

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: P237433

Luminaire Tested: **ARCH-L-AF72-200-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237433  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-200-D-U-T4W-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17025.9 lumens  
Efficiency: N/A  
Efficacy: 84.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G4

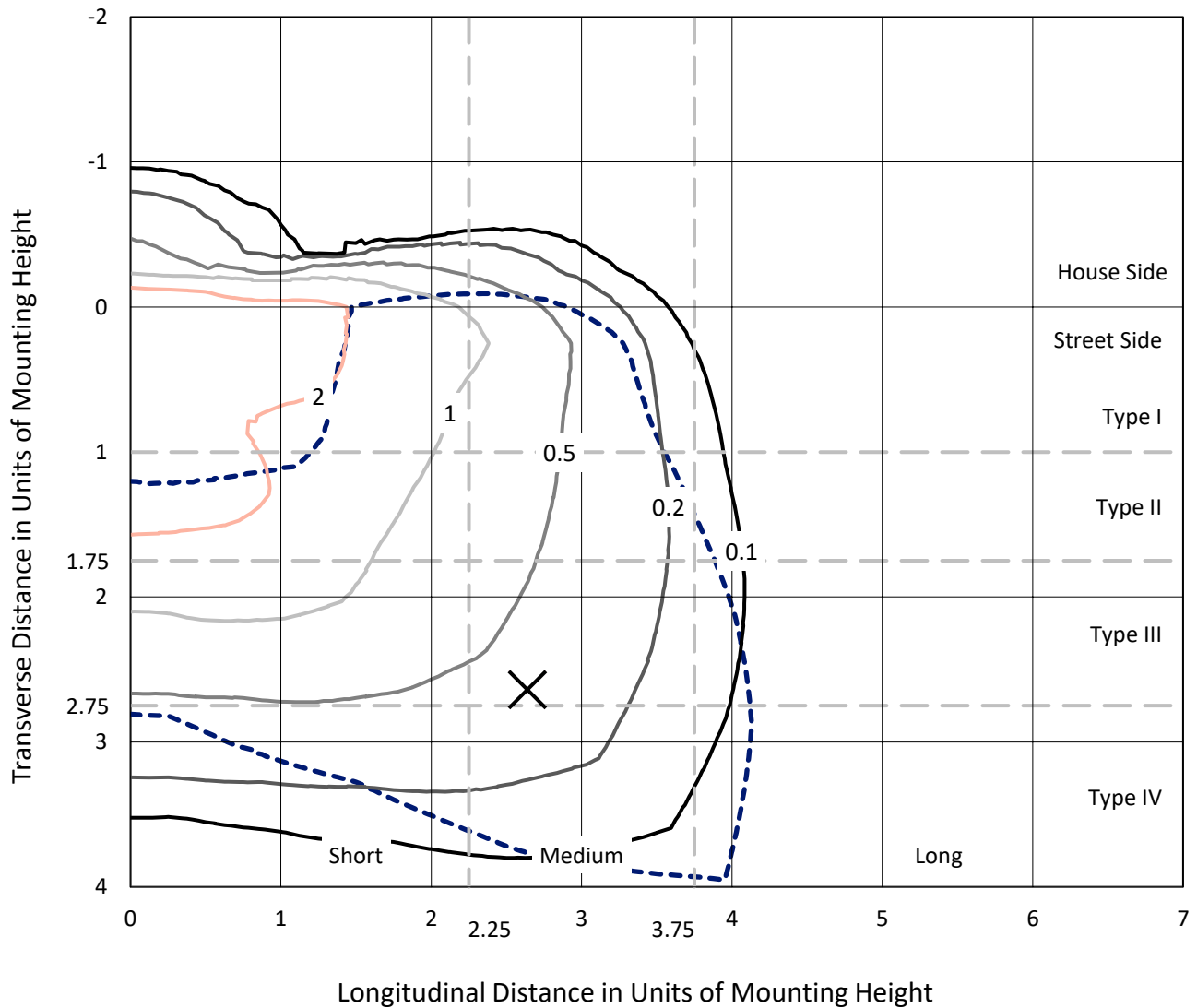
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

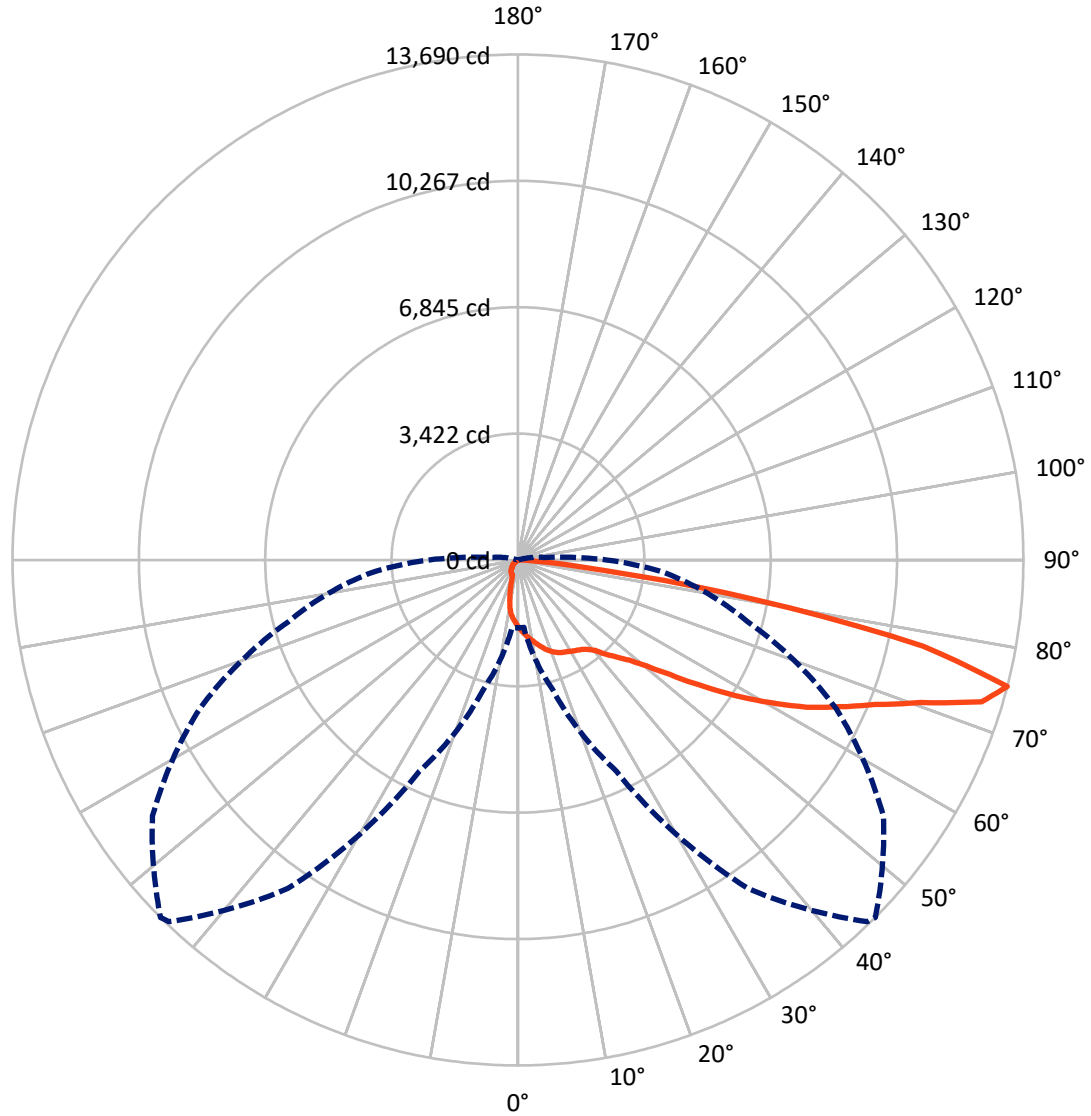
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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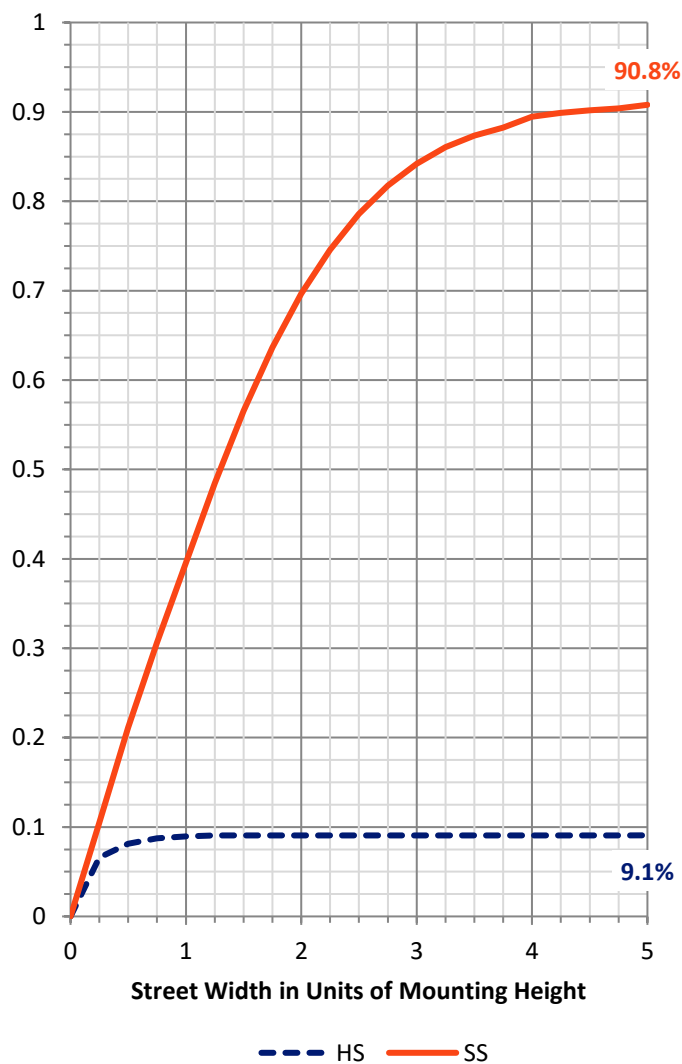
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1557.3	0.0	1557.3
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	15468.5	0.0	15468.5
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	17025.9	0.0	17025.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.9	1.0
10°-20°	486.9	2.9
20°-30°	806.4	4.7
30°-40°	1167.0	6.9
40°-50°	1910.9	11.2
50°-60°	3404.8	20.0
60°-70°	5005.5	29.4
70°-80°	3776.2	22.2
80°-90°	296.3	1.7
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°	17025.9	100.0
