

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: P237321

Luminaire Tested: **ARCH-L-AF72-280-D-U-T4W-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237321  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-280-D-U-T4W-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29032.4 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

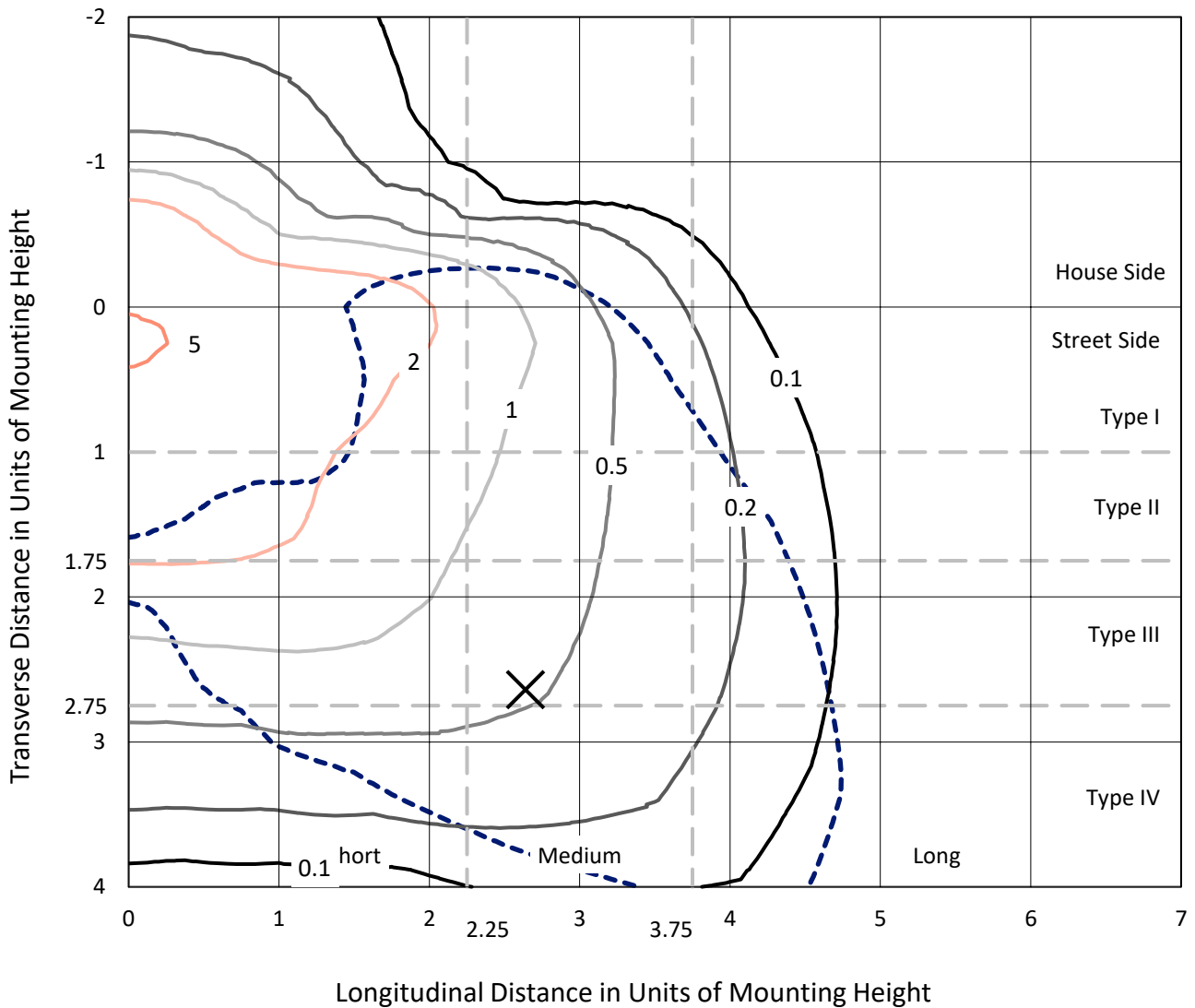
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

