

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: P237092

Luminaire Tested: **ARCH-L-AF72-190-D-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237092  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-190-D-U-T3  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23826.6 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 189  
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

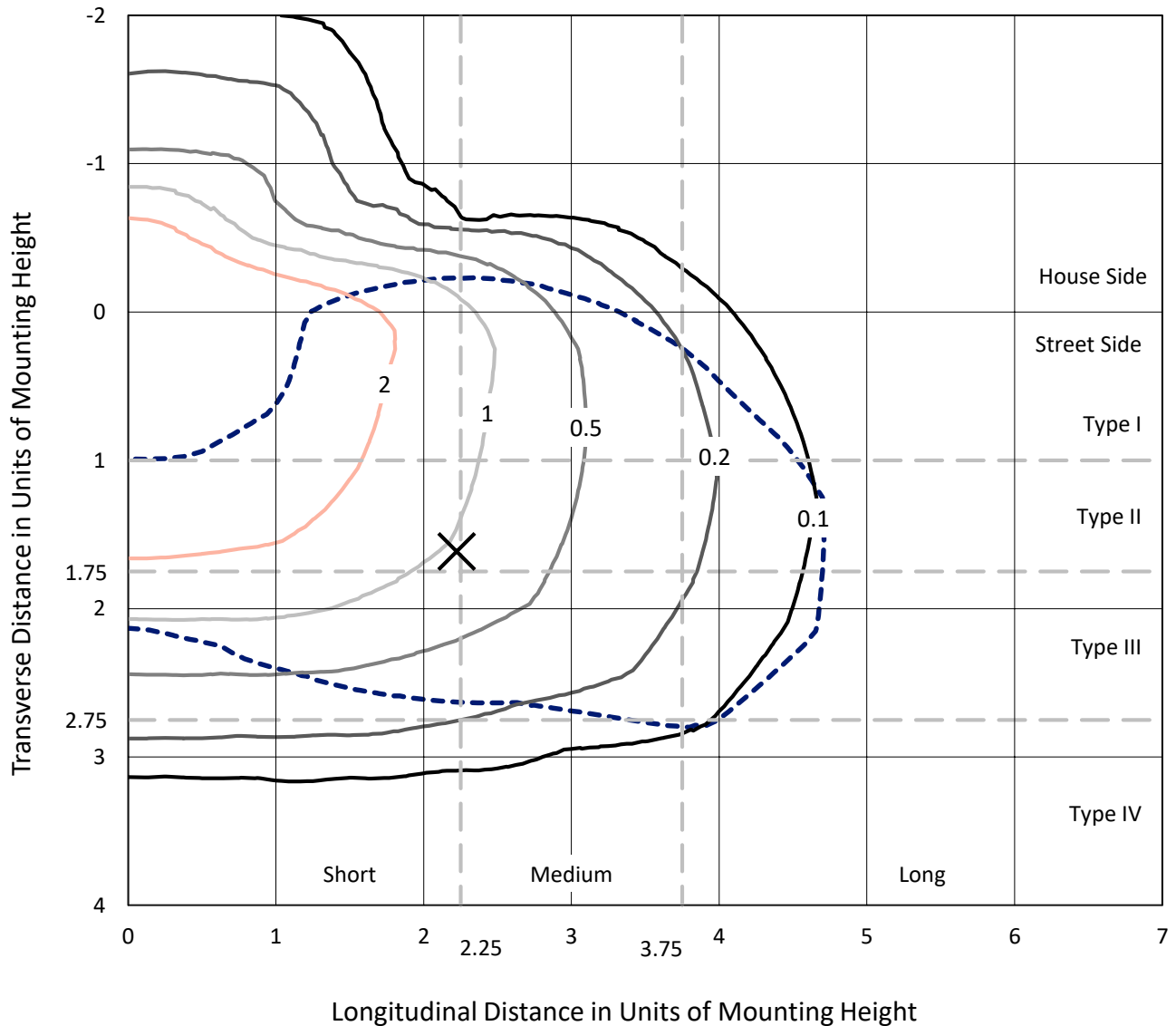


REPORT NUMBER: P237092

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

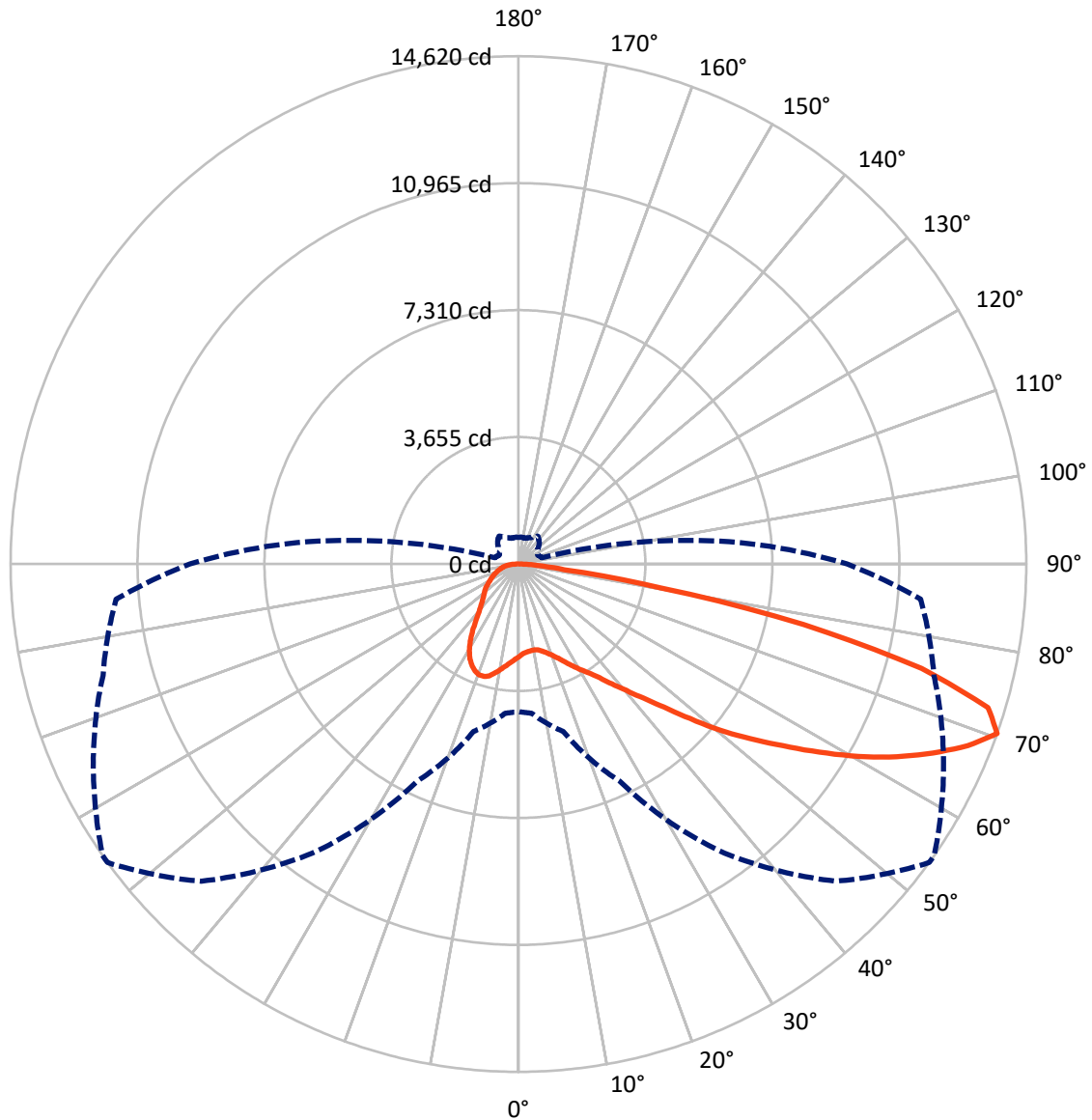


Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P237092

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5403.8	0.0	5403.8
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	18422.8	0.0	18422.8
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	23826.6	0.0	23826.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.6	1.1
10°-20°	835.9	3.5
20°-30°	1452.3	6.1
30°-40°	2122.3	8.9
40°-50°	3330.9	14.0
50°-60°	5122.1	21.5
60°-70°	6258.0	26.3
70°-80°	3880.0	16.3
80°-90°	563.7	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°	23826.6	100.0
0°-180°	23826.6	100.0

