

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: P399640

Luminaire Tested: **ARCH-L-PA3-170-730-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399640  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
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-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23688 lumens  
Efficiency: N/A  
Efficacy: 136.9 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

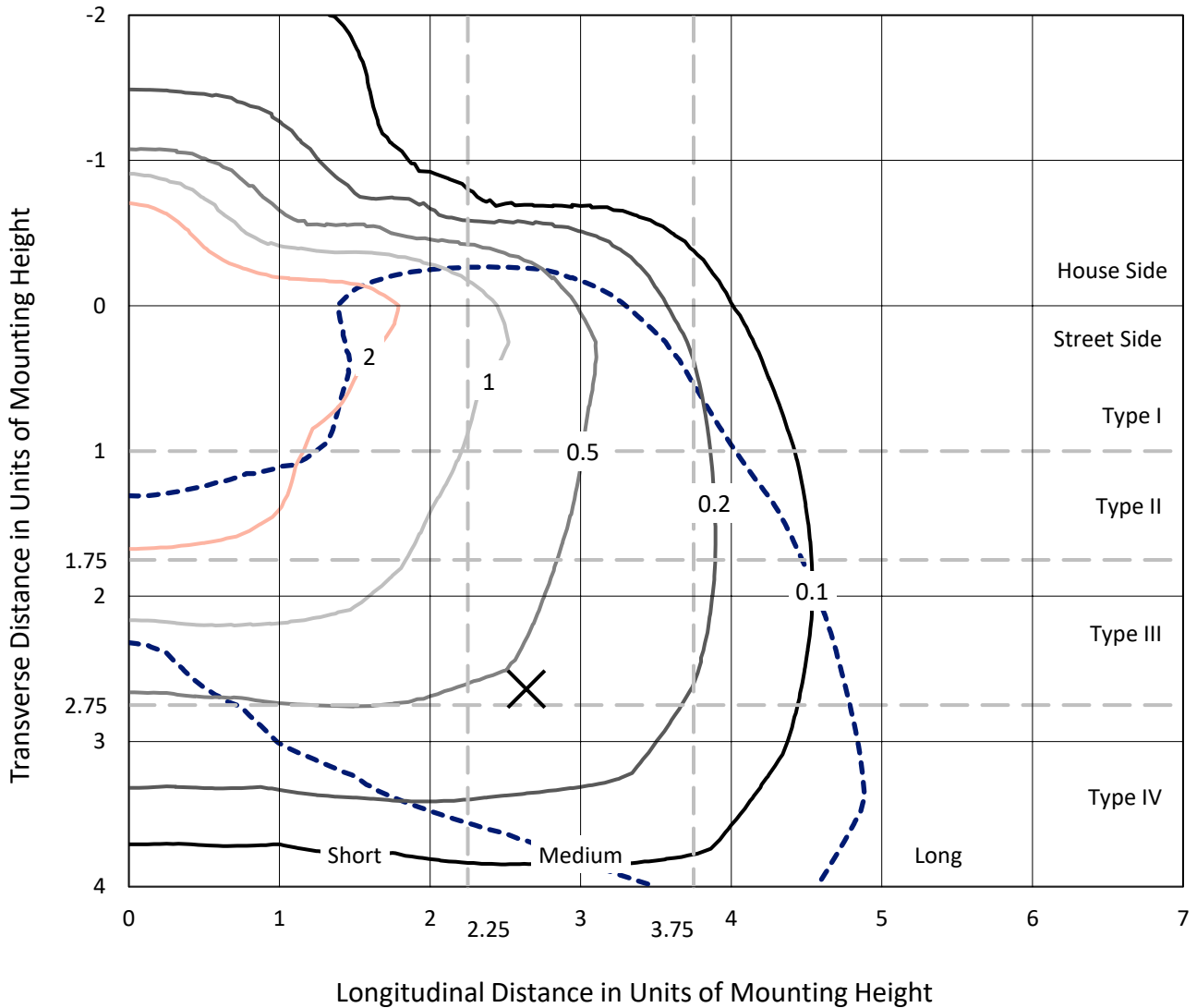
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

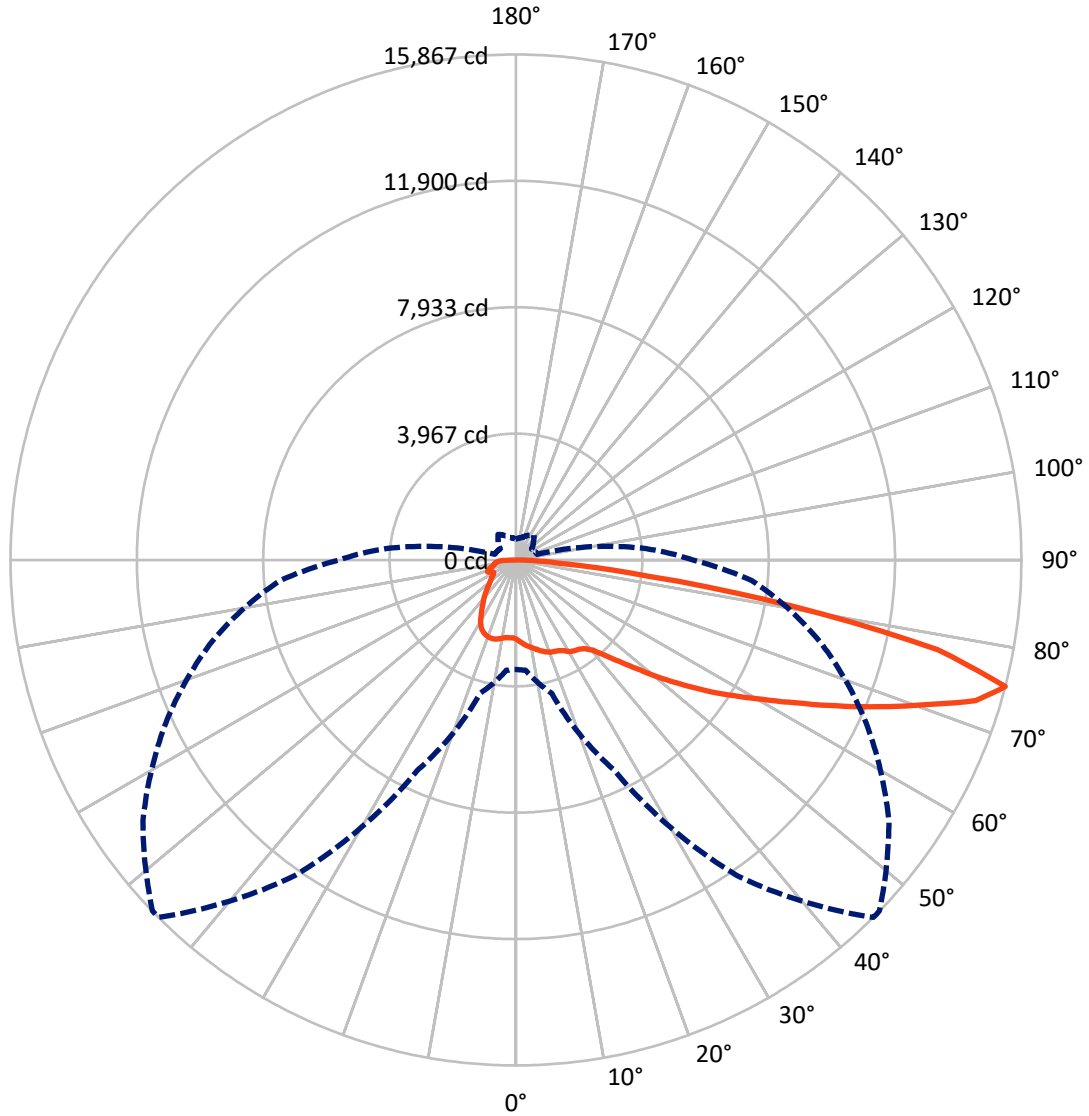
× Max cd  
 - - - 1/2 Max cd



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

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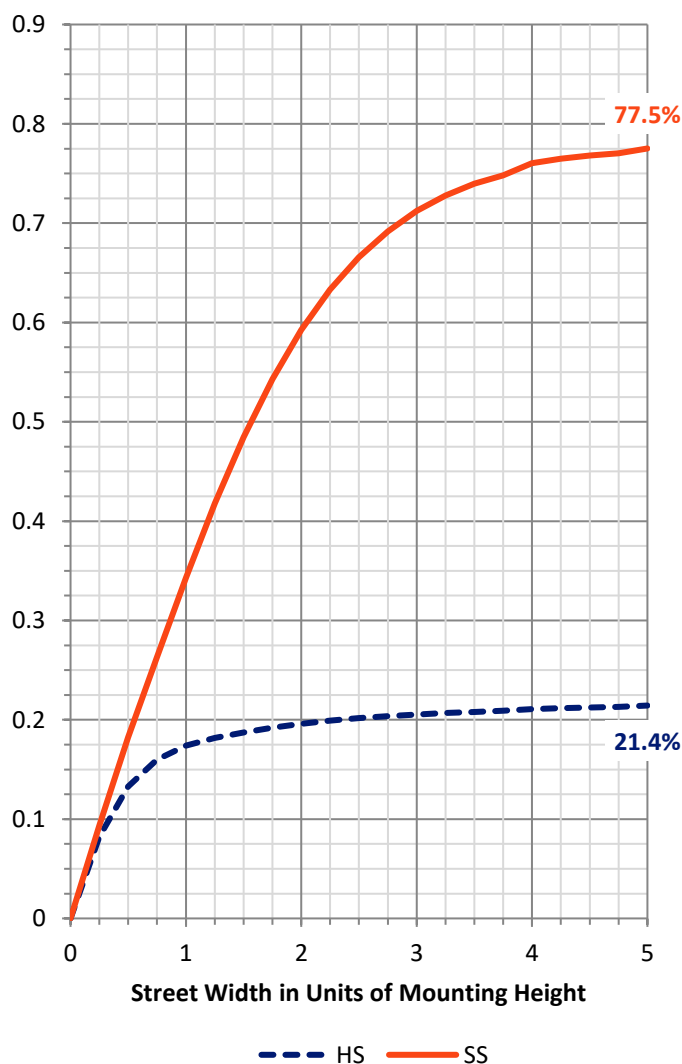
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5234.9	0.0	5234.9
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	18453.1	0.0	18453.1
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	23688.0	0.0	23688.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.1	1.0
10°-20°	783.0	3.3
20°-30°	1334.8	5.6
30°-40°	1870.3	7.9
40°-50°	2747.7	11.6
50°-60°	4373.0	18.5
60°-70°	6220.6	26.3
70°-80°	5208.5	22.0
80°-90°	903.9	3.8
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°	23688.0	100.0
0°-180°	23688.0	100.0

