

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: P399729

Luminaire Tested: **ARCH-L-PA3-180-750-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399729  
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-PA3-180-750-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 775mA 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: 19279 lumens  
Efficiency: N/A  
Efficacy: 106.5 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

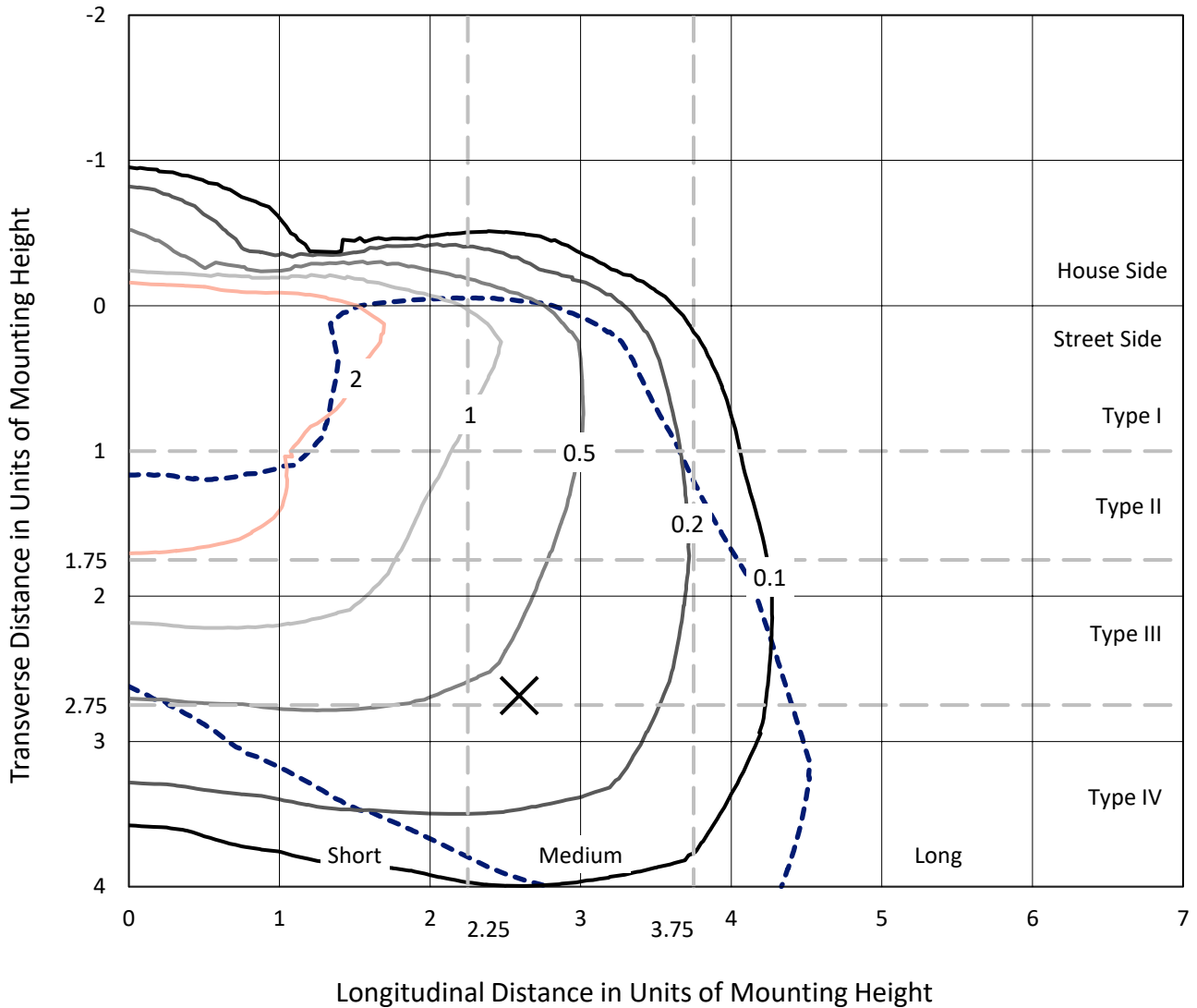
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

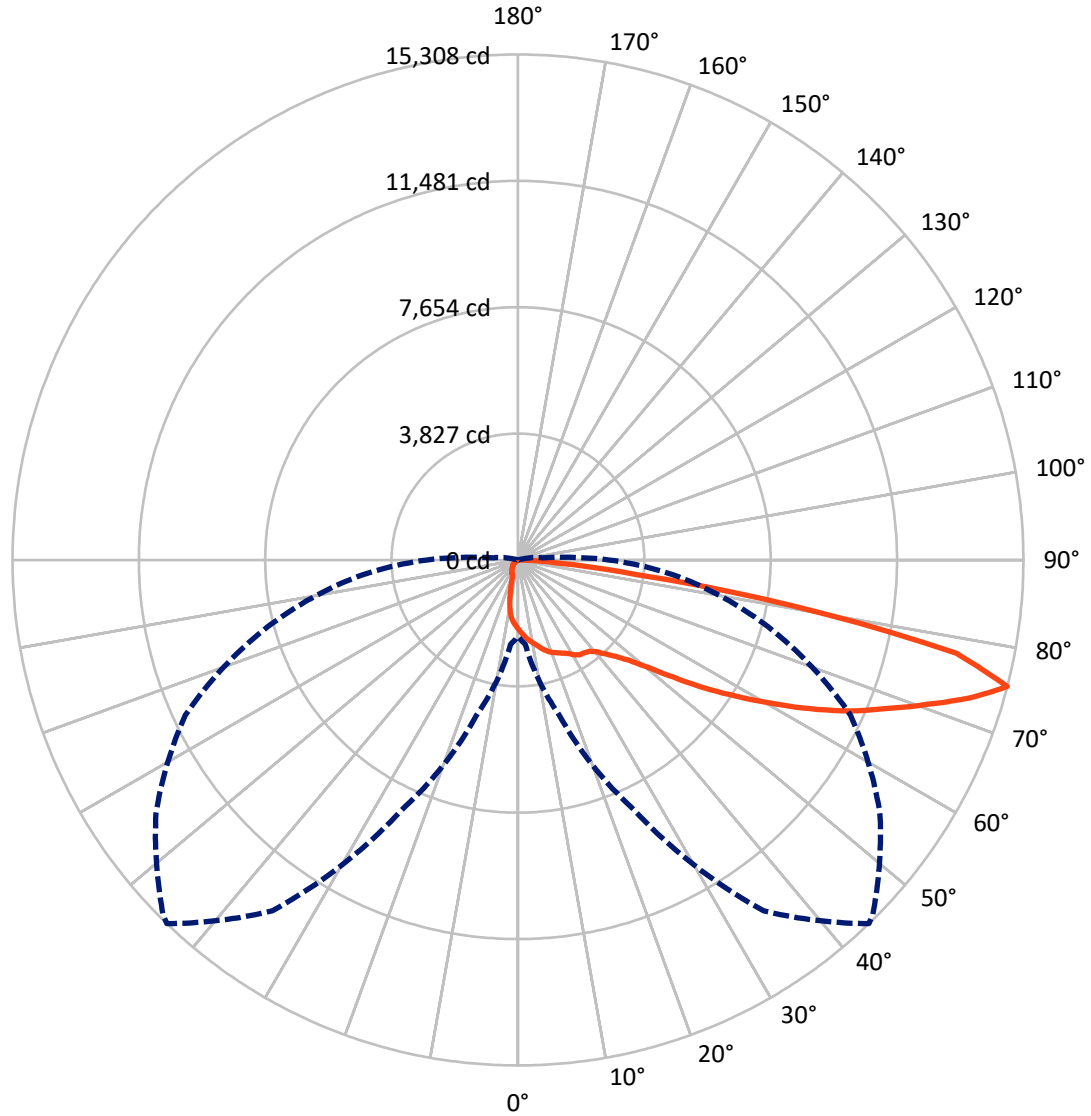
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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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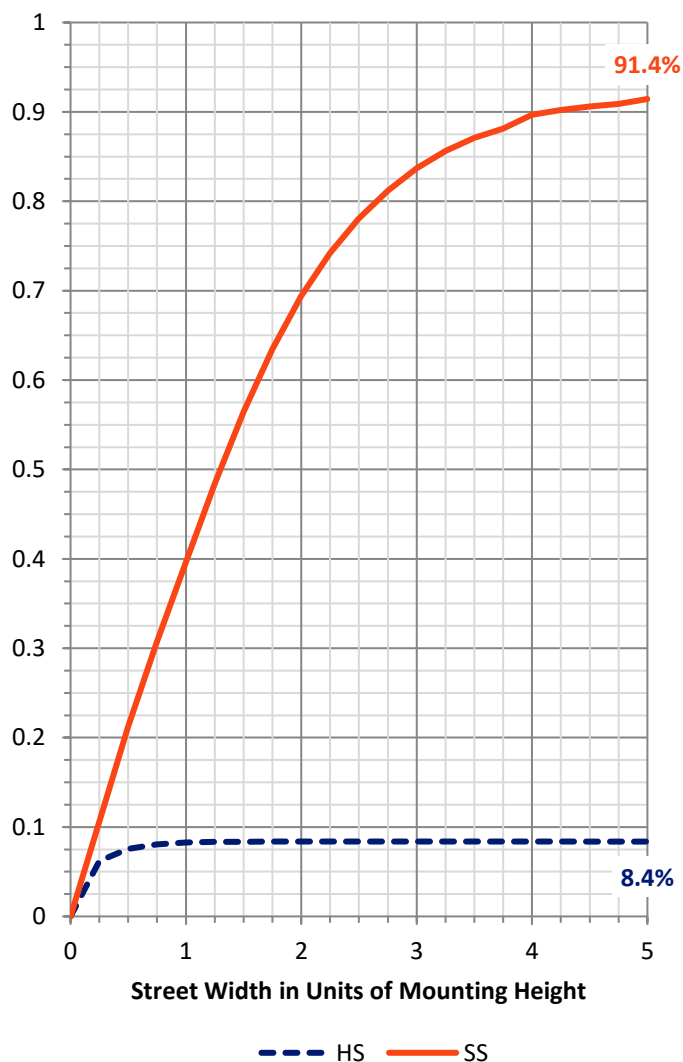
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1625.9	0.0	1625.9
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	17653.1	0.0	17653.1
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	19279.0	0.0	19279.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.9	1.0
10°-20°	554.5	2.9
20°-30°	915.2	4.7
30°-40°	1328.2	6.9
40°-50°	2159.1	11.2
50°-60°	3806.3	19.7
60°-70°	5470.4	28.4
70°-80°	4380.6	22.7
