

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: P237324

Luminaire Tested: **ARCH-L-AF72-110-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237324
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-AF72-110-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15677.7 lumens
Efficiency: N/A
Efficacy: 138.7 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): 113
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

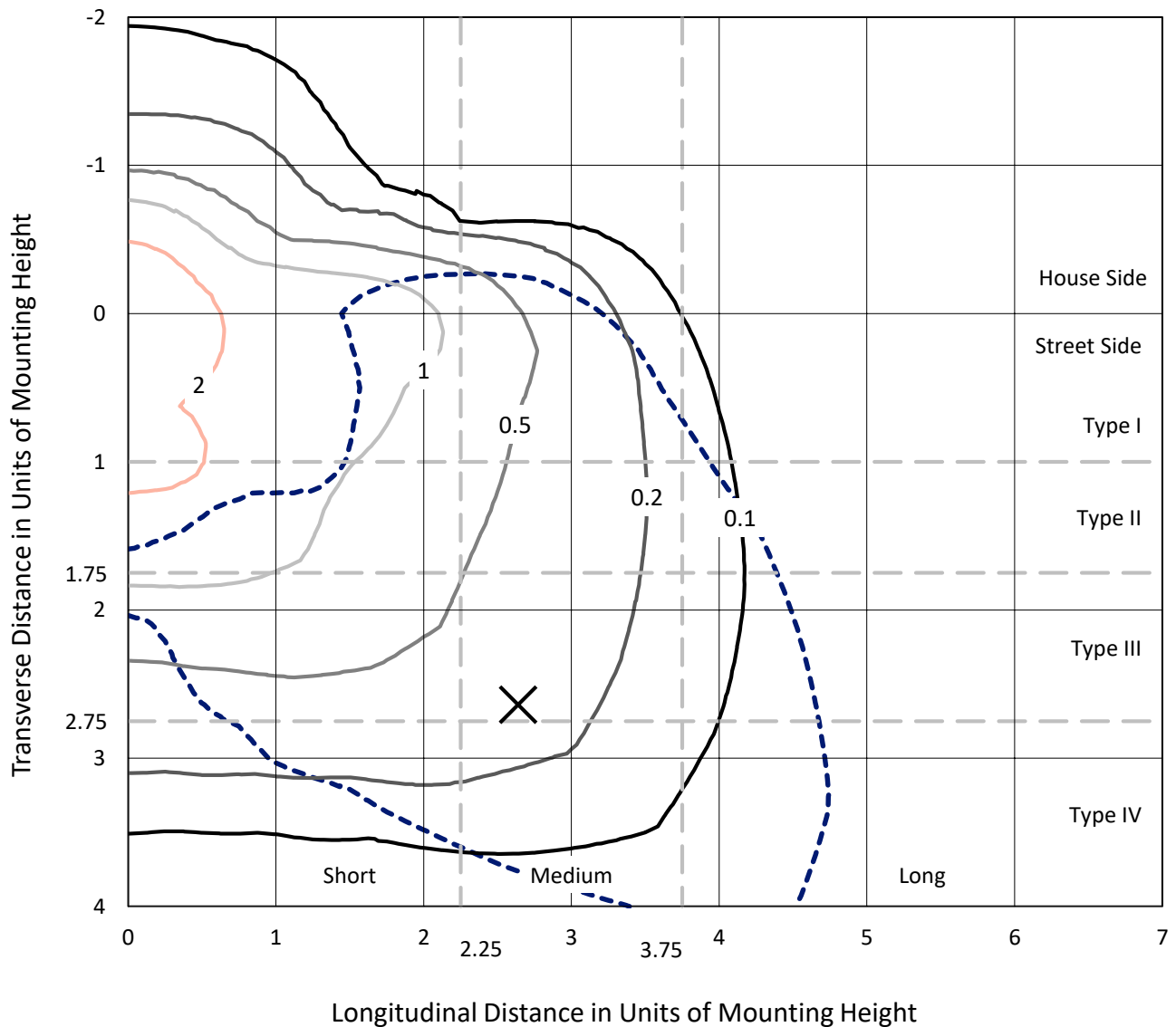


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Iso-Footcandle Lines of Horizontal Illumination

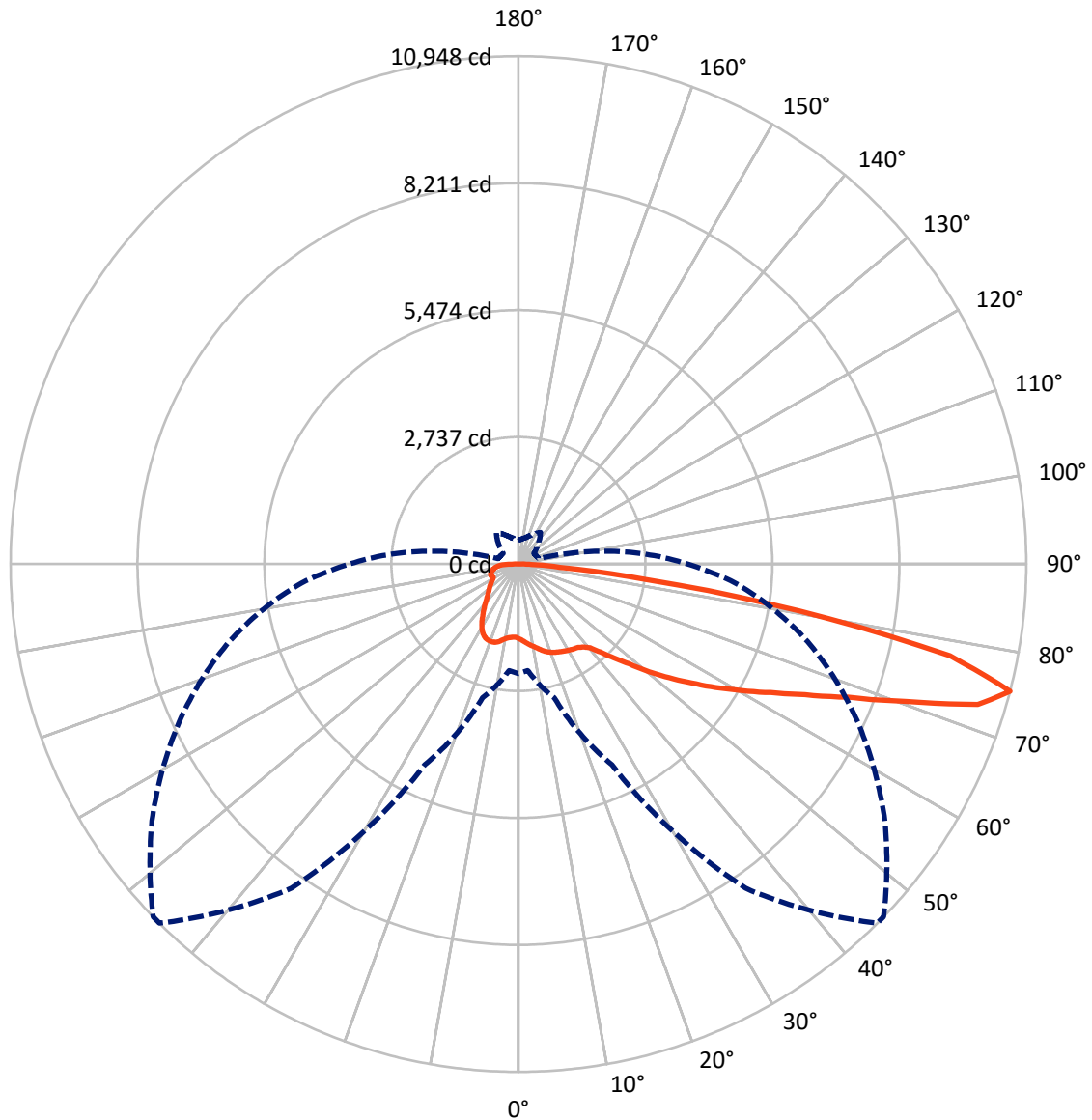
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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	3631.9	0.0	3631.9
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	12045.9	0.0	12045.9
	% Fixture	76.8	0.0	76.8
Total	Lumens	15677.7	0.0	15677.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.3	1.0
10°-20°	516.1	3.3
20°-30°	885.7	5.6
30°-40°	1238.7	7.9
40°-50°	1817.1	11.6
50°-60°	2830.6	18.1
60°-70°	4072.9	26.0
70°-80°	3548.0	22.6
80°-90°	609.3	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°	15677.7	100.0
0°-180°	15677.7	100.0

Coefficient of Utilization



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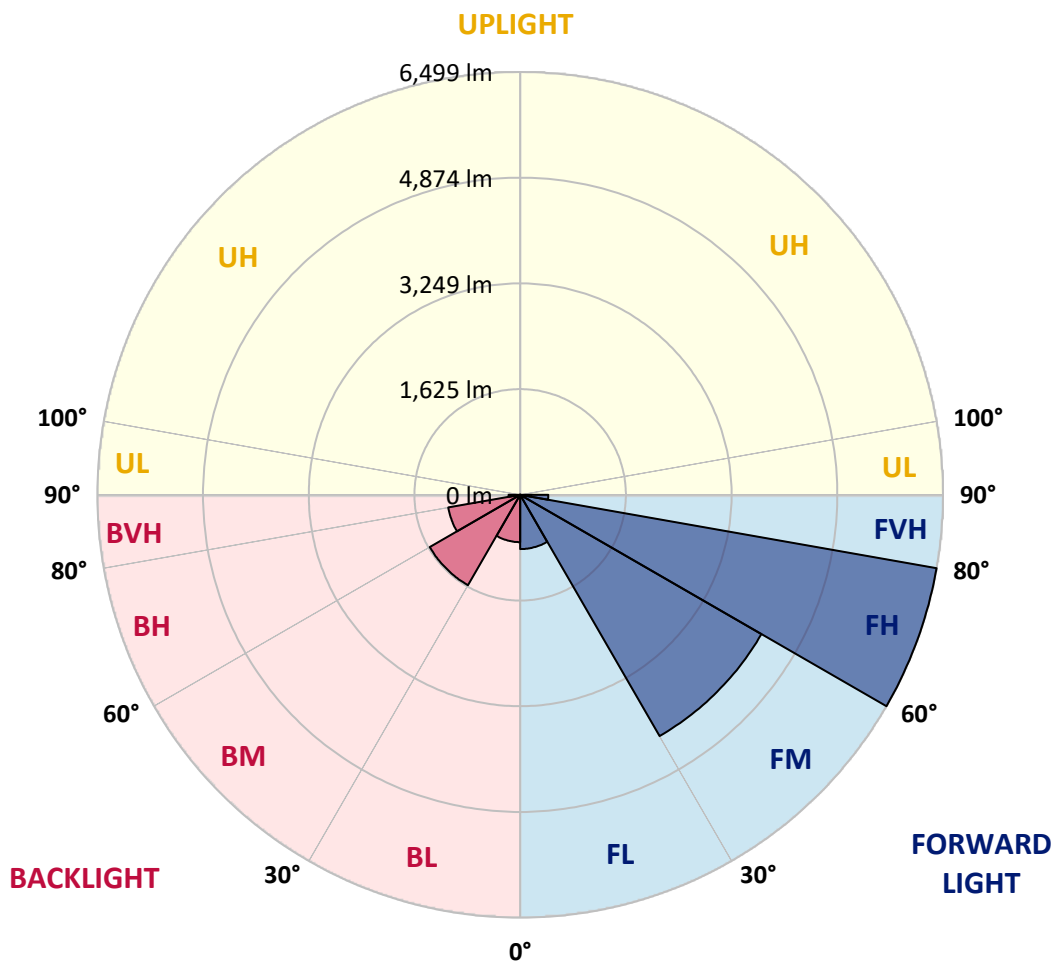
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	833.7	5.3			
FM	(30°-60°)	4281.3	27.3			
FH	(60°-80°)	6498.6	41.5			G3/7500
FVH	(80°-90°)	432.3	2.8			G3/500