**Coefficient of Utilization**

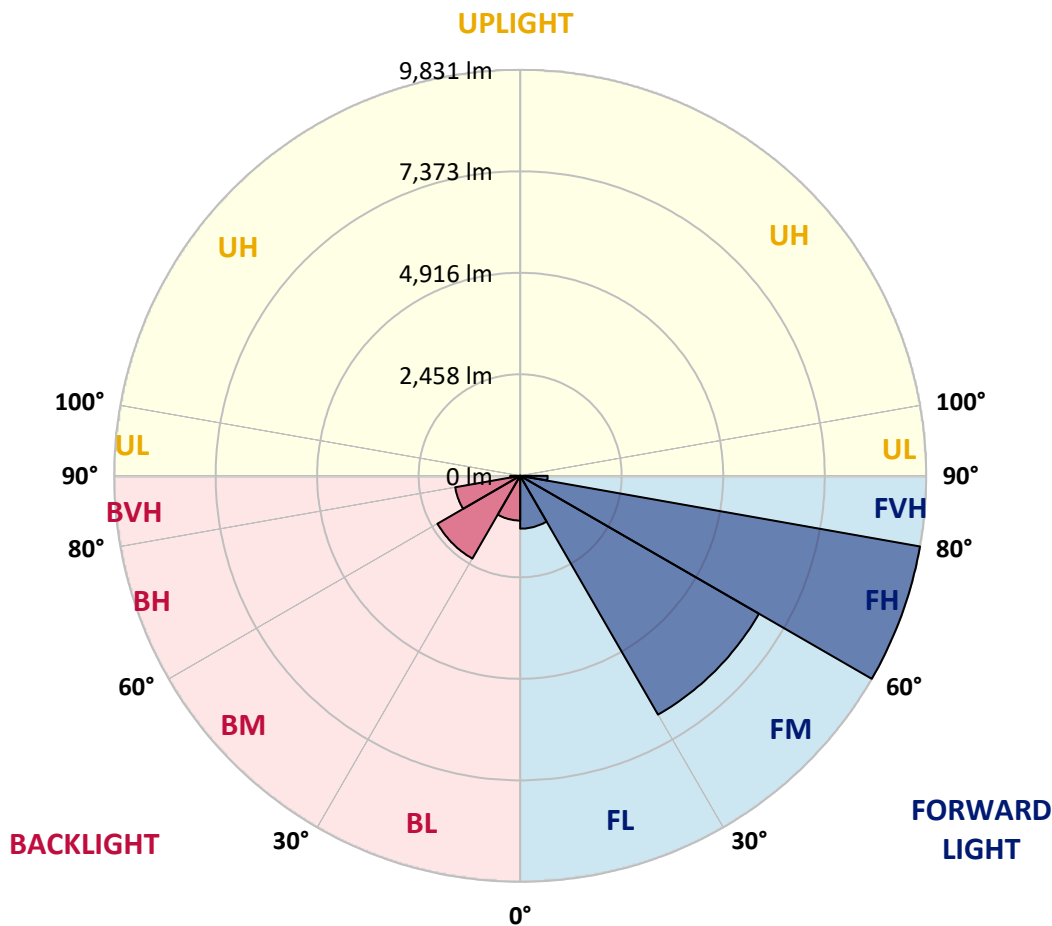


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1280.5	5.4			
FM (30°-60°)	6676.9	28.2			
FH (60°-80°)	9831.1	41.5			G4/12000
FVH (80°-90°)	664.6	2.8			G4/750
BL (0°-30°)	1083.4	4.6	B3/2500		
BM (30°-60°)	2314.1	9.8	B2/2500		
BH (60°-80°)	1598.0	6.7	B3/2500		G3/2500
BVH (80°-90°)	239.4	1.0			G3/500
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°	46°	55°	65°	75°	85°
0°	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8
2.5°	2630.2	2617.5	2611.2	2611.2	2585.9	2570.1	2566.9	2544.7	2525.7	2506.7	2490.9
5°	2782.1	2772.6	2753.6	2737.8	2703.0	2658.7	2652.3	2604.9	2557.4	2513.1	2475.1
7.5°	2921.4	2902.4	2880.2	2848.6	2791.6	2731.5	2722.0	2655.5	2589.0	2522.6	2471.9
10°	3038.5	3019.5	2987.8	2943.5	2870.7	2797.9	2788.4	2718.8	2649.2	2570.1	2497.3
12.5°	3149.3	3133.4	3086.0	3025.8	2940.4	2873.9	2864.4	2804.3	2731.5	2642.8	2547.9
15°	3244.2	3228.4	3177.7	3108.1	3010.0	2959.4	2946.7	2889.7	2816.9	2722.0	2623.9
17.5°	3291.7	3291.7	3237.9	3161.9	3070.1	3032.2	3022.7	2953.0	2886.6	2794.8	2696.7
20°	3307.5	3313.8	3275.9	3184.1	3105.0	3089.1	3079.6	3022.7	2946.7	2858.1	2766.3
22.5°	3317.0	3329.7	3298.0	3193.6	3127.1	3117.6	3111.3	3073.3	3013.2	2927.7	2835.9
