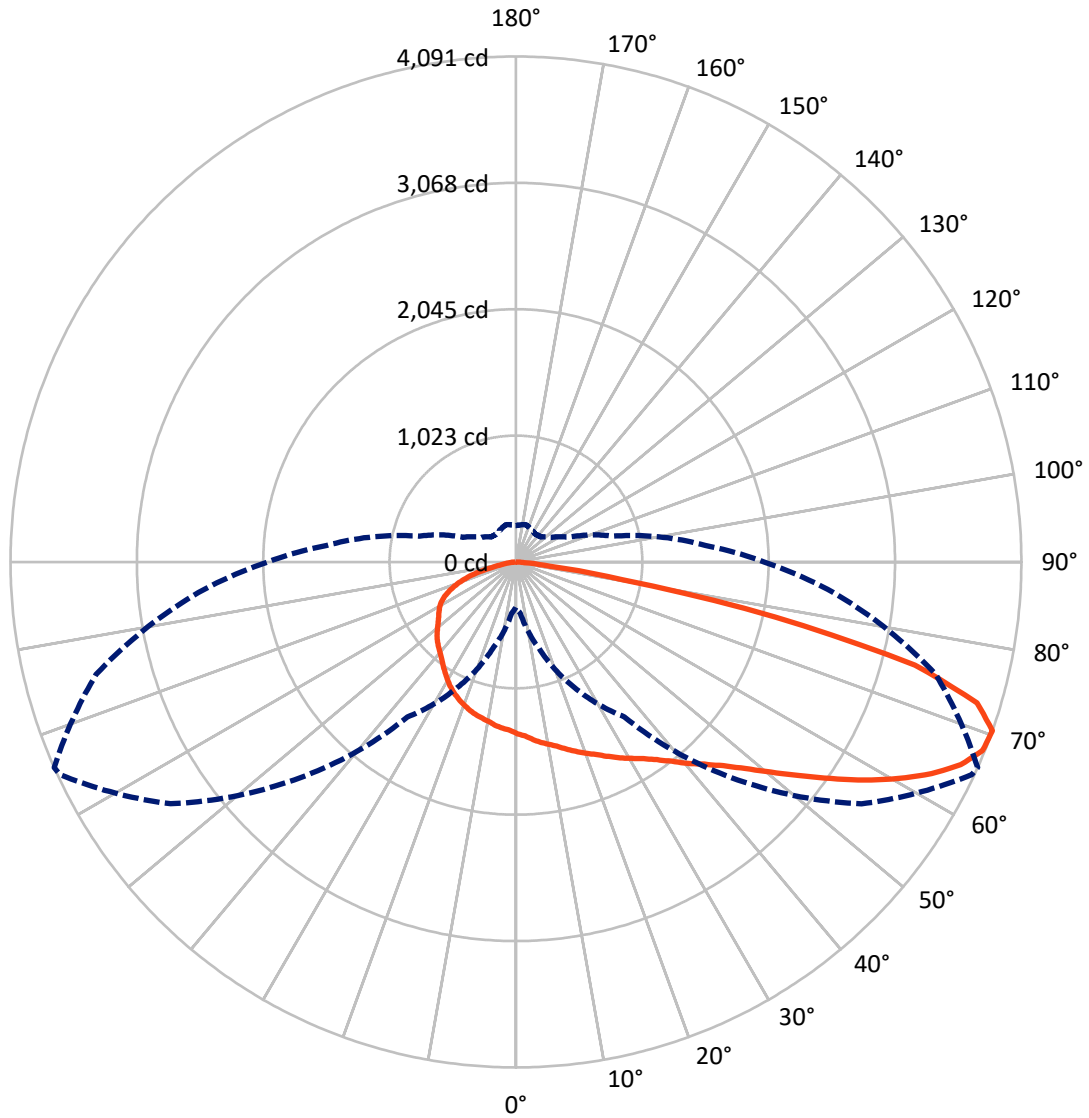
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	2041.4	0.0	2041.4
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	5662.6	0.0	5662.6
	% Fixture	73.5	0.0	73.5
Total	Lumens	7704.0	0.0	7704.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	1.7
10°-20°	400.8	5.2
20°-30°	671.8	8.7
30°-40°	1005.9	13.1
40°-50°	1344.9	17.5
50°-60°	1570.2	20.4
60°-70°	1561.3	20.3
70°-80°	924.3	12.0
80°-90°	91.1	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°	7704.0	100.0
0°-180°	7704.0	100.0



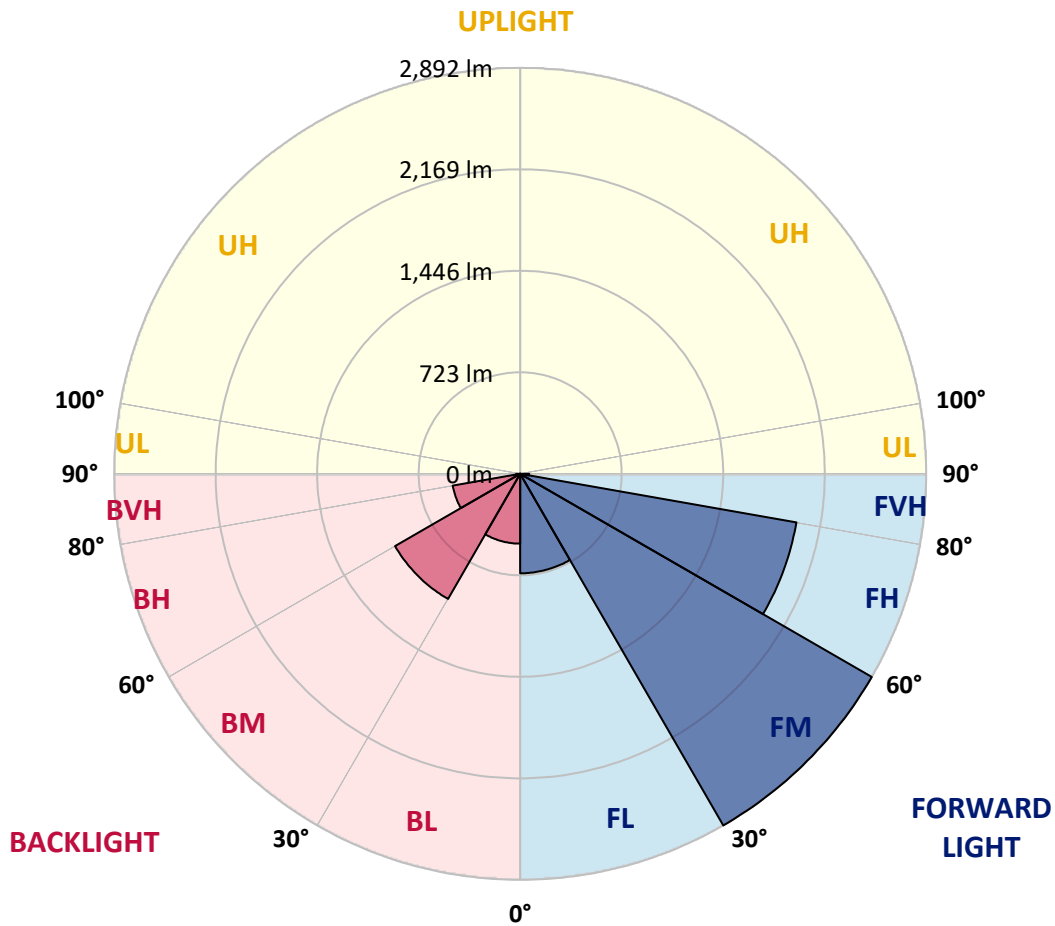
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	708.6	9.2			
FM (30°-60°)	2892.0	37.5			
FH (60°-80°)	1998.0	25.9			G2/5000
FVH (80°-90°)	64.0	0.8			G1/100
BL (0°-30°)	497.6	6.5	B1/500		
BM (30°-60°)	1029.1	13.4	B2/2500		
BH (60°-80°)	487.6	6.3	B1/500		G1/500
BVH (80°-90°)	27.1	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1441.5	1439.2	1438.1	1433.6	1423.3	1427.9	1417.7	1410.8	1409.7	1393.8	1384.7
5°	1500.6	1499.4	1497.2	1490.4	1474.5	1476.7	1459.7	1447.2	1443.8	1418.8	1399.5
7.5°	1550.6	1548.3	1547.2	1538.1	1521.0	1519.9	1499.4	1481.3	1475.6	1441.5	1412.0
10°	1589.2	1585.8	1588.1	1579.0	1560.8	1557.4	1531.3	1507.4	1501.7	1458.6	1417.7
12.5°	1622.1	1619.9	1623.3	1615.3	1600.5	1597.1	1571.0	1540.3	1533.5	1483.5	1430.2
15°	1658.5	1650.5	1657.3	1653.9	1643.7	1642.6	1618.7	1584.6	1575.6	1515.4	1449.5
17.5°	1677.8	1673.2	1681.2	1682.3	1677.8	1685.7	1663.0	1622.1	1614.2	1544.9	1466.5
20°	1691.4	1684.6	1693.7	1700.5	1703.9	1719.8	1701.6	1661.9	1652.8	1573.3	1482.4
22.5°	1738.0	1723.2	1724.4	1728.9	1731.2	1753.9	1742.5	1703.9	1694.8	1608.5	1501.7
