

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: P399828

Luminaire Tested: **ARCH-L-PA3-190-830-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399828  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-190-830-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 810mA 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: 15855 lumens  
Efficiency: N/A  
Efficacy: 83.9 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

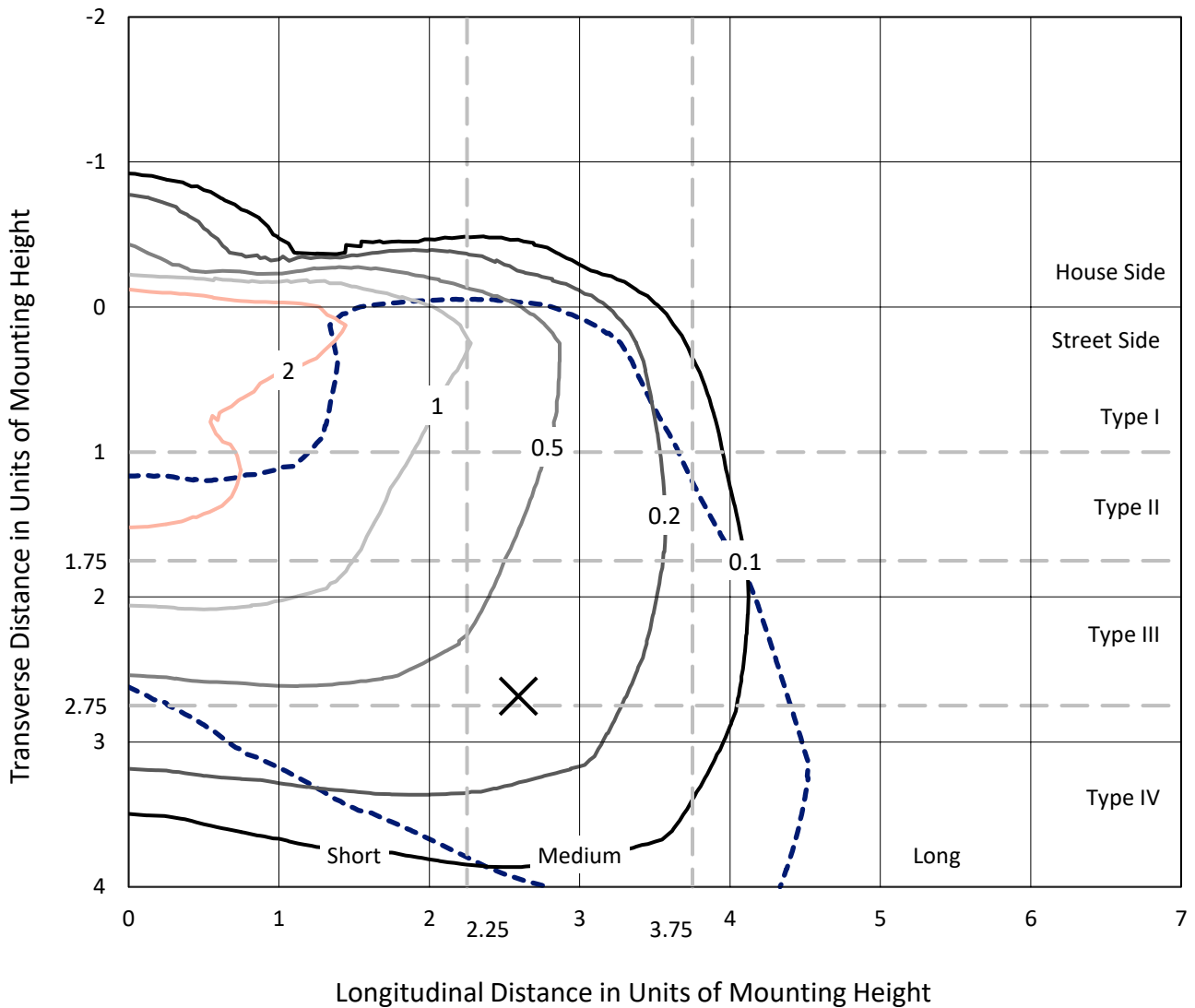
Input Watts (W): 189  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

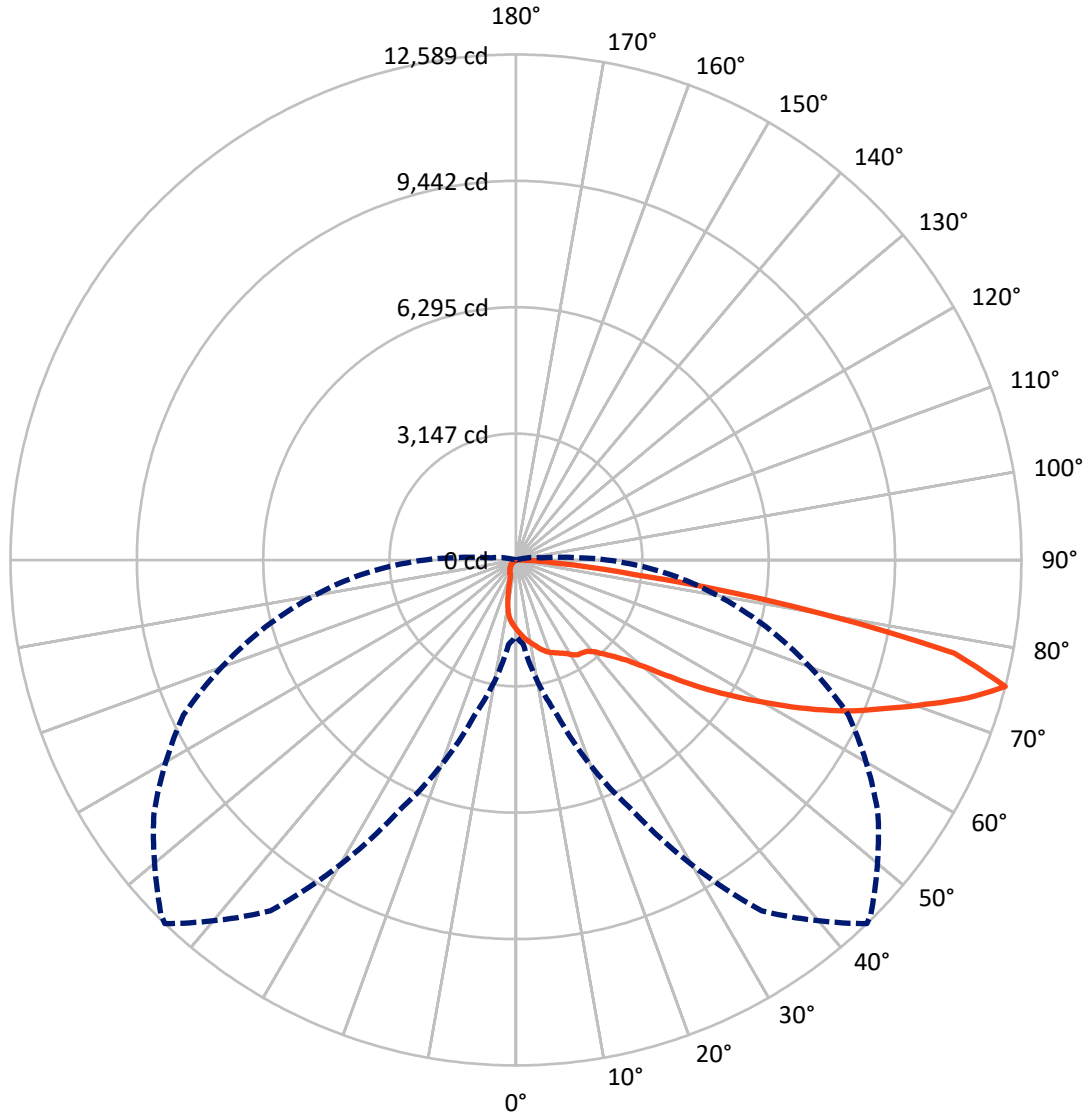
× Max cd  
 - - - 1/2 Max cd



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 44-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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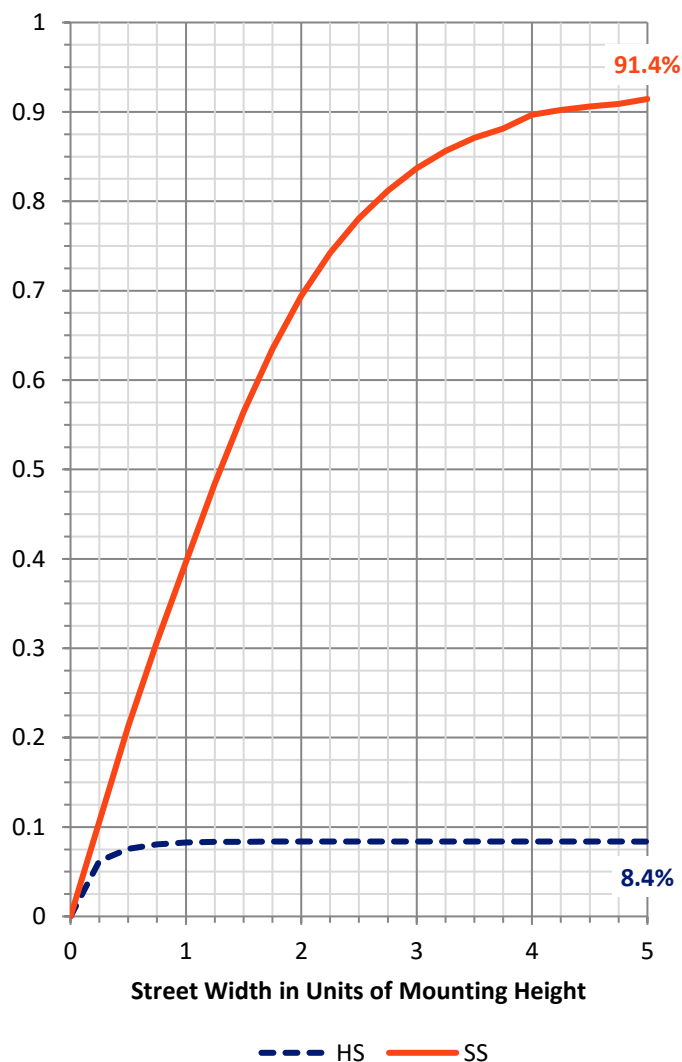
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1337.1	0.0	1337.1
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	14517.9	0.0	14517.9
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	15855.0	0.0	15855.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.8	1.0
10°-20°	456.1	2.9
20°-30°	752.6	4.7
30°-40°	1092.3	6.9
40°-50°	1775.7	11.2
50°-60°	3130.3	19.7