25°	3348.7	3348.7	3326.5	3209.4	3155.6	3152.4	3152.4	3130.3	3089.1	3016.3	2924.5
27.5°	3396.1	3393.0	3364.5	3244.2	3218.9	3228.4	3225.2	3222.1	3193.6	3120.8	3022.7
30°	3475.3	3475.3	3443.6	3313.8	3298.0	3339.2	3342.3	3348.7	3304.4	3190.4	3111.3
32.5°	3595.5	3582.9	3551.2	3383.5	3358.2	3396.1	3402.5	3399.3	3361.3	3253.7	3215.7
35°	3965.9	3937.4	3823.4	3538.6	3412.0	3434.1	3437.3	3453.1	3459.4	3374.0	3355.0
37.5°	4614.7	4576.7	4402.6	3905.7	3582.9	3529.1	3525.9	3567.1	3601.9	3525.9	3525.9
40°	5320.5	5288.9	5187.6	4538.7	3899.4	3722.1	3709.5	3747.5	3791.8	3738.0	3753.8
42.5°	5928.2	5953.5	5963.0	5209.7	4374.2	4083.0	4048.1	3994.3	4064.0	4016.5	4079.8
45°	6384.0	6371.3	6545.4	5896.6	4988.2	4535.6	4488.1	4342.5	4431.1	4428.0	4567.2
47.5°	6868.2	6846.1	6918.9	6542.2	5687.7	5089.5	5016.7	4801.4	4934.4	5026.2	5257.2
50°	7327.2	7333.5	7358.8	7051.8	6447.3	5763.6	5671.8	5383.8	5573.7	5766.8	6092.8
52.5°	7925.4	7881.1	7849.4	7646.9	7298.7	6466.3	6406.1	6077.0	6342.8	6570.7	7004.3
55°	8447.6	8419.1	8400.1	8390.6	8010.8	7241.7	7178.4	6836.6	7219.6	7381.0	8020.3
57.5°	9004.7	8988.8	9090.1	9251.5	9099.6	8029.8	7963.4	7634.2	8061.5	8175.4	9121.8
60°	9413.0	9422.5	9701.0	10112.5	10008.0	8884.4	8805.3	8514.1	8881.2	8982.5	10223.2