0°-180°	17025.9	100.0

**Coefficient of Utilization**



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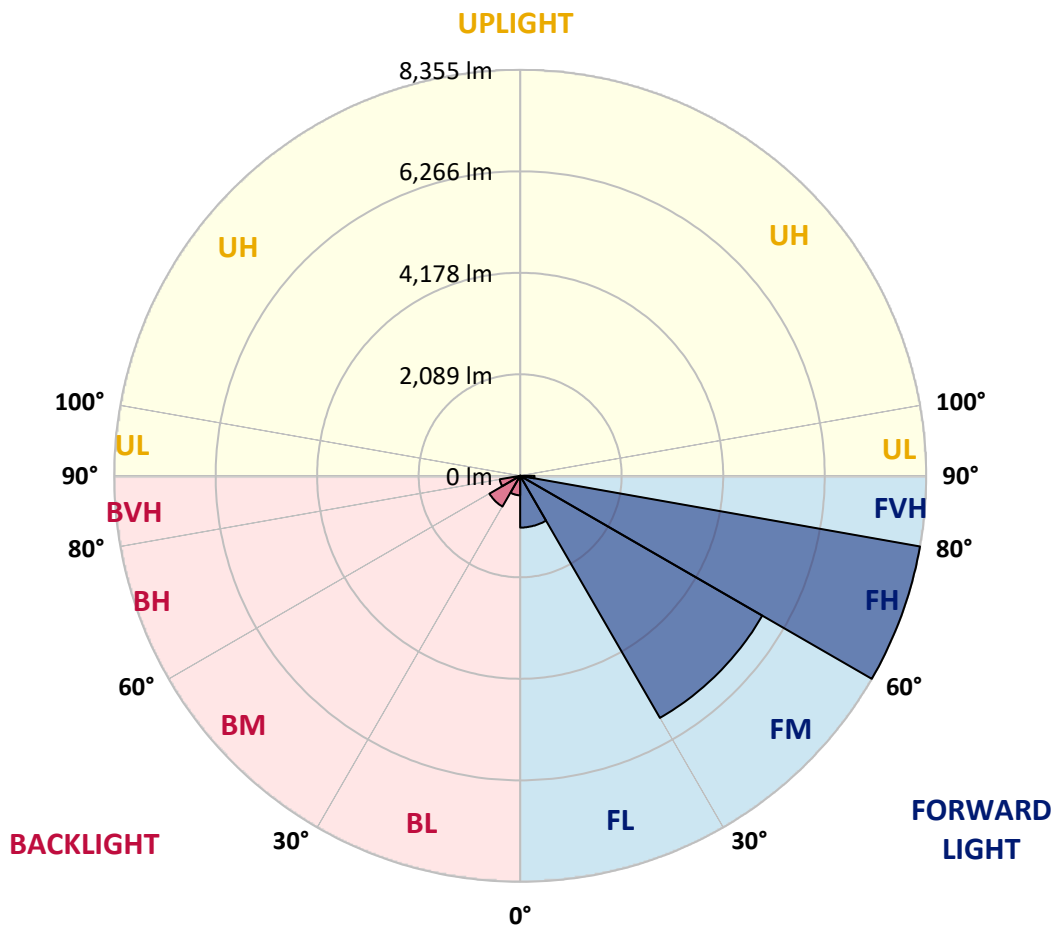
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1064.9	6.3			
FM (30°-60°)	5752.9	33.8			
FH (60°-80°)	8355.2	49.1			G4/12000
FVH (80°-90°)	295.4	1.7			G3/500
BL (0°-30°)	400.2	2.4	B1/500		
BM (30°-60°)	729.8	4.3	B1/1000		
BH (60°-80°)	426.5	2.5	B1/500		G1/500
BVH (80°-90°)	0.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1
2.5°	1978.1	1978.1	1974.1	1970.1	1950.0	1929.7	1925.8	1913.6	1877.4	1853.2	1829.1
5°	2143.3	2147.4	2139.3	2119.2	2074.9	2030.5	2026.4	1994.2	1925.8	1877.4	1825.0
7.5°	2300.5	2308.5	2288.3	2252.1	2199.7	2135.3	2131.2	2070.8	1982.2	1913.6	1837.0
10°	2433.4	2433.4	2405.3	2360.9	2304.5	2236.0	2227.9	2159.4	2058.7	1974.1	1873.4
12.5°	2578.4	2574.3	2534.0	2473.6	2409.1	2344.7	2340.8	2256.1	2159.4	2050.7	1925.8
15°	2711.4	2703.3	2650.9	2594.6	2526.1	2457.6	2453.5	2369.0	2268.2	2139.3	2002.2
17.5°	2783.9	2779.9	2731.5	2675.1	2618.7	2566.3	2562.3	2473.6	2364.9	2231.9	2078.8
20°	2796.0	2800.0	2759.7	2711.4	2679.1	2650.9	2650.9	2570.4	2453.5	2312.5	2159.4