60°-70°	4498.9	28.4
70°-80°	3602.6	22.7
80°-90°	383.8	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°	15855.0	100.0
0°-180°	15855.0	100.0

**Coefficient of Utilization**



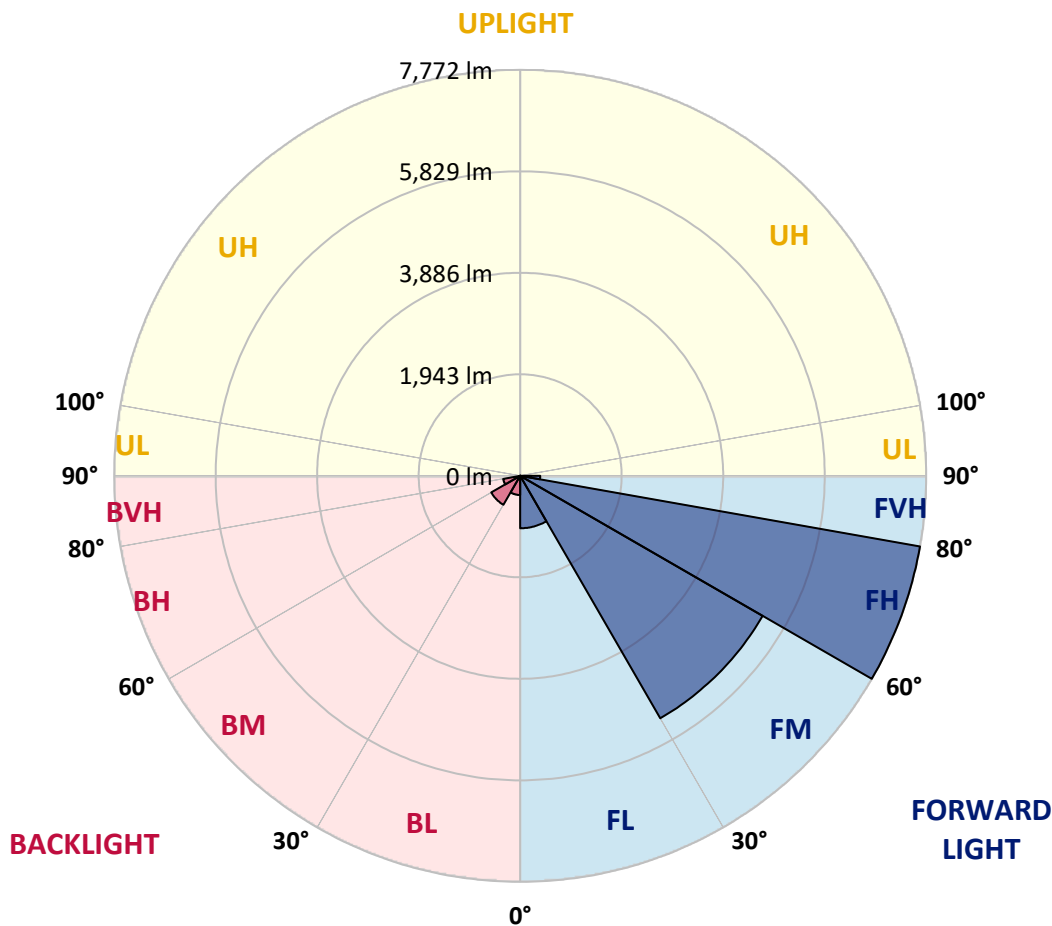
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1004.1	6.3			
FM (30°-60°)	5359.1	33.8			
FH (60°-80°)	7771.8	49.0			G4/12000
FVH (80°-90°)	382.9	2.4			G3/500
BL (0°-30°)	367.4	2.3	B1/500		
BM (30°-60°)	639.2	4.0	B1/1000		
BH (60°-80°)	329.6	2.1	B1/500		G1/500
BVH (80°-90°)	1.0	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°	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8
2.5°	1880.8	1877.9	1869.1	1854.5	1839.8	1825.2	1822.3	1798.9	1772.6	1752.1	1734.5
5°	2047.5	2044.6	2030.0	1997.8	1965.6	1927.6	1924.7	1869.1	1819.4	1763.8	1717.0
7.5°	2220.1	2214.2	2187.9	2138.2	2082.6	2024.1	2018.3	1936.4	1863.2	1790.1	1722.8
10°	2354.6	2348.8	2310.8	2252.3	2176.2	2103.1	2094.3	2009.5	1936.4	1842.8	1752.1
12.5°	2486.3	2474.6	2424.8	2360.5	2266.9	2196.7	2187.9	2100.2	2012.4	1915.9	1804.7
15°	2609.1	2594.5	2547.7	2465.8	2366.3	2299.1	2293.2	2199.6	2108.9	1997.8	1874.9
17.5°	2693.9	2688.1	2632.5	2541.8	2445.3	2389.7	2383.9	2287.4	2196.7	2079.7	1948.1