BL	(0°-30°)	727.4	4.6	B2/1000		
BM	(30°-60°)	1605.1	10.2	B2/2500		
BH	(60°-80°)	1122.4	7.2	B3/2500		G3/2500
BVH	(80°-90°)	177.0	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°	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2
2.5°	1686.4	1674.3	1674.3	1665.2	1665.2	1649.9	1643.8	1640.7	1625.5	1616.4	1607.2
5°	1784.0	1768.8	1765.8	1744.4	1735.2	1701.8	1698.7	1677.3	1649.9	1622.4	1601.1
7.5°	1872.5	1863.4	1848.2	1826.8	1799.4	1756.6	1753.5	1720.0	1674.3	1637.6	1607.2
10°	1936.5	1930.4	1909.1	1881.6	1851.1	1808.5	1805.4	1768.8	1714.0	1671.2	1628.5
12.5°	2012.8	2003.7	1976.2	1939.6	1906.1	1866.4	1863.4	1832.8	1771.9	1717.0	1662.1
15°	2086.0	2073.8	2040.3	2003.7	1967.0	1933.5	1933.5	1899.9	1835.9	1771.9	1707.8
17.5°	2122.6	2116.5	2082.9	2043.3	2012.8	1988.4	1985.3	1954.9	1890.8	1823.7	1753.5
20°	2134.8	2137.9	2107.4	2064.6	2043.3	2031.1	2028.0	2006.7	1936.5	1872.5	1805.4
22.5°	2131.7	2140.9	2116.5	2070.8	2064.6	2064.6	2064.6	2040.3	1985.3	1921.3	1854.2
25°	2143.9	2156.2	2137.9	2082.9	2082.9	2095.1	2095.1	2082.9	2034.1	1979.2	1912.2
27.5°	2186.7	2195.8	2180.5	2104.3	2107.4	2125.6	2122.6	2125.6	2095.1	2043.3	1976.2
30°	2238.5	2250.7	2232.4	2137.9	2134.8	2153.1	2153.1	2168.3	2147.0	2092.1	2037.2
32.5°	2378.8	2375.7	2317.8	2174.4	2165.3	2183.6	2183.6	2198.8	2186.7	2143.9	2092.1
35°	2796.5	2750.8	2622.7	2293.4	2201.9	2211.0	2211.0	2238.5	2244.6	2211.0	2165.3
37.5°	3223.5	3208.3	3110.7	2610.6	2336.1	2269.0	2265.9	2305.5	2333.0	2305.5	2275.0
