

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: P399988

Luminaire Tested: **ARCH-L-PA3-220-727-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399988  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-220-727-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

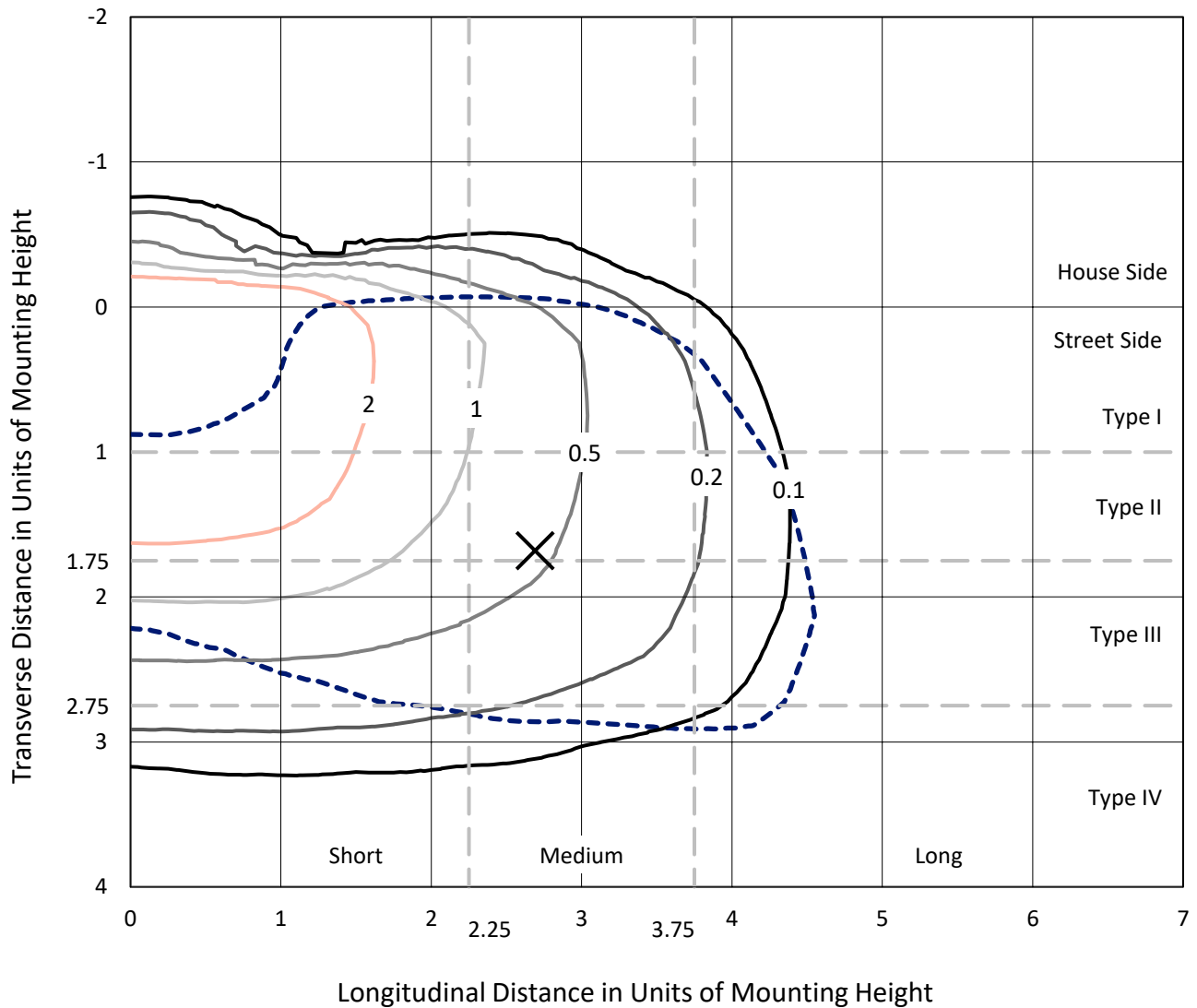
Lumens per Lamp: N/A  
Luminaire Lumens: 18902 lumens  
Efficiency: N/A  
Efficacy: 85.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

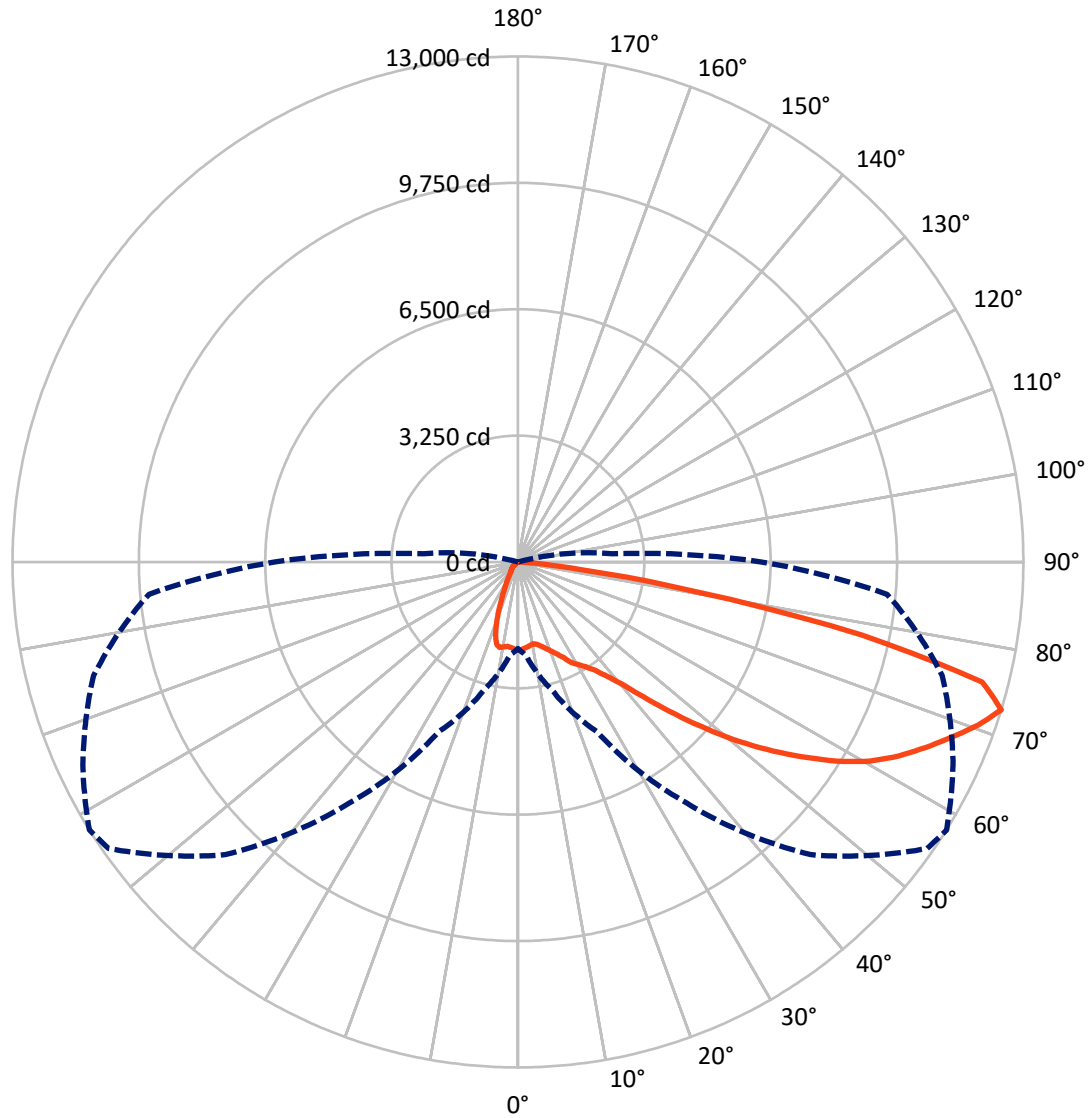
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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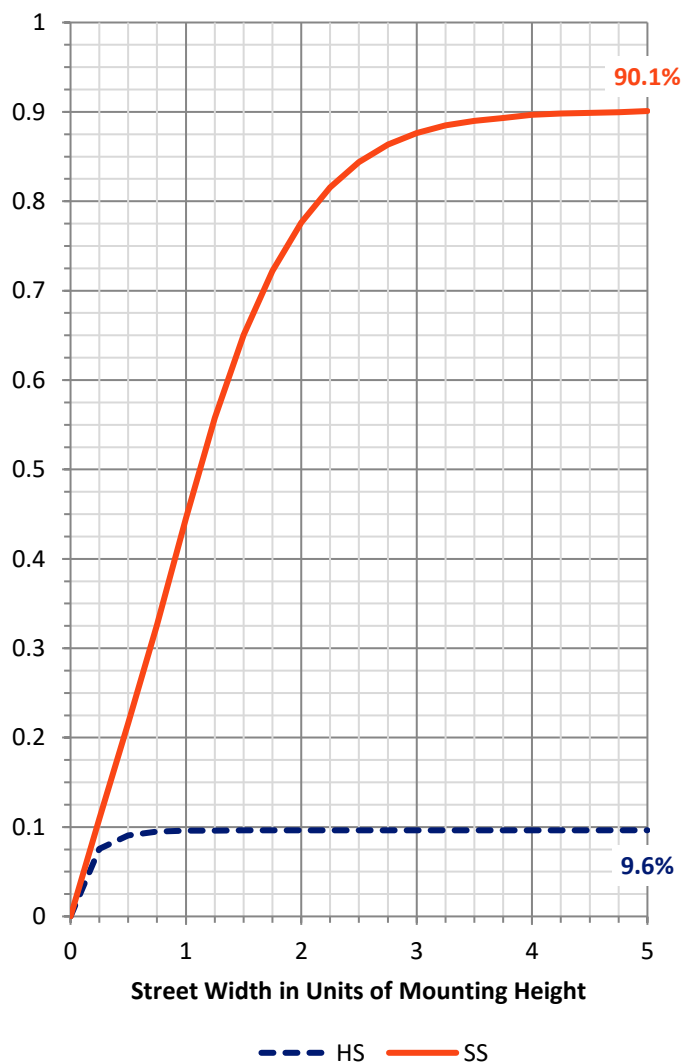
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1838.1	0.0	1838.1
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	17063.9	0.0	17063.9
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	18902.0	0.0	18902.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.2	1.1
10°-20°	542.2	2.9
20°-30°	851.7	4.5
30°-40°	1468.8	7.8
40°-50°	2794.5	14.8
50°-60°	4425.7	23.4
60°-70°	5164.3	27.3
70°-80°	3234.4	17.1
80°-90°	212.3	1.1
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°	18902.0	100.0
0°-180°	18902.0	100.0