25°	1855.0	1825.5	1806.2	1792.5	1776.6	1795.9	1789.1	1751.6	1743.7	1650.5	1525.6
27.5°	2036.7	1999.3	1960.6	1920.9	1858.4	1850.5	1839.1	1805.0	1795.9	1692.6	1549.4
30°	2243.5	2206.0	2160.6	2097.0	1980.0	1918.6	1892.5	1855.0	1844.8	1730.0	1572.1
32.5°	2449.1	2416.2	2370.7	2293.5	2126.5	2001.5	1945.9	1907.3	1897.0	1770.9	1599.4
35°	2609.3	2588.8	2559.3	2462.7	2271.9	2099.2	2023.1	1976.5	1965.2	1835.7	1649.4
37.5°	2738.8	2724.0	2699.0	2597.9	2377.5	2196.9	2111.7	2058.3	2045.8	1906.1	1702.8
40°	2929.6	2891.0	2870.5	2724.0	2469.5	2285.5	2211.7	2156.0	2142.4	1981.1	1745.9
42.5°	3092.0	3063.6	3038.7	2836.5	2557.0	2361.6	2306.0	2254.9	2236.7	2054.9	1792.5
45°	3119.3	3130.7	3118.2	2892.1	2695.6	2436.6	2401.4	2368.4	2351.4	2154.9	1862.9
47.5°	3120.4	3120.4	3046.6	2923.9	2867.1	2520.7	2503.6	2515.0	2496.8	2282.1	1947.0
50°	3038.7	3053.4	3014.8	2931.9	2912.6	2604.7	2628.6	2689.9	2671.7	2417.3	2037.9
52.5°	2869.4	2918.2	2917.1	2919.4	2846.7	2676.3	2760.3	2900.1	2869.4	2569.5	2134.4
55°	2570.6	2668.3	2755.8	2830.8	2789.9	2719.5	2921.7	3123.8	3092.0	2739.9	2232.1
57.5°	2315.1	2377.5	2486.6	2699.0	2722.9	2756.9	3072.7	3357.9	3329.5	2928.5	2334.4
60°	2023.1	2109.4	2218.5	2520.7	2641.1	2805.8	3238.6	3586.2	3558.9	3119.3	2433.2
62.5°	1574.4	1685.7	1903.8	2246.9	2521.8	2836.5	3369.2	3787.2	3774.7	3299.9	2521.8
65°	1097.3	1196.1	1501.7	1910.7	2332.1	2822.8	3473.7	3966.7	3955.4	3447.6	2584.3
67.5°	640.7	755.4	1100.7	1538.1	1997.0	2728.5	3507.8	4072.4	4072.4	3537.3	2601.3
70°	365.8	419.2	725.9	1121.2	1531.3	2468.4	3412.4	4071.2	4090.5	3516.9	2530.9
