

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: P237115

Luminaire Tested: **ARCH-L-AF72-220-D-U-T3-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237115  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-220-D-U-T3-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26049 lumens  
Efficiency: N/A  
Efficacy: 117.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

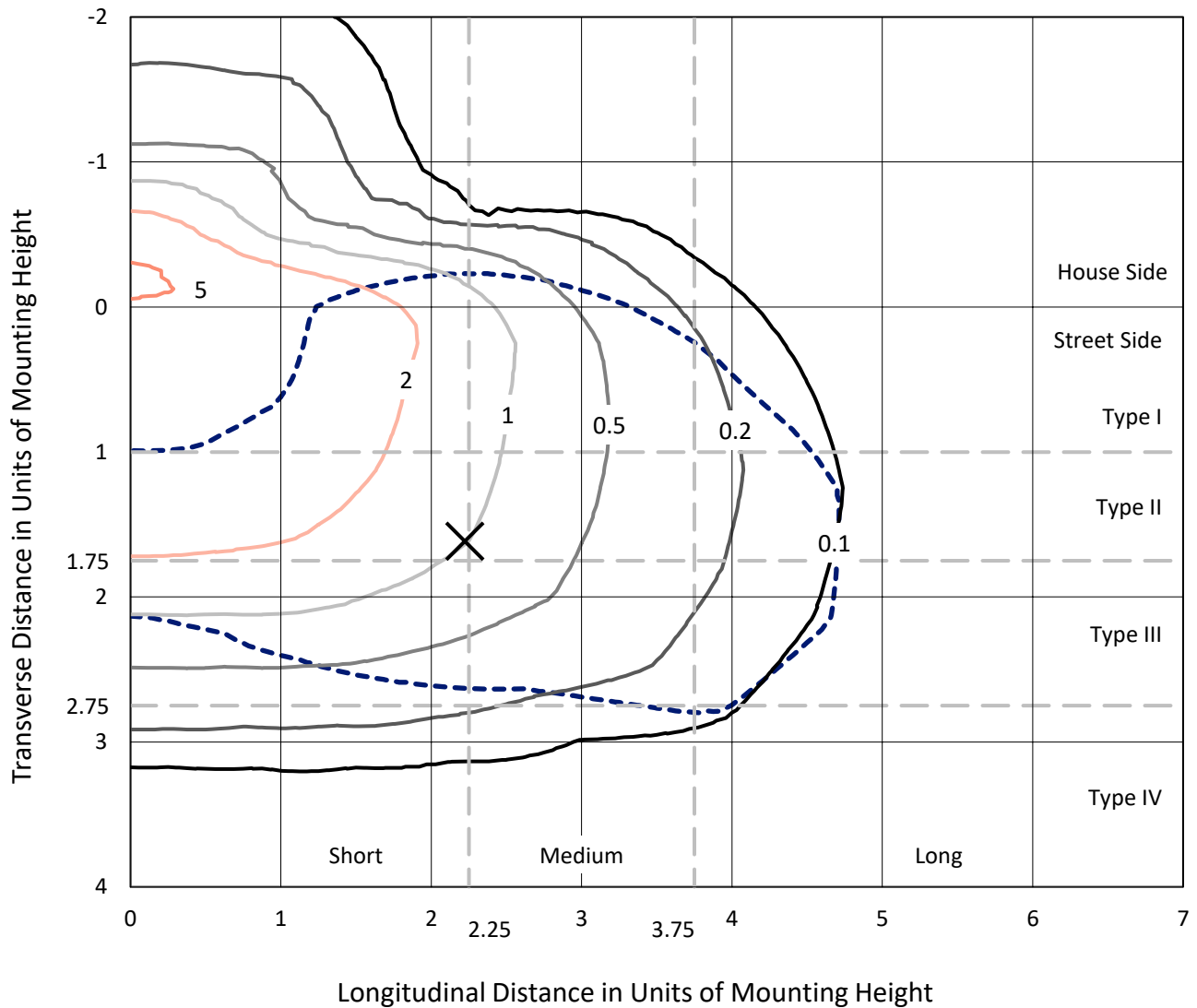
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

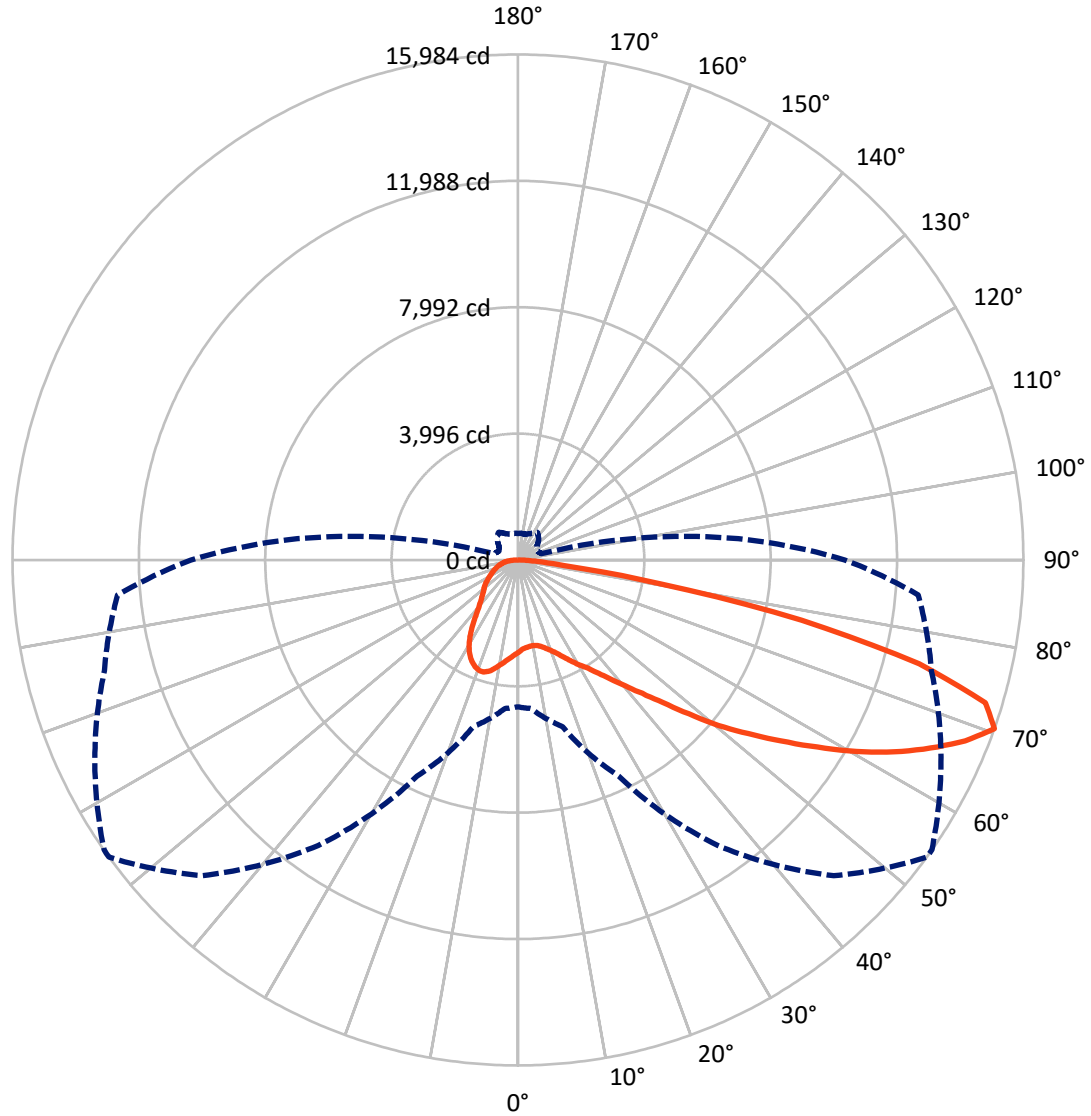
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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

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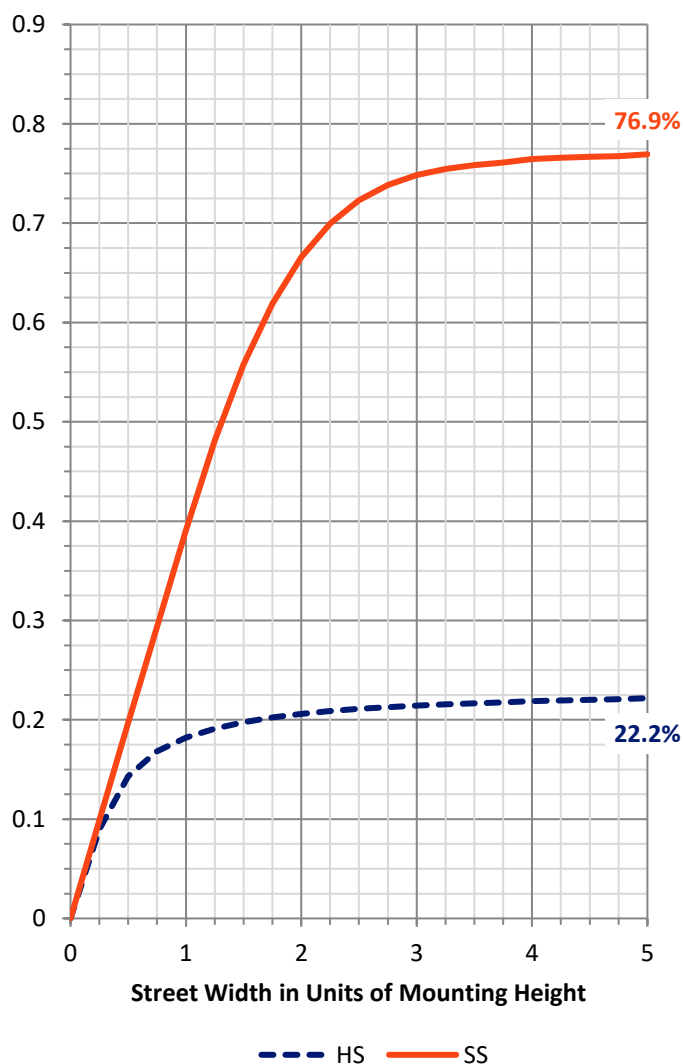
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5907.8	0.0	5907.8
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	20141.2	0.0	20141.2
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	26049.0	0.0	26049.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.0	1.1
10°-20°	913.9	3.5
20°-30°	1587.7	6.1
30°-40°	2320.3	8.9
40°-50°	3641.5	14.0
50°-60°	5599.9	21.5
60°-70°	6841.7	26.3
70°-80°	4241.9	16.3
80°-90°	616.2	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°	26049.0	100.0
0°-180°	26049.0	100.0

