

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: P399638

Luminaire Tested: **ARCH-L-PA3-170-730-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399638  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-170-730-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23788 lumens  
Efficiency: N/A  
Efficacy: 137.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

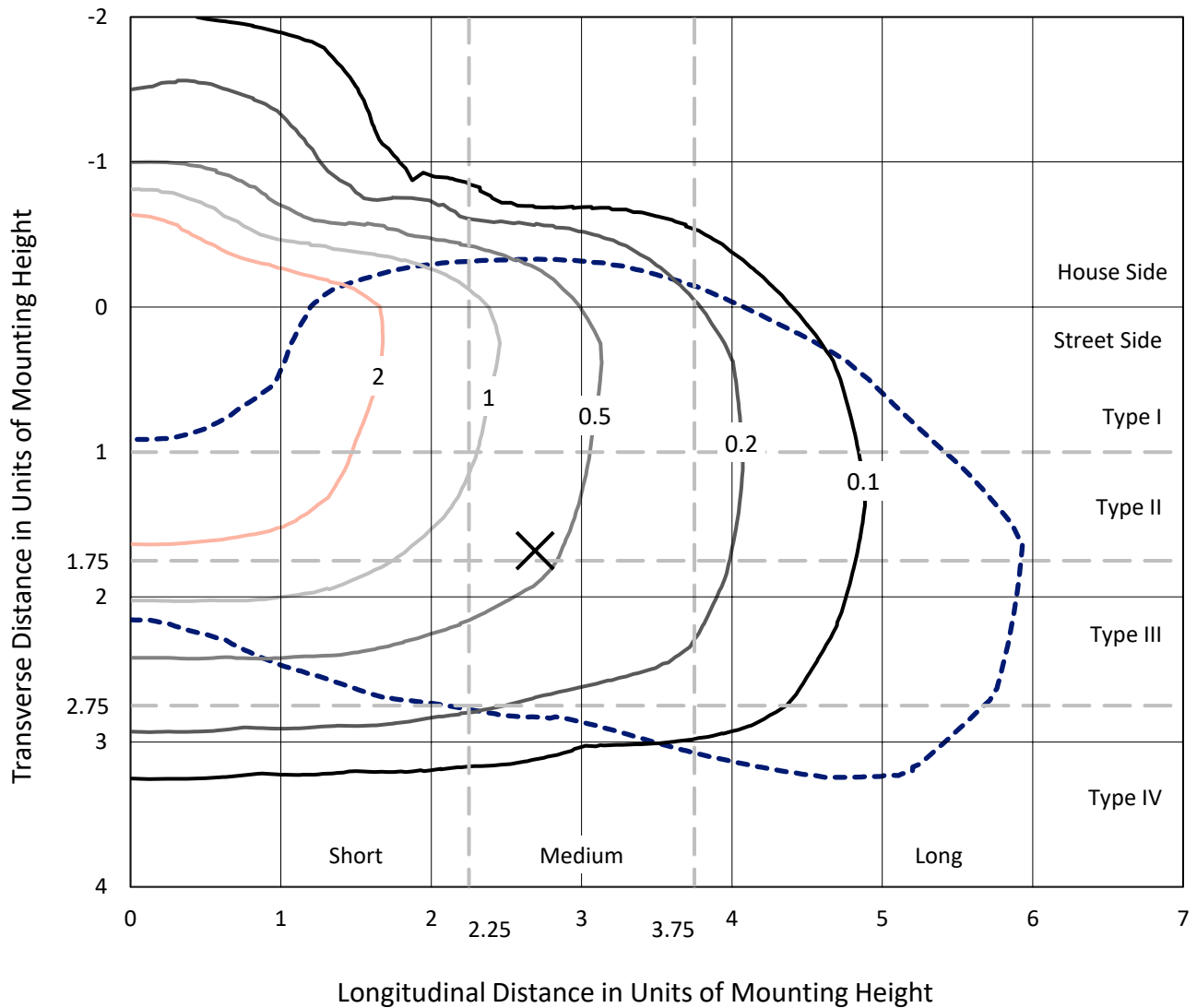
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

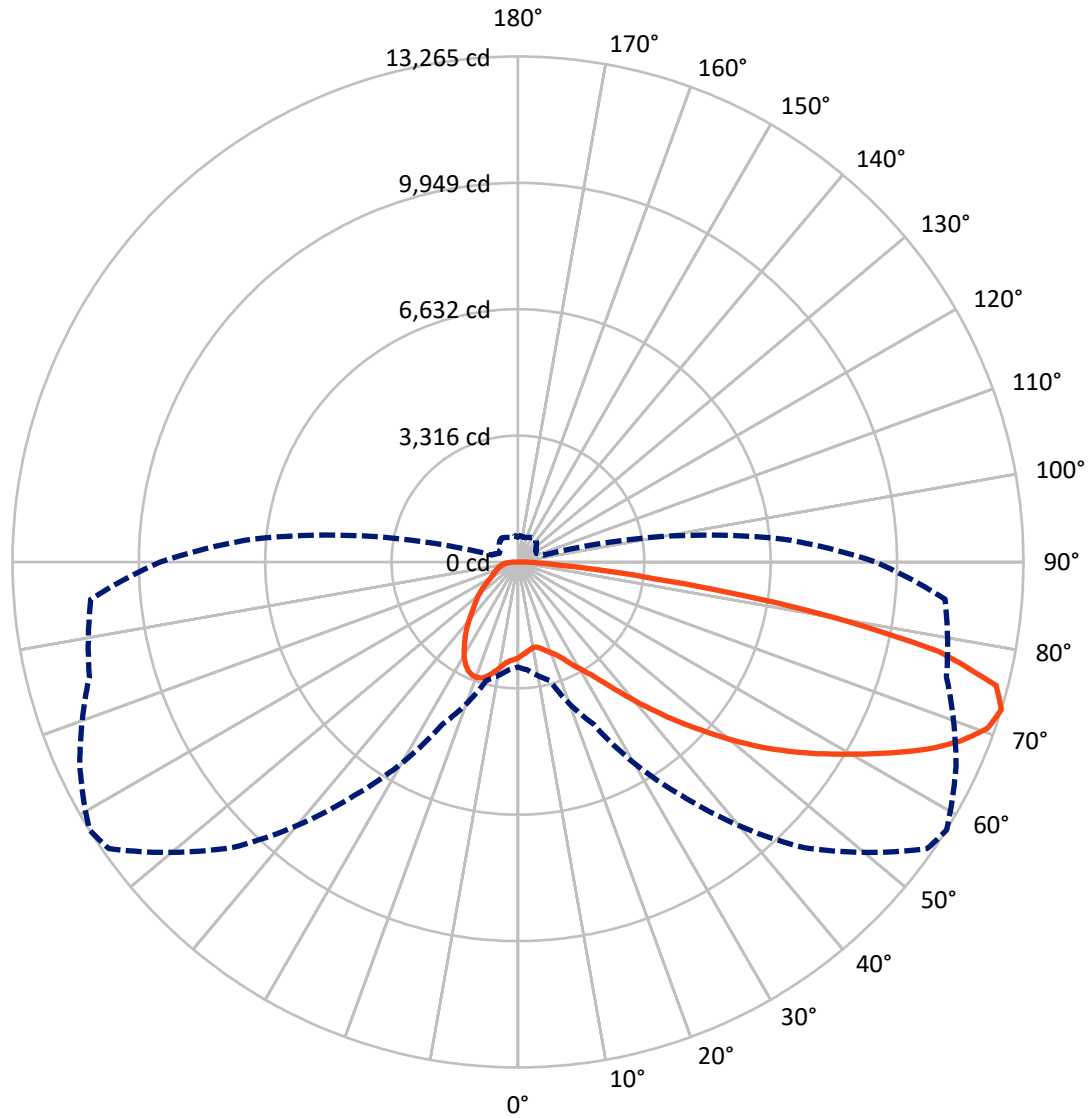
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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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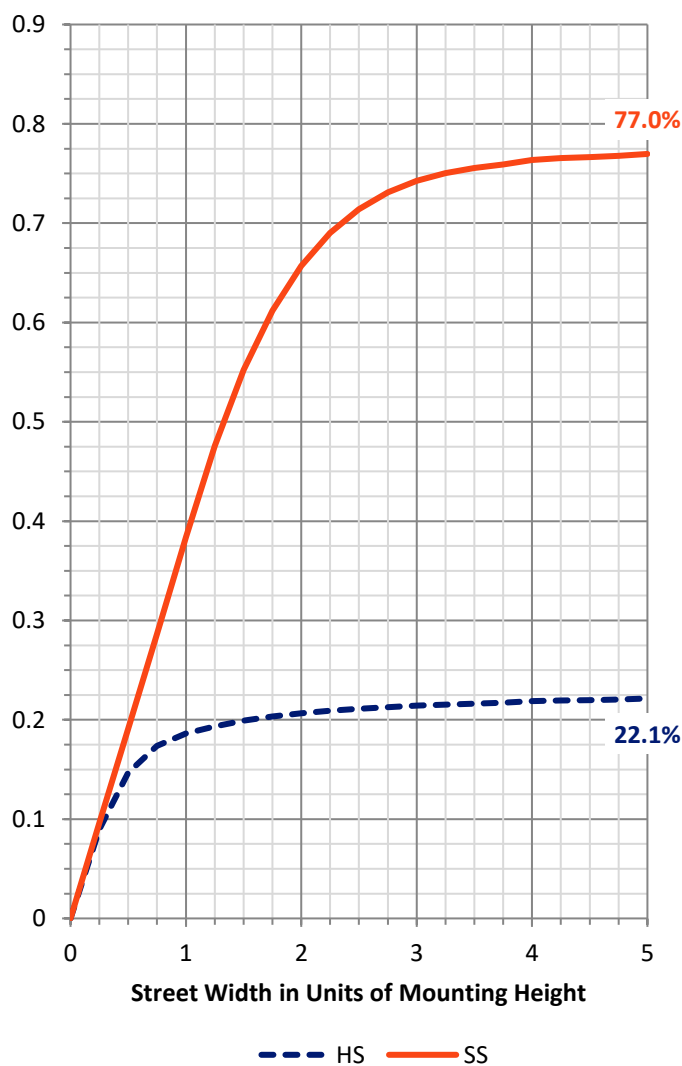
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5394.9	0.0	5394.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	18393.2	0.0	18393.2
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	23788.0	0.0	23788.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.7	1.0
10°-20°	767.6	3.2
20°-30°	1375.0	5.8
30°-40°	2068.4	8.7
40°-50°	3349.5	14.1
50°-60°	5042.1	21.2
60°-70°	5934.0	24.9
70°-80°	4207.8	17.7
80°-90°	801.8	3.4
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°	23788.0	100.0
0°-180°	23788.0	100.0

