

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: P237082

Luminaire Tested: **ARCH-L-AF72-90-D-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237082
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-90-D-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13375.1 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

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

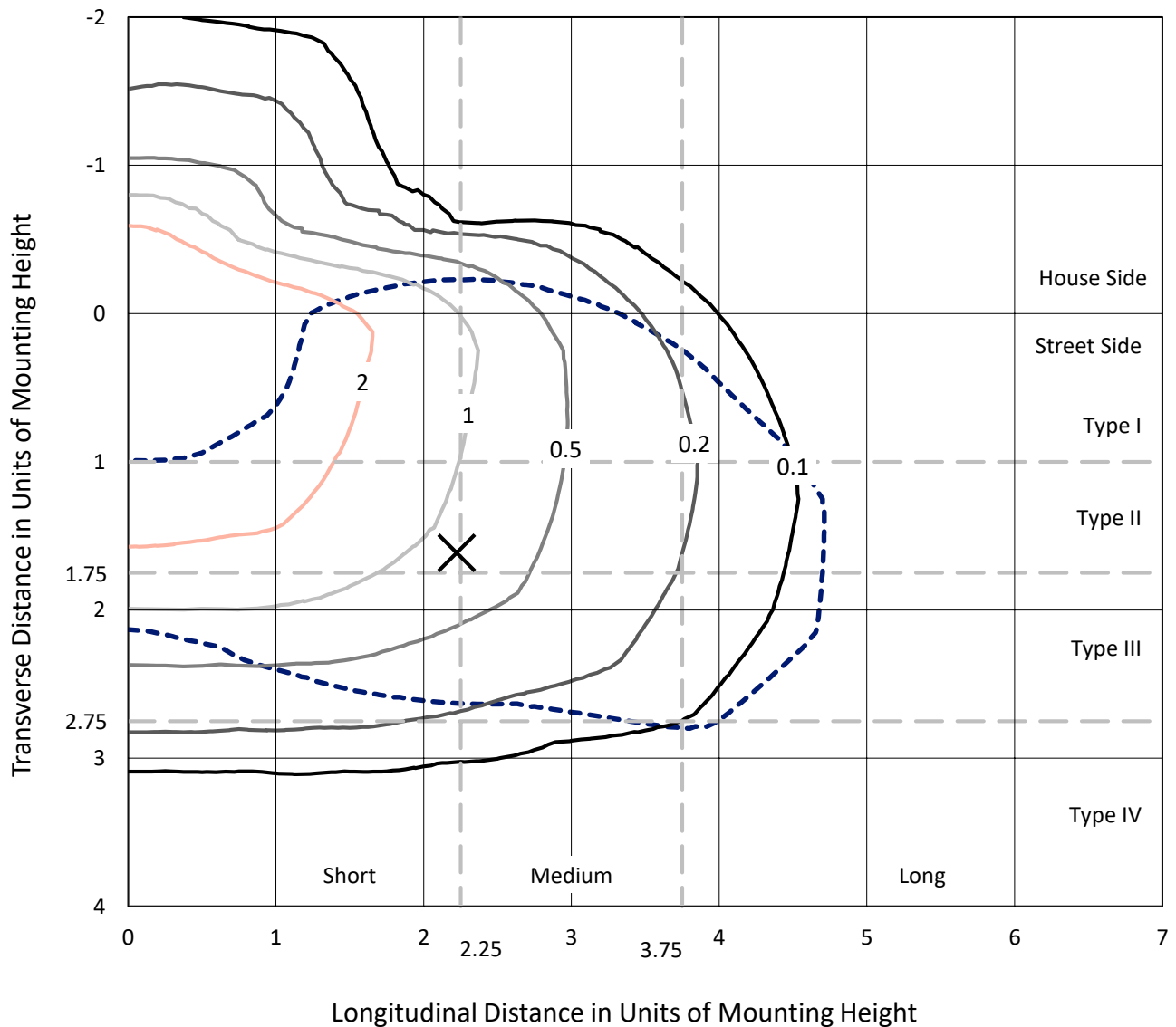


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

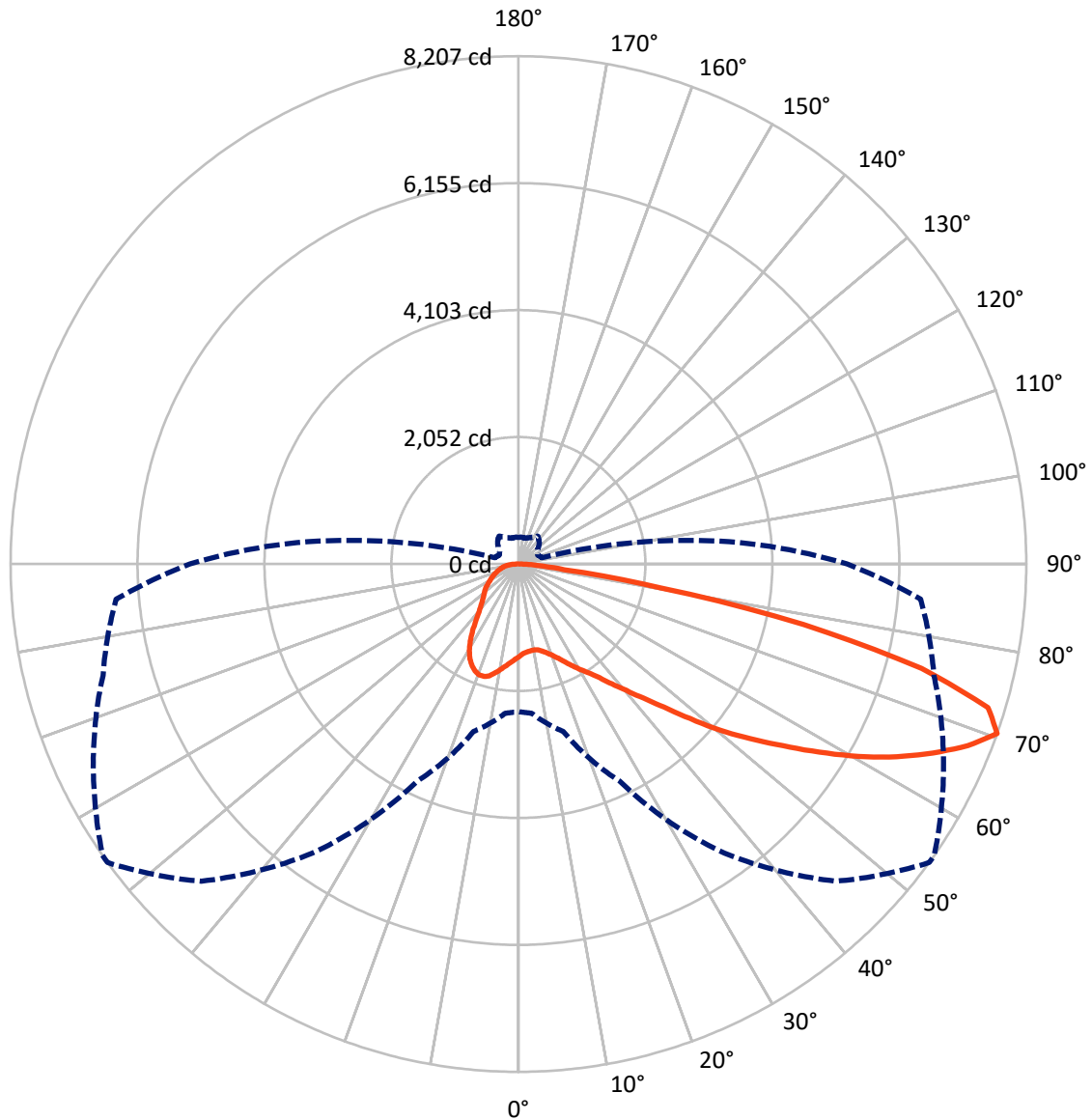


Based on 20 foot mounting height. Maximum calculated value = 4.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3033.4	0.0	3033.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	10341.7	0.0	10341.7
	% Fixture	77.3	0.0	77.3
Total	Lumens	13375.1	0.0	13375.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.9	1.1
10°-20°	469.2	3.5
20°-30°	815.2	6.1
30°-40°	1191.3	8.9
40°-50°	1869.8	14.0
50°-60°	2875.3	21.5
60°-70°	3512.9	26.3
70°-80°	2178.0	16.3
80°-90°	316.4	2.4
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°	13375.1	100.0
0°-180°	13375.1	100.0



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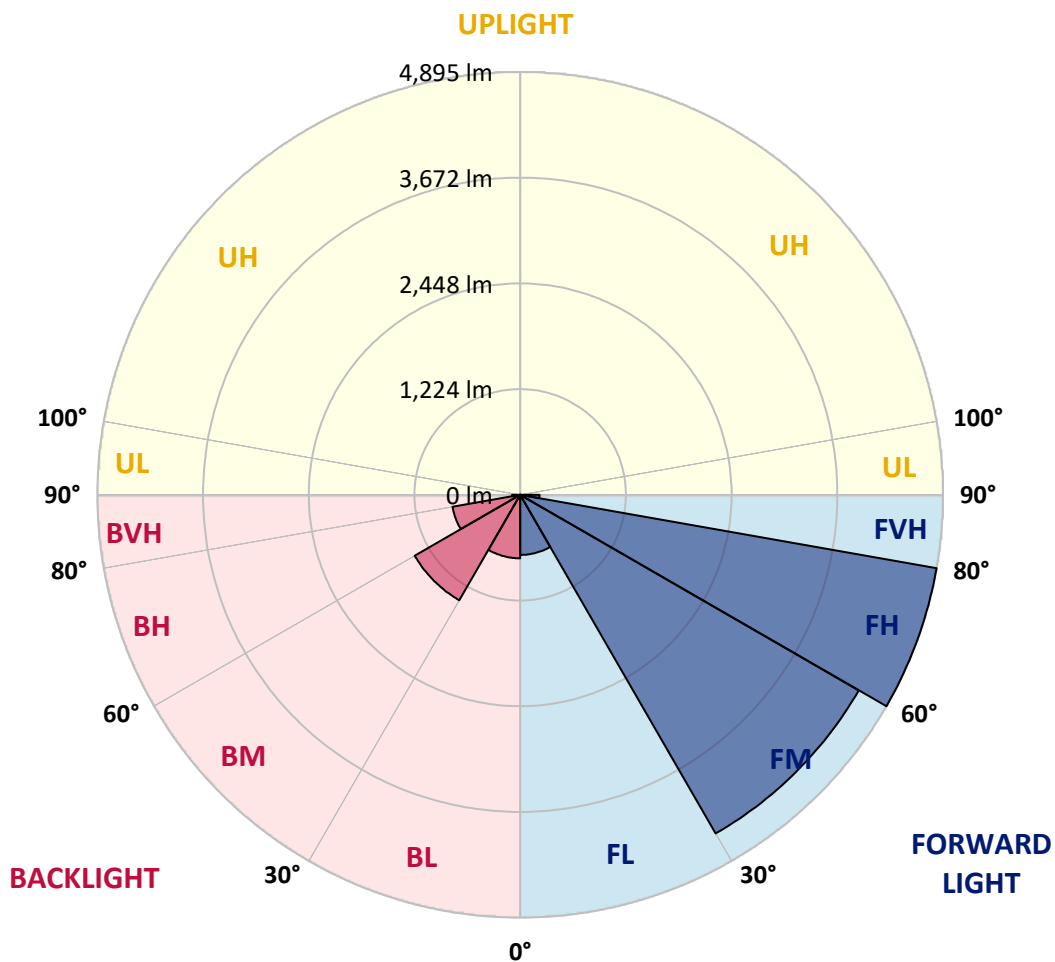
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	695.9	5.2			
FM	(30°-60°)	4526.8	33.8			
FH	(60°-80°)	4895.5	36.6			G2/5000
FVH	(80°-90°)	223.4	1.7			G2/225
BL	(0°-30°)	735.4	5.5	B2/1000		
BM	(30°-60°)	1409.6	10.5	B2/2500		
BH	(60°-80°)	795.4	5.9	B2/1000		G2/1000