20°	2737.8	2737.8	2685.2	2585.7	2498.0	2459.9	2451.2	2360.5	2272.7	2161.6	2024.1
22.5°	2746.6	2755.4	2714.4	2606.2	2541.8	2509.7	2503.8	2424.8	2340.0	2237.6	2108.9
25°	2764.1	2764.1	2743.7	2626.7	2579.9	2571.1	2568.2	2498.0	2421.9	2319.5	2193.8
27.5°	2784.6	2784.6	2770.0	2655.9	2638.4	2635.4	2632.5	2600.3	2538.9	2419.0	2293.2
30°	2837.3	2840.2	2828.5	2714.4	2702.7	2734.9	2740.7	2723.2	2647.1	2498.0	2395.6
32.5°	2968.9	2942.6	2910.4	2755.4	2775.8	2816.8	2819.7	2784.6	2702.7	2582.8	2518.4
35°	3299.4	3144.4	2998.1	2790.5	2799.2	2840.2	2846.0	2843.1	2793.4	2691.0	2658.8
37.5°	3606.5	3387.2	3179.5	2872.4	2843.1	2887.0	2898.7	2948.4	2910.4	2840.2	2849.0
40°	3785.0	3700.1	3553.9	3097.6	2930.9	2998.1	3009.8	3085.9	3071.3	3042.0	3097.6
42.5°	4334.9	4340.7	4182.8	3434.0	3091.7	3200.0	3214.6	3276.0	3296.5	3311.1	3445.7
45°	4972.5	4993.0	4955.0	4039.4	3395.9	3431.0	3451.5	3533.4	3609.5	3703.1	3948.8
47.5°	5738.9	5721.3	5580.9	4779.5	3925.4	3729.4	3744.0	3902.0	4033.6	4238.3	4589.3
50°	6417.5	6461.3	6195.2	5469.8	4671.2	4200.3	4185.7	4340.7	4577.6	4864.3	5306.0
52.5°	7101.9	7037.6	6677.8	6154.2	5554.6	4840.9	4797.0	4881.8	5215.3	5554.6	6008.0
55°	7283.3	7289.1	7166.3	6903.0	6291.7	5618.9	5545.8	5540.0	5955.3	6186.4	6745.1
