

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: P399607

Luminaire Tested: **ARCH-L-PA3-160-830-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399607
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-830-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19944 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

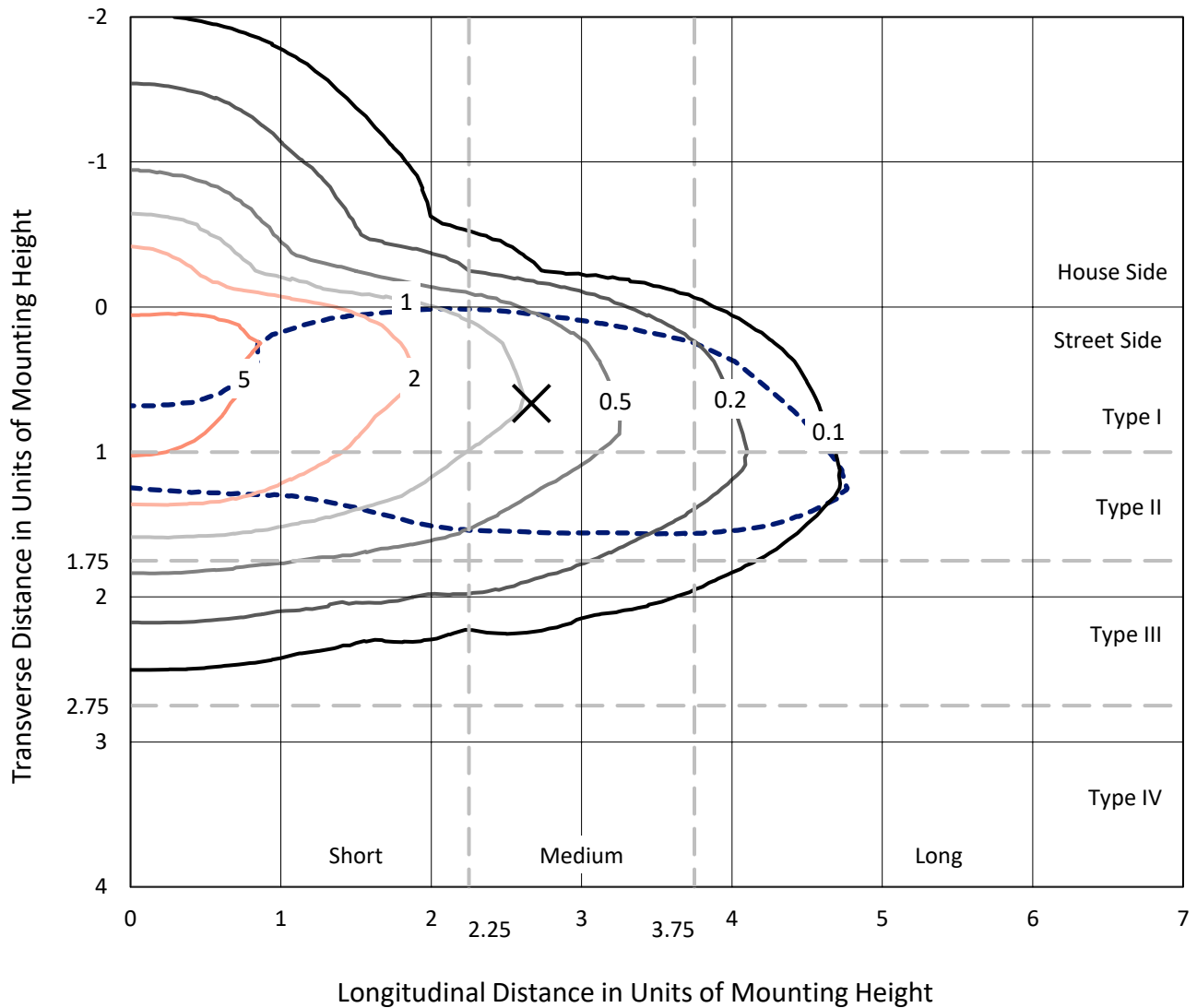
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

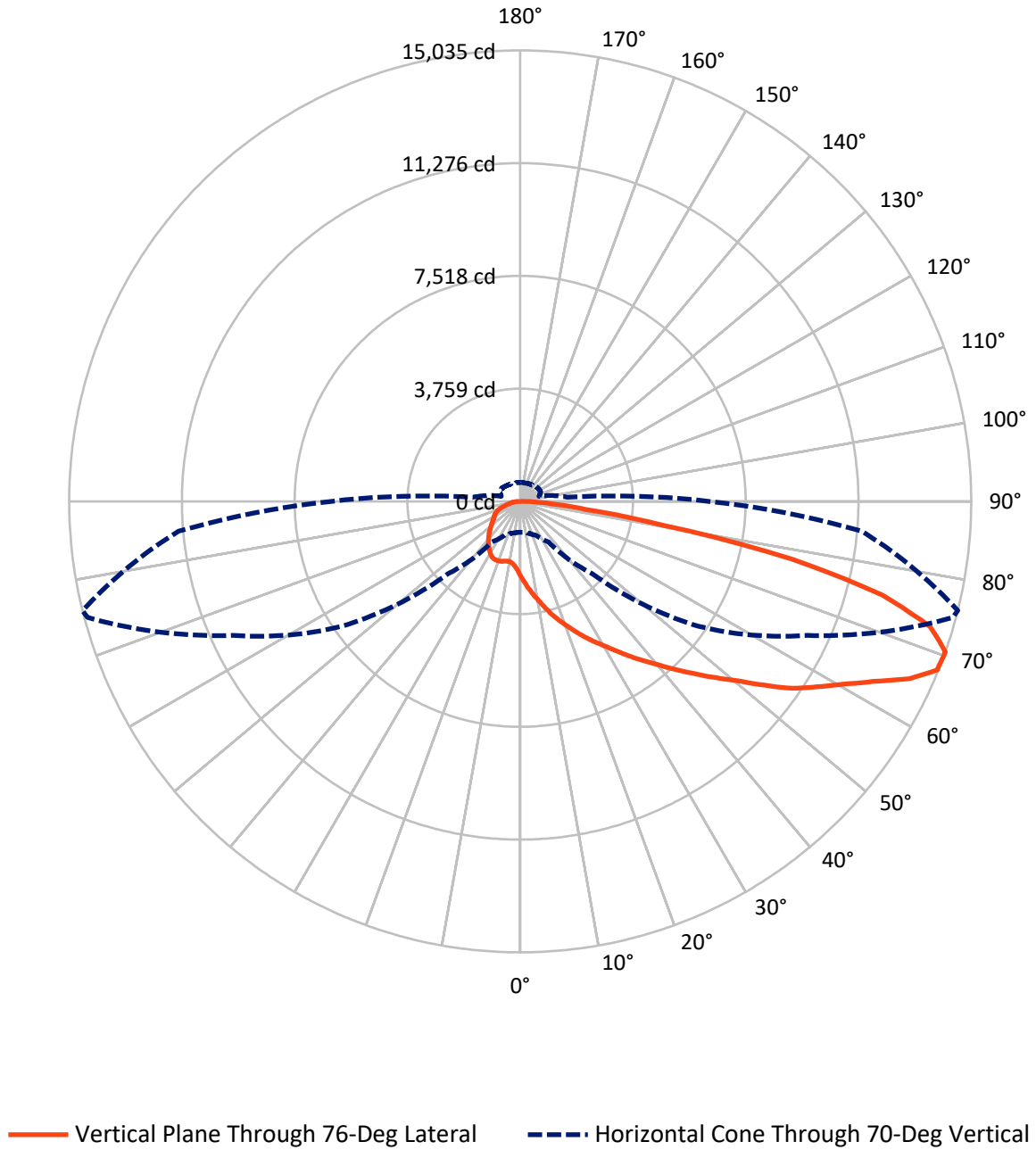
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3256.1	0.0	3256.1
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	16687.9	0.0	16687.9
	% Fixture	83.7	0.0	83.7
Total	Lumens	19944.0	0.0	19944.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.1	1.3
10°-20°	880.7	4.4
20°-30°	1575.8	7.9
30°-40°	2549.1	12.8
40°-50°	3687.6	18.5
50°-60°	4220.7	21.2
60°-70°	3882.5	19.5
70°-80°	2400.9	12.0
80°-90°	487.5	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°	19944.0	100.0
0°-180°	19944.0	100.0

Coefficient of Utilization



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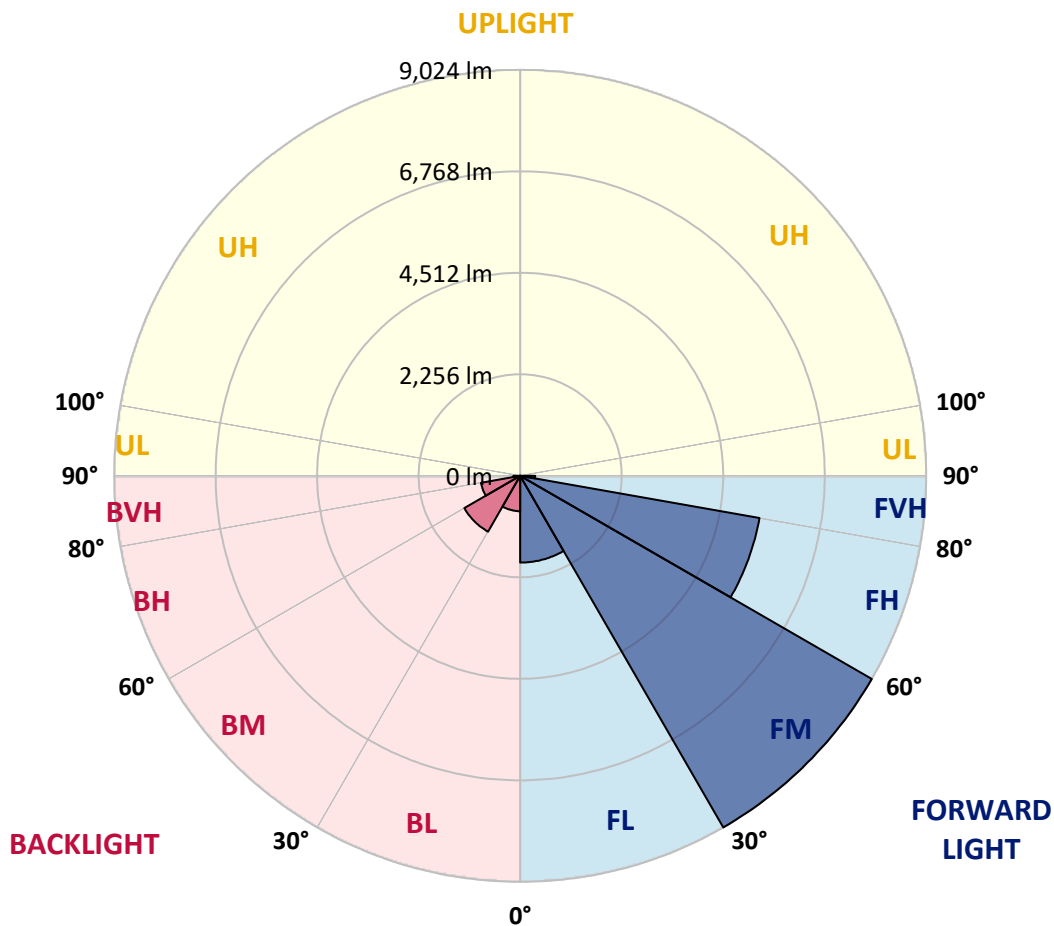
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1929.2	9.7			
FM (30°-60°)	9023.7	45.2			
FH (60°-80°)	5400.3	27.1			G3/7500
FVH (80°-90°)	334.7	1.7			G3/500
BL (0°-30°)	786.4	3.9	B2/1000		
BM (30°-60°)	1433.6	7.2	B2/2500		
BH (60°-80°)	883.2	4.4	B2/1000		G2/1000
BVH (80°-90°)	152.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1
