

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: P258093

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P258093  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-170-D-U-T2U-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15188 lumens  
Efficiency: N/A  
Efficacy: 87.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

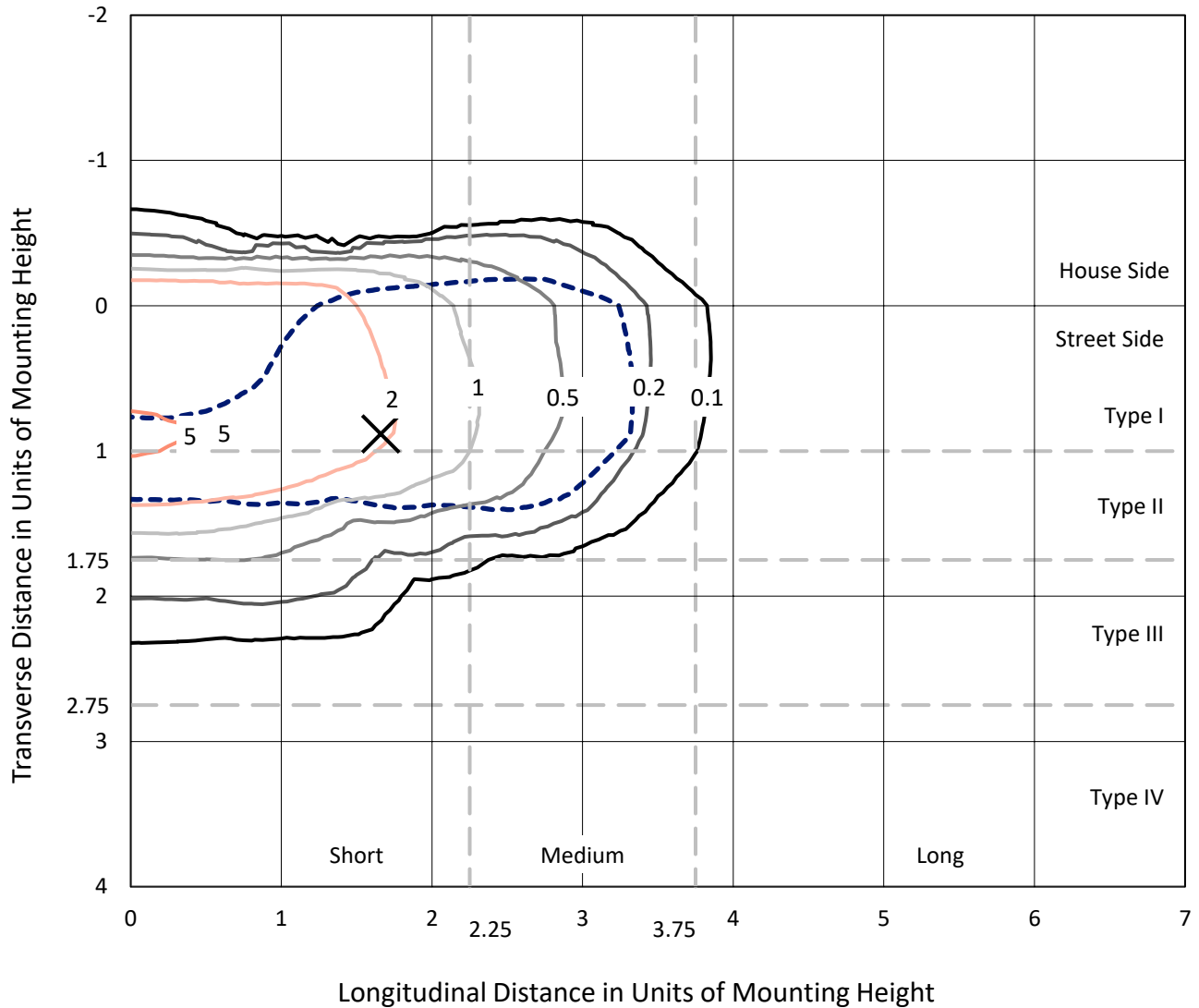
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

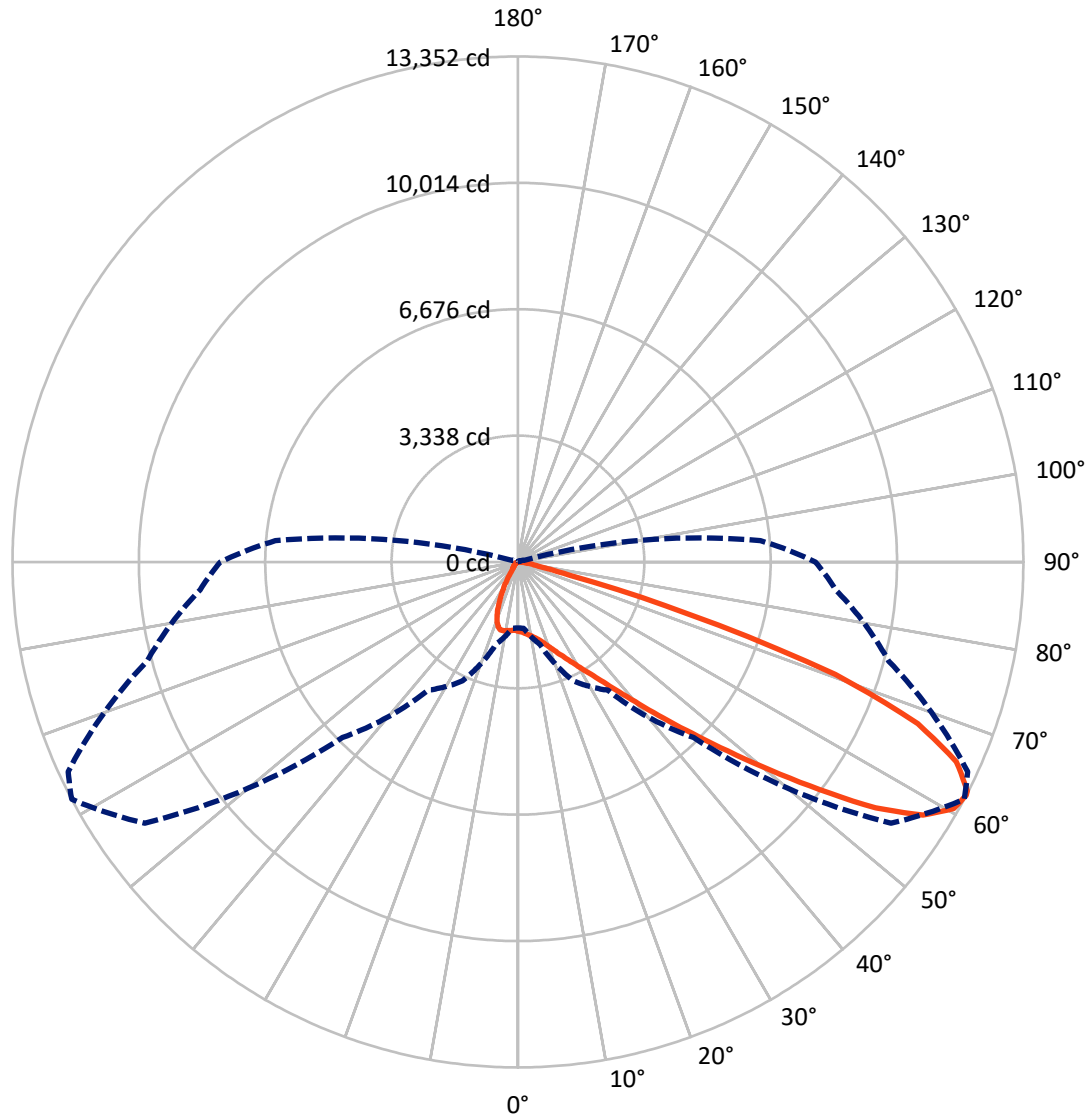
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62-Deg Vertical

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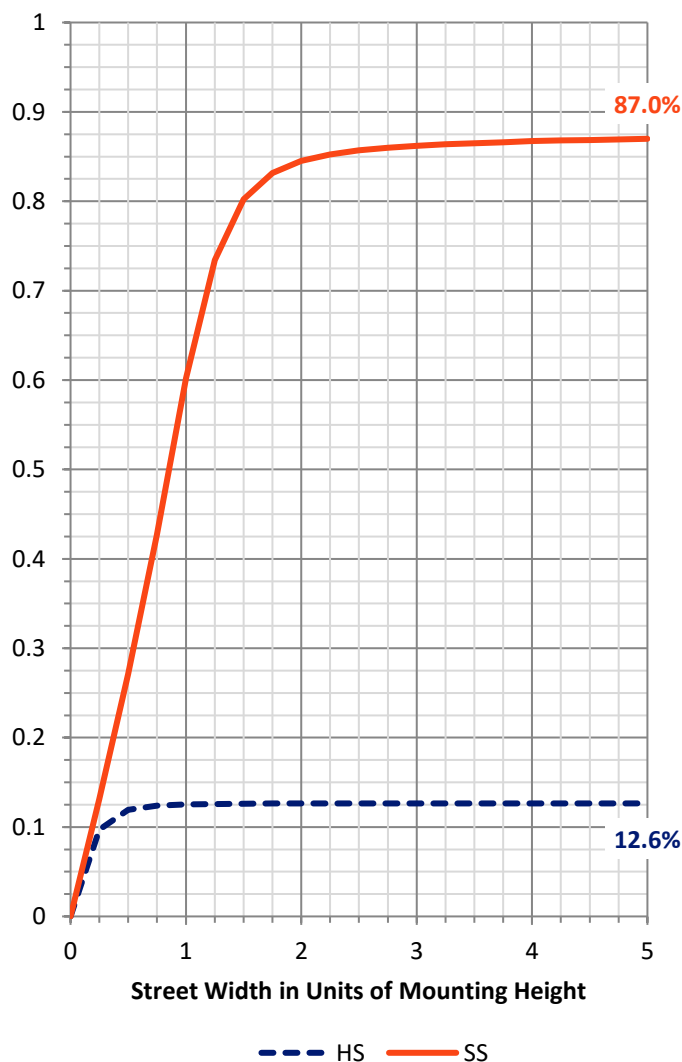
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1942.0	0.0	1942.0
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	13246.0	0.0	13246.0
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	15188.0	0.0	15188.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.1	1.2
10°-20°	491.7	3.2
20°-30°	825.8	5.4
30°-40°	1582.9	10.4
40°-50°	3233.1	21.3
50°-60°	4278.5	28.2
60°-70°	3323.7	21.9
70°-80°	1199.7	7.9
80°-90°	76.5	0.5
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°	15188.0	100.0
0°-180°	15188.0	100.0

