

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: P231279

Luminaire Tested: **ARCH-M-AF48-130-D-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231279
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-M-AF48-130-D-U-T4W-7030
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 845mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14221 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G3

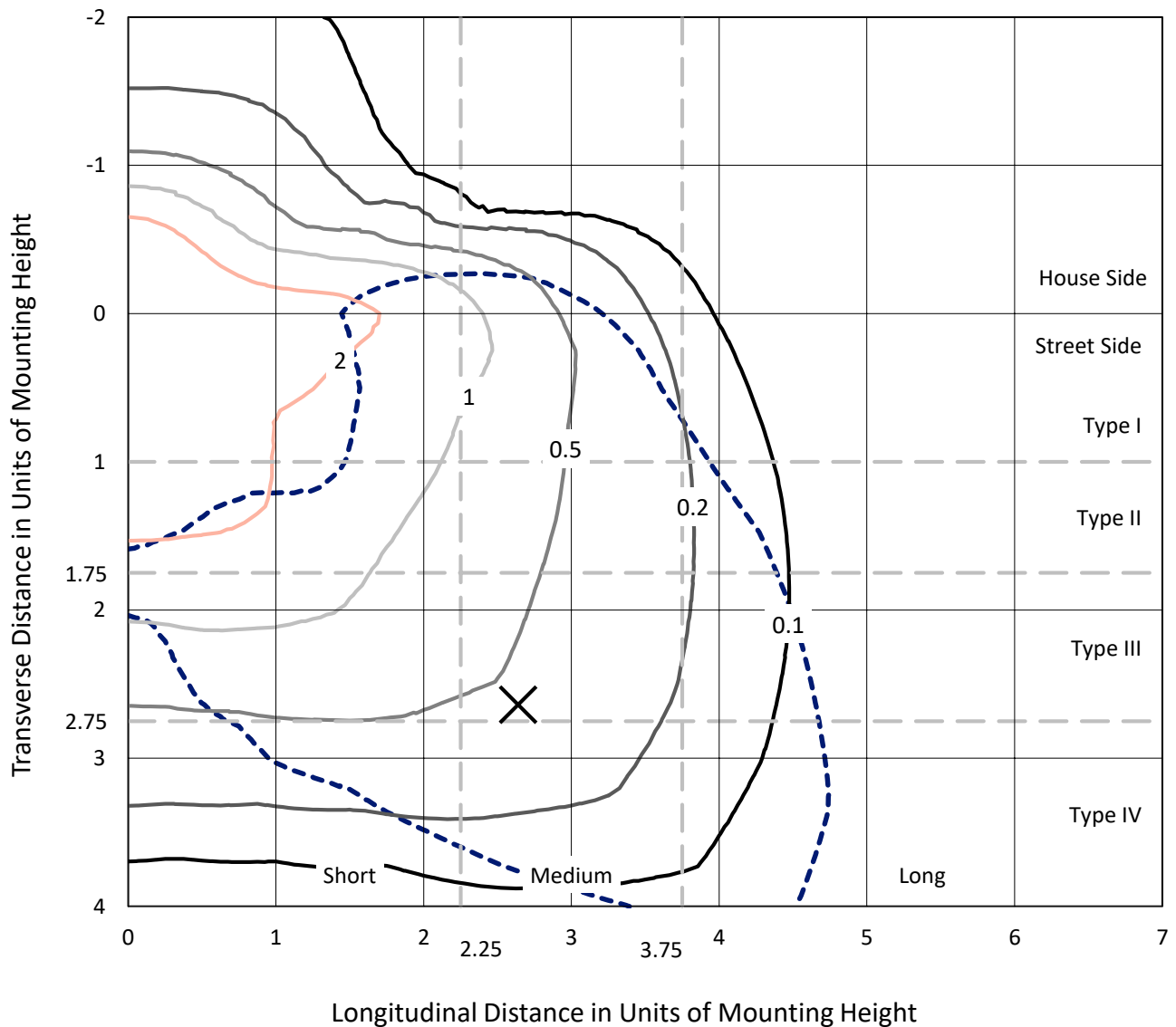
Input Watts (W): 131
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

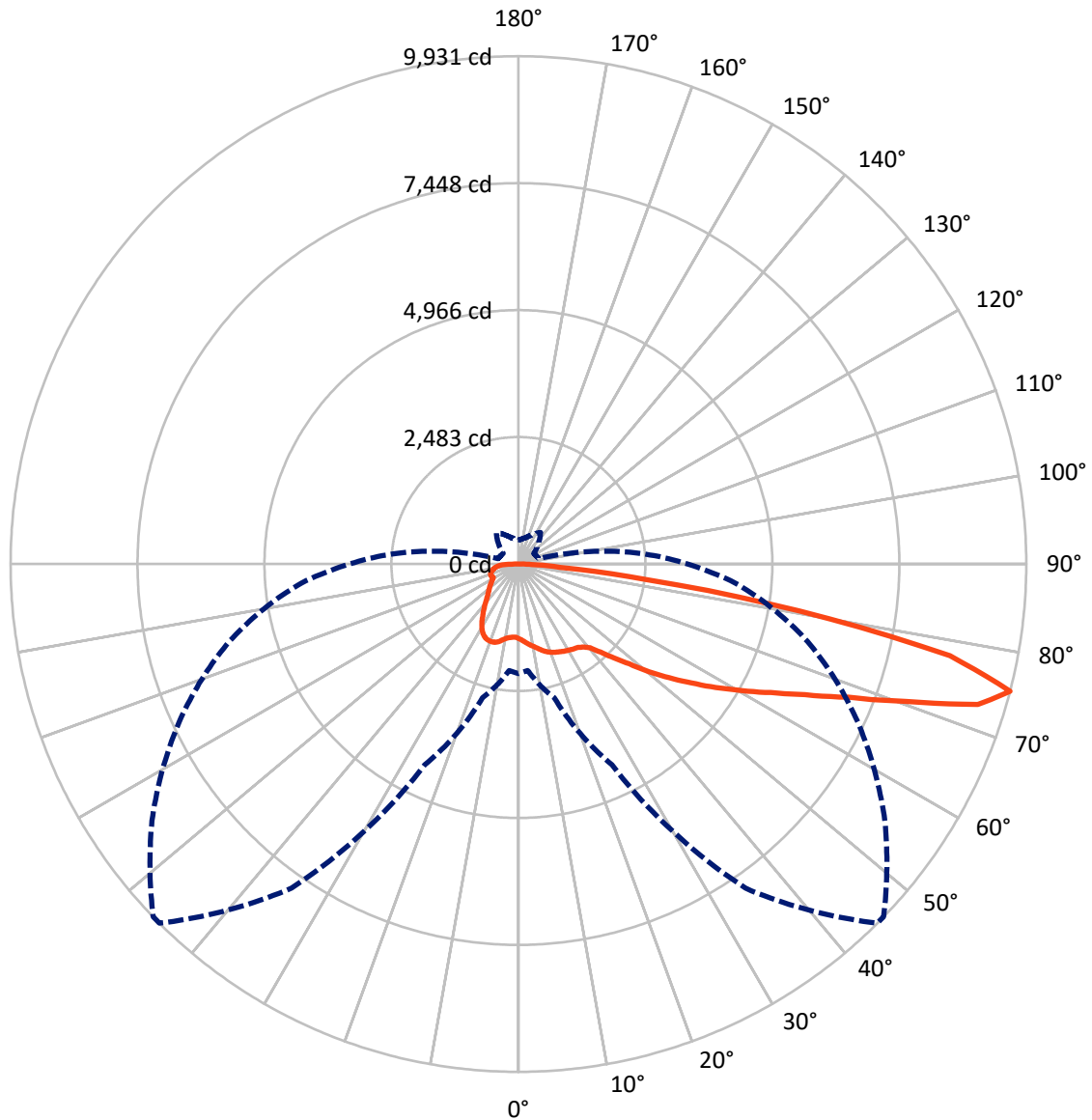


Based on 20 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Medium - Non-Cutoff

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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	3294.4	0.0	3294.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	10926.6	0.0	10926.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	14221.0	0.0	14221.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	1.0
10°-20°	468.2	3.3
20°-30°	803.4	5.6
30°-40°	1123.6	7.9
40°-50°	1648.3	11.6
50°-60°	2567.6	18.1
60°-70°	3694.5	26.0
70°-80°	3218.3	22.6
80°-90°	552.7	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°	14221.0	100.0
0°-180°	14221.0	100.0

Coefficient of Utilization



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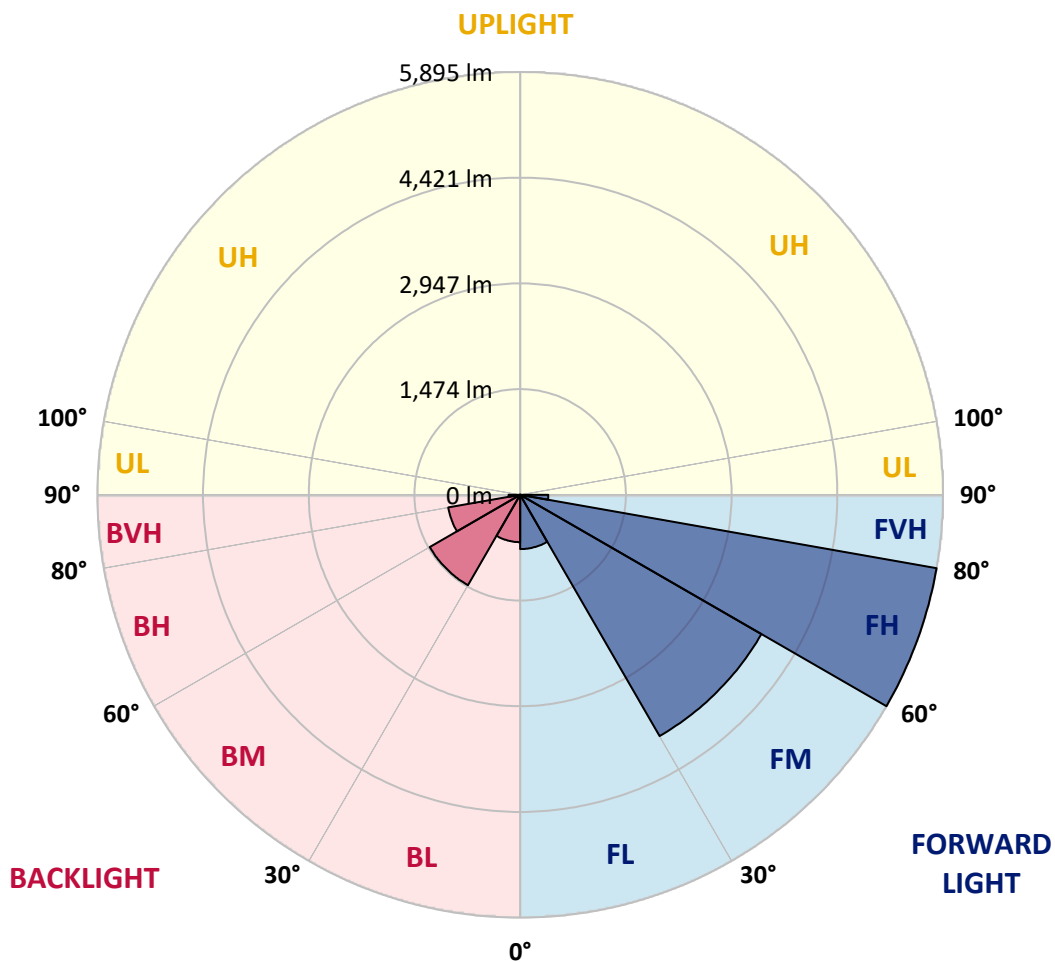
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	756.2	5.3			
FM	(30°-60°)	3883.5	27.3			
FH	(60°-80°)	5894.7	41.5			G3/7500