BVH	(80°-90°)	93.0	0.7			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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4
2.5°	1437.7	1432.7	1432.7	1440.1	1442.6	1449.8	1449.8	1452.3	1459.6	1471.9	1486.7
5°	1393.6	1391.1	1393.6	1403.4	1408.2	1422.9	1427.8	1430.3	1445.0	1464.6	1486.7
7.5°	1349.5	1347.0	1351.9	1366.6	1381.3	1403.4	1415.6	1418.0	1440.1	1467.0	1496.4
10°	1334.7	1332.3	1339.7	1351.9	1366.6	1391.1	1410.6	1413.1	1445.0	1476.8	1518.5
12.5°	1354.4	1351.9	1359.3	1371.5	1386.2	1403.4	1425.4	1427.8	1469.5	1511.1	1555.2
15°	1403.4	1403.4	1405.7	1413.1	1427.8	1442.6	1462.1	1464.6	1508.6	1557.6	1601.7
17.5°	1479.3	1474.4	1474.4	1471.9	1481.7	1489.0	1513.6	1516.0	1562.6	1606.6	1650.7
20°	1572.3	1569.9	1560.1	1547.8	1545.4	1550.3	1574.7	1577.2	1623.7	1660.5	1702.1
22.5°	1685.0	1687.5	1665.4	1638.5	1626.2	1633.6	1655.5	1658.0	1692.4	1724.2	1760.9
25°	1834.4	1827.0	1795.2	1756.0	1731.5	1731.5	1753.5	1753.5	1785.4	1805.0	1829.4
27.5°	1976.4	1961.7	1932.4	1876.0	1836.8	1844.2	1866.2	1866.2	1895.6	1903.0	1915.2
30°	2130.7	2116.0	2079.2	2008.3	1956.8	1951.9	1978.9	1976.4	2015.6	2013.2	2003.3
32.5°	2319.3	2312.0	2250.7	2160.1	2091.5	2074.3	2098.9	2101.3	2125.8	2118.4	2086.6
35°	2583.8	2581.3	2525.1	2365.9	2275.2	2243.3	2258.1	2258.1	2275.2	2255.6	2201.7
37.5°	2916.8	2921.8	2872.8	2637.7	2510.3	2456.4	2458.9	2456.4	2461.3	2439.3	2383.0
40°	3249.9	3262.2	3259.7	2975.7	2814.0	2720.9	2686.7	2681.8	2694.0	2684.2	2630.3
