

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: P399541

Luminaire Tested: **ARCH-L-PA3-150-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399541  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-150-830-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18843 lumens  
Efficiency: N/A  
Efficacy: 123.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

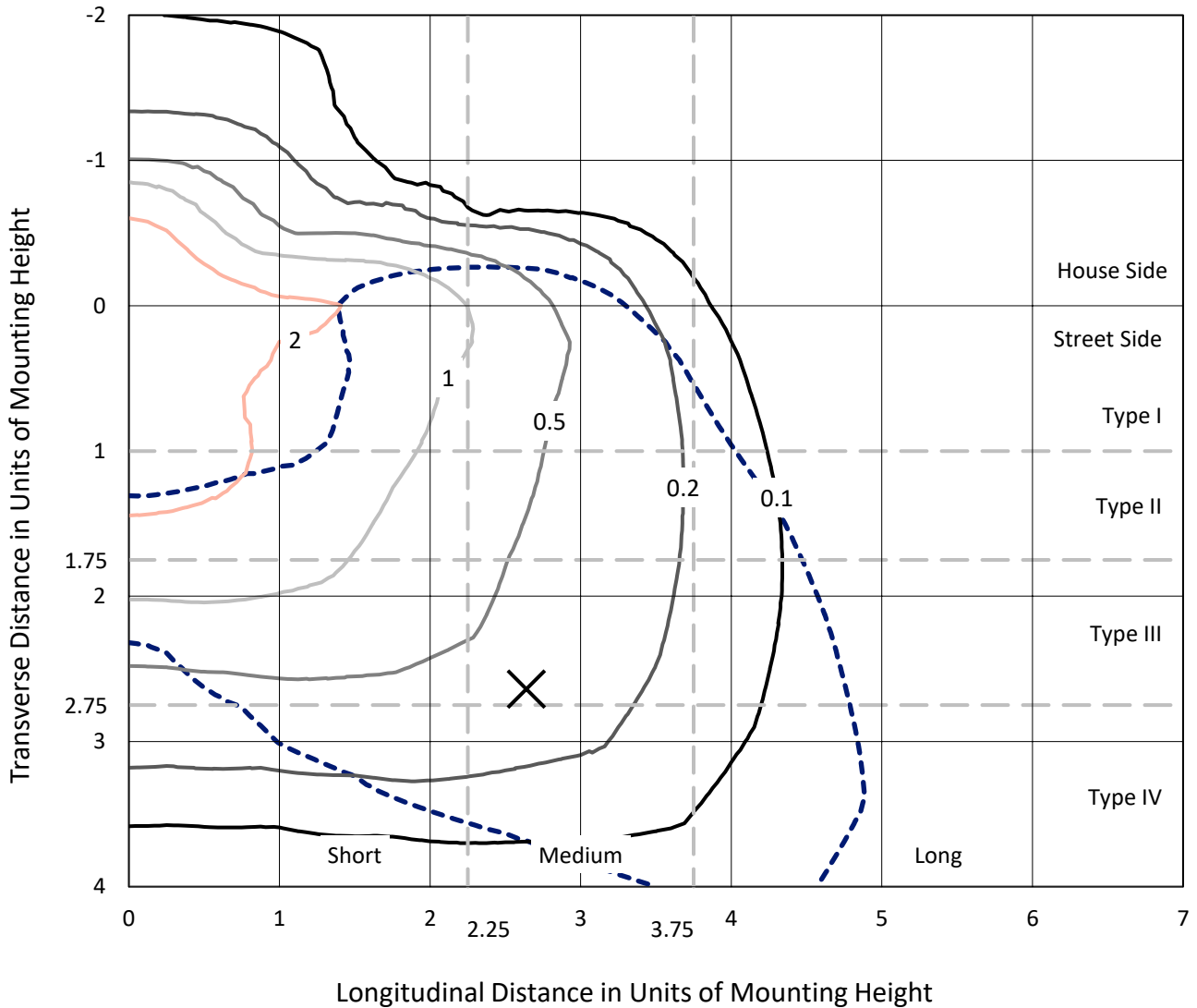
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

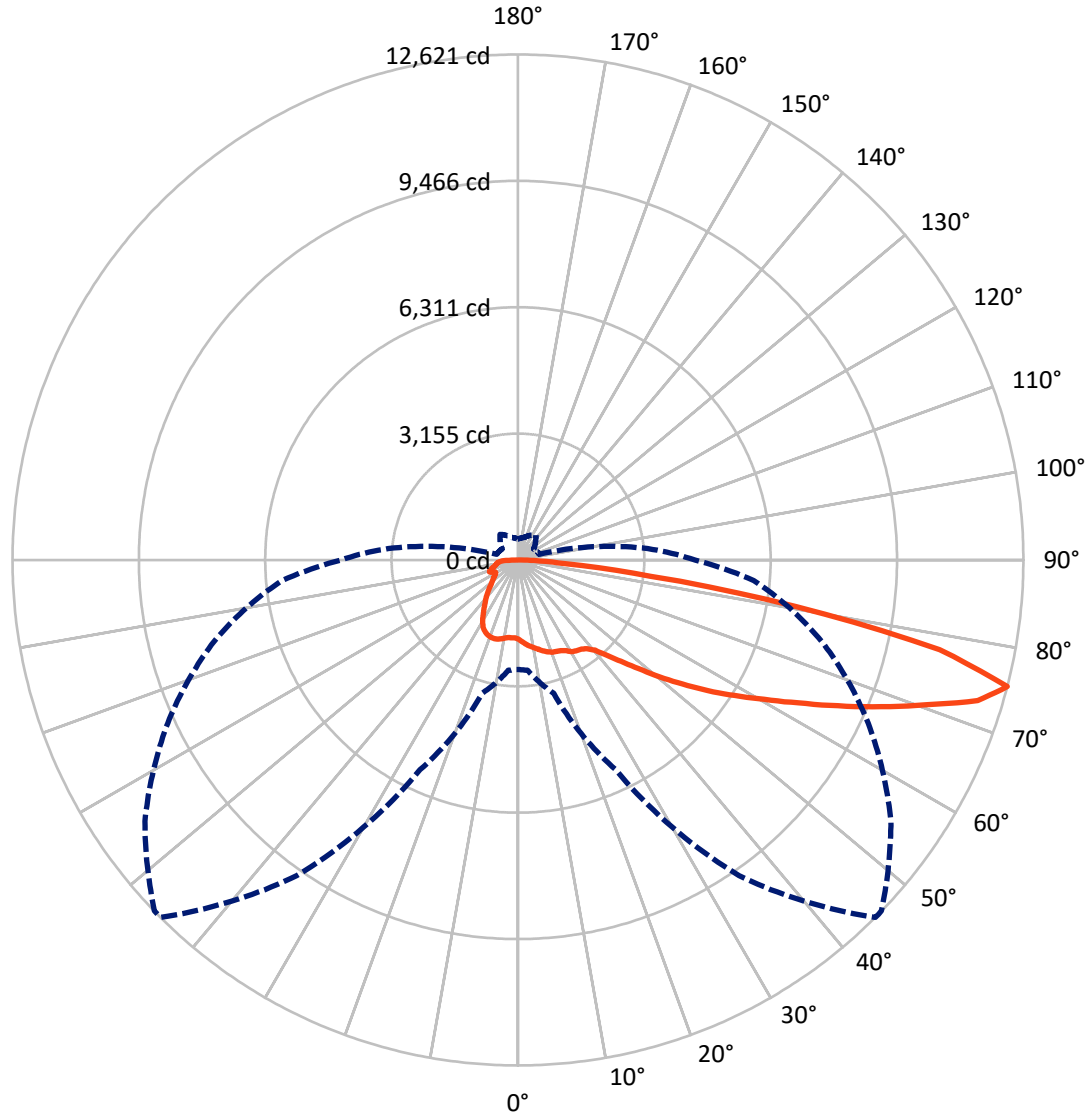
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
 Type IV - Medium - N/A

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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
<b>House Side</b>	Lumens	4164.2	0.0	4164.2
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	14678.8	0.0	14678.8
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	18843.0	0.0	18843.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.8	1.0
10°-20°	622.8	3.3
20°-30°	1061.8	5.6
30°-40°	1487.7	7.9
40°-50°	2185.7	11.6
50°-60°	3478.6	18.5
60°-70°	4948.3	26.3
70°-80°	4143.2	22.0
80°-90°	719.1	3.8
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°	18843.0	100.0
0°-180°	18843.0	100.0

**Coefficient of Utilization**



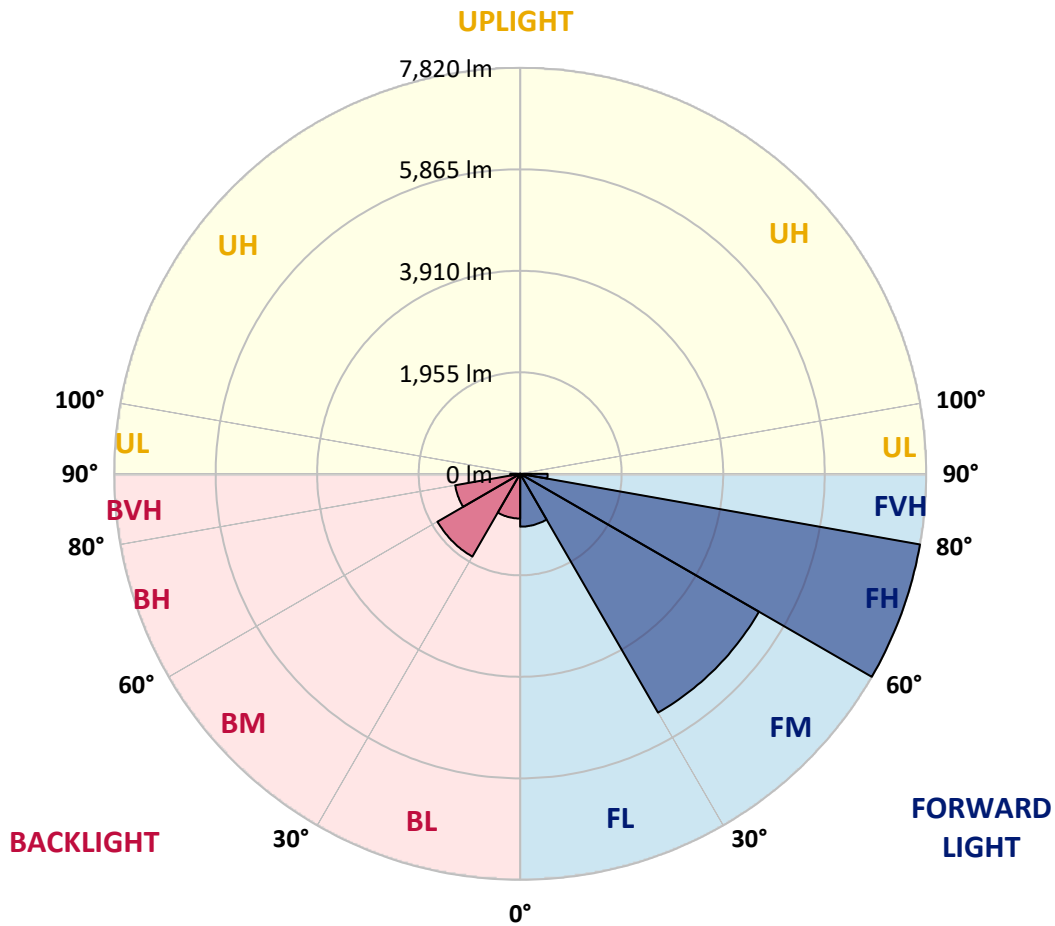
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1018.6	5.4			
FM (30°-60°)	5311.3	28.2			
FH (60°-80°)	7820.3	41.5			G4/12000
FVH (80°-90°)	528.6	2.8			G4/750
BL (0°-30°)	861.8	4.6	B2/1000		
