

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: P237323

Luminaire Tested: **ARCH-L-AF72-100-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14342.8 lumens
Efficiency: N/A
Efficacy: 140.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G3

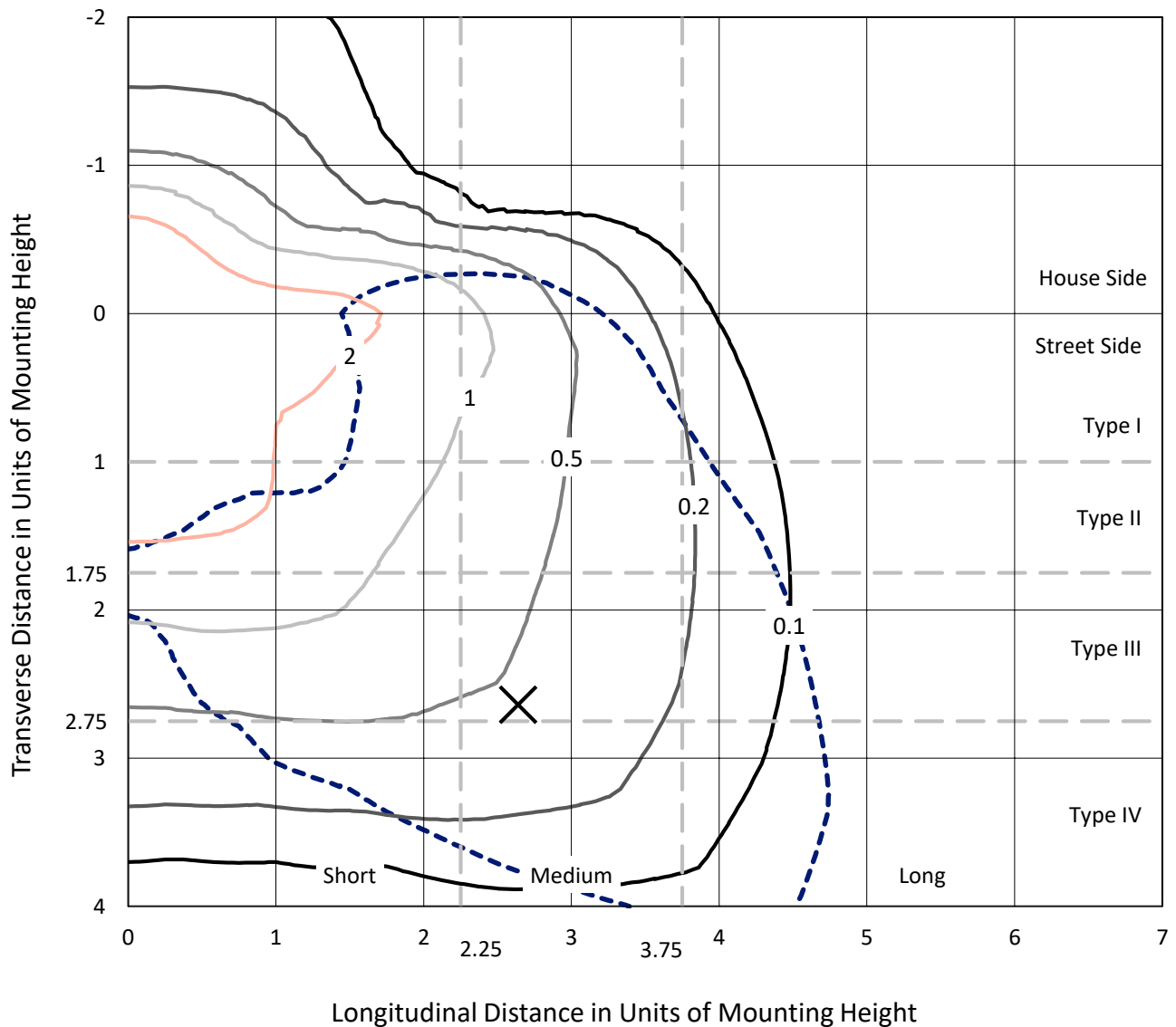
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

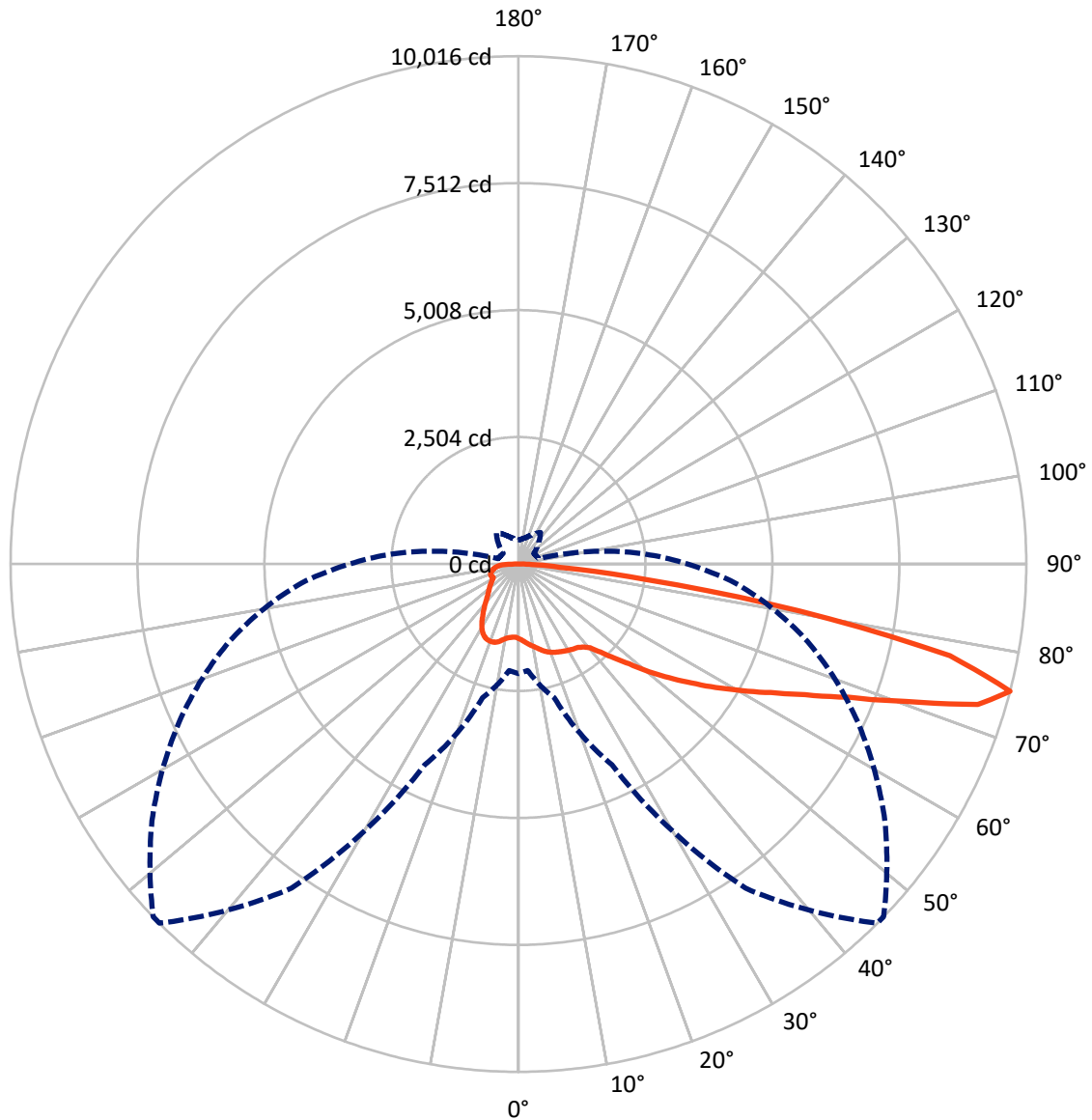
× Max cd
 - - - 1/2 Max cd



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

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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
House Side	Lumens	3322.6	0.0	3322.6
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	11020.2	0.0	11020.2
	% Fixture	76.8	0.0	76.8
Total	Lumens	14342.8	0.0	14342.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	1.0
10°-20°	472.2	3.3
20°-30°	810.3	5.6
30°-40°	1133.2	7.9
40°-50°	1662.4	11.6
50°-60°	2589.5	18.1
60°-70°	3726.1	26.0
70°-80°	3245.9	22.6
80°-90°	557.4	3.9
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°	14342.8	100.0
0°-180°	14342.8	100.0



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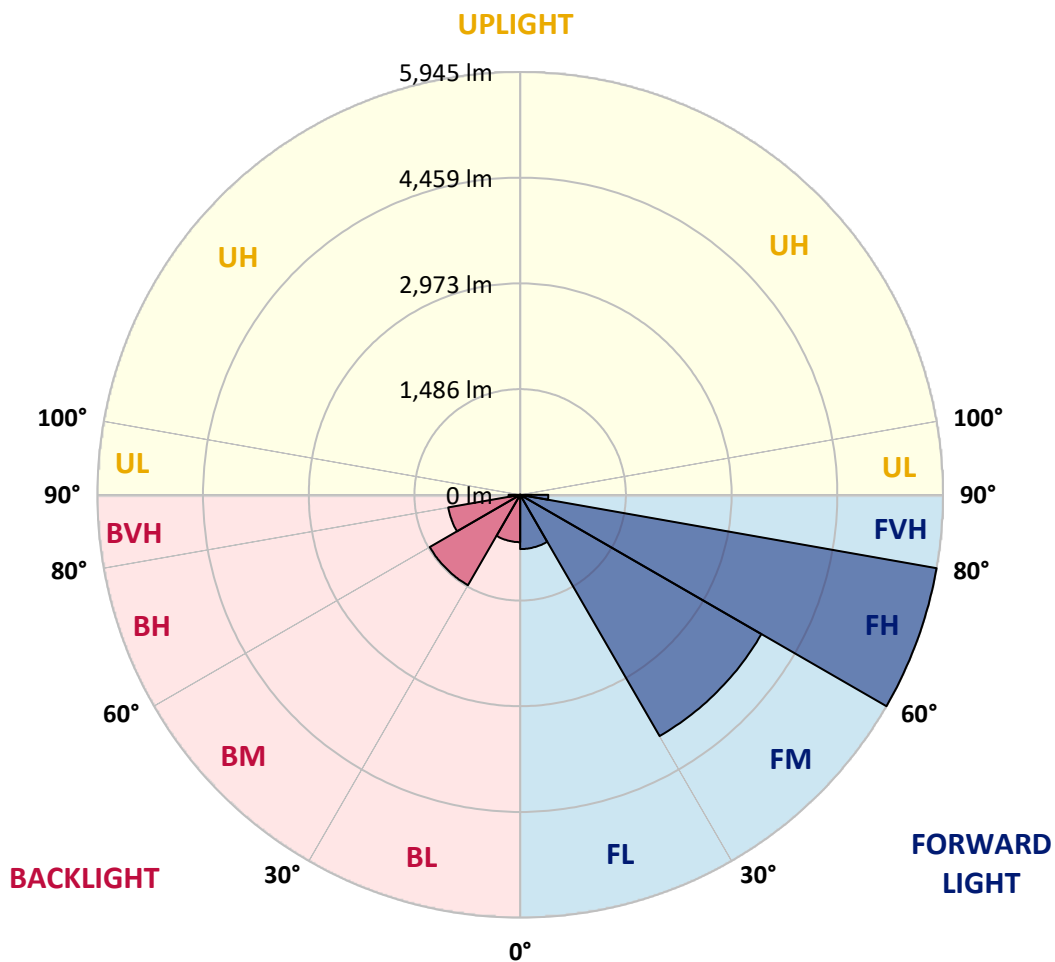
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	762.7	5.3			
FM	(30°-60°)	3916.7	27.3			
FH	(60°-80°)	5945.2	41.5			G3/7500
FVH	(80°-90°)	395.5	2.8			G3/500
BL	(0°-30°)	665.5	4.6	B2/1000		
BM	(30°-60°)	1468.4	10.2	B2/2500		
BH	(60°-80°)	1026.8	7.2	B3/2500		G3/2500