40°	3653.6	3641.3	3620.0	3034.5	2616.6	2372.6	2363.5	2397.1	2445.9	2427.6	2409.3
42.5°	4053.0	4047.0	4068.3	3452.3	2973.4	2595.3	2567.8	2528.2	2598.3	2592.3	2592.3
45°	4367.2	4382.4	4394.6	3842.6	3360.8	2882.0	2848.4	2714.2	2808.8	2833.2	2851.5
47.5°	4544.0	4556.2	4599.0	4223.9	3748.1	3214.4	3190.0	2970.4	3095.4	3168.6	3220.5
50°	4797.1	4763.7	4800.2	4595.9	4214.7	3647.4	3580.3	3315.0	3473.6	3601.7	3723.6
52.5°	5041.1	4986.3	5016.8	5025.9	4745.4	4071.3	4001.2	3720.7	3918.8	4120.1	4336.7
55°	5260.7	5257.7	5288.1	5443.7	5257.7	4525.7	4446.5	4168.9	4455.6	4672.1	5038.1
57.5°	5437.6	5468.1	5602.3	5928.6	5849.3	5019.8	4931.3	4690.4	5028.9	5245.5	5852.4
60°	5644.9	5693.7	5916.4	6340.4	6389.1	5538.3	5446.8	5272.9	5617.5	5837.2	6794.7
62.5°	5715.1	5785.3	6242.8	6773.4	6953.3	6105.5	6023.1	5907.2	6236.6	6434.9	7734.0
65°	5248.6	5382.8	6422.7	6996.0	7560.2	6788.6	6718.5	6617.9	6852.6	6983.8	8371.4
67.5°	5120.5	5181.5	6071.9	7316.2	8130.5	7666.9	7596.8	7422.9	7429.1	7374.1	8578.8
70°	4940.5	5007.7	5712.1	7557.2	8947.9	8868.6	8783.2	8270.8	7956.6	7624.3	8170.1
72.5°	4208.6	4187.2	4922.2	6907.6	9341.2	10356.8	10256.1	9182.6	8347.1	7407.7	6895.4
75°	2363.5	2302.6	2985.7	4778.9	8530.0	10948.4	10945.4	9643.2	8072.5	6453.2	4693.5
77.5°	686.2	667.9	985.1	2003.7	5742.5	9512.0	9627.9	8697.7	6736.7	4635.5	2577.0
80°	323.3	329.4	423.9	661.7	2451.9	6139.0	6471.5	5727.3	4025.6	2137.9	1064.4
82.5°	204.3	207.4	289.7	427.0	1036.9	2787.4	3061.9	2577.0	1595.0	924.0	469.6
85°	128.1	128.1	192.1	280.6	619.1	890.5	966.8	878.3	683.1	503.2	256.1