80°-90°	466.7	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°	19279.0	100.0
0°-180°	19279.0	100.0

**Coefficient of Utilization**



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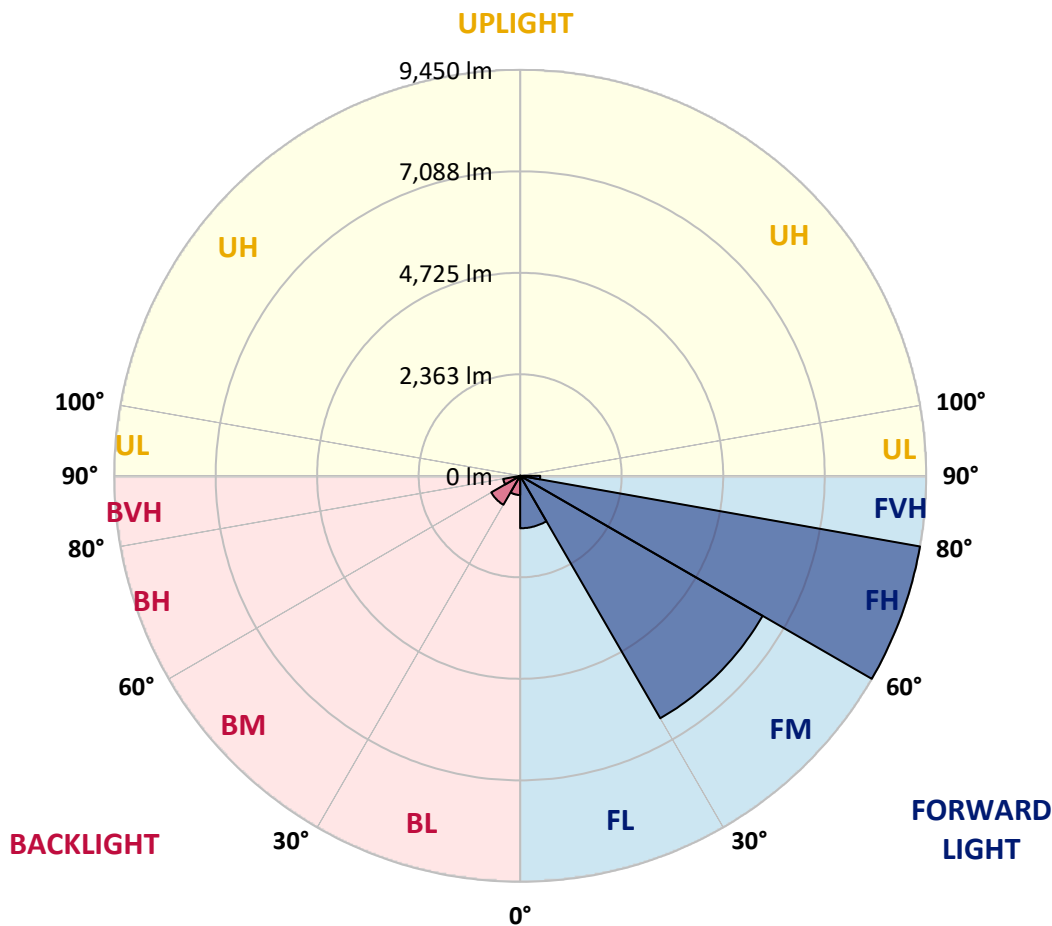
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1220.9	6.3			
FM (30°-60°)	6516.5	33.8			
FH (60°-80°)	9450.2	49.0			G4/12000
FVH (80°-90°)	465.5	2.4			G3/500
BL (0°-30°)	446.7	2.3	B1/500		
BM (30°-60°)	777.2	4.0	B1/1000		
BH (60°-80°)	400.8	2.1	B1/500		G1/500
BVH (80°-90°)	1.2	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°	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4
2.5°	2287.0	2283.4	2272.7	2254.9	2237.2	2219.4	2215.8	2187.4	2155.4	2130.5	2109.1
5°	2489.7	2486.1	2468.3	2429.2	2390.1	2343.9	2340.3	2272.7	2212.3	2144.7	2087.8
7.5°	2699.5	2692.4	2660.4	2599.9	2532.4	2461.2	2454.1	2354.5	2265.6	2176.7	2094.9
10°	2863.1	2856.0	2809.8	2738.6	2646.2	2557.3	2546.6	2443.4	2354.5	2240.7	2130.5
12.5°	3023.2	3009.0	2948.5	2870.2	2756.4	2671.1	2660.4	2553.7	2447.0	2329.6	2194.5
15°	3172.6	3154.8	3097.9	2998.3	2877.4	2795.6	2788.4	2674.6	2564.4	2429.2	2279.8
17.5°	3275.7	3268.6	3201.0	3090.8	2973.4	2905.8	2898.7	2781.3	2671.1	2528.8	2368.8