**Coefficient of Utilization**



REPORT NUMBER: P237092

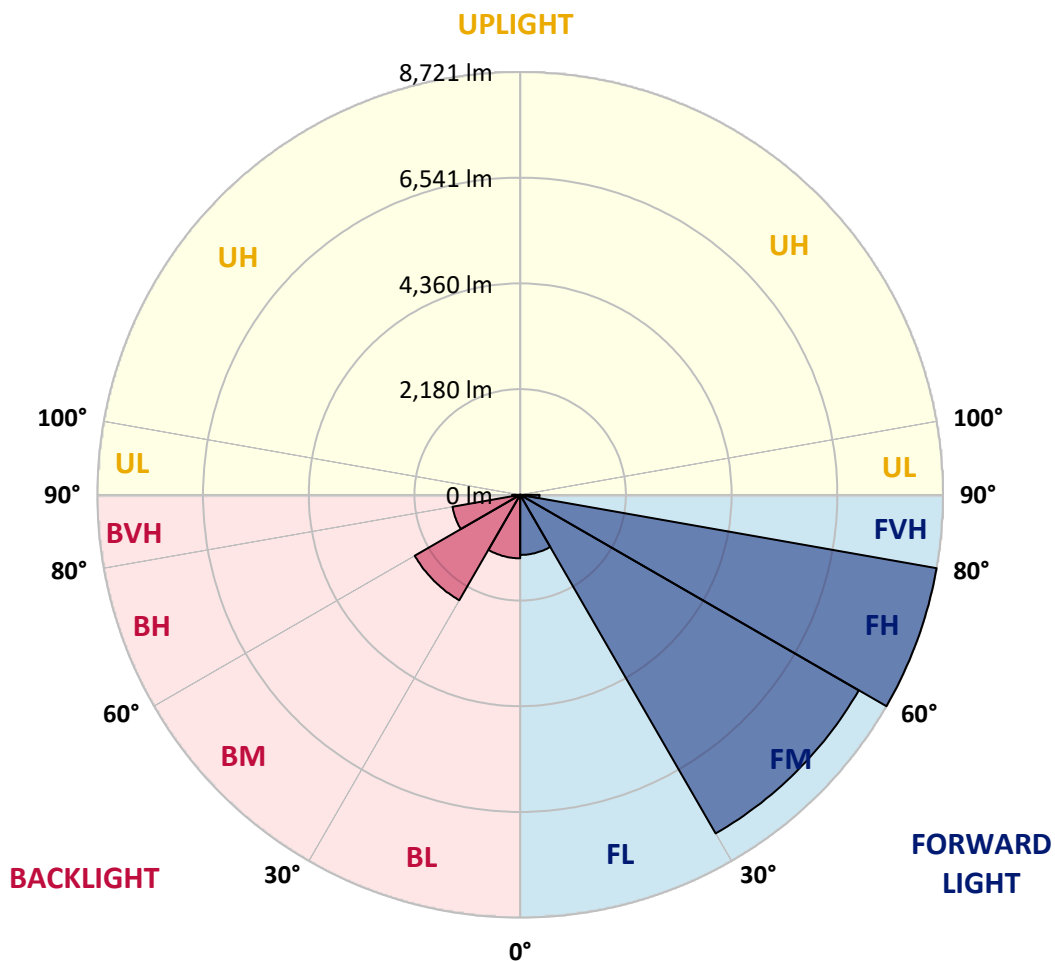
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1239.7	5.2			
FM	(30°-60°)	8064.2	33.8			
FH	(60°-80°)	8720.9	36.6			G4/12000
FVH	(80°-90°)	398.0	1.7			G3/500
BL	(0°-30°)	1310.1	5.5	B3/2500		
BM	(30°-60°)	2511.1	10.5	B3/5000		
BH	(60°-80°)	1417.0	5.9	B3/2500		G3/2500
BVH	(80°-90°)	165.6	0.7			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 III Short





