

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: P399676

Luminaire Tested: **ARCH-L-PA3-170-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399676  
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-PA3-170-827-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19121 lumens  
Efficiency: N/A  
Efficacy: 110.5 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

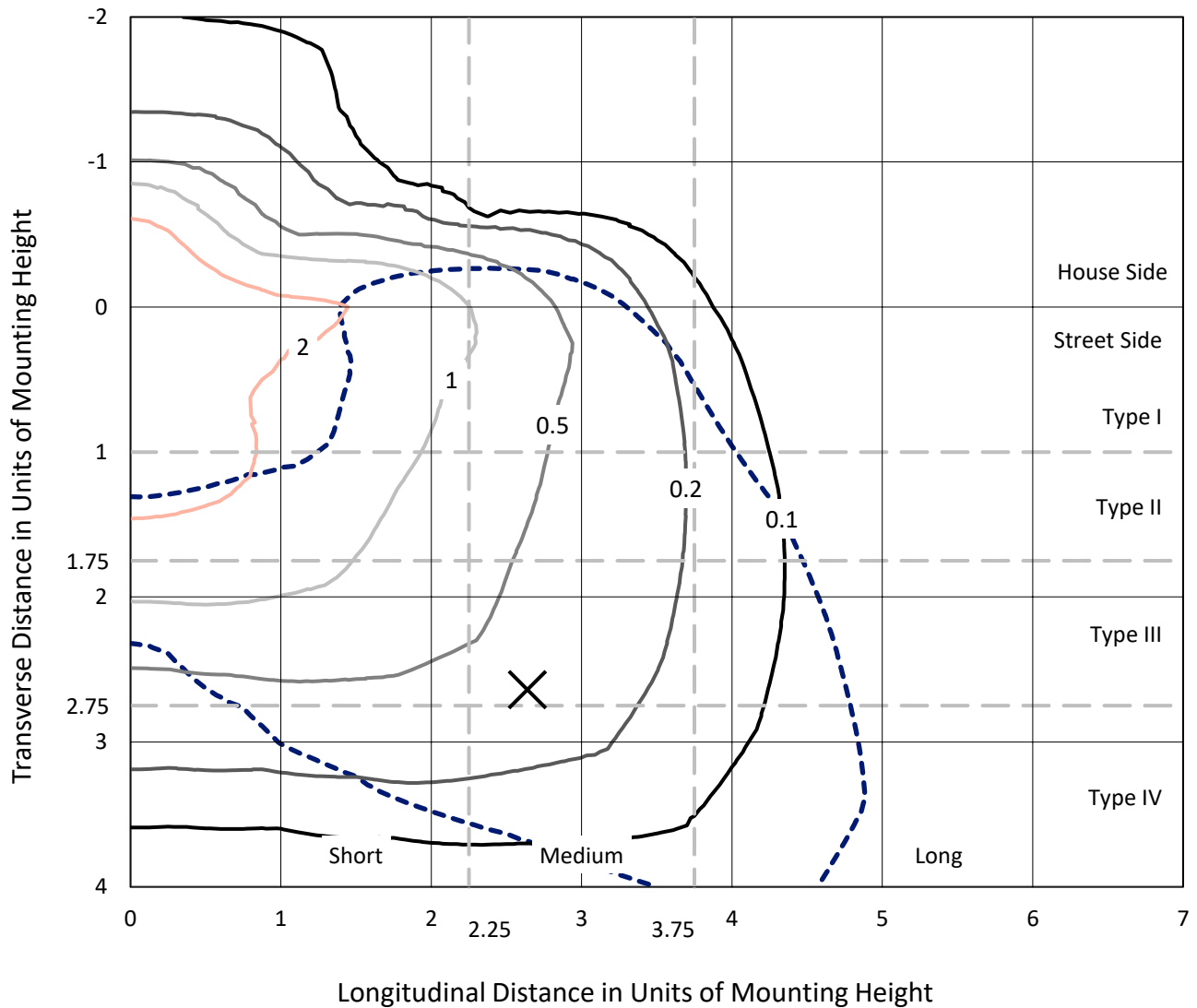
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

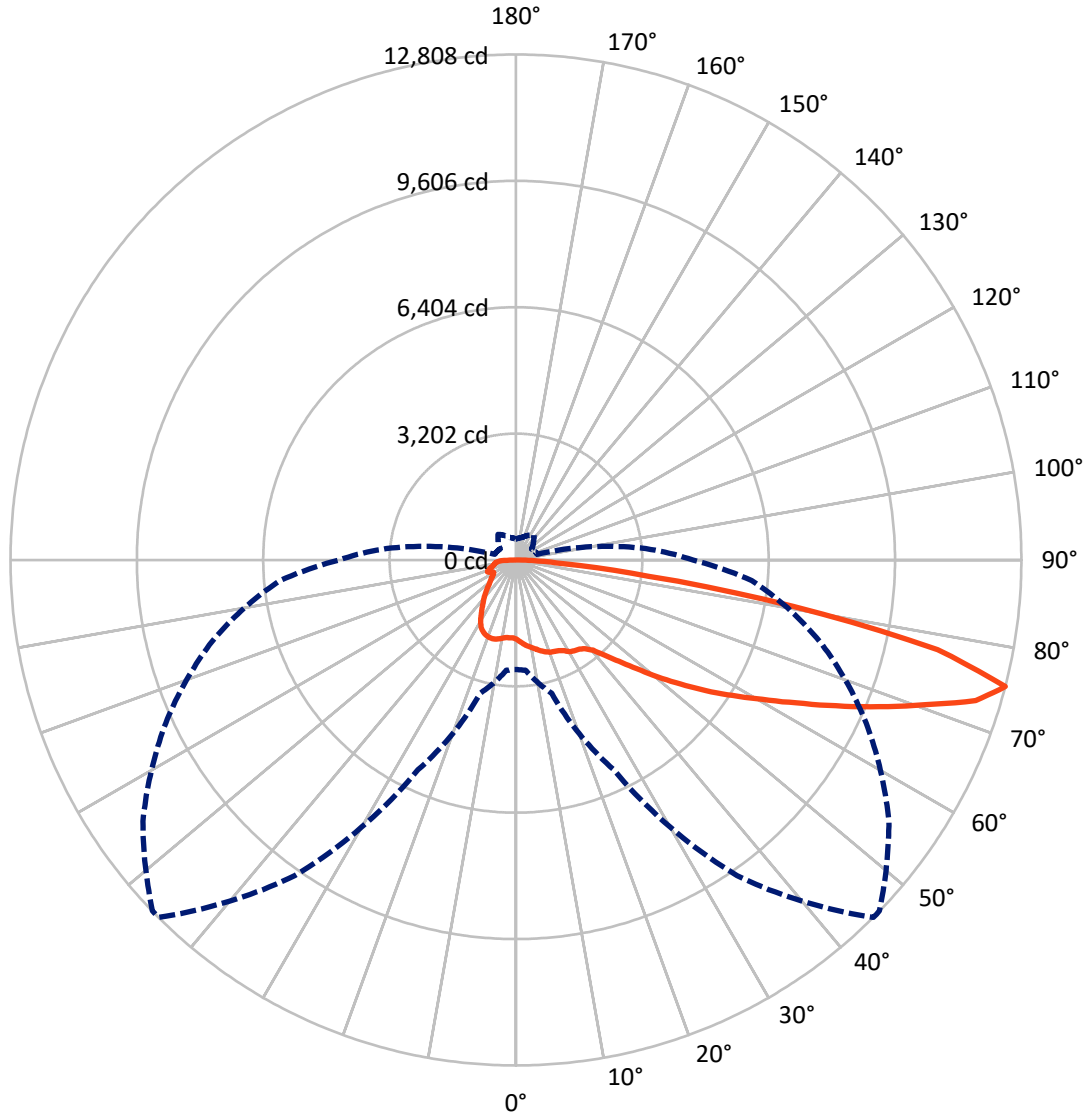
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 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	4225.6	0.0	4225.6
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	14895.3	0.0	14895.3
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	19121.0	0.0	19121.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.7	1.0
10°-20°	632.0	3.3
20°-30°	1077.5	5.6
30°-40°	1509.7	7.9
40°-50°	2218.0	11.6
50°-60°	3529.9	18.5
60°-70°	5021.3	26.3
70°-80°	4204.3	22.0
80°-90°	729.7	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°	19121.0	100.0
0°-180°	19121.0	100.0

**Coefficient of Utilization**

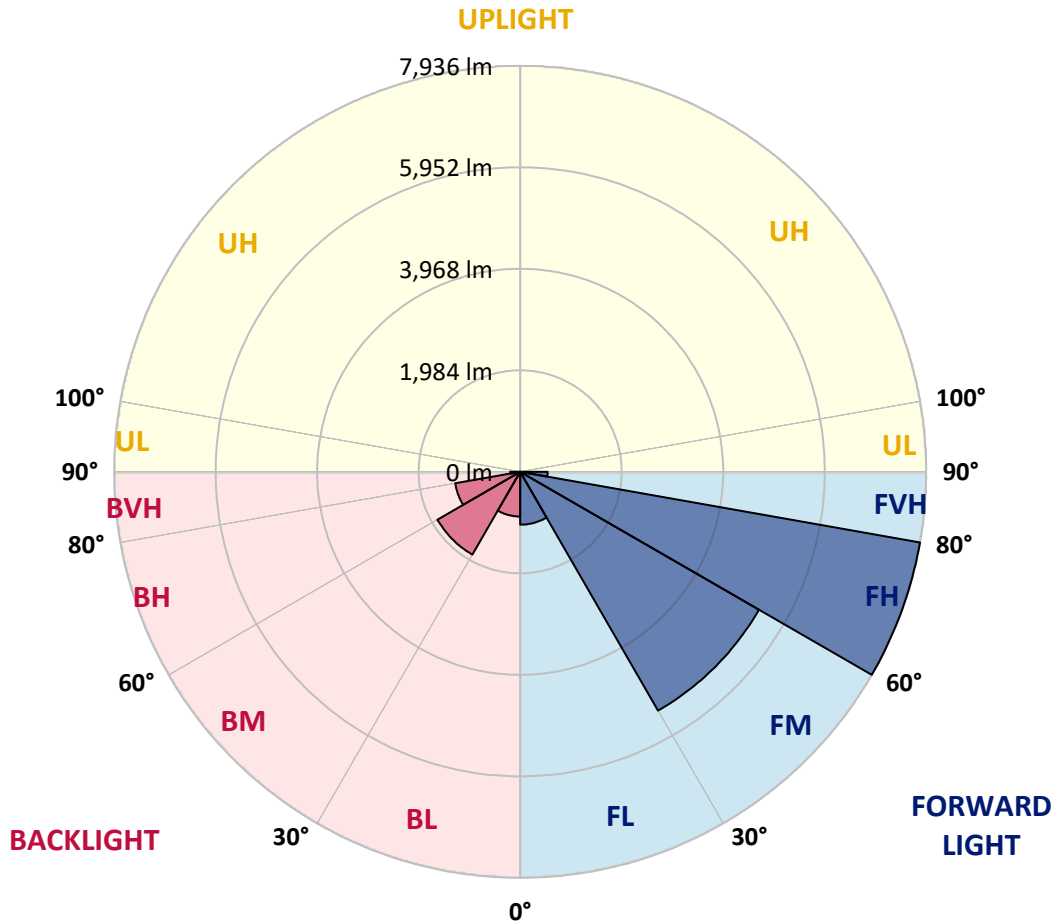


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1033.6	5.4			
FM (30°-60°)	5389.6	28.2			
FH (60°-80°)	7935.7	41.5			G4/12000
FVH (80°-90°)	536.4	2.8			G4/750
BL (0°-30°)	874.5	4.6	B2/1000		
BM (30°-60°)	1867.9	9.8	B2/2500		
BH (60°-80°)	1289.9	6.7	B3/2500		G3/2500
