

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: P265605

Luminaire Tested: **ARCH-L-AF72-120-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265605
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-AF72-120-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14351.2 lumens
Efficiency: N/A
Efficacy: 116.7 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): 123
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

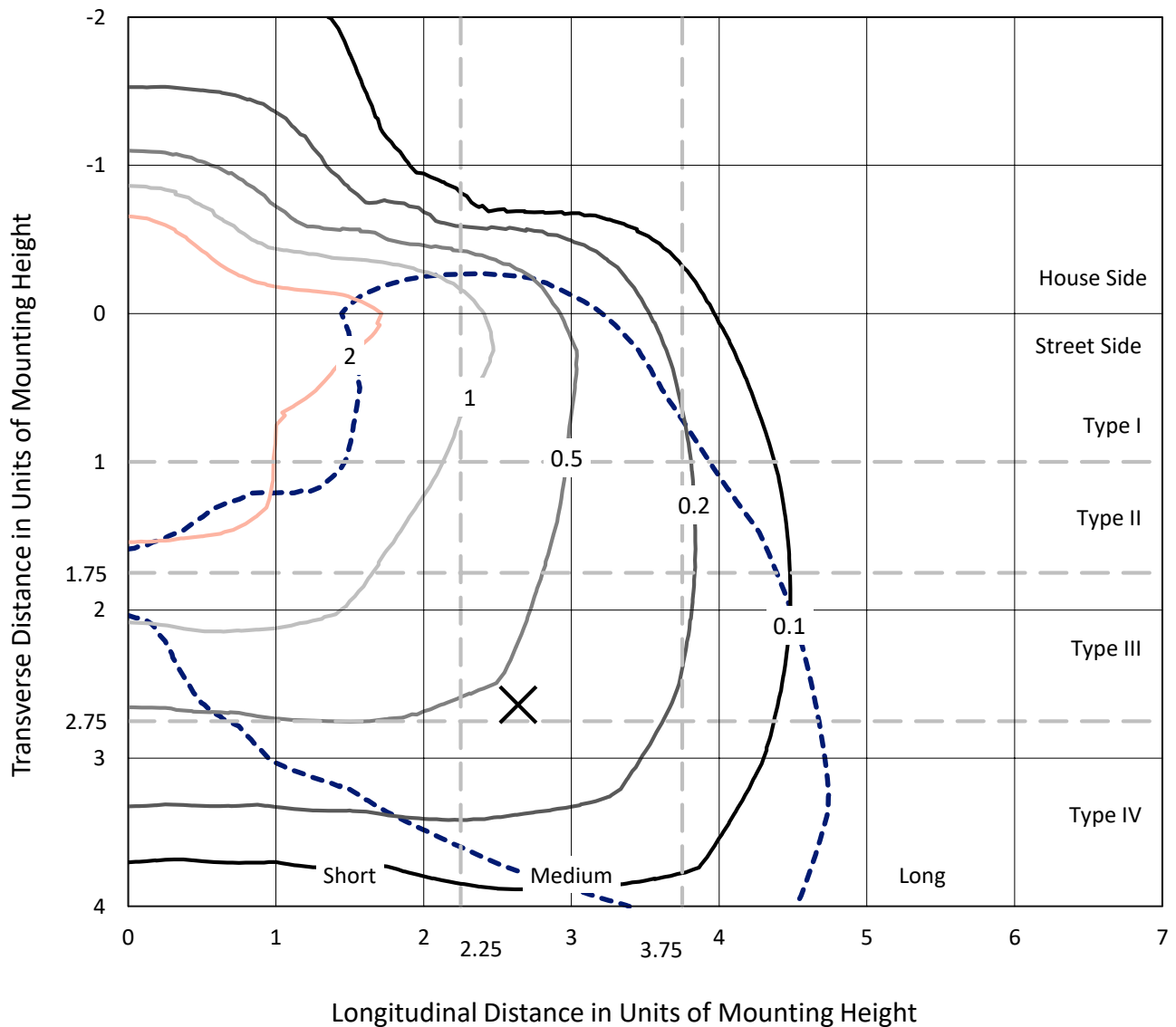


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Iso-Footcandle Lines of Horizontal Illumination

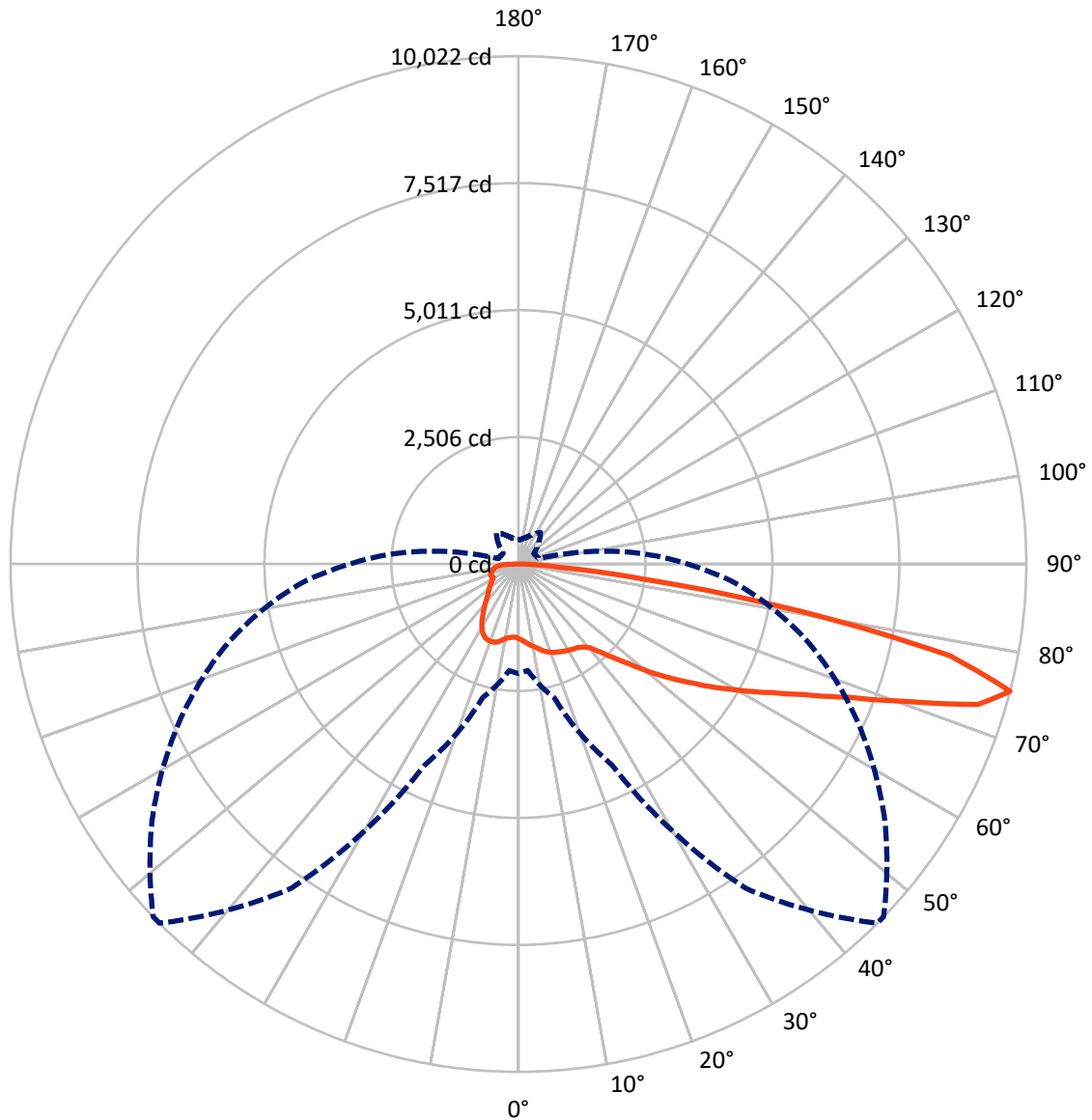
× Max cd
 - - - 1/2 Max cd



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	3324.6	0.0	3324.6
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	11026.6	0.0	11026.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	14351.2	0.0	14351.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.8	1.0
10°-20°	472.5	3.3
20°-30°	810.8	5.6
30°-40°	1133.9	7.9
40°-50°	1663.3	11.6
50°-60°	2591.1	18.1
60°-70°	3728.3	26.0
70°-80°	3247.8	22.6
80°-90°	557.8	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°	14351.2	100.0
0°-180°	14351.2	100.0

Coefficient of Utilization



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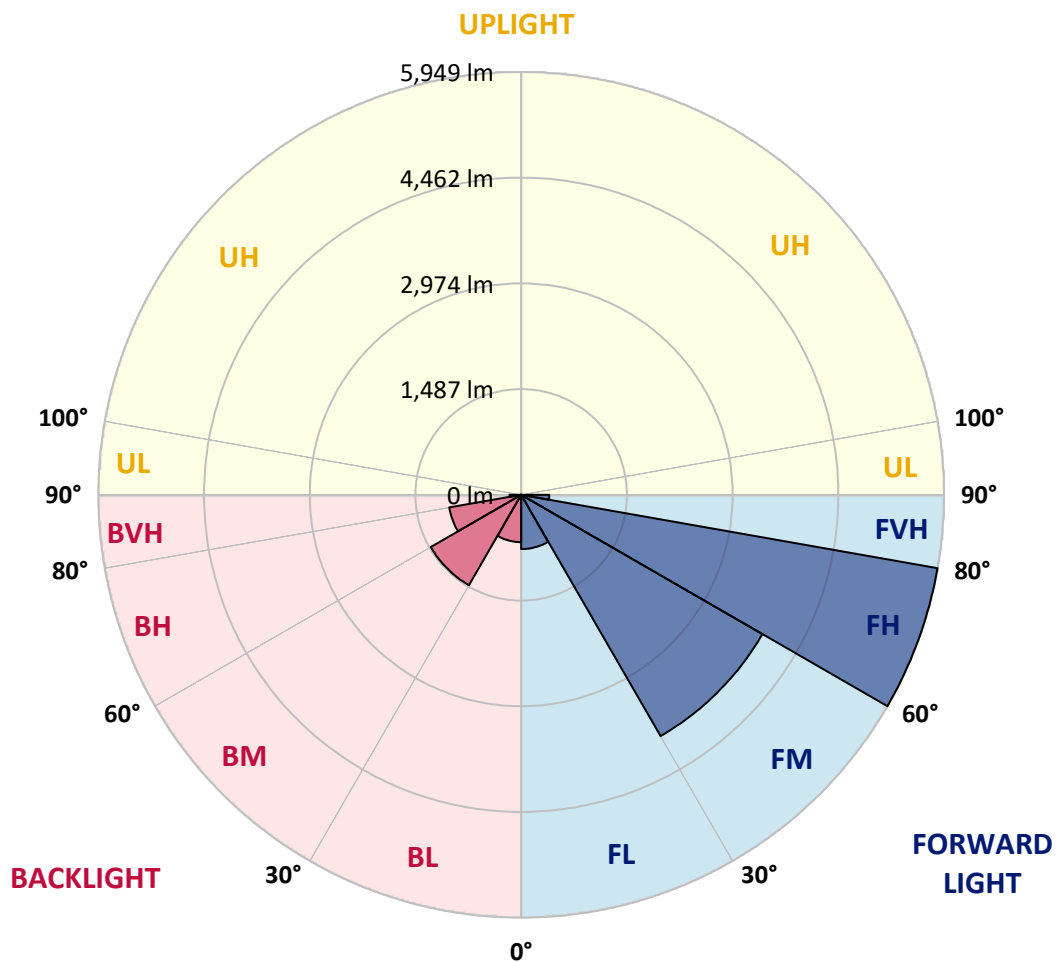
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	763.1	5.3			
FM	(30°-60°)	3919.0	27.3			
FH	(60°-80°)	5948.7	41.5			G3/7500
FVH	(80°-90°)	395.7	2.8			G3/500
BL	(0°-30°)	665.9	4.6	B2/1000		