BM (30°-60°)	1840.8	9.8	B2/2500		
BH (60°-80°)	1271.2	6.7	B3/2500		G3/2500
BVH (80°-90°)	190.4	1.0			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9
2.5°	2092.2	2082.2	2077.1	2077.1	2057.0	2044.4	2041.9	2024.2	2009.1	1994.0	1981.4
5°	2213.1	2205.5	2190.4	2177.8	2150.1	2114.9	2109.8	2072.1	2034.3	1999.1	1968.9
7.5°	2323.9	2308.7	2291.1	2265.9	2220.6	2172.8	2165.2	2112.4	2059.5	2006.6	1966.3
10°	2417.0	2401.9	2376.7	2341.5	2283.6	2225.7	2218.1	2162.7	2107.3	2044.4	1986.5
12.5°	2505.1	2492.5	2454.8	2406.9	2339.0	2286.1	2278.5	2230.7	2172.8	2102.3	2026.8
15°	2580.7	2568.1	2527.8	2472.4	2394.4	2354.1	2344.0	2298.7	2240.8	2165.2	2087.2
17.5°	2618.4	2618.4	2575.6	2515.2	2442.2	2412.0	2404.4	2349.0	2296.2	2223.1	2145.1
20°	2631.0	2636.1	2605.8	2532.8	2469.9	2457.3	2449.7	2404.4	2344.0	2273.5	2200.5
22.5°	2638.6	2648.6	2623.5	2540.4	2487.5	2480.0	2474.9	2444.7	2396.9	2328.9	2255.9
25°	2663.7	2663.7	2646.1	2553.0	2510.2	2507.6	2507.6	2490.0	2457.3	2399.4	2326.4
27.5°	2701.5	2699.0	2676.3	2580.7	2560.5	2568.1	2565.6	2563.0	2540.4	2482.5	2404.4
30°	2764.5	2764.5	2739.3	2636.1	2623.5	2656.2	2658.7	2663.7	2628.5	2537.9	2474.9
32.5°	2860.1	2850.1	2824.9	2691.4	2671.3	2701.5	2706.5	2704.0	2673.8	2588.2	2558.0
35°	3154.7	3132.0	3041.4	2814.8	2714.1	2731.7	2734.2	2746.8	2751.9	2683.9	2668.8
37.5°	3670.8	3640.6	3502.1	3106.9	2850.1	2807.3	2804.7	2837.5	2865.2	2804.7	2804.7
40°	4232.3	4207.1	4126.5	3610.4	3101.8	2960.8	2950.8	2981.0	3016.2	2973.4	2986.0