2.5°	3178.6	3155.0	3152.4	3115.6	3081.5	2989.8	2924.2	2808.8	2693.4	2690.8	2575.4
5°	3674.2	3650.6	3637.5	3592.9	3535.3	3414.6	3296.6	3118.3	2921.6	2908.5	2690.8
7.5°	4009.9	3989.0	3962.7	3944.4	3889.3	3781.8	3637.5	3425.1	3155.0	3128.7	2824.5
10°	4235.5	4222.4	4217.1	4204.0	4169.9	4083.4	3944.4	3718.8	3388.4	3359.5	2966.1
12.5°	4332.5	4327.3	4350.9	4387.6	4400.7	4366.6	4232.9	4020.4	3645.4	3613.9	3136.6
15°	4219.7	4225.0	4285.3	4411.2	4544.9	4618.4	4539.7	4332.5	3936.5	3891.9	3335.9
17.5°	4167.3	4175.2	4217.1	4337.8	4526.6	4754.8	4791.5	4628.9	4217.1	4154.2	3545.7
20°	4259.1	4269.6	4301.0	4395.5	4526.6	4770.5	4961.9	4912.1	4492.5	4426.9	3747.7
22.5°	4492.5	4505.6	4503.0	4563.3	4652.5	4820.3	5056.4	5179.6	4781.0	4707.5	3957.5
25°	4990.8	4980.3	4891.1	4862.3	4885.9	4993.4	5182.2	5436.6	5082.6	5009.1	4177.8
27.5°	5667.4	5654.3	5491.7	5344.8	5213.7	5260.9	5360.6	5643.8	5389.4	5305.5	4387.6
30°	6391.3	6375.5	6186.7	5948.0	5656.9	5588.7	5575.6	5824.8	5698.9	5609.7	4610.5
32.5°	7096.7	7083.6	6881.7	6603.7	6202.4	5997.9	5872.0	6026.7	6050.3	5963.8	4854.4
35°	7739.3	7739.3	7566.2	7235.7	6782.0	6472.6	6265.4	6275.9	6454.2	6354.5	5132.4
37.5°	8311.0	8308.4	8119.5	7794.3	7359.0	7004.9	6747.9	6577.5	6839.7	6753.2	5423.5
40°	8764.7	8746.3	8607.3	8324.1	7886.1	7534.7	7275.1	6931.5	7269.8	7191.1	5733.0
42.5°	9095.1	9084.6	8990.2	8743.7	8326.7	7996.3	7817.9	7377.3	7757.6	7678.9	6094.9