**Coefficient of Utilization**



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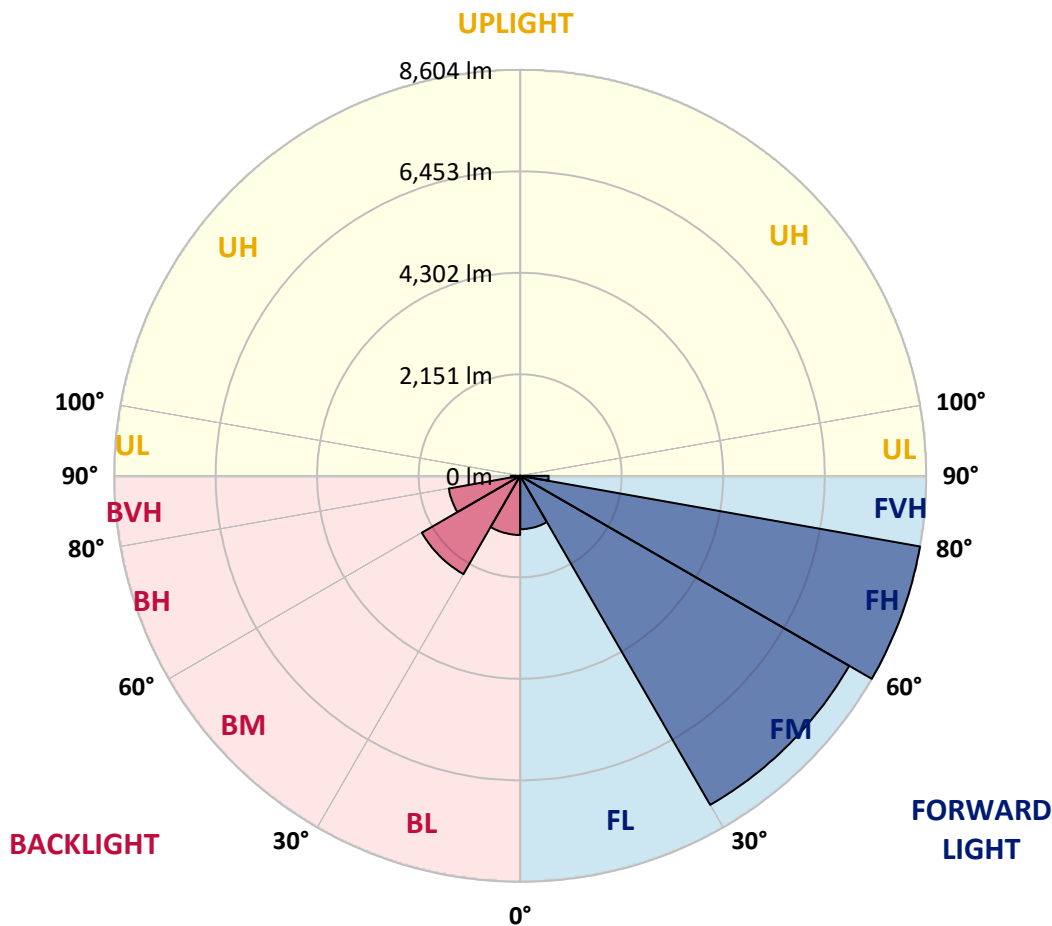
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1131.2	4.8			
FM (30°-60°)	8052.9	33.9			
FH (60°-80°)	8604.2	36.2			G4/12000
FVH (80°-90°)	604.8	2.5			G4/750
BL (0°-30°)	1253.1	5.3	B3/2500		
BM (30°-60°)	2407.1	10.1	B2/2500		
BH (60°-80°)	1537.6	6.5	B3/2500		G3/2500
BVH (80°-90°)	197.0	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1
2.5°	2414.9	2402.4	2405.5	2405.5	2418.1	2424.3	2427.5	2436.9	2443.2	2458.9	2480.9
5°	2301.9	2292.4	2295.6	2298.7	2320.7	2342.7	2361.5	2374.1	2392.9	2418.1	2449.5
7.5°	2220.2	2213.9	2217.1	2223.4	2242.2	2267.3	2298.7	2317.6	2345.8	2392.9	2446.3
10°	2160.6	2160.6	2163.7	2176.3	2195.1	2226.5	2251.6	2273.6	2330.1	2414.9	2496.6
12.5°	2113.4	2113.4	2122.9	2148.0	2179.4	2210.8	2270.5	2295.6	2371.0	2487.1	2584.5
15°	2110.3	2113.4	2116.6	2138.6	2173.1	2242.2	2330.1	2367.8	2458.9	2597.1	2710.1
17.5°	2160.6	2163.7	2151.1	2157.4	2198.2	2295.6	2411.8	2455.7	2571.9	2722.7	2838.9
20°	2314.4	2314.4	2276.7	2242.2	2270.5	2377.2	2509.1	2553.1	2681.8	2848.3	2964.5
22.5°	2628.5	2644.2	2556.2	2480.9	2436.9	2496.6	2615.9	2663.0	2807.5	2986.5	3102.7
25°	3008.4	3024.1	2904.8	2798.0	2716.4	2707.0	2785.5	2835.7	2955.1	3140.3	3237.7