**Coefficient of Utilization**

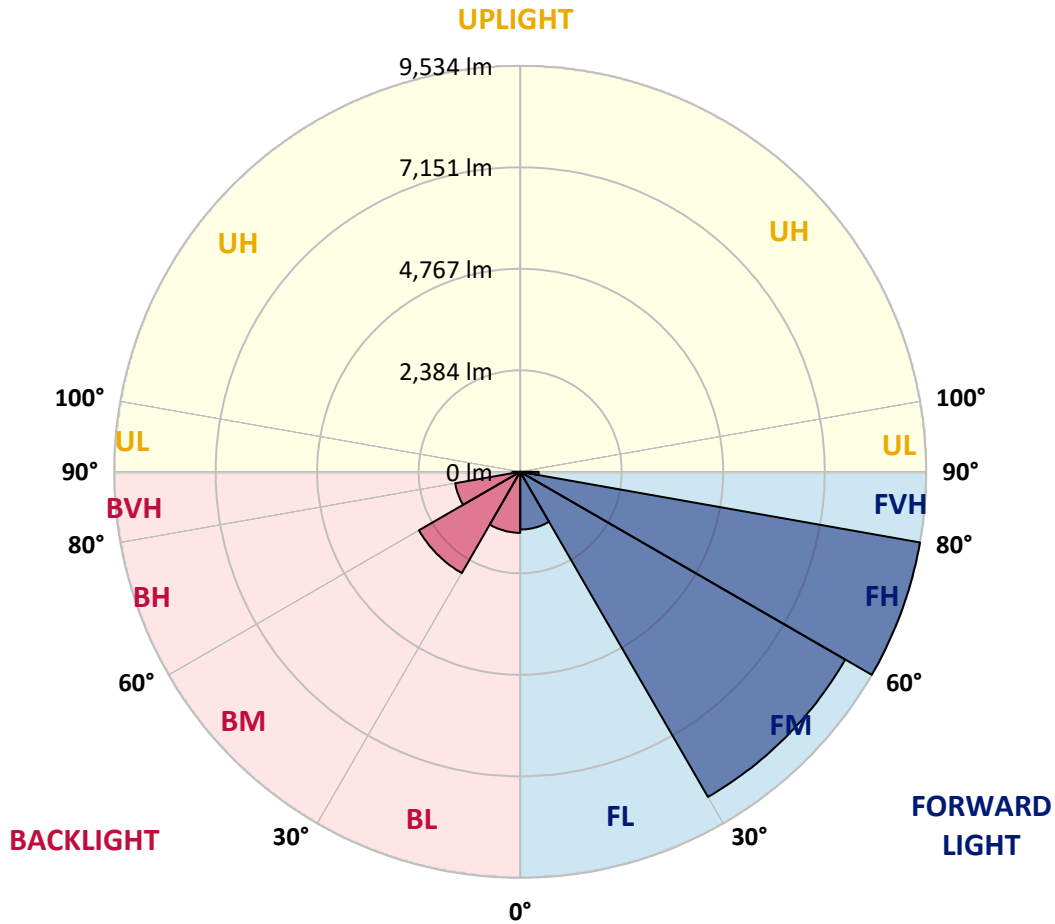


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1355.3	5.2			
FM (30°-60°)	8816.4	33.8			
FH (60°-80°)	9534.3	36.6			G4/12000
FVH (80°-90°)	435.1	1.7			G3/500
BL (0°-30°)	1432.3	5.5	B3/2500		
BM (30°-60°)	2745.3	10.5	B3/5000		
BH (60°-80°)	1549.2	5.9	B3/2500		G3/2500
BVH (80°-90°)	181.1	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4
2.5°	2799.9	2790.3	2790.3	2804.7	2809.4	2823.7	2823.7	2828.5	2842.8	2866.7	2895.3
5°	2714.0	2709.3	2714.0	2733.1	2742.6	2771.3	2780.8	2785.6	2814.2	2852.3	2895.3
7.5°	2628.2	2623.4	2632.9	2661.6	2690.2	2733.1	2757.0	2761.7	2804.7	2857.1	2914.4
10°	2599.5	2594.8	2609.1	2632.9	2661.6	2709.3	2747.4	2752.2	2814.2	2876.2	2957.3
12.5°	2637.7	2632.9	2647.2	2671.1	2699.7	2733.1	2776.0	2780.8	2861.9	2943.0	3028.8
15°	2733.1	2733.1	2737.9	2752.2	2780.8	2809.4	2847.6	2852.3	2938.2	3033.6	3119.5
17.5°	2881.0	2871.4	2871.4	2866.7	2885.7	2900.0	2947.7	2952.5	3043.1	3129.0	3214.9
20°	3062.2	3057.5	3038.4	3014.5	3009.8	3019.3	3067.0	3071.8	3162.4	3233.9	3315.0
22.5°	3281.6	3286.4	3243.5	3191.0	3167.2	3181.5	3224.4	3229.2	3295.9	3357.9	3429.5
25°	3572.6	3558.3	3496.3	3420.0	3372.3	3372.3	3415.2	3415.2	3477.2	3515.4	3563.1