FVH	(80°-90°)	392.1	2.8			G3/500
BL	(0°-30°)	659.8	4.6	B2/1000		
BM	(30°-60°)	1456.0	10.2	B2/2500		
BH	(60°-80°)	1018.1	7.2	B3/2500		G3/2500
BVH	(80°-90°)	160.6	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°	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9
2.5°	1529.8	1518.7	1518.7	1510.4	1510.4	1496.6	1491.1	1488.3	1474.5	1466.2	1457.9
5°	1618.3	1604.5	1601.7	1582.3	1574.0	1543.6	1540.8	1521.5	1496.6	1471.7	1452.3
7.5°	1698.5	1690.2	1676.4	1657.0	1632.1	1593.4	1590.6	1560.2	1518.7	1485.5	1457.9
10°	1756.6	1751.1	1731.7	1706.8	1679.2	1640.4	1637.7	1604.5	1554.7	1515.9	1477.2
12.5°	1825.8	1817.5	1792.6	1759.4	1729.0	1693.0	1690.2	1662.6	1607.2	1557.4	1507.6
15°	1892.2	1881.1	1850.7	1817.5	1784.3	1753.9	1753.9	1723.4	1665.3	1607.2	1549.1
17.5°	1925.4	1919.8	1889.4	1853.4	1825.8	1803.6	1800.9	1773.2	1715.1	1654.3	1590.6
20°	1936.4	1939.2	1911.5	1872.8	1853.4	1842.4	1839.6	1820.2	1756.6	1698.5	1637.7
22.5°	1933.7	1942.0	1919.8	1878.3	1872.8	1872.8	1872.8	1850.7	1800.9	1742.8	1681.9
25°	1944.7	1955.8	1939.2	1889.4	1889.4	1900.5	1900.5	1889.4	1845.1	1795.3	1734.5
27.5°	1983.5	1991.8	1977.9	1908.8	1911.5	1928.1	1925.4	1928.1	1900.5	1853.4	1792.6
30°	2030.5	2041.5	2025.0	1939.2	1936.4	1953.0	1953.0	1966.9	1947.5	1897.7	1847.9
32.5°	2157.7	2155.0	2102.4	1972.4	1964.1	1980.7	1980.7	1994.5	1983.5	1944.7	1897.7
35°	2536.7	2495.2	2379.0	2080.3	1997.3	2005.6	2005.6	2030.5	2036.0	2005.6	1964.1
37.5°	2924.0	2910.2	2821.7	2368.0	2119.0	2058.1	2055.4	2091.3	2116.2	2091.3	2063.7