**Coefficient of Utilization**

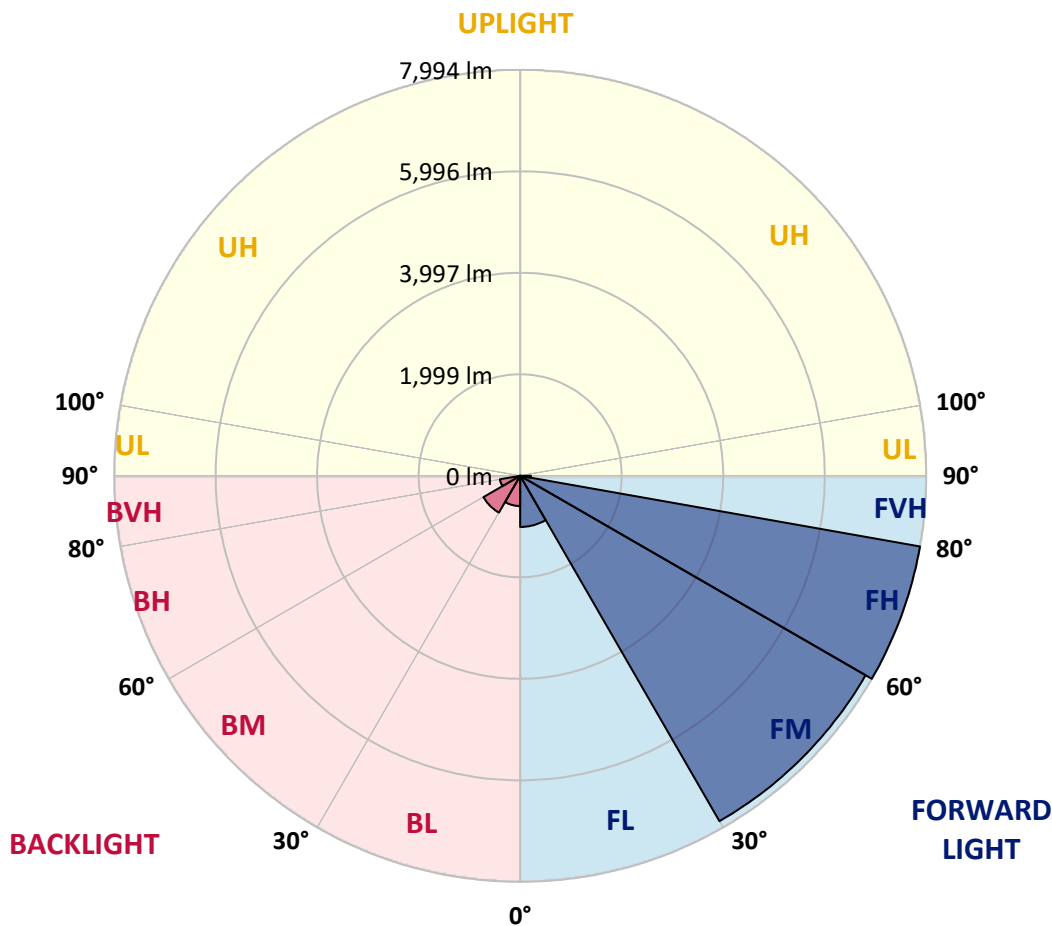


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1006.8	5.3			
FM (30°-60°)	7852.7	41.5			
FH (60°-80°)	7994.2	42.3			G4/12000
FVH (80°-90°)	210.2	1.1			G2/225
BL (0°-30°)	595.2	3.1	B2/1000		
BM (30°-60°)	836.3	4.4	B1/1000		
BH (60°-80°)	404.5	2.1	B1/500		G1/500
BVH (80°-90°)	2.1	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-G4**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1
2.5°	2258.0	2247.8	2244.5	2241.1	2244.5	2247.8	2237.7	2247.8	2241.1	2244.5	2251.2
5°	2176.9	2166.7	2163.3	2166.7	2176.9	2193.8	2200.5	2210.7	2210.7	2220.8	2224.2
7.5°	2085.6	2078.8	2075.5	2082.2	2102.5	2139.7	2160.0	2173.5	2187.0	2207.3	2227.6
10°	2034.9	2031.5	2028.1	2038.3	2058.6	2092.4	2119.4	2139.7	2190.4	2247.8	2285.0
12.5°	2001.1	2001.1	2007.8	2028.1	2055.2	2082.2	2146.4	2173.5	2251.2	2339.1	2389.8
15°	1974.0	1974.0	1984.2	2021.4	2058.6	2122.8	2217.4	2247.8	2339.1	2447.3	2514.9
17.5°	1953.8	1960.5	1967.3	2004.5	2075.5	2183.6	2295.2	2339.1	2450.7	2569.0	2643.3
20°	1957.1	1963.9	1967.3	2004.5	2105.9	2254.6	2396.6	2447.3	2575.7	2700.8	2775.2
22.5°	1977.4	1987.6	1990.9	2041.7	2160.0	2329.0	2511.5	2569.0	2707.6	2839.4	2896.8