27.5°	3849.2	3820.6	3763.4	3653.7	3577.4	3591.7	3634.6	3634.6	3691.8	3706.1	3730.0
30°	4149.7	4121.1	4049.6	3911.2	3811.1	3801.5	3854.0	3849.2	3925.6	3920.8	3901.7
32.5°	4517.0	4502.7	4383.5	4207.0	4073.4	4040.0	4087.7	4092.5	4140.2	4125.9	4063.9
35°	5032.2	5027.4	4917.7	4607.6	4431.2	4369.2	4397.8	4397.8	4431.2	4393.0	4288.1
37.5°	5680.8	5690.4	5595.0	5137.1	4889.1	4784.1	4788.9	4784.1	4793.7	4750.7	4641.0
40°	6329.5	6353.4	6348.6	5795.3	5480.5	5299.3	5232.5	5222.9	5246.8	5227.7	5122.8
42.5°	7183.3	7240.6	7107.0	6606.2	6253.2	5948.0	5766.7	5742.9	5795.3	5819.2	5719.0
45°	8070.5	8051.4	7841.6	7479.1	7159.5	6768.4	6424.9	6386.8	6424.9	6496.5	6391.6
47.5°	8533.2	8518.9	8466.4	8285.2	8237.5	7789.1	7269.2	7235.8	7164.3	7264.4	7140.4
50°	9296.4	9310.7	9096.0	9077.0	9277.3	9029.3	8223.2	8146.8	8018.1	8099.1	7994.2
52.5°	9849.7	9787.7	9654.1	9821.0	10445.9	10312.3	9119.9	9086.5	8967.3	8948.2	8900.5
55°	10073.8	10073.8	10097.7	10484.1	11376.0	11199.5	10092.9	10126.3	9964.1	9830.6	9892.6
57.5°	10140.6	10169.2	10374.3	11013.5	12468.3	11891.1	11166.1	11213.8	10980.1	10713.0	10908.6
60°	9811.5	9897.4	10388.7	11314.0	13083.6	12625.7	12296.6	12310.9	11972.2	11581.1	11924.5
62.5°	8967.3	9072.2	9949.8	11438.0	12983.4	13379.3	13365.0	13398.4	12935.7	12449.2	12878.5
