

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: P400399

Luminaire Tested: **ARCH-L-PA3-270-830-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400399  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
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-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28240 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4

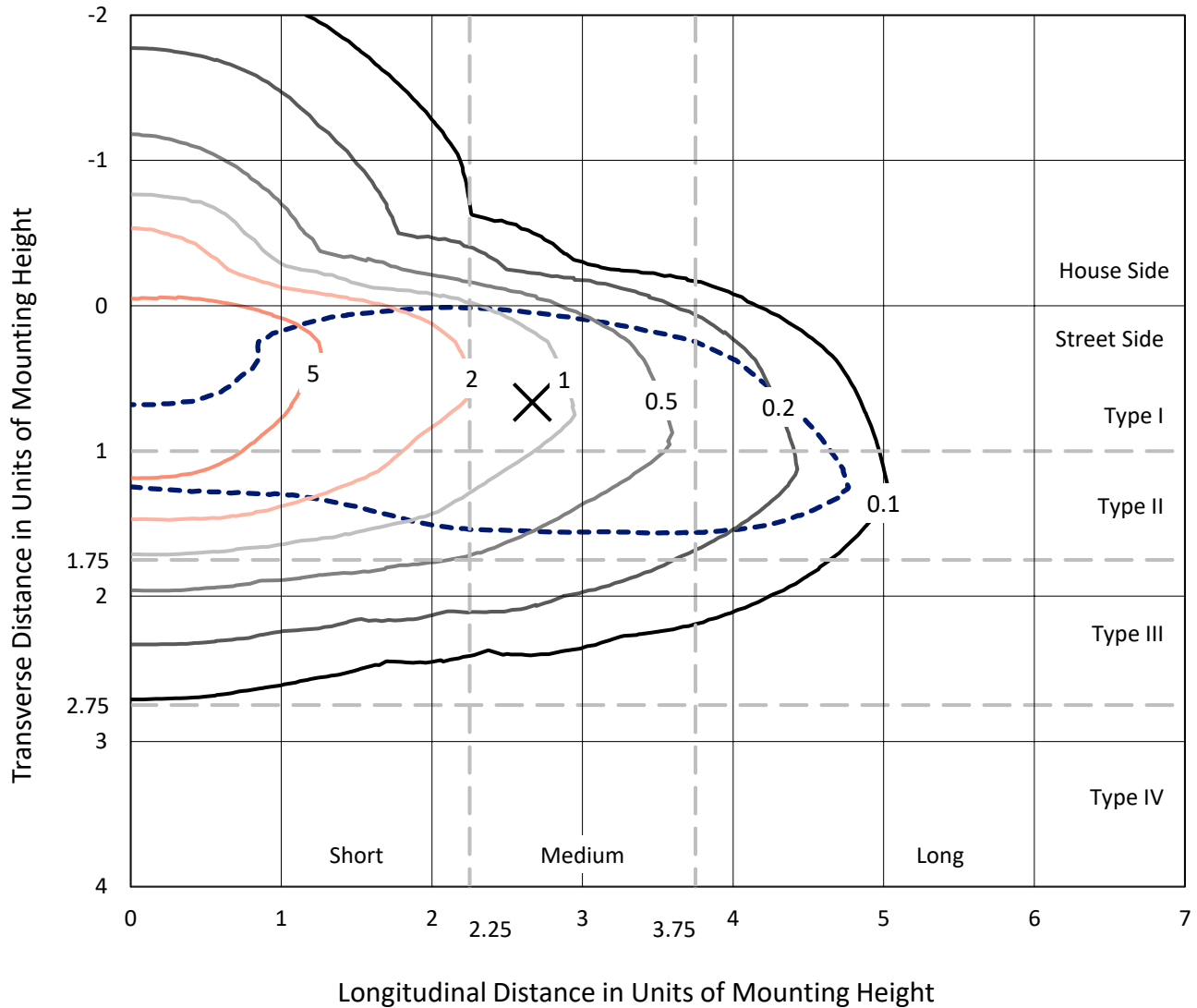
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

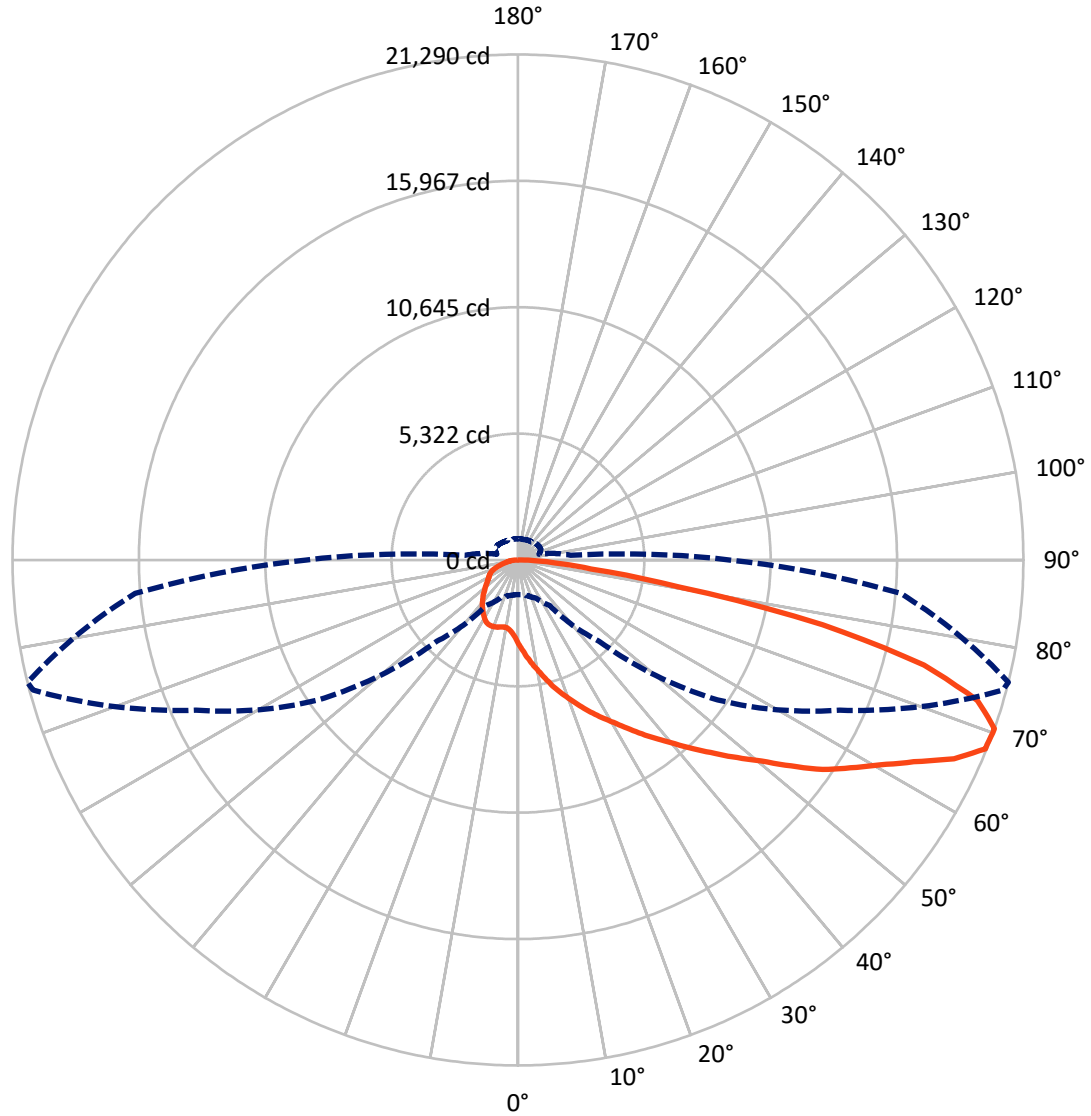
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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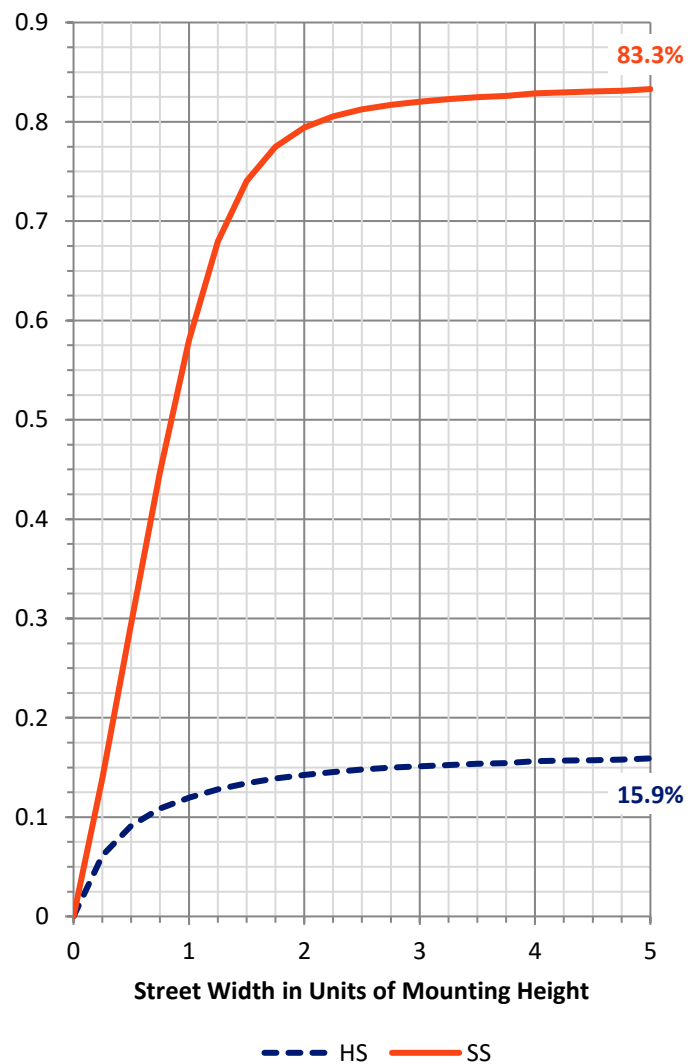
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4610.5	0.0	4610.5
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	23629.5	0.0	23629.5
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	28240.0	0.0	28240.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	366.9	1.3
10°-20°	1247.1	4.4
20°-30°	2231.3	7.9
30°-40°	3609.4	12.8
40°-50°	5221.5	18.5
50°-60°	5976.3	21.2
60°-70°	5497.5	19.5
70°-80°	3399.6	12.0
80°-90°	690.3	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°	28240.0	100.0
0°-180°	28240.0	100.0

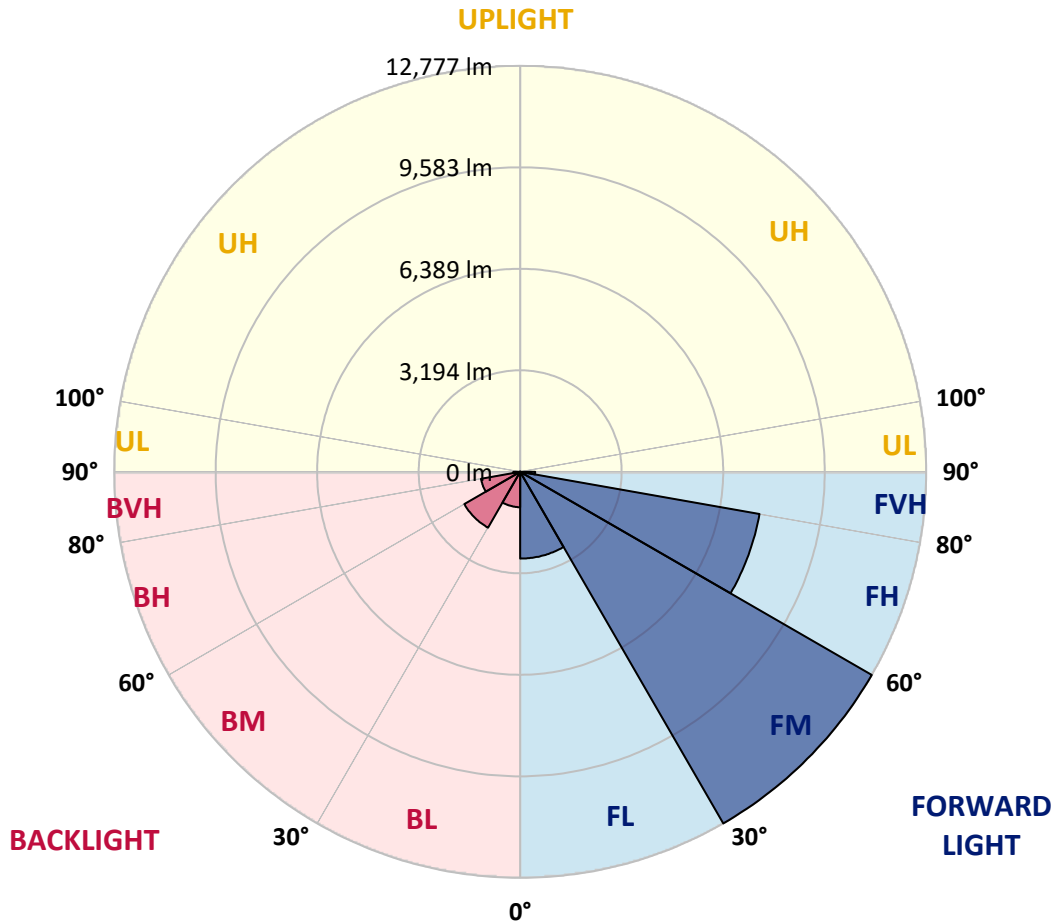