25°	2061.9	2068.7	2048.4	2092.4	2237.7	2443.9	2660.2	2721.1	2859.7	2981.4	3028.7
27.5°	2349.2	2356.0	2244.5	2193.8	2298.5	2538.5	2842.8	2927.3	3099.7	3180.8	3187.5
30°	2971.2	2978.0	2758.3	2518.3	2443.9	2619.7	2944.2	3062.5	3285.6	3376.8	3336.3
32.5°	3772.3	3765.6	3464.7	3109.8	2788.7	2761.6	3089.5	3214.6	3458.0	3545.8	3515.4
35°	4576.8	4587.0	4330.1	3796.0	3336.3	3028.7	3275.4	3420.8	3714.9	3839.9	3785.8
37.5°	5127.8	5195.4	5083.8	4505.8	4008.9	3522.2	3576.3	3731.8	4100.2	4269.2	4154.3
40°	5905.2	5888.3	5617.9	5192.0	4752.6	4252.3	4063.0	4137.4	4559.9	4786.4	4607.2
42.5°	6949.7	6915.9	6456.2	6040.4	5550.3	5141.3	4756.0	4742.4	5087.2	5350.9	5090.6
45°	7896.2	7845.5	7531.1	7128.9	6591.4	6121.6	5601.0	5482.7	5722.7	5945.8	5641.6
47.5°	8650.0	8565.5	8342.4	8129.4	7997.6	7267.5	6486.6	6307.5	6429.2	6594.8	6165.5
50°	9542.3	9309.1	8984.6	8856.2	9130.0	8565.5	7338.4	7166.1	7159.3	7253.9	6706.3
52.5°	9948.0	9525.4	9342.9	9451.1	9934.5	9772.2	8257.9	8011.1	7913.1	7923.2	7210.0
55°	9457.8	9410.5	9508.5	9846.6	10478.7	10384.0	9140.1	8835.9	8690.5	8508.0	7693.4
57.5°	8900.1	9045.5	9434.2	10079.8	11168.2	11022.9	10008.8	9664.0	9397.0	8977.9	8230.8