65°	7932.2	8037.1	8972.0	11089.8	12907.1	13918.3	14342.8	14433.5	13837.2	13183.8	13474.7
67.5°	6410.6	6549.0	7436.1	9916.4	12535.1	14361.9	15258.6	15354.0	14533.6	13565.4	13422.3
70°	4645.8	4712.6	5456.7	7536.3	11018.3	14118.7	15983.7	15978.9	14762.6	13536.7	12706.8
72.5°	2237.0	2289.5	2933.4	4679.2	7879.7	11981.8	15459.0	15549.6	14447.8	13121.8	11070.7
75°	920.6	973.0	1187.7	1974.7	4135.4	7917.9	13102.7	13317.3	13121.8	11776.7	8662.0
77.5°	572.4	591.5	696.4	1020.7	1888.8	3696.6	9172.4	9463.3	10398.2	9434.7	5719.0
80°	429.3	443.6	519.9	715.5	1192.5	1364.2	4555.2	4922.4	6300.9	5413.7	2590.0
82.5°	357.7	362.5	415.0	519.9	810.9	782.2	1459.6	1626.5	2938.2	2065.3	892.0
85°	333.9	343.4	372.0	372.0	515.1	491.3	605.8	634.4	853.8	705.9	310.0
87.5°	171.7	162.2	329.1	291.0	267.1	238.5	257.6	276.6	319.6	338.7	138.3
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°	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4	2914.4
2.5°	2904.8	2919.1	2943.0	2966.8	2995.4	3028.8	3047.9	3071.8	3090.8	3081.3	3076.5
5°	2919.1	2943.0	2995.4	3043.1	3100.4	3167.2	3210.1	3257.8	3295.9	3305.5	3291.2
7.5°	2943.0	2985.9	3057.5	3143.3	3219.6	3305.5	3372.3	3439.0	3486.7	3496.3	3496.3
10°	3000.2	3047.9	3143.3	3257.8	3348.4	3439.0	3515.4	3567.8	3610.7	3629.8	3629.8