42.5°	4715.7	4735.8	4743.4	4144.2	3479.5	3247.9	3220.2	3177.4	3232.8	3195.0	3245.3
45°	5078.2	5068.2	5206.6	4690.5	3967.9	3607.9	3570.1	3454.3	3524.8	3522.3	3633.1
47.5°	5463.5	5445.8	5503.7	5204.1	4524.3	4048.5	3990.6	3819.4	3925.1	3998.1	4181.9
50°	5828.5	5833.6	5853.7	5609.5	5128.6	4584.8	4511.8	4282.6	4433.7	4587.3	4846.6
52.5°	6304.4	6269.1	6243.9	6082.8	5805.9	5143.7	5095.9	4834.0	5045.5	5226.8	5571.7
55°	6719.8	6697.1	6682.0	6674.5	6372.3	5760.5	5710.2	5438.3	5742.9	5871.3	6379.9
57.5°	7162.9	7150.3	7230.9	7359.3	7238.4	6387.5	6334.6	6072.7	6412.6	6503.3	7256.1
60°	7487.7	7495.3	7716.8	8044.1	7961.0	7067.2	7004.3	6772.7	7064.7	7145.3	8132.2
62.5°	7490.2	7565.7	8079.4	8666.0	8761.7	7850.2	7777.2	7525.5	7734.4	7734.4	8917.8
65°	6775.2	6860.8	8013.9	8819.6	9572.4	8781.8	8711.3	8316.0	8394.1	8288.3	9655.5
67.5°	6062.7	6163.4	7248.5	8832.2	10141.4	9778.8	9695.7	9106.6	8973.2	8706.3	10171.6
70°	5589.3	5659.8	6566.2	8668.5	10483.8	10821.2	10758.2	9856.9	9428.9	9056.2	10063.3
72.5°	4705.6	4680.4	5546.5	7890.5	10675.1	12004.5	11951.6	10672.6	9824.1	8890.1	8582.9
75°	2731.7	2761.9	3441.7	5780.7	9622.7	12621.3	12616.3	11370.0	9650.4	7852.8	5914.1
77.5°	788.0	810.7	1130.5	2540.4	6085.3	10765.8	11110.7	10398.2	8157.4	5596.9	3066.6
80°	344.9	362.6	491.0	846.0	2620.9	7032.0	7334.1	7032.0	4919.6	2568.1	1203.5
82.5°	203.9	216.5	319.8	523.7	1256.3	3346.0	3753.9	3278.1	2122.4	1090.2	498.5
85°	115.8	120.9	183.8	332.3	790.6	1170.7	1314.2	1231.2	1034.8	619.4	261.8