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2731.7	9.7			
FM (30°-60°)	12777.3	45.2			
FH (60°-80°)	7646.6	27.1			G4/12000
FVH (80°-90°)	473.9	1.7			G3/500
BL (0°-30°)	1113.6	3.9	B3/2500		
BM (30°-60°)	2030.0	7.2	B2/2500		
BH (60°-80°)	1250.5	4.4	B3/2500		G3/2500
BVH (80°-90°)	216.4	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5
2.5°	4500.8	4467.3	4463.6	4411.6	4363.4	4233.4	4140.5	3977.2	3813.8	3810.0	3646.7
5°	5202.6	5169.2	5150.6	5087.5	5005.8	4835.0	4667.9	4415.3	4136.8	4118.3	3810.0
7.5°	5677.9	5648.2	5611.1	5585.1	5507.1	5354.9	5150.6	4849.8	4467.3	4430.2	3999.4
10°	5997.3	5978.7	5971.3	5952.7	5904.5	5781.9	5585.1	5265.7	4797.8	4757.0	4200.0
12.5°	6134.7	6127.3	6160.7	6212.7	6231.2	6183.0	5993.6	5692.8	5161.8	5117.2	4441.3
15°	5975.0	5982.4	6067.8	6246.1	6435.5	6539.5	6428.1	6134.7	5574.0	5510.8	4723.6
17.5°	5900.7	5911.9	5971.3	6142.1	6409.5	6732.6	6784.6	6554.3	5971.3	5882.2	5020.6
20°	6030.7	6045.6	6090.1	6223.8	6409.5	6754.8	7025.9	6955.4	6361.2	6268.4	5306.6
22.5°	6361.2	6379.8	6376.1	6461.5	6587.7	6825.4	7159.6	7334.2	6769.7	6665.7	5603.7
25°	7066.8	7051.9	6925.7	6884.8	6918.2	7070.5	7337.9	7698.1	7196.8	7092.8	5915.6
27.5°	8024.9	8006.3	7776.1	7568.1	7382.4	7449.3	7590.4	7991.4	7631.2	7512.4	6212.7