BVH	(80°-90°)	161.9	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4
2.5°	1542.9	1531.8	1531.8	1523.4	1523.4	1509.4	1503.8	1501.1	1487.1	1478.7	1470.4
5°	1632.1	1618.2	1615.4	1595.9	1587.5	1556.8	1554.1	1534.5	1509.4	1484.3	1464.8
7.5°	1713.0	1704.7	1690.7	1671.2	1646.1	1607.1	1604.3	1573.6	1531.8	1498.2	1470.4
10°	1771.6	1766.1	1746.6	1721.4	1693.5	1654.5	1651.7	1618.2	1568.0	1528.9	1489.8
12.5°	1841.4	1833.0	1808.0	1774.4	1743.7	1707.5	1704.7	1676.8	1621.0	1570.7	1520.5
15°	1908.4	1897.2	1866.5	1833.0	1799.6	1768.9	1768.9	1738.2	1679.6	1621.0	1562.5
17.5°	1941.9	1936.2	1905.6	1869.3	1841.4	1819.1	1816.4	1788.4	1729.8	1668.4	1604.3
20°	1953.0	1955.8	1927.9	1888.9	1869.3	1858.2	1855.3	1835.8	1771.6	1713.0	1651.7
22.5°	1950.3	1958.6	1936.2	1894.4	1888.9	1888.9	1888.9	1866.5	1816.4	1757.7	1696.4
25°	1961.4	1972.6	1955.8	1905.6	1905.6	1916.7	1916.7	1905.6	1861.0	1810.7	1749.3
27.5°	2000.5	2008.8	1994.9	1925.1	1927.9	1944.6	1941.9	1944.6	1916.7	1869.3	1808.0
30°	2047.8	2059.0	2042.3	1955.8	1953.0	1969.8	1969.8	1983.7	1964.2	1913.9	1863.7
32.5°	2176.2	2173.5	2120.4	1989.3	1980.9	1997.6	1997.6	2011.6	2000.5	1961.4	1913.9
35°	2558.4	2516.6	2399.4	2098.1	2014.4	2022.8	2022.8	2047.8	2053.5	2022.8	1980.9
37.5°	2949.1	2935.1	2845.8	2388.3	2137.1	2075.8	2073.0	2109.2	2134.4	2109.2	2081.4
40°	3342.5	3331.2	3311.8	2776.1	2393.8	2170.6	2162.3	2193.0	2237.6	2220.8	2204.2
42.5°	3707.9	3702.4	3721.9	3158.3	2720.2	2374.3	2349.2	2312.9	2377.1	2371.5	2371.5
