

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: P400401

Luminaire Tested: **ARCH-L-PA3-270-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400401  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-270-830-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27960 lumens  
Efficiency: N/A  
Efficacy: 102.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

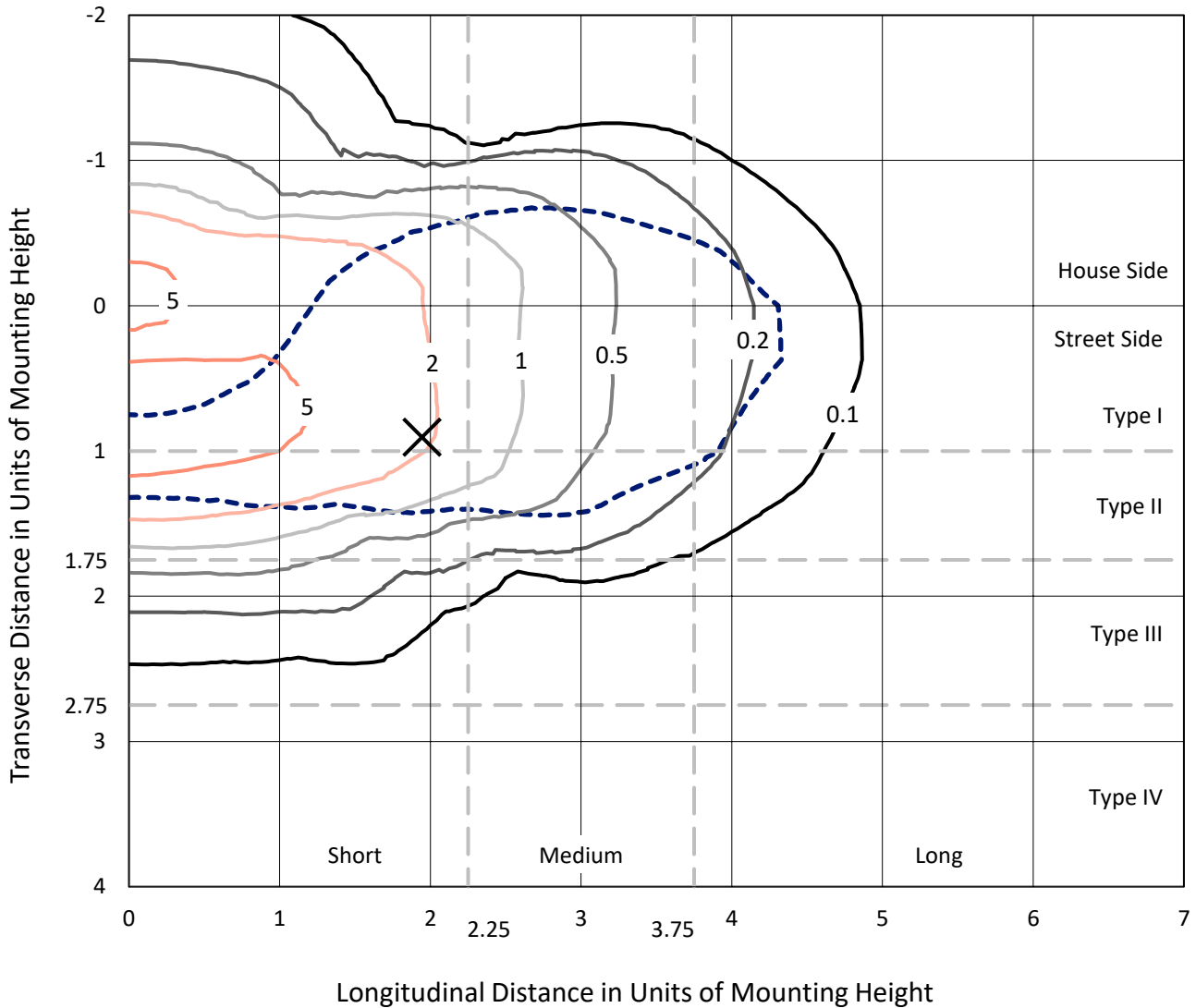
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

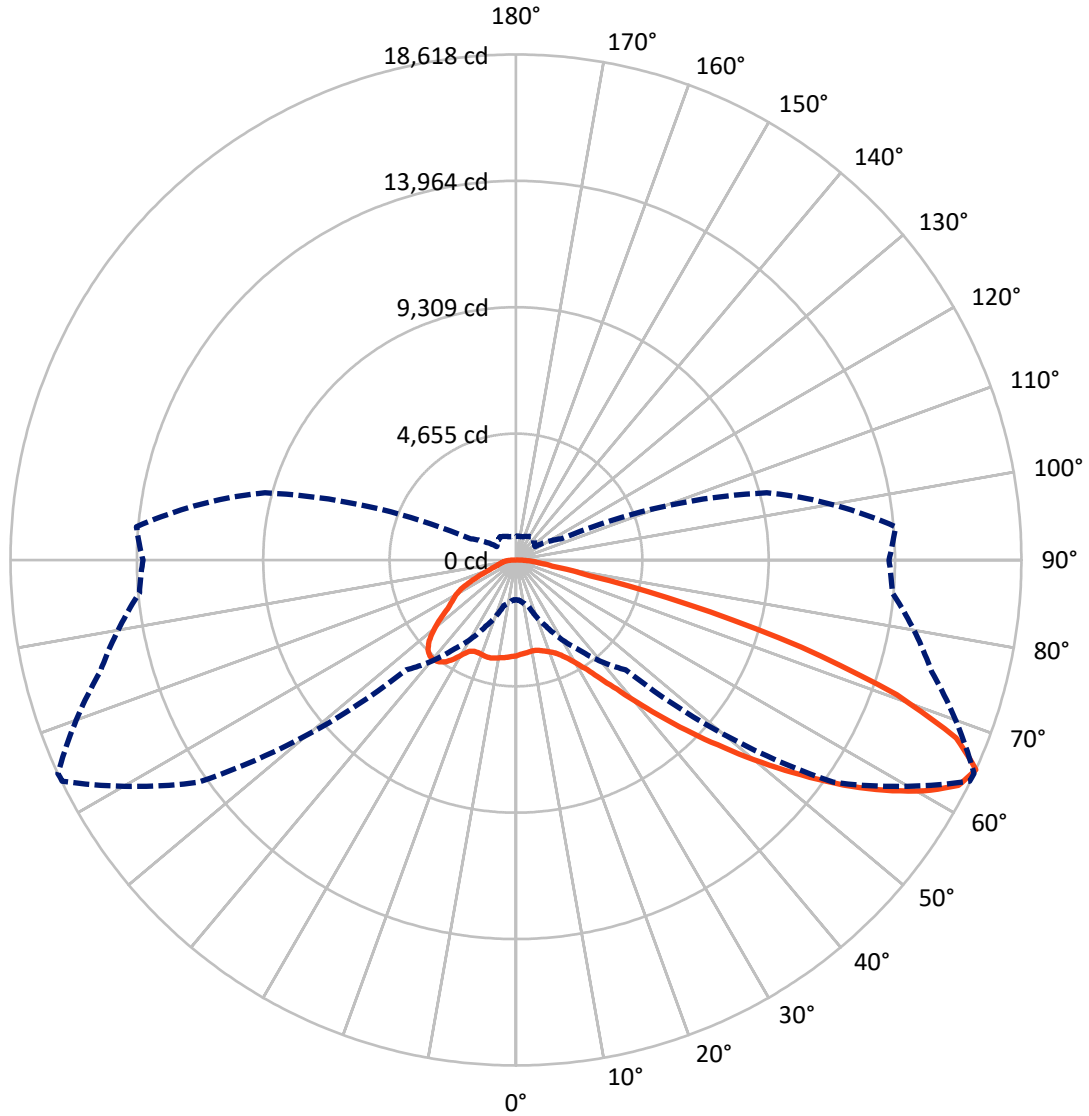
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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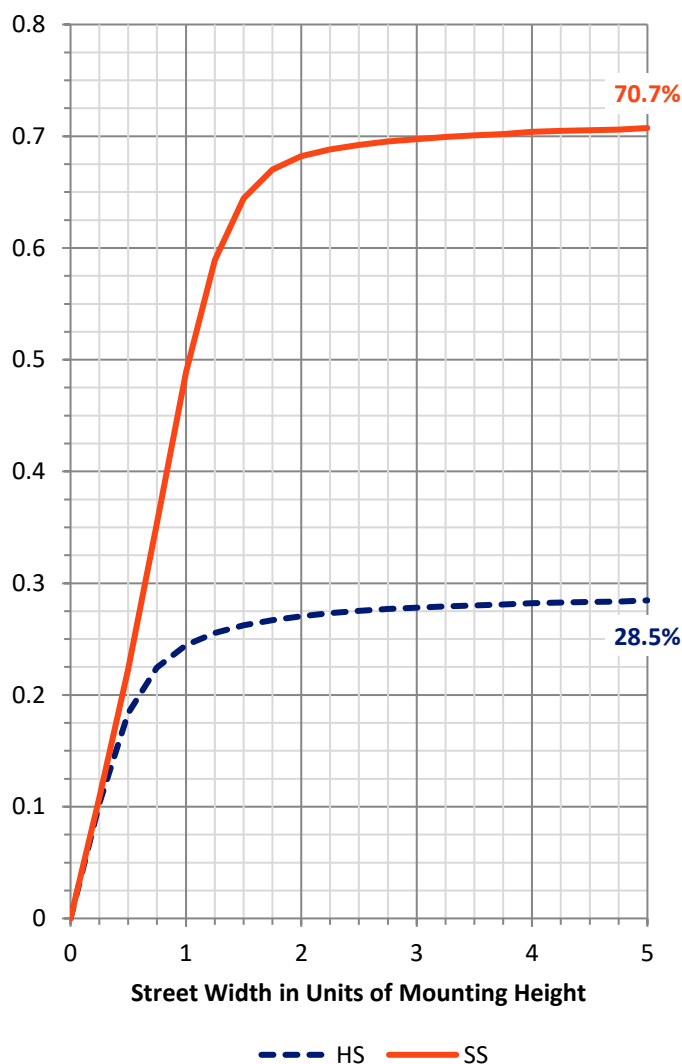
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8083.7	0.0	8083.7
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	19876.4	0.0	19876.4
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	27960.0	0.0	27960.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	336.6	1.2
10°-20°	1004.9	3.6
20°-30°	1785.1	6.4
30°-40°	3019.9	10.8
40°-50°	5257.0	18.8
50°-60°	6793.7	24.3
60°-70°	5944.9	21.3
70°-80°	3233.6	11.6
80°-90°	584.3	2.1
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°	27960.0	100.0
0°-180°	27960.0	100.0

**Coefficient of Utilization**



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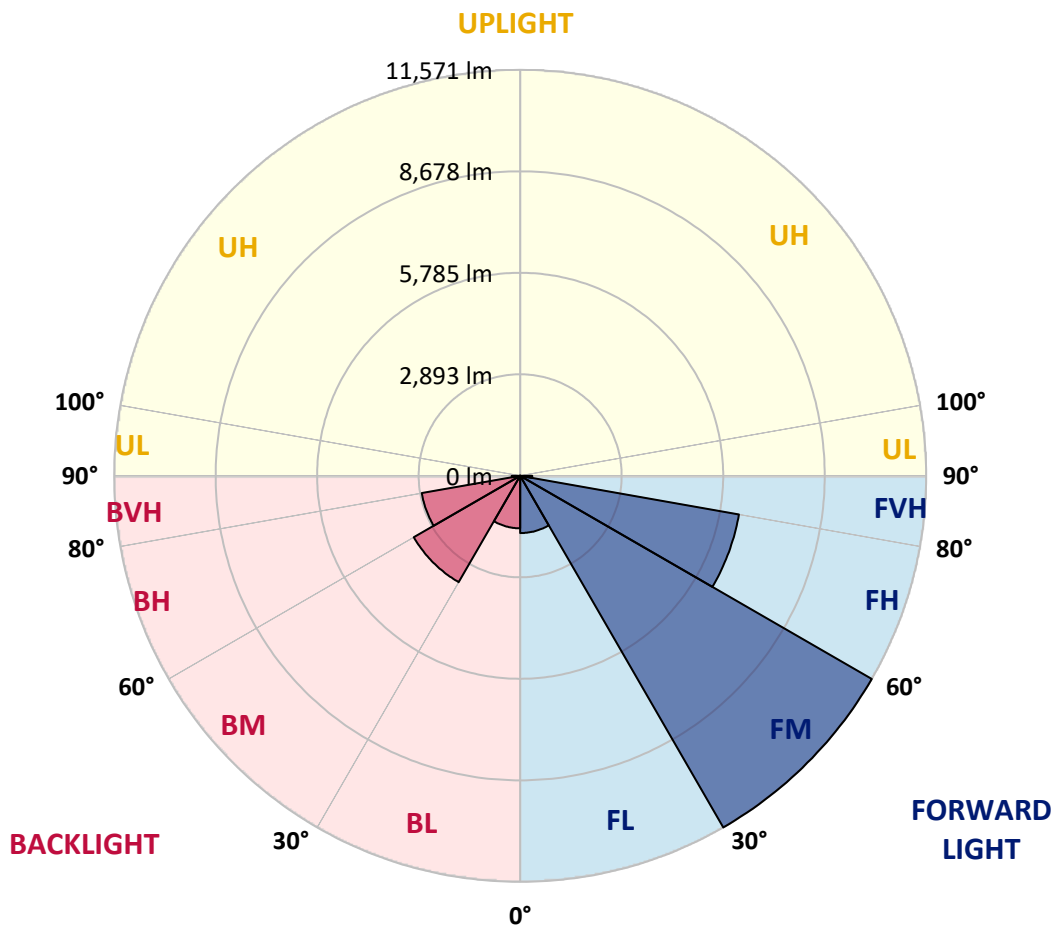