30°	9049.8	9027.5	8760.1	8422.2	8010.0	7913.5	7894.9	8247.7	8069.4	7943.2	6528.3
32.5°	10048.7	10030.1	9744.2	9350.6	8782.4	8492.8	8314.5	8533.6	8567.0	8444.5	6873.7
35°	10958.5	10958.5	10713.4	10245.5	9603.1	9164.9	8871.5	8886.4	9138.9	8997.8	7267.3
37.5°	11768.1	11764.3	11497.0	11036.5	10420.1	9918.7	9554.8	9313.4	9684.8	9562.2	7679.5
40°	12410.5	12384.5	12187.7	11786.6	11166.5	10668.9	10301.2	9814.8	10293.8	10182.4	8117.7
42.5°	12878.4	12863.5	12729.9	12380.8	11790.3	11322.4	11069.9	10446.1	10984.5	10873.1	8630.2
45°	13060.4	13090.1	13090.1	12759.6	12291.7	11864.6	11753.2	11140.5	11730.9	11619.5	9179.8
47.5°	12767.0	12845.0	13004.7	13026.9	12614.7	12325.1	12362.2	11838.6	12499.6	12440.2	9781.3
50°	11849.8	11994.6	12343.7	12974.9	12744.7	12677.9	12882.1	12551.6	13324.0	13305.4	10512.9
52.5°	9484.3	9837.0	10925.1	12057.7	12655.6	12841.3	13398.3	13353.7	14386.1	14415.8	11467.3
55°	7274.7	7408.4	8667.3	10594.6	12109.7	12789.3	13743.6	14137.3	15537.3	15574.4	12343.7
57.5°	5882.2	5971.3	6658.3	8667.3	10865.7	12507.0	14014.7	14594.0	16421.1	16517.6	13123.5
60°	4660.4	4790.4	5250.9	6632.3	9124.1	11827.5	14204.1	15102.8	17371.7	17516.6	14055.6
62.5°	3464.7	3527.8	3962.3	4913.0	7222.7	10605.7	14103.9	15656.1	18537.8	18712.3	15177.1