42.5°	3688.4	3717.7	3649.2	3392.0	3210.7	3054.0	2960.9	2948.8	2975.7	2987.9	2936.5
45°	4143.9	4134.1	4026.3	3840.2	3676.1	3475.3	3298.9	3279.4	3298.9	3335.6	3281.8
47.5°	4381.4	4374.1	4347.1	4254.0	4229.6	3999.4	3732.4	3715.3	3678.5	3730.0	3666.3
50°	4773.3	4780.7	4670.5	4660.7	4763.5	4636.1	4222.2	4183.1	4117.0	4158.6	4104.7
52.5°	5057.4	5025.6	4957.0	5042.7	5363.5	5295.0	4682.7	4665.6	4604.3	4594.5	4570.0
55°	5172.6	5172.6	5184.7	5383.2	5841.2	5750.5	5182.3	5199.5	5116.2	5047.6	5079.5
57.5°	5206.8	5221.4	5326.8	5655.0	6401.9	6105.6	5733.3	5757.9	5637.8	5500.7	5601.1
60°	5037.8	5081.9	5334.2	5809.2	6717.9	6482.7	6313.8	6321.1	6147.2	5946.4	6122.8
62.5°	4604.3	4658.2	5108.8	5873.0	6666.5	6869.7	6862.4	6879.5	6641.9	6392.1	6612.6
65°	4072.9	4126.8	4606.8	5694.2	6627.3	7146.4	7364.4	7411.0	7104.8	6769.3	6918.7
67.5°	3291.5	3362.6	3818.2	5091.6	6436.2	7374.2	7834.7	7883.7	7462.4	6965.3	6891.8
70°	2385.4	2419.7	2801.8	3869.6	5657.4	7249.3	8206.9	8204.5	7580.0	6950.5	6524.4
72.5°	1148.7	1175.6	1506.2	2402.6	4045.9	6152.1	7937.6	7984.0	7418.3	6737.5	5684.3
75°	472.7	499.6	609.8	1013.9	2123.3	4065.5	6727.6	6837.9	6737.5	6046.9	4447.6
77.5°	293.9	303.7	357.5	524.1	969.9	1898.1	4709.7	4859.0	5339.1	4844.3	2936.5
80°	220.4	227.8	267.0	367.3	612.2	700.4	2338.9	2527.5	3235.3	2779.8	1329.8
82.5°	183.7	186.2	213.1	267.0	416.3	401.6	749.4	835.1	1508.6	1060.5	458.0
85°	171.4	176.4	191.0	191.0	264.5	252.3	311.1	325.7	438.4	362.4	159.2