**Coefficient of Utilization**



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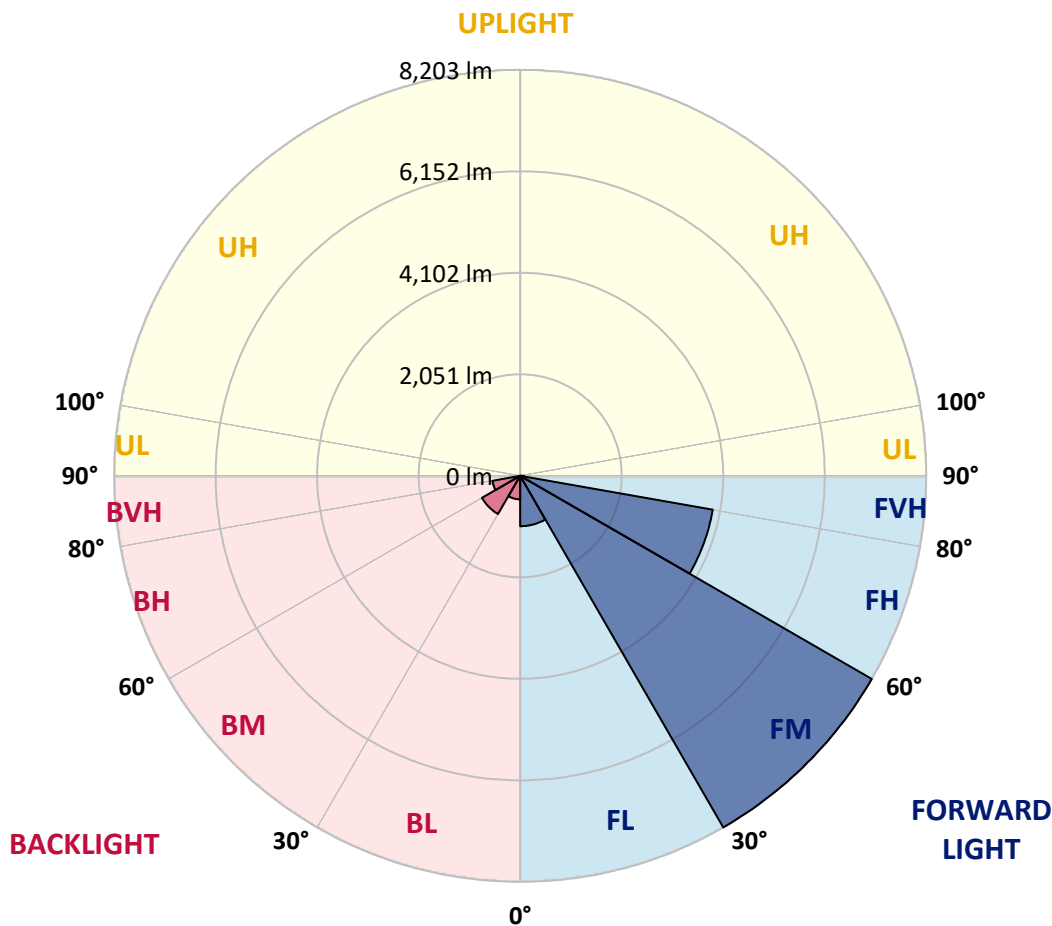
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1018.2	6.7			
FM (30°-60°)	8203.1	54.0			
FH (60°-80°)	3951.6	26.0			G2/5000
FVH (80°-90°)	73.1	0.5			G1/100
BL (0°-30°)	475.3	3.1	B1/500		
BM (30°-60°)	891.5	5.9	B1/1000		
BH (60°-80°)	571.8	3.8	B2/1000		G2/1000
BVH (80°-90°)	3.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6
2.5°	1878.1	1874.4	1870.7	1866.9	1866.9	1863.2	1859.5	1852.0	1844.5	1837.1	1833.3
5°	1911.7	1908.0	1904.3	1908.0	1904.3	1904.3	1900.5	1893.1	1885.6	1874.4	1863.2
7.5°	1937.9	1934.1	1930.4	1934.1	1937.9	1941.6	1945.3	1937.9	1934.1	1919.2	1908.0
10°	1971.5	1967.7	1964.0	1971.5	1971.5	1990.1	1993.9	1990.1	1986.4	1975.2	1956.5
12.5°	2020.0	2023.8	2023.8	2031.2	2038.7	2061.1	2068.6	2057.4	2057.4	2042.4	2020.0
15°	2109.6	2109.6	2109.6	2117.1	2120.8	2150.7	2158.2	2147.0	2154.4	2128.3	2105.9
17.5°	2195.5	2199.2	2206.7	2221.6	2221.6	2247.8	2262.7	2262.7	2277.7	2244.1	2214.2
20°	2281.4	2285.1	2296.3	2329.9	2329.9	2363.5	2389.7	2400.9	2415.8	2382.2	2329.9
22.5°	2374.7	2374.7	2393.4	2445.7	2434.5	2501.7	2550.2	2568.9	2583.8	2539.0	2456.9