27.5°	3375.9	3347.6	3237.7	3137.2	3033.6	2948.8	3008.4	3052.4	3190.6	3331.9	3391.6
30°	3664.8	3642.8	3536.0	3463.8	3366.4	3256.5	3222.0	3269.1	3382.1	3514.0	3545.4
32.5°	3985.1	3969.4	3862.6	3768.4	3686.8	3583.1	3507.8	3529.7	3592.5	3686.8	3705.6
35°	4393.3	4427.9	4314.8	4123.3	4032.2	3931.7	3878.3	3884.6	3931.7	3991.4	3960.0
37.5°	4823.6	4864.4	4870.7	4569.2	4446.7	4355.6	4299.1	4321.1	4377.6	4418.5	4321.1
40°	5621.2	5580.4	5417.1	5194.1	5005.7	4917.8	4839.3	4836.1	4876.9	4949.2	4773.3
42.5°	6679.5	6641.8	6312.1	6023.2	5724.8	5624.3	5470.5	5404.5	5423.4	5514.4	5269.5
45°	7693.8	7678.1	7414.3	7078.3	6720.3	6525.6	6173.9	6013.7	5998.0	6070.3	5778.2
47.5°	8595.1	8526.0	8334.5	8073.8	8036.1	7527.4	6880.5	6663.8	6588.4	6629.2	6302.7
50°	9559.2	9323.7	9059.9	8899.7	9172.9	8698.7	7593.3	7367.2	7181.9	7210.2	6871.1
52.5°	10071.1	9675.4	9502.7	9549.8	9917.2	9735.0	8369.0	8092.6	7794.3	7835.1	7436.3
55°	9631.4	9628.3	9703.6	9995.7	10507.6	10297.2	9107.0	8796.1	8469.5	8478.9	8086.4
57.5°	9028.5	9150.9	9540.3	10184.1	11239.3	10887.5	9832.4	9502.7	9204.3	9157.2	8824.3
60°	8478.9	8613.9	9179.2	10152.7	11493.6	11427.7	10523.3	10234.4	9992.5	9854.4	9600.0
62.5°	7643.6	7744.1	8544.9	9951.7	11280.1	11817.1	11223.6	11025.7	10843.6	10557.8	10435.3