87.5°	70.2	70.2	115.9	161.6	338.5	286.6	295.8	350.7	427.0	308.0	128.1
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°	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2	1607.2
2.5°	1604.2	1598.1	1588.8	1585.9	1582.8	1579.7	1582.8	1588.8	1582.8	1582.8	1585.9
5°	1595.0	1588.8	1576.7	1576.7	1579.7	1582.8	1598.1	1607.2	1610.2	1610.2	1610.2
7.5°	1595.0	1585.9	1576.7	1579.7	1585.9	1598.1	1622.4	1637.6	1649.9	1653.0	1653.0
10°	1610.2	1598.1	1591.9	1598.1	1616.4	1625.5	1649.9	1674.3	1689.5	1695.6	1695.6
12.5°	1637.6	1625.5	1625.5	1637.6	1662.1	1674.3	1695.6	1714.0	1732.3	1741.4	1741.4
15°	1683.5	1668.2	1671.2	1692.6	1720.0	1732.3	1747.5	1753.5	1768.8	1781.1	1781.1
17.5°	1726.1	1710.9	1717.0	1741.4	1759.7	1765.8	1774.9	1771.9	1778.0	1787.1	1790.2
20°	1774.9	1759.7	1762.7	1778.0	1781.1	1774.9	1774.9	1765.8	1762.7	1778.0	1784.0
22.5°	1823.7	1808.5	1805.4	1796.3	1781.1	1765.8	1756.6	1747.5	1741.4	1756.6	1762.7
25°	1881.6	1860.3	1845.1	1805.4	1765.8	1738.3	1726.1	1720.0	1717.0	1732.3	1738.3
27.5°	1945.8	1924.4	1878.6	1793.2	1729.2	1683.5	1674.3	1674.3	1680.4	1689.5	1695.6
30°	2006.7	1985.3	1903.0	1765.8	1665.2	1598.1	1588.8	1598.1	1613.3	1622.4	1631.6
32.5°	2067.7	2046.3	1918.2	1723.1	1570.6	1485.2	1479.1	1494.3	1518.8	1524.8	1530.9
35°	2150.0	2128.7	1936.5	1662.1	1451.7	1360.1	1354.1	1363.2	1384.6	1393.7	1402.9
37.5°	2265.9	2253.8	1964.0	1595.0	1341.9	1241.2	1222.9	1216.8	1229.1	1226.0	1238.2
40°	2418.5	2427.6	2012.8	1506.6	1235.1	1131.5	1091.8	1073.5	1061.3	1036.9	1049.1