65°	2465.8	2521.5	2829.7	3494.4	5340.0	8953.2	13520.8	16068.3	20000.9	20179.1	16306.0
67.5°	1845.6	1867.9	2042.4	2443.5	3598.4	6955.4	12339.9	15997.7	21070.4	21230.0	16759.0
70°	1459.4	1466.8	1552.2	1767.6	2339.5	4842.4	10271.5	14961.7	21148.3	21289.5	16187.1
72.5°	1210.6	1206.9	1255.2	1359.1	1630.2	3063.6	7608.9	13038.1	20145.7	20242.3	14590.3
75°	998.9	1006.4	1039.8	1099.2	1244.0	2020.1	4931.5	10401.5	17772.8	17668.8	12243.4
77.5°	839.2	835.5	850.4	902.4	1006.4	1452.0	2889.1	7516.1	13171.8	13119.8	8036.0
80°	675.9	683.3	705.6	750.1	846.7	1106.6	1708.2	4690.1	7066.8	6877.4	3839.8
82.5°	453.0	523.6	568.2	620.2	731.6	817.0	1084.3	2384.1	3160.2	3111.9	1741.6
85°	215.4	285.9	423.3	482.8	594.2	512.5	735.3	1136.3	1581.9	1563.4	627.6
87.5°	44.6	44.6	226.5	271.1	367.6	219.1	408.5	493.9	765.0	716.7	256.2
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°	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5	3531.5
2.5°	3550.1	3449.8	3249.3	3089.6	2926.2	2833.4	2718.3	2662.6	2651.4	2621.7	2644.0
5°	3613.2	3416.4	3037.6	2788.8	2621.7	2540.0	2499.2	2484.3	2480.6	2473.2	2473.2
7.5°	3698.6	3397.8	2904.0	2651.4	2543.7	2517.7	2528.9	2551.2	2554.9	2562.3	2558.6
10°	3802.6	3401.6	2829.7	2618.0	2566.0	2569.7	2606.9	2636.6	2651.4	2662.6	2658.9