65°	6660.7	6695.2	7539.9	9289.1	11013.2	11967.8	11920.7	11832.8	11656.9	11236.1	11261.2
67.5°	5596.1	5665.2	6406.3	8230.8	10429.1	11898.7	12460.9	12533.1	12325.8	11694.6	11788.8
70°	4462.4	4547.2	5109.3	6767.4	9436.7	11600.4	12960.2	13076.4	12677.5	11845.3	11886.2
72.5°	2760.4	2842.0	3218.8	4701.1	7480.3	10598.6	13114.0	13264.8	12687.0	11644.4	11251.8
75°	954.7	964.1	1259.3	2254.8	4440.4	8001.6	12611.6	12966.4	12288.1	10912.7	9791.6
77.5°	436.5	452.2	559.0	929.5	1969.0	4318.0	10413.4	11302.1	11076.0	9769.6	7536.8
80°	301.5	307.8	386.3	555.8	1136.8	1519.9	6572.7	7731.5	8127.2	7565.1	4829.8
82.5°	226.1	232.4	298.3	376.8	819.6	738.0	2502.8	3592.5	4465.6	4383.9	2019.2
85°	216.7	213.5	232.4	251.2	546.4	439.6	810.2	1111.7	1742.9	1491.7	508.7
87.5°	94.2	103.6	238.7	141.3	285.8	204.1	351.7	411.4	530.7	461.6	182.1
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°	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1	2509.1
2.5°	2490.3	2496.6	2515.4	2543.7	2559.4	2590.8	2612.8	2625.3	2634.7	2637.9	2637.9
5°	2468.3	2480.9	2521.7	2568.8	2612.8	2678.7	2738.4	2772.9	2798.0	2807.5	2810.6
7.5°	2474.6	2506.0	2565.7	2634.7	2691.3	2776.1	2848.3	2917.4	2973.9	2995.9	2995.9