57.5°	7640.1	7654.8	7684.0	7736.7	7447.1	6397.0	6320.9	6239.0	6642.7	6777.3	7485.1
60°	8002.8	8020.4	8198.8	8482.5	8289.5	7236.5	7154.6	6961.5	7186.8	7368.1	8263.2
62.5°	7956.0	8078.9	8596.6	9161.1	9137.7	8157.9	8055.5	7590.4	7733.7	7891.7	8976.9
65°	7183.8	7315.5	8479.6	9348.3	9988.9	9067.5	8900.8	8239.8	8248.5	8438.7	9664.2
67.5°	6493.5	6636.9	7748.4	9269.4	10550.5	9883.6	9711.0	8892.0	8754.6	9070.5	10032.8
70°	6095.7	6239.0	7166.3	9023.7	10708.5	10787.4	10638.3	9637.9	9357.1	9646.7	9620.4
72.5°	4770.7	4995.9	6423.3	8555.7	10878.1	11755.6	11638.6	10582.7	9869.0	9044.1	7324.2
75°	1901.3	2108.9	4010.2	6885.5	10664.6	12589.2	12498.6	11006.8	9134.8	6458.4	3749.9
77.5°	573.3	614.3	1114.4	3404.7	7818.6	11161.8	11132.6	9254.7	6464.3	2998.1	1023.8
80°	190.1	210.6	342.2	938.9	3568.5	6973.2	7104.9	5896.8	2936.7	687.4	207.7
82.5°	79.0	87.8	172.6	377.3	1263.6	3004.0	2960.1	2641.3	1023.8	427.1	76.1
85°	20.5	26.3	79.0	216.5	462.2	1035.5	1088.1	886.3	579.2	353.9	23.4
87.5°	0.0	0.0	38.0	87.8	207.7	313.0	327.6	269.1	327.6	266.2	11.7
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°	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8	1725.8
2.5°	1719.9	1705.3	1679.0	1661.4	1638.0	1632.2	1620.5	1605.8	1602.9	1588.3	1591.2