60°	8386.3	8535.0	9177.3	10133.9	11546.8	11638.1	10732.2	10404.3	10008.8	9457.8	8822.4
62.5°	7605.5	7720.4	8622.9	10056.1	11381.2	11996.4	11235.8	10989.1	10620.6	9914.2	9501.8
65°	6726.6	6801.0	7693.4	9434.2	11056.7	11955.8	11651.6	11513.0	11154.7	10390.8	10174.4
67.5°	5763.3	5851.2	6594.8	8315.3	10421.2	11766.5	12043.7	12030.2	11621.2	10918.1	10661.2
70°	4654.6	4661.3	5276.5	6895.6	9312.5	11387.9	12530.5	12560.9	12067.4	11313.6	10681.5
72.5°	2227.6	2410.1	3420.8	4813.4	7568.3	10644.3	12848.2	13000.3	12347.9	11300.1	9528.8
75°	510.4	527.3	997.2	2288.4	4438.2	8170.0	12053.8	12337.8	11665.1	9772.2	6713.1
77.5°	185.9	196.1	280.6	669.3	1707.0	4221.9	8626.3	9042.1	8622.9	6317.6	3174.0
80°	125.1	121.7	145.3	297.5	784.2	1196.6	4411.2	4657.9	4252.3	2156.6	760.5
82.5°	64.2	67.6	101.4	165.6	527.3	415.8	1473.8	1602.2	1318.3	432.7	142.0
85°	30.4	30.4	57.5	104.8	223.1	145.3	327.9	395.5	354.9	189.3	47.3
87.5°	30.4	30.4	54.1	67.6	114.9	60.8	81.1	101.4	94.6	101.4	16.9
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°	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1	2268.1
2.5°	2251.2	2247.8	2244.5	2251.2	2247.8	2254.6	2254.6	2261.4	2261.4	2254.6	2251.2