62.5°	9416.1	9511.1	10156.8	10894.2	11014.5	9868.7	9777.0	9460.4	9723.1	9723.1	11210.7
65°	8517.2	8624.9	10074.5	11087.3	12033.7	11039.8	10951.2	10454.3	10552.4	10419.5	12138.1
67.5°	7621.5	7748.1	9112.3	11103.1	12749.0	12293.2	12188.7	11448.1	11280.4	10944.9	12787.0
70°	7026.5	7115.1	8254.5	10897.4	13179.4	13603.5	13524.4	12391.3	11853.3	11384.8	12650.9
72.5°	5915.5	5883.9	6972.7	9919.4	13420.0	15091.1	15024.7	13416.8	12350.2	11175.9	10789.8
75°	3434.1	3472.1	4326.7	7267.0	12097.0	15866.6	15860.3	14293.5	12131.8	9871.9	7434.8
77.5°	990.7	1019.2	1421.1	3193.6	7650.0	13533.9	13967.5	13071.8	10254.9	7036.0	3855.1
80°	433.6	455.8	617.2	1063.5	3294.9	8840.1	9219.9	8840.1	6184.6	3228.4	1512.9
82.5°	256.4	272.2	402.0	658.3	1579.4	4206.4	4719.1	4120.9	2668.2	1370.5	626.7
85°	145.6	151.9	231.1	417.8	993.8	1471.8	1652.2	1547.7	1300.9	778.6	329.2
87.5°	66.5	69.6	113.9	196.2	557.1	496.9	515.9	683.7	753.3	474.8	164.6
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°	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8	2487.8
2.5°	2484.6	2475.1	2456.1	2449.8	2440.3	2443.4	2446.6	2446.6	2449.8	2440.3	2440.3
5°	2459.3	2443.4	2424.5	2424.5	2424.5	2449.8	2471.9	2484.6	2490.9	2490.9	2484.6
7.5°	2449.8	2430.8	2408.6	2415.0	2421.3	2452.9	2494.1	2535.2	2547.9	2547.9	2541.6