22.5°	2800.0	2812.2	2783.9	2719.5	2711.4	2715.4	2723.5	2659.1	2538.1	2405.3	2244.0
25°	2828.1	2844.3	2824.2	2747.7	2739.5	2767.7	2775.8	2747.7	2638.8	2505.9	2340.8
27.5°	2884.6	2900.8	2884.6	2788.0	2775.8	2804.0	2812.2	2828.1	2747.7	2602.5	2441.4
30°	2997.4	3001.5	2965.2	2844.3	2820.2	2856.4	2868.5	2912.9	2848.4	2695.2	2538.1
32.5°	3194.8	3154.6	3045.7	2884.6	2864.4	2904.7	2916.7	2965.2	2941.0	2783.9	2638.8
35°	3597.7	3388.2	3138.5	2941.0	2920.8	2961.2	2977.4	3045.7	3057.8	2908.8	2763.7
37.5°	3593.6	3404.3	3356.0	3049.8	3021.6	3049.8	3069.9	3154.6	3202.9	3074.0	2945.1
40°	3847.4	3766.9	3766.9	3255.3	3162.6	3202.9	3223.0	3307.6	3392.3	3291.6	3158.5
42.5°	4645.1	4592.8	4536.5	3650.1	3360.0	3472.8	3485.0	3537.3	3638.0	3605.8	3448.7
45°	5535.5	5487.2	5269.7	4318.8	3698.4	3718.5	3746.7	3831.4	3976.4	4036.8	3851.5
47.5°	6232.4	6184.2	5998.9	5124.6	4226.1	4048.9	4048.9	4214.1	4439.8	4592.8	4415.5
50°	6792.5	6736.2	6623.3	5982.7	5092.3	4524.3	4500.2	4693.6	5027.9	5265.6	5144.8
52.5°	7336.4	7171.2	7102.7	6869.0	6071.4	5213.2	5148.8	5285.8	5749.1	6043.1	5942.5
55°	7699.0	7674.8	7602.3	7682.9	7098.7	6051.3	5994.8	6023.0	6603.2	6800.7	6675.7