BM	(30°-60°)	1469.3	10.2	B2/2500		
BH	(60°-80°)	1027.4	7.2	B3/2500		G3/2500
BVH	(80°-90°)	162.0	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°	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2
2.5°	1543.7	1532.6	1532.6	1524.2	1524.2	1510.3	1504.8	1502.0	1488.0	1479.6	1471.2
5°	1633.1	1619.1	1616.4	1596.8	1588.5	1557.8	1555.0	1535.5	1510.3	1485.2	1465.7
7.5°	1714.1	1705.7	1691.8	1672.3	1647.1	1608.0	1605.2	1574.5	1532.6	1499.1	1471.2
10°	1772.7	1767.1	1747.7	1722.5	1694.6	1655.4	1652.6	1619.1	1568.9	1529.9	1490.7
12.5°	1842.6	1834.1	1808.9	1775.5	1744.8	1708.4	1705.7	1677.8	1622.0	1571.8	1521.5
15°	1909.4	1898.3	1867.7	1834.1	1800.7	1769.9	1769.9	1739.2	1680.5	1622.0	1563.3
17.5°	1943.0	1937.5	1906.7	1870.5	1842.6	1820.1	1817.5	1789.5	1730.9	1669.4	1605.2
20°	1954.2	1957.0	1929.0	1889.9	1870.5	1859.2	1856.4	1836.9	1772.7	1714.1	1652.6
22.5°	1951.4	1959.7	1937.5	1895.6	1889.9	1889.9	1889.9	1867.7	1817.5	1758.7	1697.3
25°	1962.5	1973.7	1957.0	1906.7	1906.7	1917.9	1917.9	1906.7	1862.0	1811.8	1750.3
27.5°	2001.7	2010.0	1996.0	1926.2	1929.0	1945.8	1943.0	1945.8	1917.9	1870.5	1808.9
30°	2049.0	2060.3	2043.6	1957.0	1954.2	1970.9	1970.9	1984.8	1965.3	1915.0	1864.8
32.5°	2177.5	2174.6	2121.6	1990.5	1982.1	1998.8	1998.8	2012.8	2001.7	1962.5	1915.0
35°	2560.0	2518.0	2400.8	2099.2	2015.5	2023.9	2023.9	2049.0	2054.7	2023.9	1982.1
37.5°	2950.8	2936.7	2847.4	2389.6	2138.4	2077.1	2074.1	2110.5	2135.6	2110.5	2082.6