5°	2220.8	2214.0	2207.3	2207.3	2203.9	2210.7	2230.9	2247.8	2251.2	2241.1	2237.7
7.5°	2224.2	2224.2	2217.4	2203.9	2180.2	2180.2	2180.2	2200.5	2210.7	2203.9	2200.5
10°	2285.0	2288.4	2271.5	2241.1	2200.5	2163.3	2092.4	1987.6	1889.5	1862.5	1852.4
12.5°	2389.8	2393.2	2359.4	2305.3	2220.8	2001.1	1730.7	1480.5	1287.9	1233.8	1223.6
15°	2514.9	2518.3	2457.4	2369.5	2112.6	1602.2	1200.0	916.0	747.0	706.5	703.1
17.5°	2643.3	2636.6	2545.3	2376.3	1791.5	1135.8	730.1	584.8	540.8	530.7	534.1
20°	2768.4	2748.1	2623.0	2251.2	1379.1	743.6	534.1	500.3	490.1	483.4	483.4
22.5°	2883.3	2842.8	2687.3	2004.5	966.7	534.1	476.6	469.8	456.3	446.2	442.8
25°	2998.3	2940.8	2727.8	1683.3	649.0	466.5	449.6	436.0	419.1	405.6	402.2
27.5°	3136.8	3055.7	2707.6	1277.7	486.8	432.7	419.1	398.9	375.2	354.9	348.2
30°	3268.7	3177.4	2592.6	882.2	415.8	398.9	378.6	348.2	317.7	294.1	287.3
32.5°	3434.3	3329.5	2386.4	578.0	361.7	348.2	327.9	290.7	250.1	223.1	216.3
35°	3670.9	3552.6	2122.8	405.6	317.7	294.1	267.0	226.5	182.5	162.3	158.9
37.5°	4002.2	3843.3	1791.5	327.9	280.6	246.8	206.2	165.6	135.2	118.3	114.9
40°	4407.8	4164.4	1423.1	290.7	250.1	206.2	155.5	118.3	98.0	84.5	84.5
42.5°	4847.2	4465.3	1047.9	267.0	219.7	169.0	114.9	84.5	71.0	64.2	60.8