40°	3314.1	3303.0	3283.6	2752.5	2373.5	2152.2	2143.9	2174.3	2218.6	2202.0	2185.4
42.5°	3676.4	3670.9	3690.3	3131.5	2697.2	2354.1	2329.2	2293.3	2356.9	2351.4	2351.4
45°	3961.4	3975.2	3986.3	3485.6	3048.5	2614.2	2583.7	2462.0	2547.8	2569.9	2586.5
47.5°	4121.8	4132.9	4171.6	3831.4	3399.8	2915.7	2893.6	2694.4	2807.8	2874.2	2921.2
50°	4351.4	4321.0	4354.2	4168.9	3823.1	3308.5	3247.7	3007.0	3150.8	3267.0	3377.7
52.5°	4572.7	4522.9	4550.6	4558.9	4304.4	3693.0	3629.4	3374.9	3554.7	3737.3	3933.7
55°	4771.9	4769.1	4796.8	4937.9	4769.1	4105.2	4033.3	3781.6	4041.6	4238.0	4570.0
57.5°	4932.4	4960.0	5081.7	5377.7	5305.8	4553.4	4473.2	4254.6	4561.7	4758.1	5308.6
60°	5120.5	5164.7	5366.7	5751.2	5795.5	5023.6	4940.7	4783.0	5095.6	5294.7	6163.4
62.5°	5184.1	5247.7	5662.7	6144.0	6307.2	5538.2	5463.5	5358.4	5657.1	5836.9	7015.4
65°	4760.8	4882.6	5825.9	6346.0	6857.7	6157.8	6094.2	6002.9	6215.9	6334.9	7593.6
67.5°	4644.7	4700.0	5507.8	6636.4	7375.0	6954.5	6890.9	6733.2	6738.8	6689.0	7781.7
70°	4481.4	4542.3	5181.3	6855.0	8116.4	8044.5	7967.0	7502.3	7217.3	6915.8	7411.0
72.5°	3817.5	3798.2	4464.9	6265.7	8473.3	9394.4	9303.2	8329.4	7571.4	6719.4	6254.7
75°	2143.9	2088.6	2708.2	4334.8	7737.4	9931.1	9928.3	8747.1	7322.5	5853.5	4257.4
77.5°	622.4	605.8	893.5	1817.5	5209.0	8628.2	8733.3	7889.6	6110.8	4204.8	2337.5
80°	293.2	298.8	384.5	600.3	2224.1	5568.6	5870.1	5195.2	3651.6	1939.2	965.4
82.5°	185.3	188.1	262.8	387.3	940.6	2528.4	2777.4	2337.5	1446.8	838.2	426.0