40°	3344.4	3333.3	3313.7	2777.6	2395.2	2171.9	2163.6	2194.2	2238.9	2222.1	2205.3
42.5°	3710.1	3704.5	3724.1	3160.1	2721.9	2375.7	2350.5	2314.4	2378.5	2373.0	2373.0
45°	3997.6	4011.7	4022.8	3517.6	3076.4	2638.1	2607.4	2484.6	2571.0	2593.4	2610.1
47.5°	4159.6	4170.7	4209.8	3866.5	3430.9	2942.4	2920.1	2719.1	2833.6	2900.5	2948.0
50°	4391.3	4360.6	4394.1	4207.0	3858.1	3338.8	3277.3	3034.6	3179.7	3297.0	3408.6
52.5°	4614.7	4564.4	4592.2	4600.7	4343.8	3726.9	3662.7	3405.8	3587.3	3771.5	3969.7
55°	4815.6	4812.8	4840.7	4983.1	4812.8	4142.9	4070.2	3816.2	4078.7	4276.8	4611.8
57.5°	4977.5	5005.4	5128.2	5427.0	5354.3	4595.1	4514.2	4293.5	4603.5	4801.6	5357.2
60°	5167.4	5212.1	5415.8	5803.9	5848.5	5069.7	4986.0	4826.8	5142.3	5343.2	6219.9
62.5°	5231.5	5295.8	5714.5	6200.3	6365.0	5589.0	5513.5	5407.4	5709.0	5890.4	7079.6
65°	4804.4	4927.3	5879.2	6404.0	6920.5	6214.2	6150.1	6057.9	6272.9	6392.9	7663.1
67.5°	4687.1	4743.1	5558.3	6697.3	7442.5	7018.2	6954.0	6794.9	6800.4	6750.3	7853.0
70°	4522.4	4584.0	5228.8	6917.8	8190.7	8118.2	8040.0	7570.9	7283.5	6979.1	7478.8
72.5°	3852.6	3833.0	4505.8	6323.1	8550.8	9480.4	9388.4	8405.7	7640.8	6780.9	6311.9
75°	2163.6	2107.8	2733.1	4374.6	7808.2	10022.0	10019.2	8827.3	7389.5	5907.2	4296.4
77.5°	628.2	611.3	901.7	1834.1	5256.7	8707.2	8813.4	7961.8	6166.8	4243.4	2358.9
80°	295.9	301.6	388.1	605.7	2244.4	5619.5	5924.0	5242.8	3684.9	1957.0	974.3
82.5°	187.0	189.8	265.2	390.9	949.1	2551.5	2802.8	2358.9	1460.0	845.8	429.8
85°	117.3	117.3	175.9	256.8	566.7	815.1	885.0	804.1	625.3	460.7	234.5