25°	2516.6	2501.7	2516.6	2565.2	2557.7	2651.0	2740.7	2759.3	2778.0	2725.7	2602.5
27.5°	2785.5	2763.1	2710.8	2714.5	2714.5	2822.8	2949.8	2975.9	2987.1	2942.3	2789.2
30°	3323.1	3323.1	3129.0	2998.3	2912.4	3009.5	3188.7	3233.5	3248.5	3181.3	2979.6
32.5°	4260.3	4260.3	3901.9	3569.6	3244.7	3244.7	3450.1	3532.2	3547.2	3468.8	3233.5
35°	5455.2	5447.7	4910.0	4454.5	3819.7	3580.8	3756.3	3894.4	3939.2	3834.7	3562.1
37.5°	6724.7	6676.1	6097.4	5574.7	4704.7	4118.5	4170.7	4353.7	4394.8	4308.9	3987.8
40°	7755.2	7699.2	7232.5	6795.6	5847.2	4977.2	4768.1	4936.2	4984.7	4865.2	4495.6
42.5°	8688.7	8550.5	8229.4	7915.8	7161.5	6463.3	5563.5	5630.7	5682.9	5556.0	5066.9
45°	9364.5	9151.7	8987.4	8890.3	8490.8	8095.0	6594.0	6459.6	6478.3	6321.4	5690.4
47.5°	9383.2	9233.8	9248.8	9502.7	9667.0	9652.0	7934.5	7456.5	7385.6	7124.2	6355.0
50°	8487.1	8572.9	8845.5	9569.9	10458.5	10996.2	9528.8	8636.4	8423.6	7953.1	7015.9
52.5°	6993.5	7127.9	7639.5	8860.5	10574.3	11881.2	11182.9	9984.3	9603.5	8774.6	7523.7
55°	5477.6	5485.0	6022.7	7266.1	9801.4	12041.7	12504.7	11466.7	10884.2	9398.1	7859.8
57.5°	3767.5	3972.8	4656.1	5492.5	8057.7	11242.7	13001.3	12616.7	11866.2	9782.7	8095.0