87.5°	52.9	55.4	90.6	156.1	443.1	395.3	410.4	543.8	599.2	377.7	130.9
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°	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9	1978.9
2.5°	1976.4	1968.9	1953.8	1948.7	1941.2	1943.7	1946.2	1946.2	1948.7	1941.2	1941.2
5°	1956.3	1943.7	1928.6	1928.6	1928.6	1948.7	1966.3	1976.4	1981.4	1981.4	1976.4
7.5°	1948.7	1933.6	1916.0	1921.0	1926.1	1951.2	1984.0	2016.7	2026.8	2026.8	2021.7
10°	1963.8	1948.7	1936.1	1943.7	1956.3	1976.4	2001.6	2031.8	2057.0	2059.5	2057.0
12.5°	1999.1	1981.4	1968.9	1984.0	1999.1	2011.7	2024.2	2036.8	2069.6	2074.6	2074.6
15°	2057.0	2039.4	2024.2	2036.8	2041.9	2041.9	2041.9	2041.9	2074.6	2079.6	2079.6
17.5°	2114.9	2099.8	2084.7	2087.2	2072.1	2051.9	2044.4	2041.9	2059.5	2074.6	2077.1
20°	2170.3	2157.7	2142.6	2117.4	2079.6	2041.9	2029.3	2029.3	2039.4	2062.0	2062.0
22.5°	2230.7	2215.6	2190.4	2132.5	2069.6	2016.7	2004.1	2011.7	2024.2	2054.5	2051.9
25°	2298.7	2278.5	2235.7	2127.5	2036.8	1973.9	1976.4	1999.1	2021.7	2054.5	2054.5
27.5°	2374.2	2346.5	2260.9	2087.2	1963.8	1903.4	1926.1	1978.9	2011.7	2046.9	2051.9
30°	2457.3	2432.1	2281.1	2016.7	1845.5	1790.1	1845.5	1931.1	1981.4	2014.2	2021.7
32.5°	2558.0	2537.9	2298.7	1926.1	1691.9	1644.1	1724.6	1830.4	1910.9	1948.7	1956.3
35°	2683.9	2663.7	2321.3	1822.8	1548.4	1498.0	1571.1	1679.3	1785.1	1832.9	1848.0
37.5°	2847.5	2817.3	2341.5	1712.0	1427.5	1369.6	1404.9	1503.1	1598.8	1664.2	1681.8
40°	3056.5	3008.7	2359.1	1586.2	1321.8	1256.3	1268.9	1316.8	1372.2	1430.1	1452.7