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1631.4	5.8			
FM	(30°-60°)	11570.6	41.4			
FH	(60°-80°)	6330.5	22.6			G3/7500
FVH	(80°-90°)	343.8	1.2			G3/500
BL	(0°-30°)	1495.2	5.3	B3/2500		
BM	(30°-60°)	3500.0	12.5	B3/5000		
BH	(60°-80°)	2848.0	10.2	B4/5000		G4/5000
BVH	(80°-90°)	240.4	0.9			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0
2.5°	3470.5	3466.8	3459.4	3466.8	3470.5	3477.8	3474.1	3481.5	3477.8	3488.9	3507.3
5°	3382.1	3374.8	3371.1	3389.5	3400.5	3418.9	3426.3	3452.1	3448.4	3466.8	3496.2
7.5°	3282.8	3282.8	3279.1	3301.2	3315.9	3349.0	3374.8	3418.9	3422.6	3455.7	3488.9
10°	3205.5	3209.2	3205.5	3223.9	3246.0	3286.4	3330.6	3393.2	3396.8	3444.7	3477.8
12.5°	3176.0	3176.0	3176.0	3201.8	3231.2	3286.4	3338.0	3404.2	3411.6	3463.1	3492.5
15°	3216.5	3220.2	3212.8	3238.6	3271.7	3338.0	3385.8	3455.7	3463.1	3510.9	3529.3
17.5°	3360.0	3374.8	3356.4	3371.1	3363.7	3415.2	3459.4	3529.3	3533.0	3573.5	3580.9
20°	3643.4	3658.1	3628.7	3610.3	3544.1	3540.4	3558.8	3614.0	3614.0	3639.7	3621.3
22.5°	4081.4	4096.1	4044.6	3974.6	3816.4	3739.1	3698.6	3724.4	3720.7	3731.7	3683.9
25°	4662.8	4659.2	4596.6	4467.8	4213.9	4026.2	3926.8	3886.3	3886.3	3864.2	3805.4