12.5°	3947.4	3446.1	2818.5	2640.3	2618.0	2632.9	2670.0	2699.7	2714.6	2718.3	2718.3
15°	4136.8	3539.0	2844.5	2688.6	2670.0	2681.1	2703.4	2714.6	2718.3	2714.6	2714.6
17.5°	4344.8	3650.4	2881.7	2718.3	2688.6	2677.4	2670.0	2658.9	2636.6	2621.7	2621.7
20°	4545.3	3750.6	2900.2	2714.6	2662.6	2618.0	2573.5	2517.7	2480.6	2450.9	2450.9
22.5°	4745.8	3843.5	2900.2	2673.7	2592.0	2506.6	2413.8	2324.6	2268.9	2231.8	2231.8
25°	4957.5	3932.6	2878.0	2603.2	2480.6	2358.1	2231.8	2120.4	2064.7	2027.6	2020.1
27.5°	5135.8	3984.6	2818.5	2502.9	2343.2	2187.2	2042.4	1927.3	1886.5	1853.0	1853.0
30°	5325.2	4018.0	2707.1	2372.9	2187.2	2009.0	1860.5	1767.6	1723.1	1674.8	1671.1
32.5°	5536.8	4040.3	2580.9	2235.5	2027.6	1838.2	1711.9	1637.7	1541.1	1489.1	1481.7
35°	5781.9	4070.0	2447.2	2079.6	1867.9	1697.1	1622.8	1500.3	1407.4	1362.9	1359.1
37.5°	6041.9	4092.3	2302.4	1942.2	1723.1	1604.2	1530.0	1385.1	1303.4	1236.6	1229.2
40°	6316.7	4092.3	2153.8	1808.5	1607.9	1563.4	1422.3	1292.3	1154.9	1121.5	1114.0
42.5°	6621.2	4084.8	2005.3	1678.5	1500.3	1470.5	1359.1	1221.7	1151.2	1121.5	1114.0
45°	6944.2	4058.8	1864.2	1530.0	1388.8	1329.4	1244.0	1206.9	1177.2	1177.2	1177.2
47.5°	7311.9	4036.6	1704.5	1396.3	1307.1	1240.3	1177.2	1154.9	1151.2	1162.3	1173.5