12.5°	3081.3	3138.5	3253.0	3391.3	3491.5	3577.4	3620.3	3644.1	3663.2	3682.3	3687.1
15°	3176.7	3238.7	3377.0	3524.9	3629.8	3672.8	3672.8	3668.0	3668.0	3677.5	3687.1
17.5°	3272.1	3338.9	3482.0	3639.4	3706.1	3682.3	3648.9	3634.6	3625.1	3620.3	3634.6
20°	3372.3	3439.0	3582.1	3730.0	3710.9	3610.7	3563.1	3529.7	3501.0	3486.7	3505.8
22.5°	3482.0	3544.0	3691.8	3792.0	3648.9	3496.3	3405.6	3353.2	3305.5	3276.9	3295.9
25°	3610.7	3672.8	3815.9	3811.1	3539.2	3324.6	3181.5	3095.6	3043.1	3014.5	3014.5
27.5°	3763.4	3815.9	3954.2	3763.4	3386.6	3095.6	2885.7	2804.7	2790.3	2766.5	2766.5
30°	3920.8	3963.7	4083.0	3653.7	3176.7	2795.1	2566.2	2528.0	2532.8	2508.9	2513.7
32.5°	4083.0	4125.9	4159.3	3491.5	2904.8	2456.5	2303.8	2275.2	2270.4	2251.4	2232.3
35°	4311.9	4373.9	4168.8	3272.1	2575.7	2175.0	2065.3	2036.7	2008.1	1941.3	1941.3
37.5°	4660.1	4726.9	4145.0	3000.2	2237.0	1955.6	1855.5	1817.3	1769.6	1702.8	1679.0
40°	5137.1	5137.1	4092.5	2694.9	1965.2	1779.1	1683.7	1636.0	1583.6	1516.8	1502.5
42.5°	5699.9	5566.4	4011.4	2384.9	1764.8	1659.9	1574.0	1521.6	1459.6	1383.2	1373.7
45°	6358.2	5995.7	3896.9	2108.3	1617.0	1588.3	1535.9	1445.3	1340.3	1259.2	1244.9
47.5°	6997.3	6382.0	3787.2	1912.7	1493.0	1559.7	1516.8	1364.2	1221.1	1106.6	1092.3