57.5°	8037.4	8033.4	8194.6	8569.2	8218.7	7010.1	6921.5	6877.1	7429.1	7380.7	7489.5
60°	8456.4	8383.9	8758.6	9294.3	9246.1	7944.8	7844.0	7755.4	8061.5	7924.6	8464.5
62.5°	8476.6	8456.4	9217.8	9987.4	10265.4	8895.6	8778.8	8460.5	8613.6	8456.4	9395.1
65°	7707.0	7807.7	9411.3	10354.0	11119.5	9729.5	9588.5	9093.0	9105.0	9000.3	10491.0
67.5°	7533.9	7586.2	8879.4	10748.8	11735.9	10571.5	10438.5	9822.2	9677.1	9685.2	11139.5
70°	7102.7	7183.4	8218.7	10720.6	12223.3	11695.5	11562.6	10893.8	10543.3	10152.5	10640.0
72.5°	5426.8	5563.7	6925.5	9399.1	12090.4	13166.1	13129.8	12251.6	10889.8	9322.5	8049.4
75°	1837.0	1833.1	3638.0	6313.1	10861.6	13617.3	13689.7	12082.3	9499.9	6429.9	3996.6
77.5°	394.9	398.8	749.3	2558.3	7215.6	10934.1	11212.0	9113.1	6127.8	2864.4	914.5
80°	193.4	197.4	310.2	676.9	2884.6	6131.8	6566.9	4685.5	2264.2	572.1	153.1
82.5°	96.7	100.7	161.1	358.6	1067.7	2179.6	2328.7	1724.3	648.7	322.4	76.6
85°	36.3	36.3	80.6	213.5	487.6	511.7	628.5	499.6	390.8	261.9	20.1
87.5°	8.0	8.0	44.4	104.8	217.5	161.1	161.1	153.1	237.7	177.2	8.0
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°	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1	1821.1