87.5°	64.1	64.1	106.1	148.0	309.8	262.5	270.7	321.1	390.9	282.0	117.3
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°	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2	1471.2
2.5°	1468.4	1462.8	1454.4	1451.8	1448.8	1446.1	1448.8	1454.4	1448.8	1448.8	1451.8
5°	1460.0	1454.4	1443.2	1443.2	1446.1	1448.8	1462.8	1471.2	1473.9	1473.9	1473.9
7.5°	1460.0	1451.8	1443.2	1446.1	1451.8	1462.8	1485.2	1499.1	1510.3	1513.0	1513.0
10°	1473.9	1462.8	1457.2	1462.8	1479.6	1488.0	1510.3	1532.6	1546.6	1552.1	1552.1
12.5°	1499.1	1488.0	1488.0	1499.1	1521.5	1532.6	1552.1	1568.9	1585.7	1594.0	1594.0
15°	1541.0	1526.9	1529.9	1549.3	1574.5	1585.7	1599.6	1605.2	1619.1	1630.3	1630.3
17.5°	1580.1	1566.1	1571.8	1594.0	1610.8	1616.4	1624.8	1622.0	1627.5	1636.0	1638.7
20°	1624.8	1610.8	1613.5	1627.5	1630.3	1624.8	1624.8	1616.4	1613.5	1627.5	1633.1
22.5°	1669.4	1655.4	1652.6	1644.3	1630.3	1616.4	1608.0	1599.6	1594.0	1608.0	1613.5
25°	1722.5	1702.8	1689.0	1652.6	1616.4	1591.3	1580.1	1574.5	1571.8	1585.7	1591.3
27.5°	1781.1	1761.5	1719.6	1641.6	1582.9	1541.0	1532.6	1532.6	1538.2	1546.6	1552.1
30°	1836.9	1817.5	1742.1	1616.4	1524.2	1462.8	1454.4	1462.8	1476.9	1485.2	1493.5
32.5°	1892.8	1873.1	1755.9	1577.2	1437.6	1359.6	1353.9	1367.8	1390.2	1395.8	1401.4
35°	1968.1	1948.6	1772.7	1521.5	1328.9	1245.1	1239.5	1247.8	1267.4	1275.9	1284.1
37.5°	2074.1	2063.0	1797.8	1460.0	1228.3	1136.1	1119.5	1113.9	1125.0	1122.3	1133.4
40°	2213.9	2222.1	1842.6	1379.1	1130.6	1035.7	999.5	982.7	971.4	949.1	960.3