72.5°	255.6	279.4	488.5	754.3	1038.3	1997.0	3162.5	3874.7	3900.8	3323.8	2290.1
75°	198.8	215.8	344.2	514.6	654.3	1356.3	2616.1	3267.0	3336.3	2833.0	1851.6
77.5°	151.1	163.6	201.1	321.5	419.2	779.3	1726.6	2142.4	2146.9	1734.6	992.8
80°	110.2	122.7	134.0	196.5	222.6	364.6	652.0	895.1	870.1	839.5	537.3
82.5°	65.9	78.4	81.8	106.8	109.1	155.6	228.3	288.5	277.2	369.2	252.2
85°	28.4	39.8	42.0	48.8	46.6	63.6	90.9	76.1	68.2	78.4	54.5
87.5°	6.8	11.4	11.4	12.5	10.2	15.9	17.0	12.5	11.4	13.6	13.6
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°	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1382.4	1379.0	1380.2	1360.9	1355.2	1349.5	1346.1	1343.8	1341.6	1345.0	1348.4
5°	1392.7	1384.7	1375.6	1347.2	1335.9	1323.4	1314.3	1306.3	1302.9	1302.9	1306.3
7.5°	1400.6	1387.0	1367.7	1330.2	1309.7	1292.7	1277.9	1267.7	1262.0	1262.0	1265.4
10°	1401.8	1382.4	1351.8	1306.3	1279.1	1254.1	1237.0	1225.7	1217.7	1217.7	1220.0
12.5°	1408.6	1382.4	1342.7	1288.2	1254.1	1223.4	1203.0	1185.9	1182.5	1182.5	1184.8
15°	1419.9	1388.1	1337.0	1272.3	1231.4	1196.1	1173.4	1155.3	1148.4	1153.0	1154.1
17.5°	1430.2	1391.5	1326.8	1251.8	1203.0	1164.3	1139.4	1123.4	1114.4	1124.6	1124.6
20°	1437.0	1391.5	1312.0	1225.7	1172.3	1129.1	1105.3	1086.0	1079.1	1091.6	1092.8
22.5°	1447.2	1390.4	1296.1	1199.6	1139.4	1093.9	1070.1	1055.3	1051.9	1065.5	1070.1
25°	1458.6	1392.7	1279.1	1170.0	1103.0	1058.7	1040.5	1033.7	1036.0	1053.0	1058.7
27.5°	1471.0	1397.2	1262.0	1137.1	1063.2	1023.5	1013.3	1016.7	1025.8	1047.3	1054.2
30°	1482.4	1398.3	1238.2	1098.5	1017.8	980.3	984.9	999.6	1013.3	1034.8	1042.8
32.5°	1497.2	1399.5	1213.2	1056.4	969.0	941.7	962.1	986.0	999.6	1020.1	1029.2