45°	3995.3	4009.3	4020.4	3515.5	3074.6	2636.6	2605.9	2483.1	2569.7	2592.0	2608.6
47.5°	4157.2	4168.3	4207.4	3864.2	3428.9	2940.7	2918.4	2717.5	2831.8	2898.8	2946.3
50°	4388.7	4358.0	4391.5	4204.5	3855.8	3336.9	3275.5	3032.7	3177.8	3295.0	3406.6
52.5°	4611.9	4561.6	4589.6	4598.0	4341.3	3724.7	3660.5	3403.9	3585.1	3769.3	3967.4
55°	4812.8	4810.0	4837.8	4980.1	4810.0	4140.4	4067.9	3814.0	4076.3	4274.3	4609.1
57.5°	4974.6	5002.5	5125.3	5423.8	5351.3	4592.3	4511.4	4291.1	4600.7	4798.9	5354.0
60°	5164.4	5209.0	5412.6	5800.4	5845.0	5066.7	4983.0	4823.9	5139.2	5340.1	6216.2
62.5°	5228.5	5292.6	5711.1	6196.6	6361.2	5585.6	5510.3	5404.2	5705.6	5887.0	7075.4
65°	4801.6	4924.4	5875.8	6400.3	6916.5	6210.5	6146.4	6054.3	6269.2	6389.1	7658.6
67.5°	4684.4	4740.3	5554.9	6693.3	7438.2	7014.1	6949.9	6790.9	6796.5	6746.3	7848.3
70°	4519.8	4581.2	5225.7	6913.7	8186.0	8113.3	8035.3	7566.6	7279.1	6975.1	7474.5
72.5°	3850.2	3830.7	4503.1	6319.4	8545.8	9474.9	9382.8	8400.8	7636.3	6776.9	6308.2
75°	2162.3	2106.5	2731.4	4372.0	7803.7	10016.1	10013.4	8822.0	7385.2	5903.7	4293.8
77.5°	627.8	611.0	901.2	1833.0	5253.6	8702.0	8808.1	7957.1	6163.2	4240.8	2357.6
80°	295.7	301.4	387.8	605.5	2243.1	5616.3	5920.4	5239.7	3682.8	1955.8	973.7
82.5°	186.9	189.8	265.0	390.6	948.6	2550.1	2801.1	2357.6	1459.1	845.4	429.6
85°	117.2	117.2	175.7	256.7	566.4	814.7	884.4	803.5	624.9	460.3	234.4
87.5°	64.1	64.1	106.0	147.9	309.6	262.3	270.7	320.9	390.6	281.8	117.2