10°	2468.8	2449.8	2434.0	2443.4	2459.3	2484.6	2516.2	2554.2	2585.9	2589.0	2585.9
12.5°	2513.1	2490.9	2475.1	2494.1	2513.1	2528.9	2544.7	2560.6	2601.7	2608.0	2608.0
15°	2585.9	2563.7	2544.7	2560.6	2566.9	2566.9	2566.9	2566.9	2608.0	2614.4	2614.4
17.5°	2658.7	2639.7	2620.7	2623.9	2604.9	2579.5	2570.1	2566.9	2589.0	2608.0	2611.2
20°	2728.3	2712.5	2693.5	2661.8	2614.4	2566.9	2551.1	2551.1	2563.7	2592.2	2592.2
22.5°	2804.3	2785.3	2753.6	2680.8	2601.7	2535.2	2519.4	2528.9	2544.7	2582.7	2579.5
25°	2889.7	2864.4	2810.6	2674.5	2560.6	2481.4	2484.6	2513.1	2541.6	2582.7	2582.7
27.5°	2984.7	2949.9	2842.2	2623.9	2468.8	2392.8	2421.3	2487.8	2528.9	2573.2	2579.5
30°	3089.1	3057.5	2867.6	2535.2	2320.0	2250.4	2320.0	2427.6	2490.9	2532.1	2541.6
32.5°	3215.7	3190.4	2889.7	2421.3	2126.9	2066.8	2168.1	2301.0	2402.3	2449.8	2459.3
35°	3374.0	3348.7	2918.2	2291.5	1946.5	1883.2	1975.0	2111.1	2244.0	2304.2	2323.2
37.5°	3579.7	3541.7	2943.5	2152.3	1794.6	1721.8	1766.1	1889.6	2009.8	2092.1	2114.3
40°	3842.4	3782.3	2965.7	1994.0	1661.7	1579.4	1595.2	1655.3	1725.0	1797.8	1826.3
42.5°	4212.7	4092.5	2968.9	1826.3	1525.6	1449.6	1443.3	1462.3	1462.3	1462.3	1471.8
45°	4728.6	4500.8	2975.2	1668.0	1386.3	1307.2	1288.2	1281.9	1234.4	1142.6	1136.3
47.5°	5380.6	5035.7	3003.7	1535.1	1240.7	1171.1	1145.8	1120.4	1031.8	936.9	917.9