27.5°	5384.2	5329.0	5218.6	5064.0	4710.7	4449.4	4235.9	4132.9	4114.5	4048.2	3937.8
30°	6153.3	6112.9	5954.6	5730.1	5321.6	4986.7	4633.4	4427.3	4416.3	4272.7	4107.1
32.5°	7058.7	6992.4	6815.8	6547.1	6057.6	5586.6	5145.0	4832.1	4813.7	4585.6	4357.4
35°	8221.6	8166.4	7824.2	7555.5	6926.2	6307.9	5785.3	5369.4	5354.7	5075.0	4784.3
37.5°	9616.4	9472.9	9141.7	8637.5	7975.0	7242.7	6580.2	6057.6	6039.2	5730.1	5362.1
40°	10860.3	10731.5	10437.1	9973.4	9263.1	8449.8	7551.8	6918.8	6900.4	6525.0	6061.3
42.5°	11780.4	11692.1	11500.7	11232.0	10724.2	10231.0	8792.1	7960.3	7927.2	7441.4	6863.6
45°	12314.0	12244.1	12133.7	12199.9	12192.6	12100.6	10271.5	9200.6	9093.8	8464.5	7757.9
47.5°	12185.2	12122.7	12166.8	12682.1	13392.3	13926.0	11993.9	10470.2	10326.7	9506.0	8711.1
50°	11254.1	11279.9	11511.7	12498.0	14091.6	15276.6	13903.9	11916.6	11725.2	10554.9	9616.4
52.5°	9557.5	9620.1	10183.2	11563.3	14014.3	16152.5	15629.9	13410.7	13156.8	11578.0	10440.8
55°	7592.3	7750.6	8479.2	9929.2	13005.9	16215.1	16932.7	14912.3	14632.6	12538.5	11158.4
57.5°	5616.0	5851.6	6694.3	8026.6	11073.8	15225.1	17584.1	16347.6	16009.0	13491.7	11916.6
60°	3562.5	3706.0	4677.6	6249.0	8475.6	12803.5	17499.5	17569.4	17275.0	14441.2	12707.8
62.5°	2274.4	2344.3	2833.8	4456.8	5925.2	9480.3	16575.7	18493.1	18294.4	15306.1	13458.6