45°	9223.6	9244.6	9244.6	9011.2	8680.8	8379.2	8300.5	7867.8	8284.8	8206.1	6483.0
47.5°	9016.5	9071.5	9184.3	9200.0	8908.9	8704.4	8730.6	8360.8	8827.6	8785.7	6907.9
50°	8368.7	8471.0	8717.5	9163.3	9000.7	8953.5	9097.8	8864.4	9409.9	9396.7	7424.6
52.5°	6698.1	6947.2	7715.7	8515.5	8937.8	9068.9	9462.3	9430.8	10159.9	10180.9	8098.6
55°	5137.7	5232.1	6121.1	7482.2	8552.3	9032.2	9706.2	9984.2	10972.9	10999.1	8717.5
57.5°	4154.2	4217.1	4702.3	6121.1	7673.7	8832.9	9897.7	10306.8	11597.1	11665.3	9268.2
60°	3291.3	3383.1	3708.3	4683.9	6443.7	8352.9	10031.4	10666.1	12268.5	12370.8	9926.5
62.5°	2446.9	2491.5	2798.3	3469.7	5100.9	7490.1	9960.6	11056.8	13092.0	13215.2	10718.5
65°	1741.4	1780.7	1998.4	2467.9	3771.3	6323.1	9548.8	11347.9	14125.3	14251.2	11515.8
67.5°	1303.4	1319.2	1442.4	1725.7	2541.3	4912.1	8714.9	11298.1	14880.6	14993.3	11835.7
70°	1030.7	1035.9	1096.2	1248.4	1652.2	3419.9	7254.1	10566.4	14935.6	15035.3	11431.9
72.5°	855.0	852.3	886.4	959.9	1151.3	2163.6	5373.7	9207.9	14227.5	14295.7	10304.2
75°	705.5	710.7	734.3	776.3	878.6	1426.7	3482.8	7345.9	12551.7	12478.3	8646.7
77.5°	592.7	590.1	600.6	637.3	710.7	1025.4	2040.4	5308.1	9302.3	9265.6	5675.3
80°	477.3	482.6	498.3	529.8	598.0	781.5	1206.4	3312.3	4990.8	4857.0	2711.8
82.5°	320.0	369.8	401.3	438.0	516.7	577.0	765.8	1683.7	2231.8	2197.7	1230.0
85°	152.1	201.9	299.0	340.9	419.6	361.9	519.3	802.5	1117.2	1104.1	443.2
87.5°	31.5	31.5	160.0	191.4	259.6	154.7	288.5	348.8	540.3	506.2	181.0