20°	3329.1	3329.1	3265.0	3144.1	3037.4	2991.2	2980.5	2870.2	2763.5	2628.4	2461.2
22.5°	3339.7	3350.4	3300.6	3169.0	3090.8	3051.6	3044.5	2948.5	2845.4	2720.9	2564.4
25°	3361.1	3361.1	3336.2	3193.9	3137.0	3126.3	3122.8	3037.4	2944.9	2820.5	2667.5
27.5°	3386.0	3386.0	3368.2	3229.5	3208.1	3204.6	3201.0	3161.9	3087.2	2941.4	2788.4
30°	3450.0	3453.5	3439.3	3300.6	3286.4	3325.5	3332.6	3311.3	3218.8	3037.4	2912.9
32.5°	3610.0	3578.0	3538.9	3350.4	3375.3	3425.1	3428.6	3386.0	3286.4	3140.6	3062.3
35°	4011.9	3823.4	3645.6	3393.1	3403.8	3453.5	3460.7	3457.1	3396.6	3272.2	3233.0
37.5°	4385.4	4118.6	3866.1	3492.7	3457.1	3510.5	3524.7	3585.1	3538.9	3453.5	3464.2
40°	4602.4	4499.2	4321.4	3766.5	3563.8	3645.6	3659.8	3752.3	3734.5	3699.0	3766.5
42.5°	5271.0	5278.1	5086.1	4175.6	3759.4	3891.0	3908.8	3983.5	4008.4	4026.2	4189.8
45°	6046.4	6071.3	6025.0	4911.8	4129.3	4172.0	4196.9	4296.5	4389.0	4502.8	4801.5
47.5°	6978.2	6956.9	6786.2	5811.6	4773.1	4534.8	4552.6	4744.6	4904.7	5153.6	5580.4
50°	7803.4	7856.7	7533.1	6651.0	5680.0	5107.4	5089.6	5278.1	5566.2	5914.8	6451.8
52.5°	8635.6	8557.4	8119.9	7483.3	6754.2	5886.3	5833.0	5936.1	6341.6	6754.2	7305.4
55°	8856.2	8863.3	8713.9	8393.8	7650.4	6832.4	6743.5	6736.4	7241.4	7522.4	8201.7