5°	1690.7	1667.3	1620.5	1588.3	1550.3	1538.6	1518.1	1503.5	1491.8	1471.3	1474.2
7.5°	1684.8	1649.7	1585.4	1523.9	1462.5	1418.6	1357.2	1307.5	1266.5	1222.7	1231.4
10°	1705.3	1661.4	1570.7	1485.9	1374.8	1234.4	1073.5	968.2	915.5	862.9	868.7
12.5°	1746.2	1693.6	1576.6	1447.9	1222.7	982.8	760.5	617.2	579.2	555.8	558.7
15°	1807.7	1743.3	1594.1	1374.8	1017.9	710.8	506.0	444.6	459.2	468.0	468.0
17.5°	1872.0	1798.9	1608.8	1243.1	786.8	497.3	412.4	406.6	427.1	447.5	447.5
20°	1951.0	1857.4	1611.7	1076.4	567.5	403.7	389.0	389.0	403.7	427.1	427.1
22.5°	2027.0	1921.7	1585.4	886.3	432.9	374.4	374.4	374.4	383.2	406.6	409.5
25°	2117.7	2000.7	1529.8	684.5	371.5	356.9	356.9	359.8	365.6	386.1	389.0
27.5°	2214.2	2082.6	1436.2	500.2	339.3	336.4	339.3	342.2	345.2	365.6	371.5
30°	2325.4	2173.3	1316.3	374.4	310.1	310.1	318.8	324.7	324.7	342.2	348.1
32.5°	2454.1	2293.2	1172.9	310.1	280.8	277.9	292.5	301.3	301.3	315.9	321.8
35°	2615.0	2416.1	1000.4	275.0	257.4	251.6	257.4	272.0	277.9	289.6	292.5
37.5°	2828.5	2562.3	816.1	254.5	239.9	228.2	228.2	231.1	242.8	254.5	257.4
40°	3100.5	2723.2	634.7	239.9	222.3	210.6	201.8	198.9	196.0	204.8	210.6
42.5°	3442.7	2904.5	473.9	225.2	207.7	190.1	178.4	166.7	152.1	149.2	152.1