50°	7783.5	4029.1	1570.8	1299.7	1244.0	1166.0	1158.6	1140.0	1143.8	1143.8	1143.8
52.5°	8355.4	3962.3	1444.5	1229.2	1180.9	1088.1	1110.3	1128.9	1136.3	1132.6	1128.9
55°	8775.0	3843.5	1336.9	1180.9	1136.3	1058.3	1088.1	1117.8	1125.2	1114.0	1114.0
57.5°	9153.8	3676.4	1251.4	1143.8	1106.6	1039.8	1073.2	1102.9	1095.5	1091.8	1088.1
60°	9588.2	3516.7	1184.6	1125.2	1076.9	1032.4	1062.1	1080.6	1069.5	1062.1	1058.3
62.5°	10059.9	3360.7	1136.3	1125.2	1054.6	1028.6	1050.9	1058.3	1036.1	1028.6	1028.6
65°	10279.0	3115.6	1084.3	1125.2	1043.5	1021.2	1028.6	1021.2	998.9	998.9	995.2
67.5°	9918.7	2710.9	1017.5	1110.3	1058.3	1010.1	995.2	984.1	958.1	958.1	950.7
70°	8923.5	2228.1	920.9	1062.1	1062.1	1006.4	950.7	924.7	895.0	906.1	891.2
72.5°	7623.8	1767.6	802.1	980.4	1039.8	1002.6	902.4	861.5	835.5	846.7	824.4
75°	6175.5	1370.3	661.0	850.4	984.1	984.1	854.1	798.4	768.7	768.7	742.7
77.5°	3936.3	1013.8	538.5	705.6	883.8	958.1	813.3	727.8	683.3	672.1	653.6
80°	1949.6	713.0	441.9	560.7	753.8	898.7	783.5	646.1	583.0	560.7	527.3
82.5°	1036.1	493.9	352.8	438.2	601.6	809.5	746.4	557.0	479.0	445.6	408.5
85°	464.2	304.5	282.2	334.2	456.8	664.7	672.1	456.8	367.6	438.2	323.1
87.5°	170.8	137.4	137.4	170.8	263.7	278.5	475.3	293.4	234.0	159.7	126.3
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)