60°	2468.1	2479.3	3274.6	4241.7	5485.0	9148.0	12698.9	13225.3	12661.5	10010.5	8255.6
62°	1740.0	1758.6	2251.5	3465.0	4133.4	6556.7	12030.5	13352.3	13109.6	10144.9	8423.6
62.5°	1613.0	1628.0	2042.4	3270.9	3883.2	5880.8	11791.5	13322.4	13176.8	10189.7	8483.3
65°	1183.6	1183.6	1336.7	2247.8	2845.2	3177.5	9991.8	12728.7	13087.2	10548.2	8707.4
67.5°	914.8	922.3	974.5	1385.3	2147.0	1926.7	6377.4	11392.0	12153.7	11078.4	8834.3
70°	787.8	784.1	821.4	918.5	1549.6	1280.7	2807.9	8890.3	10178.5	10944.0	8718.6
72.5°	582.5	586.2	672.1	806.5	1079.1	832.7	1269.5	4719.6	6601.5	8565.5	7471.5
75°	373.4	377.1	474.2	634.8	776.6	545.1	731.8	1407.7	2703.3	4749.5	4570.2
77.5°	250.2	257.6	309.9	444.3	679.6	339.8	459.3	590.0	814.0	1781.1	1639.2
80°	168.0	168.0	197.9	298.7	429.4	283.8	246.4	392.1	421.9	552.6	276.3
82.5°	112.0	112.0	130.7	197.9	280.0	253.9	149.4	212.8	246.4	276.3	97.1
85°	67.2	67.2	89.6	123.2	183.0	141.9	97.1	119.5	127.0	175.5	52.3
87.5°	41.1	37.3	59.7	85.9	97.1	85.9	63.5	63.5	67.2	97.1	26.1
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°	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6	1829.6
2.5°	1825.9	1822.1	1818.4	1810.9	1799.7	1792.3	1784.8	1777.3	1769.9	1769.9	1781.1