42.5°	3351.1	3255.4	2361.6	1452.7	1213.5	1153.1	1148.1	1163.2	1163.2	1163.2	1170.7
45°	3761.5	3580.2	2366.7	1326.8	1102.8	1039.8	1024.7	1019.7	981.9	908.9	903.9
47.5°	4280.1	4005.7	2389.3	1221.1	986.9	931.6	911.4	891.3	820.8	745.2	730.1
50°	4944.8	4499.2	2434.6	1120.4	888.8	851.0	825.8	778.0	699.9	642.0	626.9
52.5°	5710.2	5085.8	2477.4	1014.6	815.7	790.6	760.4	702.4	619.4	584.1	579.1
55°	6588.9	5740.4	2563.0	921.5	752.8	735.2	707.5	652.1	589.1	564.0	561.5
57.5°	7487.7	6473.1	2683.9	838.4	692.4	682.3	682.3	634.5	594.2	584.1	584.1
60°	8353.8	7102.5	2590.7	760.4	637.0	642.0	689.9	677.3	647.1	659.6	667.2
62.5°	9026.0	7472.6	2102.3	697.4	596.7	642.0	765.4	765.4	730.1	725.1	725.1
65°	9313.0	7467.6	1477.9	649.6	581.6	705.0	853.5	813.2	720.1	684.8	677.3
67.5°	9240.0	7140.3	1019.7	616.8	576.6	770.4	893.8	780.5	674.7	644.5	621.9
70°	8598.0	6447.9	785.5	586.6	569.0	742.7	881.2	742.7	639.5	611.8	591.7
72.5°	6936.3	5171.4	652.1	556.4	538.8	687.3	838.4	707.5	611.8	581.6	561.5
75°	4423.6	3252.9	551.4	516.1	480.9	616.8	780.5	672.2	581.6	541.3	526.2
77.5°	2127.5	1402.4	480.9	468.3	433.0	571.5	722.6	626.9	541.3	508.6	498.5
80°	861.1	642.0	417.9	420.5	397.8	543.8	682.3	584.1	501.0	465.8	448.2
82.5°	448.2	372.6	352.5	362.6	362.6	518.7	652.1	548.9	465.8	450.7	392.8
85°	241.7	231.6	271.9	292.1	314.7	468.3	606.8	511.1	425.5	365.1	352.5
87.5°	118.3	151.1	153.6	176.2	219.0	375.1	511.1	428.0	355.0	294.6	289.5
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)