45°	3881.5	3126.8	351.0	213.5	198.9	172.6	152.1	131.6	105.3	96.5	99.5
47.5°	4399.2	3357.9	275.0	201.8	193.1	152.1	125.8	90.7	64.4	58.5	61.4
50°	4949.1	3580.2	234.0	187.2	181.4	131.6	90.7	55.6	38.0	38.0	41.0
52.5°	5417.1	3706.0	213.5	175.5	163.8	108.2	58.5	32.2	23.4	23.4	26.3
55°	5870.5	3773.3	198.9	163.8	140.4	76.1	32.2	20.5	14.6	14.6	14.6
57.5°	6338.5	3802.5	181.4	149.2	111.2	46.8	17.6	11.7	8.8	8.8	8.8
60°	6753.9	3746.9	155.0	122.9	73.1	23.4	8.8	8.8	5.9	2.9	2.9
62.5°	7101.9	3641.6	108.2	87.8	43.9	11.7	5.9	2.9	0.0	0.0	0.0
65°	7315.5	3472.0	70.2	58.5	26.3	8.8	2.9	0.0	0.0	0.0	0.0
67.5°	7254.0	3153.2	43.9	38.0	11.7	5.9	2.9	0.0	0.0	0.0	0.0
70°	6546.2	2585.7	32.2	23.4	8.8	2.9	0.0	0.0	0.0	0.0	0.0
72.5°	4718.0	1749.2	23.4	14.6	5.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2269.8	623.0	14.6	11.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	555.8	137.5	8.8	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	122.9	26.3	5.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.0	11.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.6	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.8	2.9	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)