5°	1859.5	1848.3	1833.3	1818.4	1796.0	1781.1	1769.9	1754.9	1747.4	1747.4	1751.2
7.5°	1900.5	1889.3	1863.2	1837.1	1803.5	1777.3	1751.2	1717.6	1691.4	1680.2	1691.4
10°	1945.3	1930.4	1893.1	1852.0	1814.7	1747.4	1661.6	1557.0	1467.4	1426.3	1445.0
12.5°	2001.4	1982.7	1937.9	1881.9	1796.0	1631.7	1418.9	1176.2	1023.1	952.1	967.1
15°	2083.5	2057.4	1993.9	1908.0	1717.6	1362.9	1015.6	735.6	593.7	533.9	541.4
17.5°	2180.6	2147.0	2061.1	1900.5	1515.9	982.0	604.9	429.4	369.7	354.7	354.7
20°	2285.1	2240.3	2128.3	1844.5	1209.8	616.1	377.1	328.6	306.2	295.0	295.0
22.5°	2393.4	2333.7	2184.3	1713.8	862.5	384.6	309.9	276.3	250.2	239.0	239.0
25°	2524.1	2445.7	2240.3	1486.1	548.9	309.9	265.1	231.5	205.4	190.4	194.2
27.5°	2677.2	2576.4	2288.9	1202.3	354.7	268.8	220.3	186.7	164.3	156.8	156.8
30°	2837.7	2718.3	2300.1	899.9	287.5	231.5	183.0	153.1	138.2	130.7	130.7
32.5°	3058.0	2901.2	2266.5	597.4	242.7	194.2	153.1	127.0	115.7	112.0	112.0
35°	3349.3	3140.2	2188.0	369.7	205.4	160.6	127.0	112.0	100.8	97.1	97.1
37.5°	3718.9	3472.5	2049.9	253.9	175.5	130.7	108.3	97.1	89.6	85.9	85.9
40°	4211.8	3875.7	1870.7	220.3	149.4	112.0	93.3	85.9	78.4	78.4	78.4
42.5°	4734.5	4364.9	1639.2	194.2	127.0	97.1	82.1	74.7	70.9	67.2	67.2