BVH (80°-90°)	193.2	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°	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1
2.5°	2123.1	2112.9	2107.8	2107.8	2087.3	2074.5	2072.0	2054.1	2038.8	2023.5	2010.7
5°	2245.7	2238.1	2222.7	2210.0	2181.9	2146.1	2141.0	2102.7	2064.3	2028.6	1997.9
7.5°	2358.1	2342.8	2324.9	2299.4	2253.4	2204.8	2197.2	2143.5	2089.9	2036.2	1995.3
10°	2452.7	2437.3	2411.8	2376.0	2317.3	2258.5	2250.8	2194.6	2138.4	2074.5	2015.8
12.5°	2542.1	2529.3	2491.0	2442.5	2373.5	2319.8	2312.2	2263.6	2204.8	2133.3	2056.7
15°	2618.7	2606.0	2565.1	2508.9	2429.7	2388.8	2378.6	2332.6	2273.8	2197.2	2118.0
17.5°	2657.1	2657.1	2613.6	2552.3	2478.2	2447.6	2439.9	2383.7	2330.0	2255.9	2176.7
20°	2669.8	2674.9	2644.3	2570.2	2506.3	2493.5	2485.9	2439.9	2378.6	2307.0	2233.0
22.5°	2677.5	2687.7	2662.2	2577.9	2524.2	2516.5	2511.4	2480.8	2432.2	2363.2	2289.2
25°	2703.0	2703.0	2685.2	2590.6	2547.2	2544.6	2544.6	2526.8	2493.5	2434.8	2360.7
27.5°	2741.4	2738.8	2715.8	2618.7	2598.3	2606.0	2603.4	2600.9	2577.9	2519.1	2439.9
30°	2805.2	2805.2	2779.7	2674.9	2662.2	2695.4	2697.9	2703.0	2667.3	2575.3	2511.4
32.5°	2902.3	2892.1	2866.6	2731.2	2710.7	2741.4	2746.5	2743.9	2713.3	2626.4	2595.7
35°	3201.2	3178.3	3086.3	2856.3	2754.1	2772.0	2774.6	2787.4	2792.5	2723.5	2708.2
37.5°	3725.0	3694.3	3553.8	3152.7	2892.1	2848.7	2846.1	2879.3	2907.4	2846.1	2846.1
40°	4294.7	4269.2	4187.4	3663.7	3147.6	3004.5	2994.3	3025.0	3060.7	3017.3	3030.1
42.5°	4785.3	4805.7	4813.4	4205.3	3530.8	3295.8	3267.7	3224.2	3280.4	3242.1	3293.2