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°	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1	2494.1
2.5°	2507.2	2436.4	2294.8	2182.0	2066.6	2001.0	1919.7	1880.4	1872.5	1851.5	1867.3
5°	2551.8	2412.8	2145.3	1969.6	1851.5	1793.9	1765.0	1754.5	1751.9	1746.6	1746.6
7.5°	2612.1	2399.7	2050.9	1872.5	1796.5	1778.1	1786.0	1801.7	1804.3	1809.6	1807.0
10°	2685.5	2402.3	1998.4	1848.9	1812.2	1814.8	1841.1	1862.0	1872.5	1880.4	1877.8
12.5°	2787.8	2433.8	1990.5	1864.7	1848.9	1859.4	1885.6	1906.6	1917.1	1919.7	1919.7
15°	2921.6	2499.3	2008.9	1898.8	1885.6	1893.5	1909.2	1917.1	1919.7	1917.1	1917.1
17.5°	3068.4	2578.0	2035.1	1919.7	1898.8	1890.9	1885.6	1877.8	1862.0	1851.5	1851.5
20°	3210.0	2648.8	2048.2	1917.1	1880.4	1848.9	1817.5	1778.1	1751.9	1730.9	1730.9
22.5°	3351.7	2714.4	2048.2	1888.3	1830.6	1770.2	1704.7	1641.7	1602.4	1576.2	1576.2
25°	3501.2	2777.3	2032.5	1838.4	1751.9	1665.3	1576.2	1497.5	1458.2	1431.9	1426.7
27.5°	3627.0	2814.0	1990.5	1767.6	1654.9	1544.7	1442.4	1361.1	1332.3	1308.7	1308.7
30°	3760.8	2837.6	1911.9	1675.8	1544.7	1418.8	1313.9	1248.4	1216.9	1182.8	1180.2
32.5°	3910.3	2853.4	1822.7	1578.8	1431.9	1298.2	1209.0	1156.6	1088.4	1051.7	1046.4
35°	4083.4	2874.4	1728.3	1468.7	1319.2	1198.5	1146.1	1059.5	994.0	962.5	959.9
37.5°	4267.0	2890.1	1626.0	1371.6	1216.9	1133.0	1080.5	978.2	920.5	873.3	868.1
40°	4461.0	2890.1	1521.1	1277.2	1135.6	1104.1	1004.5	912.7	815.6	792.0	786.8