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°	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4
2.5°	1467.5	1462.0	1453.6	1450.9	1448.0	1445.2	1448.0	1453.6	1448.0	1448.0	1450.9
5°	1459.1	1453.6	1442.5	1442.5	1445.2	1448.0	1462.0	1470.4	1473.2	1473.2	1473.2
7.5°	1459.1	1450.9	1442.5	1445.2	1450.9	1462.0	1484.3	1498.2	1509.4	1512.2	1512.2
10°	1473.2	1462.0	1456.4	1462.0	1478.7	1487.1	1509.4	1531.8	1545.7	1551.2	1551.2
12.5°	1498.2	1487.1	1487.1	1498.2	1520.5	1531.8	1551.2	1568.0	1584.8	1593.1	1593.1
15°	1540.1	1526.1	1528.9	1548.4	1573.6	1584.8	1598.7	1604.3	1618.2	1629.4	1629.4
17.5°	1579.1	1565.2	1570.7	1593.1	1609.8	1615.4	1623.8	1621.0	1626.6	1635.0	1637.7
20°	1623.8	1609.8	1612.6	1626.6	1629.4	1623.8	1623.8	1615.4	1612.6	1626.6	1632.1
22.5°	1668.4	1654.5	1651.7	1643.4	1629.4	1615.4	1607.1	1598.7	1593.1	1607.1	1612.6
25°	1721.4	1701.9	1688.0	1651.7	1615.4	1590.3	1579.1	1573.6	1570.7	1584.8	1590.3
27.5°	1780.0	1760.5	1718.7	1640.5	1581.9	1540.1	1531.8	1531.8	1537.3	1545.7	1551.2
30°	1835.8	1816.4	1741.0	1615.4	1523.4	1462.0	1453.6	1462.0	1475.9	1484.3	1492.7
32.5°	1891.6	1872.1	1754.9	1576.4	1436.8	1358.8	1353.2	1367.1	1389.5	1395.0	1400.6
35°	1966.9	1947.4	1771.6	1520.5	1328.1	1244.3	1238.8	1247.2	1266.6	1275.0	1283.4
37.5°	2073.0	2061.9	1796.8	1459.1	1227.6	1135.6	1118.8	1113.2	1124.4	1121.6	1132.7
40°	2212.4	2220.8	1841.4	1378.2	1130.0	1035.1	998.8	982.1	970.9	948.6	959.7