35°	1533.5	1418.8	1193.9	1015.5	923.5	908.8	942.8	973.5	981.5	999.6	1007.6
37.5°	1575.6	1450.6	1183.7	973.5	879.2	875.8	919.0	949.6	951.9	963.3	971.2
40°	1601.7	1464.2	1172.3	938.3	839.5	841.7	886.0	909.9	905.3	913.3	919.0
42.5°	1627.8	1468.8	1148.4	908.8	802.0	804.2	838.3	855.4	857.6	874.7	882.6
45°	1672.1	1481.3	1122.3	881.5	767.9	759.9	780.4	803.1	832.6	865.6	874.7
47.5°	1731.2	1507.4	1095.1	848.6	735.0	708.8	716.8	756.5	787.2	817.9	823.6
50°	1791.4	1533.5	1070.1	808.8	702.0	654.3	657.7	694.1	719.1	742.9	746.3
52.5°	1850.5	1556.2	1048.5	771.3	664.5	589.6	603.2	640.7	657.7	669.1	672.5
55°	1909.5	1575.6	1029.2	739.5	621.4	538.4	550.9	586.1	603.2	608.9	611.1
57.5°	1970.9	1598.3	1014.4	712.2	572.5	493.0	501.0	525.9	541.8	548.7	546.4
60°	2022.0	1617.6	1006.4	683.8	523.7	451.0	448.7	471.4	494.1	501.0	498.7
62.5°	2061.7	1630.1	994.0	647.5	480.5	408.9	397.6	427.1	451.0	455.5	458.9
65°	2083.3	1631.2	963.3	600.9	436.2	363.5	355.6	385.1	399.9	404.4	404.4
67.5°	2079.9	1613.0	903.1	538.4	395.3	322.6	315.8	334.0	355.6	359.0	355.6
70°	2009.5	1538.1	806.5	472.6	346.5	286.3	273.8	291.9	312.4	299.9	294.2
72.5°	1809.6	1343.8	664.5	399.9	291.9	240.8	235.1	253.3	254.5	256.7	251.0
75°	1427.9	1000.8	497.5	311.2	236.3	202.2	201.1	197.7	202.2	211.3	204.5
77.5°	749.7	499.8	269.2	190.8	171.5	162.4	154.5	153.4	167.0	172.7	165.8
80°	406.7	280.6	154.5	114.7	104.5	105.6	115.9	113.6	128.4	131.8	126.1
82.5°	177.2	132.9	76.1	69.3	69.3	68.2	71.6	79.5	95.4	95.4	76.1
85°	38.6	32.9	29.5	34.1	38.6	38.6	38.6	38.6	27.3	14.8	10.2
87.5°	12.5	12.5	12.5	13.6	14.8	14.8	12.5	9.1	5.7	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)