87.5°	88.2	83.3	169.0	149.4	137.2	122.4	132.3	142.1	164.1	173.9	71.0
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°	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4	1496.4
2.5°	1491.5	1498.8	1511.1	1523.4	1538.0	1555.2	1565.0	1577.2	1587.0	1582.1	1579.6
5°	1498.8	1511.1	1538.0	1562.6	1591.9	1626.2	1648.3	1672.7	1692.4	1697.2	1689.9
7.5°	1511.1	1533.1	1569.9	1613.9	1653.2	1697.2	1731.5	1765.8	1790.3	1795.2	1795.2
10°	1540.5	1565.0	1613.9	1672.7	1719.3	1765.8	1805.0	1831.9	1854.0	1863.8	1863.8
12.5°	1582.1	1611.6	1670.3	1741.3	1792.7	1836.8	1858.9	1871.1	1880.9	1890.7	1893.2
15°	1631.1	1662.9	1734.0	1809.9	1863.8	1885.8	1885.8	1883.4	1883.4	1888.3	1893.2
17.5°	1680.1	1714.4	1787.8	1868.6	1903.0	1890.7	1873.5	1866.2	1861.4	1858.9	1866.2
20°	1731.5	1765.8	1839.3	1915.2	1905.5	1854.0	1829.4	1812.4	1797.6	1790.3	1800.1
22.5°	1787.8	1819.7	1895.6	1947.1	1873.5	1795.2	1748.6	1721.7	1697.2	1682.5	1692.4
25°	1854.0	1885.8	1959.3	1956.8	1817.3	1707.0	1633.6	1589.5	1562.6	1547.8	1547.8
27.5°	1932.4	1959.3	2030.4	1932.4	1738.8	1589.5	1481.7	1440.1	1432.7	1420.5	1420.5
30°	2013.2	2035.2	2096.4	1876.0	1631.1	1435.2	1317.7	1298.0	1300.5	1288.2	1290.7
32.5°	2096.4	2118.4	2135.6	1792.7	1491.5	1261.3	1182.9	1168.2	1165.8	1155.9	1146.2
35°	2214.0	2245.8	2140.5	1680.1	1322.5	1116.8	1060.5	1045.8	1031.0	996.8	996.8
37.5°	2392.8	2427.1	2128.2	1540.5	1148.7	1004.1	952.7	933.1	908.6	874.3	862.0
40°	2637.7	2637.7	2101.3	1383.7	1009.0	913.5	864.5	840.0	813.1	778.8	771.5