2.5°	1817.0	1800.8	1772.6	1744.5	1724.3	1700.2	1688.0	1675.9	1672.0	1668.0	1675.9
5°	1796.9	1772.6	1720.3	1675.9	1635.7	1603.5	1579.3	1555.1	1543.1	1535.0	1539.0
7.5°	1796.9	1760.6	1684.0	1615.5	1551.1	1482.5	1414.2	1361.7	1321.5	1297.2	1301.3
10°	1817.0	1768.7	1668.0	1575.3	1454.4	1309.4	1160.4	1047.5	971.0	926.6	926.6
12.5°	1861.3	1796.9	1672.0	1526.9	1321.5	1067.7	842.1	705.0	648.7	616.4	620.5
15°	1921.8	1845.2	1692.1	1462.4	1136.1	793.7	588.3	499.6	499.6	507.6	511.7
17.5°	1990.2	1905.6	1708.2	1365.7	898.4	568.0	463.3	455.3	467.3	487.6	487.6
20°	2058.7	1966.0	1716.3	1212.7	672.8	451.2	439.1	439.1	447.2	467.3	471.4
22.5°	2143.3	2042.6	1708.2	1023.3	503.5	427.1	423.1	423.1	423.1	447.2	447.2
25°	2231.9	2131.2	1675.9	821.8	427.1	411.0	406.9	402.8	402.8	423.1	427.1
27.5°	2332.6	2223.9	1599.4	628.5	402.8	394.9	390.8	382.7	382.7	398.8	398.8
30°	2433.4	2328.7	1482.5	475.4	382.7	378.7	370.6	362.6	354.5	370.6	370.6
32.5°	2542.1	2437.5	1329.4	378.7	354.5	354.5	350.5	338.3	330.4	338.3	342.4
35°	2687.2	2562.3	1156.3	330.4	318.3	318.3	318.3	314.2	298.2	306.2	306.2
37.5°	2880.6	2735.6	954.8	306.2	290.1	282.0	282.0	282.0	270.0	273.9	273.9
40°	3126.4	2937.0	761.4	286.0	270.0	249.7	241.7	245.8	237.7	237.7	233.7