45°	5153.2	5142.9	5283.5	4759.7	4026.5	3661.1	3622.8	3505.3	3576.8	3574.3	3686.7
47.5°	5544.1	5526.2	5584.9	5280.9	4591.1	4108.2	4049.5	3875.7	3983.0	4057.1	4243.6
50°	5914.5	5919.6	5940.1	5692.2	5204.3	4652.4	4578.3	4345.8	4499.1	4655.0	4918.1
52.5°	6397.4	6361.6	6336.1	6172.6	5891.5	5219.6	5171.0	4905.3	5119.9	5303.9	5653.9
55°	6818.9	6795.9	6780.6	6772.9	6466.4	5845.5	5794.4	5518.5	5827.6	5957.9	6474.0
57.5°	7268.6	7255.8	7337.6	7467.9	7345.2	6481.7	6428.0	6162.3	6507.2	6599.2	7363.1
60°	7598.2	7605.8	7830.7	8162.8	8078.5	7171.5	7107.6	6872.6	7168.9	7250.7	8252.2
62.5°	7600.7	7677.4	8198.6	8793.8	8890.9	7966.1	7892.0	7636.5	7848.5	7848.5	9049.3
65°	6875.1	6962.0	8132.1	8949.7	9713.6	8911.4	8839.8	8438.7	8517.9	8410.6	9797.9
67.5°	6152.1	6254.3	7355.5	8962.5	10291.0	9923.1	9838.8	9240.9	9105.5	8834.7	10321.7
70°	5671.8	5743.3	6663.1	8796.4	10638.5	10980.8	10916.9	10002.3	9568.0	9189.8	10211.8
72.5°	4775.0	4749.5	5628.4	8006.9	10832.6	12181.6	12127.9	10830.1	9969.1	9021.2	8709.5
75°	2772.0	2802.7	3492.5	5866.0	9764.7	12807.5	12802.4	11537.8	9792.8	7968.6	6001.4
77.5°	799.7	822.7	1147.1	2577.9	6175.1	10924.6	11274.6	10551.6	8277.8	5679.5	3111.8
80°	350.0	367.9	498.2	858.4	2659.6	7135.7	7442.3	7135.7	4992.2	2606.0	1221.2
82.5°	206.9	219.7	324.5	531.4	1274.9	3395.4	3809.3	3326.4	2153.8	1106.3	505.9
85°	117.5	122.6	186.5	337.2	802.2	1188.0	1333.6	1249.3	1050.0	628.5	265.7