REPORT NUMBER: P237092

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7
2.5°	2561.0	2552.3	2552.3	2565.4	2569.8	2582.8	2582.8	2587.1	2600.2	2622.1	2648.2
5°	2482.5	2478.1	2482.5	2499.9	2508.7	2534.9	2543.6	2547.9	2574.1	2609.0	2648.2
7.5°	2403.9	2399.5	2408.3	2434.5	2460.7	2499.9	2521.8	2526.1	2565.4	2613.3	2665.7
10°	2377.7	2373.5	2386.4	2408.3	2434.5	2478.1	2513.0	2517.4	2574.1	2630.8	2705.0
12.5°	2412.6	2408.3	2421.4	2443.2	2469.4	2499.9	2539.2	2543.6	2617.7	2691.9	2770.5
15°	2499.9	2499.9	2504.3	2517.4	2543.6	2569.8	2604.6	2609.0	2687.5	2774.8	2853.3
17.5°	2635.1	2626.4	2626.4	2622.1	2639.5	2652.6	2696.3	2700.6	2783.6	2862.0	2940.6
20°	2800.9	2796.6	2779.2	2757.4	2753.0	2761.7	2805.3	2809.6	2892.6	2958.1	3032.2
22.5°	3001.6	3006.0	2966.8	2918.8	2896.9	2910.0	2949.3	2953.7	3014.7	3071.4	3136.9
25°	3267.8	3254.7	3197.9	3128.2	3084.5	3084.5	3123.8	3123.8	3180.6	3215.4	3259.0
27.5°	3520.8	3494.7	3442.3	3342.0	3272.1	3285.2	3324.5	3324.5	3376.9	3390.0	3411.7
30°	3795.7	3769.5	3704.1	3577.6	3485.9	3477.2	3525.2	3520.8	3590.7	3586.3	3568.9
32.5°	4131.6	4118.5	4009.5	3848.0	3725.9	3695.3	3739.0	3743.4	3787.0	3773.9	3717.2
35°	4602.9	4598.5	4498.1	4214.6	4053.1	3996.4	4022.5	4022.5	4053.1	4018.2	3922.2
37.5°	5196.2	5204.9	5117.6	4698.8	4471.9	4376.0	4380.3	4376.0	4384.7	4345.4	4245.0
40°	5789.5	5811.4	5807.0	5300.9	5013.0	4847.2	4786.1	4777.4	4799.2	4781.7	4685.7
42.5°	6570.5	6622.8	6500.6	6042.6	5719.7	5440.5	5274.7	5252.9	5300.9	5322.7	5231.1
45°	7382.0	7364.5	7172.5	6841.0	6548.6	6190.9	5876.8	5841.9	5876.8	5942.2	5846.3
47.5°	7805.2	7792.1	7744.0	7578.3	7534.6	7124.5	6649.0	6618.5	6553.0	6644.7	6531.2
50°	8503.3	8516.3	8320.0	8302.6	8485.8	8258.9	7521.6	7451.8	7333.9	7408.1	7312.2
52.5°	9009.3	8952.6	8830.4	8983.1	9554.7	9432.5	8341.8	8311.3	8202.2	8184.7	8141.2
55°	9214.3	9214.3	9236.2	9589.6	10405.5	10244.0	9231.8	9262.4	9114.0	8991.8	9048.6
57.5°	9275.5	9301.6	9489.2	10073.8	11404.6	10876.6	10213.4	10257.1	10043.3	9799.1	9977.9
60°	8974.4	9052.9	9502.3	10348.7	11967.3	11548.5	11247.4	11260.5	10950.8	10593.1	10907.2
62.5°	8202.2	8298.2	9101.0	10462.1	11875.7	12237.9	12224.8	12255.3	11832.1	11387.1	11779.8
65°	7255.5	7351.4	8206.5	10143.7	11805.9	12730.8	13119.1	13202.0	12656.7	12059.0	12325.1
67.5°	5863.7	5990.2	6801.7	9070.4	11465.6	13136.6	13956.8	14044.1	13293.7	12408.0	12277.1
70°	4249.4	4310.5	4991.1	6893.4	10078.2	12914.0	14620.0	14615.6	13503.1	12381.8	11622.7
72.5°	2046.2	2094.2	2683.2	4279.9	7207.5	10959.5	14140.0	14222.9	13215.1	12002.3	10126.2
75°	842.0	890.1	1086.4	1806.2	3782.6	7242.4	11984.8	12181.1	12002.3	10771.9	7923.0
77.5°	523.5	541.0	637.0	933.6	1727.7	3381.3	8389.8	8655.9	9511.1	8629.7	5231.1
80°	392.6	405.7	475.6	654.4	1090.7	1247.8	4166.6	4502.5	5763.3	4951.9	2369.1
82.5°	327.2	331.5	379.6	475.6	741.6	715.6	1335.1	1487.8	2687.5	1889.1	815.9
85°	305.4	314.1	340.3	340.3	471.2	449.4	554.1	580.2	780.9	645.7	283.6
87.5°	157.0	148.3	301.1	266.2	244.3	218.1	235.6	253.1	292.4	309.7	126.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P237092