42.5°	3460.7	3154.6	572.1	270.0	253.8	225.6	209.4	205.5	197.4	193.4	193.4
45°	3940.1	3420.5	411.0	253.8	241.7	197.4	181.3	169.3	149.0	137.0	137.0
47.5°	4560.6	3722.6	306.2	237.7	229.7	173.2	153.1	128.9	100.7	92.7	92.7
50°	5317.9	4061.0	257.9	213.5	209.4	153.1	120.8	84.5	56.4	48.3	52.3
52.5°	6055.2	4379.3	229.7	189.3	185.3	133.0	88.6	44.4	24.1	24.1	24.1
55°	6675.7	4604.9	209.4	169.3	161.1	104.8	48.3	20.1	12.1	12.1	12.1
57.5°	7235.7	4733.7	189.3	149.0	128.9	72.5	20.1	8.0	8.0	4.1	4.1
60°	7747.3	4810.3	165.2	128.9	100.7	40.3	8.0	4.1	4.1	0.0	0.0
62.5°	8250.9	4866.7	141.1	104.8	76.6	16.1	4.1	4.1	0.0	0.0	0.0
65°	8633.6	4846.6	112.7	84.5	48.3	8.0	4.1	0.0	0.0	0.0	0.0
67.5°	8621.5	4572.7	84.5	64.5	24.1	4.1	0.0	0.0	0.0	0.0	0.0
70°	7711.1	3851.5	56.4	40.3	8.0	4.1	0.0	0.0	0.0	0.0	0.0
72.5°	5471.0	2469.7	36.3	24.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	2409.1	749.3	20.1	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	471.4	173.2	12.1	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	112.7	20.1	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	48.3	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)