10°	2534.3	2578.2	2659.9	2750.9	2823.2	2911.1	2986.5	3046.1	3112.1	3149.8	3156.0
12.5°	2625.3	2678.7	2785.5	2886.0	2967.6	3036.7	3105.8	3149.8	3181.2	3209.4	3215.7
15°	2754.1	2820.0	2926.8	3030.4	3102.7	3146.6	3165.5	3165.5	3162.3	3165.5	3171.7
17.5°	2882.8	2945.6	3052.4	3156.0	3190.6	3165.5	3143.5	3137.2	3134.1	3127.8	3130.9
20°	3008.4	3068.1	3159.2	3237.7	3209.4	3121.5	3093.2	3090.1	3080.7	3074.4	3068.1
22.5°	3134.1	3178.0	3253.4	3281.7	3168.6	3043.0	3008.4	2989.6	2977.0	2961.3	2945.6
25°	3278.5	3291.1	3347.6	3303.6	3068.1	2898.5	2848.3	2820.0	2807.5	2791.8	2779.2
27.5°	3413.5	3413.5	3423.0	3269.1	2920.5	2707.0	2631.6	2581.4	2578.2	2575.1	2571.9
30°	3536.0	3520.3	3488.9	3165.5	2729.0	2471.4	2358.4	2308.1	2327.0	2342.7	2345.8
32.5°	3680.5	3649.1	3561.1	3024.1	2499.7	2207.7	2069.5	2047.5	2069.5	2088.3	2075.8
35°	3906.6	3850.1	3636.5	2860.8	2279.9	1965.9	1834.0	1802.6	1796.3	1793.1	1768.0
37.5°	4230.0	4132.7	3696.2	2685.0	2063.2	1752.3	1655.0	1589.0	1529.3	1466.5	1457.1
40°	4625.7	4459.3	3737.0	2484.0	1834.0	1573.3	1469.7	1384.9	1284.4	1174.5	1161.9
42.5°	5059.1	4811.0	3755.8	2261.0	1633.0	1425.7	1297.0	1190.2	1077.1	992.3	976.6
45°	5527.0	5191.0	3740.1	2047.5	1469.7	1300.1	1155.6	1039.5	948.4	888.7	876.2
47.5°	5982.3	5627.5	3696.2	1877.9	1344.1	1193.3	1045.7	939.0	869.9	803.9	788.2