85°	116.2	116.2	174.3	254.5	561.6	807.8	876.9	796.7	619.7	456.4	232.4
87.5°	63.6	63.6	105.1	146.6	307.1	260.0	268.3	318.1	387.3	279.4	116.2
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°	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9	1457.9
2.5°	1455.1	1449.6	1441.3	1438.5	1435.7	1433.0	1435.7	1441.3	1435.7	1435.7	1438.5
5°	1446.8	1441.3	1430.2	1430.2	1433.0	1435.7	1449.6	1457.9	1460.6	1460.6	1460.6
7.5°	1446.8	1438.5	1430.2	1433.0	1438.5	1449.6	1471.7	1485.5	1496.6	1499.3	1499.3
10°	1460.6	1449.6	1444.0	1449.6	1466.2	1474.5	1496.6	1518.7	1532.5	1538.1	1538.1
12.5°	1485.5	1474.5	1474.5	1485.5	1507.6	1518.7	1538.1	1554.7	1571.3	1579.6	1579.6
15°	1527.0	1513.2	1515.9	1535.3	1560.2	1571.3	1585.1	1590.6	1604.5	1615.5	1615.5
17.5°	1565.7	1551.9	1557.4	1579.6	1596.2	1601.7	1610.0	1607.2	1612.8	1621.1	1623.8
20°	1610.0	1596.2	1598.9	1612.8	1615.5	1610.0	1610.0	1601.7	1598.9	1612.8	1618.3
22.5°	1654.3	1640.4	1637.7	1629.4	1615.5	1601.7	1593.4	1585.1	1579.6	1593.4	1598.9
25°	1706.8	1687.5	1673.6	1637.7	1601.7	1576.8	1565.7	1560.2	1557.4	1571.3	1576.8
27.5°	1764.9	1745.6	1704.1	1626.6	1568.5	1527.0	1518.7	1518.7	1524.2	1532.5	1538.1
30°	1820.2	1800.9	1726.2	1601.7	1510.4	1449.6	1441.3	1449.6	1463.4	1471.7	1480.0
32.5°	1875.6	1856.2	1740.0	1563.0	1424.7	1347.2	1341.7	1355.5	1377.6	1383.2	1388.7
35°	1950.3	1930.9	1756.6	1507.6	1316.8	1233.8	1228.2	1236.5	1255.9	1264.2	1272.5
37.5°	2055.4	2044.3	1781.5	1446.8	1217.2	1125.9	1109.3	1103.8	1114.8	1112.1	1123.1