45°	5305.8	4865.2	1351.7	171.8	108.3	85.9	74.7	63.5	59.7	59.7	59.7
47.5°	5873.4	5380.5	1038.0	149.4	93.3	74.7	63.5	56.0	52.3	48.5	48.5
50°	6455.8	5847.2	761.7	130.7	82.1	67.2	56.0	48.5	41.1	37.3	37.3
52.5°	6877.8	6127.3	556.3	112.0	70.9	56.0	44.8	37.3	29.9	26.1	26.1
55°	7187.7	6299.0	407.0	93.3	63.5	48.5	37.3	29.9	22.4	22.4	18.7
57.5°	7430.4	6381.2	306.2	82.1	56.0	41.1	29.9	22.4	18.7	14.9	14.9
60°	7617.1	6384.9	227.8	67.2	48.5	33.6	22.4	14.9	11.2	11.2	11.2
62°	7863.5	6433.4	186.7	56.0	44.8	29.9	18.7	11.2	7.5	3.7	3.7
62.5°	7934.5	6452.1	179.2	56.0	41.1	26.1	14.9	11.2	7.5	3.7	3.7
65°	8263.0	6485.7	138.2	44.8	33.6	22.4	11.2	7.5	0.0	0.0	0.0
67.5°	8561.7	6433.4	100.8	33.6	26.1	14.9	11.2	3.7	0.0	0.0	0.0
70°	8531.9	6075.0	70.9	22.4	18.7	11.2	7.5	0.0	0.0	0.0	0.0
72.5°	7030.9	4547.8	48.5	18.7	11.2	7.5	3.7	0.0	0.0	0.0	0.0
75°	4245.4	1990.1	33.6	11.2	11.2	7.5	3.7	0.0	0.0	0.0	0.0
77.5°	1392.7	720.6	22.4	7.5	7.5	3.7	3.7	0.0	0.0	0.0	0.0
80°	227.8	119.5	11.2	7.5	7.5	3.7	3.7	0.0	0.0	0.0	0.0
82.5°	70.9	29.9	7.5	7.5	3.7	3.7	0.0	0.0	0.0	0.0	0.0
85°	26.1	11.2	7.5	7.5	3.7	3.7	0.0	0.0	0.0	0.0	0.0
87.5°	11.2	7.5	7.5	7.5	3.7	3.7	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)