57.5°	9290.1	9307.9	9343.4	9407.4	9055.3	7778.5	7686.0	7586.4	8077.2	8240.8	9101.6
60°	9731.1	9752.4	9969.4	10314.4	10079.7	8799.2	8699.7	8464.9	8738.8	8959.3	10047.6
62.5°	9674.2	9823.6	10453.1	11139.5	11111.1	9919.6	9795.1	9229.6	9403.9	9595.9	10915.5
65°	8735.2	8895.3	10310.8	11367.2	12146.1	11025.7	10823.0	10019.2	10029.9	10261.0	11751.3
67.5°	7895.8	8070.1	9421.7	11271.1	12829.0	12018.0	11808.2	10812.3	10645.2	11029.3	12199.4
70°	7412.1	7586.4	8713.9	10972.4	13021.0	13117.1	12935.7	11719.3	11377.8	11730.0	11697.9
72.5°	5801.0	6074.8	7810.5	10403.3	13227.3	14294.3	14152.1	12868.1	12000.3	10997.3	8905.9
75°	2311.8	2564.4	4876.2	8372.4	12967.7	15308.0	15197.7	13383.8	11107.5	7853.2	4559.7
77.5°	697.1	746.9	1355.1	4140.0	9507.0	13572.3	13536.8	11253.4	7860.3	3645.6	1244.8
80°	231.2	256.1	416.1	1141.7	4339.2	8479.1	8639.2	7170.3	3570.9	835.8	252.5
82.5°	96.0	106.7	209.8	458.8	1536.5	3652.7	3599.4	3211.7	1244.8	519.3	92.5
85°	24.9	32.0	96.0	263.2	562.0	1259.1	1323.1	1077.7	704.2	430.4	28.5
87.5°	0.0	0.0	46.2	106.7	252.5	380.6	398.3	327.2	398.3	323.7	14.2
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°	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4	2098.4
2.5°	2091.3	2073.5	2041.5	2020.2	1991.7	1984.6	1970.4	1952.6	1949.1	1931.3	1934.8