42.5°	2416.1	2421.7	1891.6	1286.2	1046.3	940.2	892.8	862.1	839.8	803.5	809.2
45°	2714.7	2667.2	1950.3	1188.6	970.9	864.9	809.2	772.8	742.2	711.5	714.2
47.5°	3110.9	2965.7	2014.4	1107.7	895.6	803.5	753.3	711.5	675.1	650.1	652.8
50°	3599.2	3336.9	2078.5	1032.3	820.3	756.1	711.5	666.9	630.5	605.5	602.6
52.5°	4243.6	3783.3	2120.4	948.6	744.9	714.2	675.1	633.3	588.7	558.0	555.3
55°	4913.2	4302.2	2156.7	848.1	672.4	666.9	647.3	599.9	546.9	507.8	502.2
57.5°	5649.8	4857.4	2184.6	750.5	616.6	627.8	622.2	566.4	507.8	471.5	468.7
60°	6319.4	5432.2	2095.3	664.0	566.4	588.7	594.2	546.9	516.2	524.6	527.3
62.5°	6994.5	5875.8	1754.9	599.9	532.9	563.5	611.0	608.2	594.2	608.2	611.0
65°	7237.3	5967.9	1244.3	546.9	499.4	574.7	664.0	658.5	594.2	569.2	563.5
67.5°	7100.6	5694.5	837.0	505.0	474.3	588.7	719.9	658.5	571.9	538.5	527.3
70°	6450.5	5022.1	613.8	463.2	451.9	585.9	750.5	655.6	560.8	524.6	510.6
72.5°	5144.8	3875.3	493.9	424.1	418.5	571.9	767.2	650.1	549.6	510.6	493.9
75°	3331.2	2410.6	415.7	385.0	368.3	549.6	758.9	633.3	535.7	485.5	474.3
77.5°	1545.7	1037.9	354.4	340.3	320.9	516.2	733.8	599.9	505.0	457.6	443.7
80°	719.9	491.0	298.5	295.7	287.3	488.3	700.3	560.8	468.7	429.6	407.3
82.5°	385.0	295.7	242.7	242.7	251.1	454.8	658.5	513.3	421.3	401.7	343.2
85°	203.7	170.2	175.7	189.8	214.8	401.7	602.6	463.2	368.3	306.9	298.5
87.5°	103.2	108.8	108.8	128.4	164.6	326.4	496.6	382.3	312.5	251.1	245.5
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)