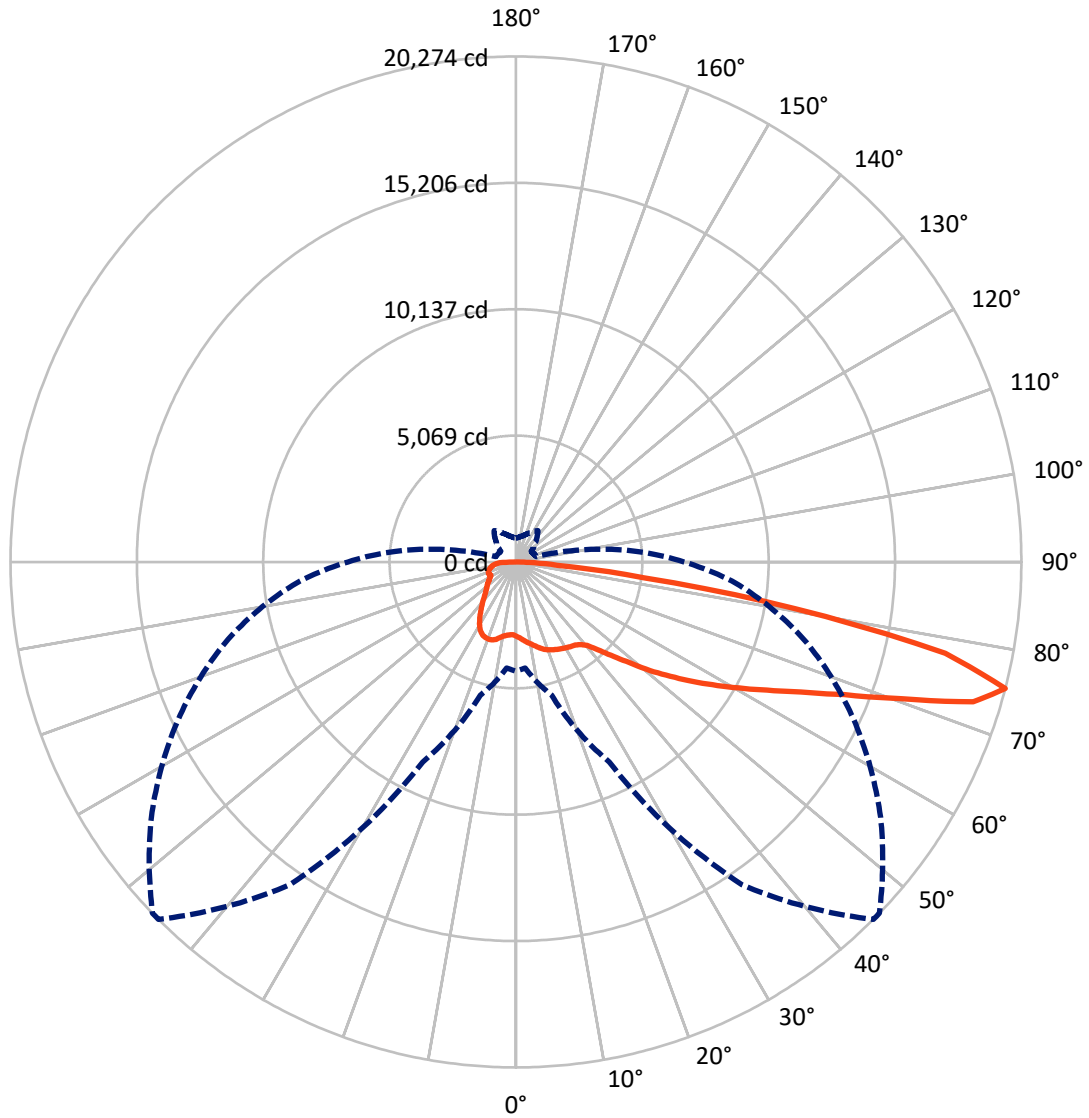
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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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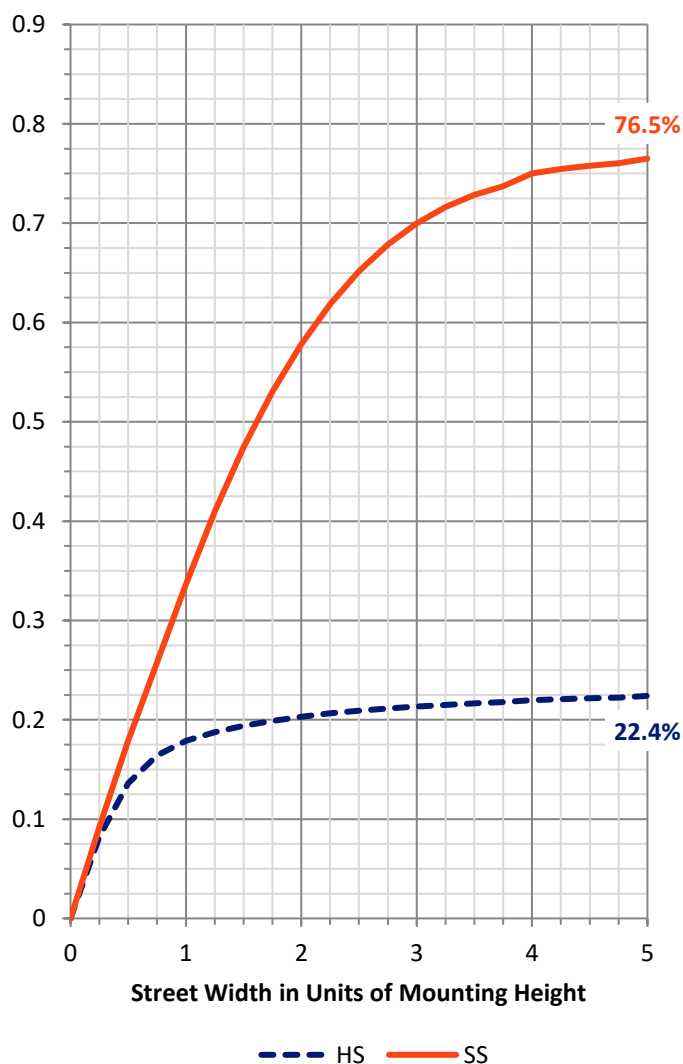
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6725.6	0.0	6725.6
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	22306.8	0.0	22306.8
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	29032.4	0.0	29032.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	294.9	1.0
10°-20°	955.8	3.3
20°-30°	1640.1	5.6
30°-40°	2293.9	7.9
40°-50°	3364.9	11.6
50°-60°	5241.7	18.1
60°-70°	7542.4	26.0
70°-80°	6570.2	22.6
80°-90°	1128.3	3.9
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°	29032.4	100.0
0°-180°	29032.4	100.0