5°	2055.8	2027.3	1970.4	1931.3	1885.0	1870.8	1845.9	1828.1	1813.9	1789.0	1792.6
7.5°	2048.7	2006.0	1927.7	1853.0	1778.3	1725.0	1650.3	1589.8	1540.0	1486.7	1497.4
10°	2073.5	2020.2	1909.9	1806.8	1671.6	1500.9	1305.3	1177.3	1113.2	1049.2	1056.3
12.5°	2123.3	2059.3	1917.1	1760.6	1486.7	1195.0	924.7	750.5	704.2	675.8	679.3
15°	2198.0	2119.8	1938.4	1671.6	1237.7	864.3	615.3	540.6	558.4	569.1	569.1
17.5°	2276.3	2187.4	1956.2	1511.6	956.7	604.6	501.5	494.4	519.3	544.2	544.2
20°	2372.3	2258.5	1959.7	1308.9	690.0	490.8	473.0	473.0	490.8	519.3	519.3
22.5°	2464.8	2336.7	1927.7	1077.7	526.4	455.3	455.3	455.3	465.9	494.4	497.9
25°	2575.0	2432.8	1860.1	832.3	451.7	433.9	433.9	437.5	444.6	469.5	473.0
27.5°	2692.4	2532.4	1746.3	608.2	412.6	409.0	412.6	416.1	419.7	444.6	451.7
30°	2827.6	2642.6	1600.5	455.3	377.0	377.0	387.7	394.8	394.8	416.1	423.2
32.5°	2984.1	2788.4	1426.2	377.0	341.4	337.9	355.7	366.3	366.3	384.1	391.2
35°	3179.7	2937.8	1216.4	334.3	313.0	305.9	313.0	330.8	337.9	352.1	355.7
37.5°	3439.3	3115.7	992.3	309.4	291.6	277.4	277.4	281.0	295.2	309.4	313.0
40°	3770.1	3311.3	771.8	291.6	270.3	256.1	245.4	241.9	238.3	249.0	256.1
42.5°	4186.2	3531.8	576.2	273.9	252.5	231.2	217.0	202.7	184.9	181.4	184.9