65°	1461.0	1490.5	1740.7	2741.8	4033.5	5722.7	14275.6	18592.5	18618.3	15847.0	13922.3
67.5°	1188.7	1203.4	1295.4	1692.9	2852.2	3161.3	9944.0	17179.3	17492.1	15707.2	13764.0
70°	1082.0	1100.4	1196.1	1350.6	2208.1	2182.4	4813.7	14375.0	14886.5	14901.2	13061.1
72.5°	912.7	938.5	1067.3	1277.0	1707.6	1722.3	2038.8	10238.4	10992.8	13318.7	12004.9
75°	761.8	776.5	886.9	1126.1	1446.3	1376.4	1431.6	5428.3	6517.7	10680.0	10882.4
77.5°	618.3	633.0	714.0	898.0	1284.4	1070.9	1126.1	2248.6	2778.6	7250.0	8895.1
80°	441.6	456.3	548.4	699.2	971.6	964.2	835.4	1240.2	1347.0	3919.4	5778.0
82.5°	316.5	327.5	415.9	500.5	673.5	967.9	629.3	842.8	883.3	1737.1	2329.6
85°	213.5	213.5	287.1	331.2	434.3	610.9	507.9	570.4	596.2	824.4	629.3
87.5°	92.0	92.0	154.6	169.3	228.2	283.4	379.1	287.1	294.4	445.3	257.6
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°	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0	3533.0
2.5°	3518.3	3522.0	3529.3	3551.4	3566.1	3588.2	3599.3	3614.0	3614.0	3606.6	3610.3
5°	3510.9	3522.0	3547.7	3588.2	3614.0	3654.5	3683.9	3706.0	3713.3	3706.0	3709.7
7.5°	3507.3	3525.7	3569.8	3628.7	3665.5	3717.0	3757.5	3783.3	3801.7	3794.3	3798.0
10°	3496.2	3525.7	3580.9	3654.5	3709.7	3761.2	3798.0	3809.0	3820.1	3812.7	3809.0