42.5°	4676.1	2884.8	1416.2	1185.4	1059.5	1038.5	959.9	862.8	813.0	792.0	786.8
45°	4904.2	2866.5	1316.5	1080.5	980.8	938.9	878.6	852.3	831.4	831.4	831.4
47.5°	5163.9	2850.8	1203.8	986.1	923.2	875.9	831.4	815.6	813.0	820.9	828.7
50°	5496.9	2845.5	1109.4	917.9	878.6	823.5	818.2	805.1	807.8	807.8	807.8
52.5°	5900.8	2798.3	1020.2	868.1	834.0	768.4	784.2	797.3	802.5	799.9	797.3
55°	6197.2	2714.4	944.1	834.0	802.5	747.4	768.4	789.4	794.6	786.8	786.8
57.5°	6464.7	2596.4	883.8	807.8	781.5	734.3	757.9	778.9	773.7	771.0	768.4
60°	6771.5	2483.6	836.6	794.6	760.6	729.1	750.1	763.2	755.3	750.1	747.4
62.5°	7104.6	2373.4	802.5	794.6	744.8	726.5	742.2	747.4	731.7	726.5	726.5
65°	7259.3	2200.4	765.8	794.6	736.9	721.2	726.5	721.2	705.5	705.5	702.9
67.5°	7004.9	1914.5	718.6	784.2	747.4	713.3	702.9	695.0	676.6	676.6	671.4
70°	6302.1	1573.6	650.4	750.1	750.1	710.7	671.4	653.0	632.0	639.9	629.4
72.5°	5384.2	1248.4	566.5	692.4	734.3	708.1	637.3	608.4	590.1	598.0	582.2
75°	4361.4	967.7	466.8	600.6	695.0	695.0	603.2	563.9	542.9	542.9	524.5
77.5°	2779.9	716.0	380.3	498.3	624.2	676.6	574.3	514.0	482.6	474.7	461.6
80°	1376.9	503.5	312.1	396.0	532.4	634.7	553.4	456.3	411.7	396.0	372.4
82.5°	731.7	348.8	249.1	309.5	424.9	571.7	527.1	393.4	338.3	314.7	288.5
85°	327.8	215.1	199.3	236.0	322.6	469.4	474.7	322.6	259.6	309.5	228.2
87.5°	120.6	97.0	97.0	120.6	186.2	196.7	335.7	207.2	165.2	112.8	89.2
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)