42.5°	2417.6	2423.2	1892.8	1286.9	1046.9	940.7	893.4	862.6	840.3	804.1	809.6
45°	2716.2	2668.9	1951.4	1189.3	971.4	865.3	809.6	773.4	742.5	711.8	714.6
47.5°	3112.6	2967.6	2015.5	1108.2	896.1	804.1	753.8	711.8	675.5	650.5	653.2
50°	3601.2	3338.8	2079.8	1033.0	820.7	756.6	711.8	667.3	630.9	605.7	603.0
52.5°	4246.1	3785.5	2121.6	949.1	745.4	714.6	675.5	633.8	589.1	558.3	555.5
55°	4916.2	4304.8	2158.0	848.7	672.8	667.3	647.7	600.2	547.2	508.1	502.5
57.5°	5653.2	4860.3	2185.8	751.0	617.0	628.2	622.5	566.7	508.1	471.8	468.9
60°	6323.1	5435.4	2096.6	664.4	566.7	589.1	594.6	547.2	516.4	524.8	527.7
62.5°	6998.6	5879.2	1755.9	600.2	533.2	564.0	611.3	608.6	594.6	608.6	611.3
65°	7241.5	5971.4	1245.1	547.2	499.6	575.0	664.4	658.8	594.6	569.4	564.0
67.5°	7104.8	5697.8	837.5	505.2	474.6	589.1	720.3	658.8	572.3	538.9	527.7
70°	6454.3	5024.9	614.3	463.4	452.2	586.2	751.0	656.0	561.1	524.8	510.9
72.5°	5147.7	3877.7	494.1	424.3	418.7	572.3	767.7	650.5	549.9	510.9	494.1
75°	3333.3	2411.9	415.9	385.3	368.6	549.9	759.3	633.8	536.0	485.8	474.6
77.5°	1546.6	1038.5	354.6	340.5	321.1	516.4	734.3	600.2	505.2	457.9	443.9
80°	720.3	491.4	298.6	295.9	287.5	488.6	700.7	561.1	468.9	429.8	407.7
82.5°	385.3	295.9	242.9	242.9	251.3	455.0	658.8	513.7	421.6	402.0	343.4
85°	203.7	170.3	175.9	189.8	215.0	402.0	603.0	463.4	368.6	307.1	298.6
87.5°	103.2	108.9	108.9	128.4	164.7	326.7	496.9	382.5	312.7	251.3	245.6
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)