87.5°	53.7	56.2	92.0	158.4	449.7	401.1	416.4	551.9	608.1	383.2	132.9
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°	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1	2008.1
2.5°	2005.6	1997.9	1982.6	1977.5	1969.8	1972.4	1974.9	1974.9	1977.5	1969.8	1969.8
5°	1985.1	1972.4	1957.0	1957.0	1957.0	1977.5	1995.3	2005.6	2010.7	2010.7	2005.6
7.5°	1977.5	1962.1	1944.3	1949.4	1954.5	1980.0	2013.2	2046.4	2056.7	2056.7	2051.6
10°	1992.8	1977.5	1964.7	1972.4	1985.1	2005.6	2031.1	2061.8	2087.3	2089.9	2087.3
12.5°	2028.6	2010.7	1997.9	2013.2	2028.6	2041.3	2054.1	2066.9	2100.1	2105.2	2105.2
15°	2087.3	2069.4	2054.1	2066.9	2072.0	2072.0	2072.0	2072.0	2105.2	2110.3	2110.3
17.5°	2146.1	2130.8	2115.4	2118.0	2102.7	2082.2	2074.5	2072.0	2089.9	2105.2	2107.8
20°	2202.3	2189.5	2174.2	2148.6	2110.3	2072.0	2059.2	2059.2	2069.4	2092.4	2092.4
22.5°	2263.6	2248.3	2222.7	2164.0	2100.1	2046.4	2033.7	2041.3	2054.1	2084.8	2082.2
25°	2332.6	2312.2	2268.7	2158.9	2066.9	2003.0	2005.6	2028.6	2051.6	2084.8	2084.8
27.5°	2409.2	2381.1	2294.3	2118.0	1992.8	1931.5	1954.5	2008.1	2041.3	2077.1	2082.2
30°	2493.5	2468.0	2314.7	2046.4	1872.7	1816.5	1872.7	1959.6	2010.7	2043.9	2051.6
32.5°	2595.7	2575.3	2332.6	1954.5	1716.9	1668.3	1750.1	1857.4	1939.1	1977.5	1985.1
35°	2723.5	2703.0	2355.6	1849.7	1571.2	1520.1	1594.2	1704.1	1811.4	1859.9	1875.3
37.5°	2889.6	2858.9	2376.0	1737.3	1448.6	1389.8	1425.6	1525.3	1622.3	1688.8	1706.6
40°	3101.6	3053.1	2393.9	1609.6	1341.3	1274.9	1287.7	1336.2	1392.4	1451.2	1474.2