45°	5300.2	4732.3	706.5	246.8	192.7	128.4	81.1	57.5	47.3	47.3	43.9
47.5°	5770.0	4911.5	456.3	223.1	162.3	94.6	54.1	40.6	33.8	33.8	33.8
50°	6236.5	5006.1	324.5	202.8	131.8	64.2	40.6	30.4	27.0	27.0	27.0
52.5°	6574.5	4945.3	260.3	175.8	101.4	47.3	30.4	23.7	20.3	20.3	20.3
55°	6868.6	4840.5	226.5	152.1	74.4	33.8	23.7	20.3	16.9	16.9	16.9
57.5°	7169.4	4705.3	202.8	128.4	54.1	23.7	16.9	13.5	13.5	13.5	13.5
60°	7443.2	4475.4	175.8	101.4	37.2	16.9	13.5	10.1	10.1	10.1	10.1
62.5°	7710.3	4279.4	152.1	77.7	27.0	13.5	6.8	6.8	3.4	3.4	3.4
65°	7862.4	4015.7	121.7	50.7	16.9	10.1	3.4	3.4	0.0	0.0	0.0
67.5°	7815.1	3701.3	84.5	30.4	10.1	6.8	3.4	0.0	0.0	0.0	0.0
70°	7487.2	3278.8	50.7	16.9	10.1	6.8	3.4	0.0	0.0	0.0	0.0
72.5°	6270.3	2427.0	30.4	13.5	6.8	3.4	0.0	0.0	0.0	0.0	0.0
75°	4188.1	1115.5	16.9	10.1	3.4	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	1916.6	334.6	10.1	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	385.3	87.9	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	81.1	16.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.9	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.8	3.4	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)