45°	4719.7	3802.1	426.8	259.6	241.9	209.8	184.9	160.1	128.0	117.4	120.9
47.5°	5349.3	4083.1	334.3	245.4	234.7	184.9	152.9	110.3	78.2	71.1	74.7
50°	6017.9	4353.4	284.5	227.6	220.5	160.1	110.3	67.6	46.2	46.2	49.8
52.5°	6587.0	4506.3	259.6	213.4	199.2	131.6	71.1	39.1	28.5	28.5	32.0
55°	7138.3	4588.1	241.9	199.2	170.7	92.5	39.1	24.9	17.8	17.8	17.8
57.5°	7707.3	4623.7	220.5	181.4	135.2	56.9	21.3	14.2	10.7	10.7	10.7
60°	8212.4	4556.1	188.5	149.4	88.9	28.5	10.7	10.7	7.1	3.6	3.6
62.5°	8635.6	4428.1	131.6	106.7	53.4	14.2	7.1	3.6	0.0	0.0	0.0
65°	8895.3	4221.8	85.4	71.1	32.0	10.7	3.6	0.0	0.0	0.0	0.0
67.5°	8820.6	3834.1	53.4	46.2	14.2	7.1	3.6	0.0	0.0	0.0	0.0
70°	7959.9	3144.1	39.1	28.5	10.7	3.6	0.0	0.0	0.0	0.0	0.0
72.5°	5736.9	2126.9	28.5	17.8	7.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	2760.0	757.6	17.8	14.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	675.8	167.2	10.7	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	149.4	32.0	7.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	49.8	14.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.8	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.7	3.6	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)