40°	2193.7	2202.0	1825.8	1366.6	1120.4	1026.3	990.3	973.7	962.7	940.6	951.6
42.5°	2395.6	2401.2	1875.6	1275.3	1037.4	932.3	885.2	854.8	832.7	796.7	802.2
45°	2691.6	2644.6	1933.7	1178.5	962.7	857.6	802.2	766.3	735.8	705.4	708.2
47.5°	3084.5	2940.6	1997.3	1098.2	888.0	796.7	746.9	705.4	669.5	644.6	647.3
50°	3568.6	3308.5	2060.9	1023.5	813.3	749.7	705.4	661.2	625.2	600.3	597.5
52.5°	4207.6	3751.1	2102.4	940.6	738.6	708.2	669.5	628.0	583.7	553.3	550.5
55°	4871.5	4265.7	2138.4	841.0	666.7	661.2	641.8	594.8	542.2	503.5	497.9
57.5°	5601.8	4816.2	2166.0	744.1	611.4	622.4	616.9	561.6	503.5	467.5	464.7
60°	6265.7	5386.0	2077.5	658.4	561.6	583.7	589.2	542.2	511.8	520.1	522.8
62.5°	6935.2	5825.9	1740.0	594.8	528.4	558.8	605.8	603.1	589.2	603.1	605.8
65°	7175.9	5917.2	1233.8	542.2	495.2	569.9	658.4	652.9	589.2	564.3	558.8
67.5°	7040.3	5646.1	829.9	500.7	470.3	583.7	713.7	652.9	567.1	533.9	522.8
70°	6395.7	4979.4	608.6	459.2	448.1	580.9	744.1	650.1	556.0	520.1	506.2
72.5°	5101.1	3842.4	489.6	420.5	414.9	567.1	760.7	644.6	545.0	506.2	489.6
75°	3303.0	2390.1	412.2	381.8	365.2	545.0	752.4	628.0	531.1	481.3	470.3
77.5°	1532.5	1029.1	351.3	337.5	318.1	511.8	727.5	594.8	500.7	453.7	439.8
80°	713.7	486.9	296.0	293.2	284.9	484.1	694.3	556.0	464.7	426.0	403.9
82.5°	381.8	293.2	240.7	240.7	249.0	450.9	652.9	509.0	417.7	398.4	340.3
85°	201.9	168.7	174.3	188.1	213.0	398.4	597.5	459.2	365.2	304.3	296.0
87.5°	102.4	107.9	107.9	127.3	163.2	323.7	492.4	379.0	309.8	249.0	243.4
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)