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7	2665.7
2.5°	2657.0	2670.1	2691.9	2713.7	2739.9	2770.5	2787.8	2809.6	2827.1	2818.4	2814.0
5°	2670.1	2691.9	2739.9	2783.6	2835.8	2896.9	2936.2	2979.9	3014.7	3023.4	3010.3
7.5°	2691.9	2731.2	2796.6	2875.1	2945.0	3023.4	3084.5	3145.7	3189.3	3197.9	3197.9
10°	2744.3	2787.8	2875.1	2979.9	3062.7	3145.7	3215.4	3263.4	3302.7	3320.2	3320.2
12.5°	2818.4	2870.8	2975.5	3102.0	3193.7	3272.1	3311.4	3333.2	3350.7	3368.2	3372.5
15°	2905.7	2962.4	3088.9	3224.1	3320.2	3359.4	3359.4	3355.1	3355.1	3363.8	3372.5
17.5°	2992.9	3054.0	3184.9	3328.9	3390.0	3368.2	3337.6	3324.5	3315.8	3311.4	3324.5
20°	3084.5	3145.7	3276.5	3411.7	3394.4	3302.7	3259.0	3228.5	3202.3	3189.3	3206.7
22.5°	3184.9	3241.6	3376.9	3468.5	3337.6	3197.9	3115.1	3067.1	3023.4	2997.2	3014.7
25°	3302.7	3359.4	3490.3	3485.9	3237.2	3040.9	2910.0	2831.5	2783.6	2757.4	2757.4
27.5°	3442.3	3490.3	3616.8	3442.3	3097.6	2831.5	2639.5	2565.4	2552.3	2530.5	2530.5
30°	3586.3	3625.5	3734.6	3342.0	2905.7	2556.7	2347.3	2312.3	2316.7	2294.9	2299.2
32.5°	3734.6	3773.9	3804.5	3193.7	2657.0	2246.9	2107.3	2081.1	2076.7	2059.3	2041.8
35°	3944.0	4000.8	3813.2	2992.9	2356.0	1989.4	1889.1	1862.9	1836.8	1775.6	1775.6
37.5°	4262.5	4323.6	3791.4	2744.3	2046.2	1788.7	1697.2	1662.3	1618.6	1557.5	1535.8
40°	4698.8	4698.8	3743.4	2465.0	1797.5	1627.3	1540.1	1496.5	1448.5	1387.4	1374.3
42.5°	5213.7	5091.4	3669.2	2181.4	1614.2	1518.3	1439.7	1391.7	1335.1	1265.2	1256.5
45°	5815.7	5484.1	3564.5	1928.4	1479.0	1452.8	1404.8	1322.0	1226.0	1151.8	1138.7
47.5°	6400.3	5837.5	3464.1	1749.6	1365.5	1426.6	1387.4	1247.8	1116.9	1012.2	999.1
50°	7041.7	6151.6	3346.3	1601.1	1278.3	1409.2	1365.5	1138.7	994.7	920.6	911.9
52.5°	7683.0	6470.2	3219.8	1444.1	1204.1	1374.3	1313.3	1060.2	990.4	890.1	877.0
55°	8359.2	6841.0	3071.4	1269.6	1116.9	1304.5	1243.4	1055.8	1020.9	890.1	859.5
57.5°	9018.0	7251.1	2831.5	1099.5	1020.9	1199.8	1217.2	1029.6	955.4	881.3	846.4
60°	9746.7	7687.4	2434.5	955.4	938.0	1112.6	1182.3	972.9	881.3	855.1	837.7
62.5°	10331.3	8080.0	1902.2	855.1	868.2	1042.7	1138.7	938.0	850.8	828.9	824.6
65°	10584.3	8088.8	1365.5	767.8	798.4	977.3	1095.1	907.5	824.6	815.9	811.5
67.5°	10318.2	7643.7	959.8	685.0	724.2	916.2	1038.4	877.0	798.4	802.8	794.0
70°	9458.7	6705.7	702.5	606.4	654.4	850.8	977.3	837.7	767.8	776.6	763.5
72.5°	7914.3	5226.7	562.8	541.0	597.7	780.9	916.2	794.0	719.9	724.2	698.1
75°	5846.3	3464.1	471.2	484.3	532.2	715.6	837.7	737.3	667.5	650.1	632.6
77.5°	3477.2	1780.0	388.3	423.2	475.6	637.0	750.4	667.5	610.8	580.2	567.1
80°	1435.4	719.9	318.4	357.7	414.5	567.1	663.2	584.6	545.3	514.9	497.4
82.5°	571.5	353.4	253.1	292.4	349.0	493.0	580.2	514.9	475.6	453.8	405.7
85°	218.1	174.5	170.1	205.1	261.8	379.6	479.9	431.9	401.4	344.6	331.5
87.5°	87.3	78.6	78.6	100.4	148.3	240.0	344.6	301.1	314.1	248.7	253.1
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)