50°	6216.2	5656.0	3060.6	1408.5	1117.3	1069.8	1038.1	978.0	879.9	807.1	788.1
52.5°	7178.4	6393.5	3114.4	1275.5	1025.5	993.8	955.9	883.1	778.6	734.3	728.0
55°	8283.0	7216.4	3222.1	1158.4	946.4	924.2	889.4	819.8	740.6	709.0	705.8
57.5°	9413.0	8137.4	3374.0	1054.0	870.4	857.7	857.7	797.6	747.0	734.3	734.3
60°	10501.8	8928.7	3256.9	955.9	800.8	807.1	867.2	851.4	813.4	829.3	838.7
62.5°	11346.8	9394.0	2642.8	876.7	750.1	807.1	962.2	962.2	917.9	911.5	911.5
65°	11707.7	9387.6	1857.9	816.6	731.1	886.2	1073.0	1022.3	905.2	860.9	851.4
67.5°	11615.9	8976.2	1281.9	775.4	724.8	968.5	1123.6	981.2	848.2	810.3	781.8
70°	10808.8	8105.8	987.5	737.5	715.3	933.7	1107.8	933.7	803.9	769.1	743.8
72.5°	8719.8	6501.1	819.8	699.5	677.3	864.1	1054.0	889.4	769.1	731.1	705.8
75°	5561.1	4089.3	693.2	648.8	604.5	775.4	981.2	845.1	731.1	680.5	661.5
77.5°	2674.5	1763.0	604.5	588.7	544.4	718.5	908.4	788.1	680.5	639.3	626.7
80°	1082.5	807.1	525.4	528.6	500.1	683.7	857.7	734.3	629.9	585.5	563.4
82.5°	563.4	468.4	443.1	455.8	455.8	652.0	819.8	690.0	585.5	566.6	493.8
85°	303.8	291.2	341.8	367.2	395.6	588.7	762.8	642.5	534.9	458.9	443.1
87.5°	148.8	189.9	193.1	221.6	275.4	471.6	642.5	538.1	446.3	370.3	364.0
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)