42.5°	3400.5	3303.4	2396.5	1474.2	1231.4	1170.1	1165.0	1180.3	1180.3	1180.3	1188.0
45°	3817.0	3633.0	2401.6	1346.4	1119.0	1055.2	1039.8	1034.7	996.4	922.3	917.2
47.5°	4343.3	4064.8	2424.6	1239.1	1001.5	945.3	924.9	904.4	832.9	756.2	740.9
50°	5017.8	4565.5	2470.6	1136.9	901.9	863.5	838.0	789.5	710.3	651.5	636.2
52.5°	5794.4	5160.8	2514.0	1029.6	827.8	802.2	771.6	712.8	628.5	592.7	587.6
55°	6686.1	5825.1	2600.9	935.1	763.9	746.0	717.9	661.7	597.8	572.3	569.7
57.5°	7598.2	6568.6	2723.5	850.8	702.6	692.4	692.4	643.8	602.9	592.7	592.7
60°	8477.0	7207.3	2629.0	771.6	646.4	651.5	700.0	687.3	656.6	669.4	677.0
62.5°	9159.2	7582.8	2133.3	707.7	605.5	651.5	776.7	776.7	740.9	735.8	735.8
65°	9450.4	7577.7	1499.7	659.2	590.2	715.4	866.1	825.2	730.7	694.9	687.3
67.5°	9376.4	7245.6	1034.7	625.9	585.1	781.8	907.0	792.0	684.7	654.0	631.1
70°	8724.9	6543.0	797.1	595.3	577.4	753.7	894.2	753.7	648.9	620.8	600.4
72.5°	7038.7	5247.7	661.7	564.6	546.7	697.5	850.8	717.9	620.8	590.2	569.7
75°	4488.9	3300.9	559.5	523.7	488.0	625.9	792.0	682.1	590.2	549.3	534.0
77.5°	2158.9	1423.1	488.0	475.2	439.4	580.0	733.2	636.2	549.3	516.1	505.9
80°	873.8	651.5	424.1	426.7	403.7	551.9	692.4	592.7	508.4	472.6	454.8
82.5°	454.8	378.1	357.7	367.9	367.9	526.3	661.7	557.0	472.6	457.3	398.6
85°	245.3	235.0	275.9	296.4	319.4	475.2	615.7	518.6	431.8	370.5	357.7
87.5°	120.1	153.3	155.8	178.8	222.3	380.7	518.6	434.3	360.2	298.9	293.8
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)