12.5°	3510.9	3544.1	3602.9	3691.3	3753.8	3794.3	3805.4	3787.0	3761.2	3746.5	3742.8
15°	3540.4	3573.5	3632.4	3724.4	3779.6	3794.3	3768.5	3709.7	3650.8	3617.7	3614.0
17.5°	3580.9	3602.9	3650.8	3731.7	3775.9	3757.5	3706.0	3636.1	3591.9	3566.1	3569.8
20°	3606.6	3606.6	3643.4	3706.0	3742.8	3728.1	3665.5	3588.2	3518.3	3485.2	3474.1
22.5°	3643.4	3625.0	3628.7	3683.9	3735.4	3713.3	3580.9	3444.7	3345.3	3308.5	3304.8
25°	3742.8	3691.3	3658.1	3691.3	3812.7	3632.4	3367.4	3209.2	3117.1	3084.0	3087.7
27.5°	3864.2	3794.3	3724.4	3779.6	3875.3	3448.4	3095.1	2914.7	2859.5	2833.8	2844.8
30°	3985.7	3893.7	3801.7	4000.4	3831.1	3161.3	2745.4	2568.8	2521.0	2502.6	2517.3
32.5°	4210.2	4059.3	3948.9	4294.8	3694.9	2833.8	2366.4	2204.5	2160.3	2138.2	2130.8
35°	4585.6	4394.2	4283.8	4552.4	3503.6	2469.4	2020.4	1906.4	1858.5	1810.7	1803.3
37.5°	5126.6	4894.7	4795.3	4699.6	3234.9	2108.8	1755.5	1678.2	1608.3	1534.7	1531.0
40°	5774.3	5472.5	5398.9	4765.9	2863.2	1770.2	1571.5	1497.9	1409.5	1339.6	1343.3
42.5°	6521.4	6134.9	5976.7	4747.5	2403.2	1589.9	1439.0	1358.0	1280.7	1218.2	1214.5
45°	7320.0	6882.0	6517.7	4618.7	1946.8	1464.7	1358.0	1262.3	1185.0	1115.1	1107.7
47.5°	8203.2	7713.8	7018.2	4368.4	1608.3	1376.4	1310.2	1174.0	1104.1	1059.9	1059.9