50°	6566.4	6045.1	3642.8	1746.0	1205.9	1086.6	976.6	863.6	785.1	753.7	747.4
52.5°	7213.4	6462.8	3580.0	1579.6	1070.9	1001.8	932.7	832.2	807.1	747.4	738.0
55°	7913.6	6959.0	3567.4	1369.2	951.5	942.1	888.7	860.5	866.7	747.4	731.7
57.5°	8651.6	7489.7	3595.7	1158.8	854.2	888.7	907.6	885.6	876.2	763.1	731.7
60°	9421.0	8001.6	3510.9	964.1	778.8	844.8	929.5	873.0	803.9	756.8	734.8
62.5°	10168.4	8431.8	3143.5	825.9	722.3	832.2	917.0	825.9	747.4	747.4	738.0
65°	10711.7	8623.4	2458.9	725.4	684.6	816.5	895.0	794.5	731.7	753.7	741.1
67.5°	10774.5	8425.5	1651.8	646.9	653.2	788.2	844.8	766.2	716.0	772.5	753.7
70°	10388.2	7910.5	1011.2	587.2	612.4	738.0	800.8	738.0	694.0	756.8	728.6
72.5°	9386.5	6949.6	712.9	537.0	568.4	690.9	760.0	712.9	662.6	684.6	656.3
75°	7700.1	5385.7	565.3	489.9	524.4	646.9	725.4	675.2	624.9	615.5	596.7
77.5°	5454.8	3451.2	455.3	452.2	477.3	593.5	678.3	631.2	581.0	562.1	549.6
80°	3137.2	1692.6	392.5	408.2	433.4	540.1	621.8	581.0	533.9	505.6	486.8
82.5°	1199.6	590.4	345.4	354.9	383.1	483.6	565.3	530.7	483.6	508.7	427.1
85°	389.4	323.5	282.6	292.1	320.3	402.0	499.3	471.1	417.7	370.6	342.3
87.5°	172.7	175.9	150.7	166.4	201.0	266.9	364.3	345.4	304.6	254.4	244.9
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)