42.5°	2926.7	2858.1	2059.7	1224.6	906.1	852.3	808.2	781.2	749.4	710.2	705.3
45°	3264.6	3078.6	2000.9	1082.5	830.2	815.6	788.6	742.0	688.2	646.6	639.2
47.5°	3592.8	3276.9	1944.6	982.1	766.6	800.9	778.8	700.4	627.0	568.1	560.9
50°	3952.9	3453.3	1878.4	898.9	717.6	791.0	766.6	639.2	558.4	516.8	511.9
52.5°	4312.9	3632.0	1807.5	810.7	676.0	771.5	737.1	595.2	556.0	499.6	492.2
55°	4692.5	3840.2	1724.2	712.7	627.0	732.3	698.0	592.7	573.1	499.6	482.4
57.5°	5062.3	4070.4	1589.5	617.1	573.1	673.5	683.3	578.0	536.3	494.7	475.2
60°	5471.3	4315.3	1366.6	536.3	526.5	624.5	663.7	546.2	494.7	480.1	470.3
62.5°	5799.5	4535.8	1067.9	480.1	487.3	585.3	639.2	526.5	477.6	465.3	462.9
65°	5941.5	4540.7	766.6	431.1	448.2	548.6	614.7	509.4	462.9	458.0	455.5
67.5°	5792.2	4290.9	538.8	384.5	406.5	514.3	582.9	492.2	448.2	450.6	445.7
70°	5309.6	3764.3	394.3	340.4	367.3	477.6	548.6	470.3	431.1	436.0	428.6
72.5°	4442.7	2934.0	315.9	303.7	335.5	438.4	514.3	445.7	404.1	406.5	391.9
75°	3281.8	1944.6	264.5	271.9	298.8	401.6	470.3	413.9	374.7	364.9	355.2
77.5°	1951.9	999.2	218.0	237.5	267.0	357.5	421.3	374.7	342.9	325.7	318.3
80°	805.8	404.1	178.8	200.8	232.6	318.3	372.3	328.2	306.2	289.0	279.2
82.5°	320.8	198.4	142.1	164.1	195.9	276.7	325.7	289.0	267.0	254.7	227.8
85°	122.4	98.0	95.5	115.1	146.9	213.1	269.4	242.4	225.4	193.4	186.2
87.5°	49.0	44.1	44.1	56.4	83.3	134.7	193.4	169.0	176.4	139.6	142.1
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)