50°	9093.8	8508.7	7478.2	3989.4	1409.5	1310.2	1240.2	1126.1	1070.9	1034.1	1034.1
52.5°	9855.6	9336.7	7857.3	3536.7	1284.4	1255.0	1192.4	1104.1	1045.2	1012.1	1008.4
55°	10595.4	10105.9	8195.9	3087.7	1181.4	1181.4	1181.4	1085.7	1019.4	990.0	986.3
57.5°	11331.4	10915.5	8549.2	2793.3	1089.3	1118.8	1159.3	1063.6	997.3	971.6	967.9
60°	12163.1	11887.1	8957.7	2587.2	1008.4	1052.5	1129.8	1037.8	960.5	938.5	934.8
62.5°	13046.4	13046.4	9329.4	2296.5	934.8	997.3	1085.7	1004.7	927.4	909.0	905.3
65°	13738.3	14036.4	9568.6	1862.2	861.2	942.1	1034.1	960.5	883.3	879.6	872.2
67.5°	13819.2	14286.6	9417.7	1405.8	794.9	883.3	982.6	912.7	839.1	839.1	828.1
70°	13237.8	13712.5	8946.6	1052.5	747.1	824.4	916.4	853.8	783.9	791.2	772.8
72.5°	12266.2	12384.0	7776.3	831.7	691.9	761.8	835.4	787.6	725.0	725.0	699.2
75°	10985.5	10330.4	5649.1	695.6	625.6	688.2	754.4	714.0	658.8	640.4	625.6
77.5°	8744.2	7485.6	3282.8	599.9	570.4	618.3	662.4	633.0	585.2	544.7	544.7
80°	5329.0	4386.8	1450.0	518.9	504.2	541.0	570.4	537.3	496.8	456.3	445.3
82.5°	2027.8	1692.9	702.9	445.3	441.6	463.7	485.8	452.7	423.2	404.8	349.6
85°	555.7	511.6	482.1	371.7	364.3	360.7	386.4	371.7	331.2	272.3	242.9
87.5°	209.8	239.2	261.3	228.2	242.9	224.5	257.6	235.5	209.8	136.2	121.4
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)