50°	7698.5	6725.4	3658.4	1750.5	1397.6	1540.7	1493.0	1244.9	1087.5	1006.4	996.9
52.5°	8399.6	7073.6	3520.1	1578.8	1316.5	1502.5	1435.7	1159.1	1082.7	973.0	958.7
55°	9139.0	7479.1	3357.9	1388.0	1221.1	1426.2	1359.4	1154.3	1116.1	973.0	939.7
57.5°	9859.2	7927.4	3095.6	1202.0	1116.1	1311.7	1330.8	1125.7	1044.6	963.5	925.3
60°	10655.8	8404.4	2661.6	1044.6	1025.5	1216.3	1292.6	1063.7	963.5	934.9	915.8
62.5°	11294.9	8833.7	2079.6	934.9	949.2	1140.0	1244.9	1025.5	930.1	906.3	901.5
65°	11571.6	8843.2	1493.0	839.5	872.9	1068.4	1197.2	992.1	901.5	892.0	887.2
67.5°	11280.6	8356.7	1049.4	748.9	791.8	1001.7	1135.2	958.7	872.9	877.6	868.1
70°	10341.0	7331.2	767.9	663.0	715.5	930.1	1068.4	915.8	839.5	849.0	834.7
72.5°	8652.4	5714.2	615.3	591.5	653.5	853.8	1001.7	868.1	787.0	791.8	763.2
75°	6391.6	3787.2	515.1	529.4	581.9	782.2	915.8	806.1	729.8	710.7	691.6
77.5°	3801.5	1946.1	424.5	462.7	519.9	696.4	820.4	729.8	667.8	634.4	620.1
80°	1569.3	787.0	348.2	391.1	453.1	620.1	725.0	639.2	596.2	562.8	543.8
82.5°	624.8	386.4	276.6	319.6	381.6	539.0	634.4	562.8	519.9	496.1	443.6
85°	238.5	190.8	186.0	224.2	286.2	415.0	524.7	472.2	438.8	376.8	362.5
87.5°	95.4	85.9	85.9	109.7	162.2	262.3	376.8	329.1	343.4	271.9	276.6
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)