42.5°	2641.1	2647.1	2067.7	1405.9	1143.7	1027.8	975.9	942.3	918.0	878.3	884.4
45°	2967.4	2915.5	2131.7	1299.1	1061.3	945.4	884.4	844.8	811.2	777.6	780.7
47.5°	3400.4	3241.8	2201.9	1210.8	979.0	878.3	823.4	777.6	738.1	710.5	713.6
50°	3934.1	3647.4	2272.1	1128.4	896.6	826.4	777.6	728.9	689.3	661.7	658.8
52.5°	4638.6	4135.4	2317.8	1036.9	814.3	780.7	738.1	692.2	643.4	610.0	606.9
55°	5370.5	4702.6	2357.4	927.1	735.0	728.9	707.6	655.7	597.7	555.1	548.9
57.5°	6175.7	5309.5	2387.9	820.4	674.0	686.2	680.1	619.1	555.1	515.4	512.4
60°	6907.6	5937.7	2290.3	725.8	619.1	643.4	649.6	597.7	564.2	573.4	576.4
62.5°	7645.6	6422.7	1918.2	655.7	582.5	616.0	667.9	664.8	649.6	664.8	667.9
65°	7910.9	6523.3	1360.1	597.7	545.8	628.2	725.8	719.7	649.6	622.2	616.0
67.5°	7761.4	6224.5	914.9	552.0	518.4	643.4	786.9	719.7	625.2	588.6	576.4
70°	7050.9	5489.5	671.0	506.3	494.1	640.5	820.4	716.7	613.0	573.4	558.1
72.5°	5623.7	4236.0	539.8	463.6	457.5	625.2	838.7	710.5	600.8	558.1	539.8
75°	3641.3	2634.9	454.4	420.8	402.5	600.8	829.5	692.2	585.5	530.6	518.4
77.5°	1689.5	1134.5	387.3	372.0	350.7	564.2	802.1	655.7	552.0	500.1	484.9
80°	786.9	536.7	326.3	323.3	314.1	533.7	765.5	613.0	512.4	469.6	445.3
82.5°	420.8	323.3	265.4	265.4	274.5	497.1	719.7	561.2	460.5	439.2	375.1
85°	222.6	186.1	192.1	207.4	234.9	439.2	658.8	506.3	402.5	335.4	326.3
87.5°	112.8	119.0	119.0	140.2	179.9	356.8	542.9	417.8	341.6	274.5	268.4
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)