**Coefficient of Utilization**



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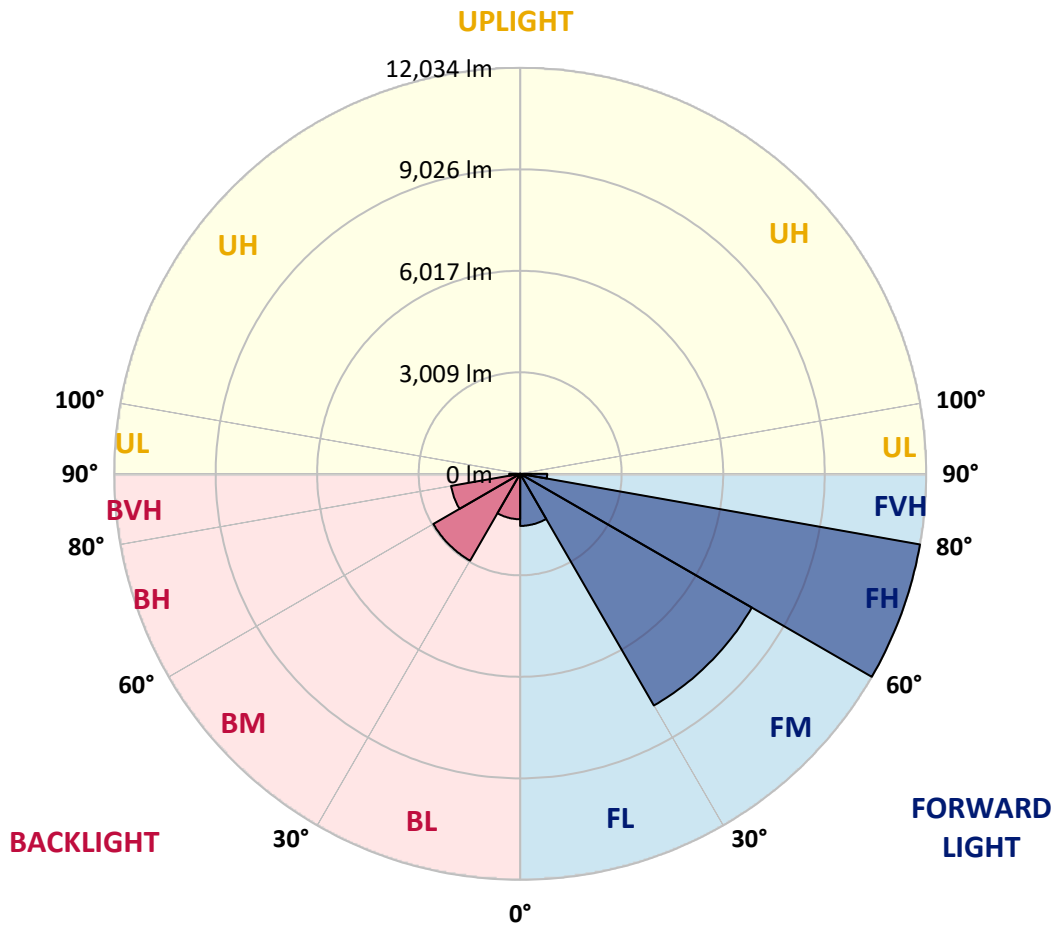
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1543.8	5.3			
FM (30°-60°)	7928.2	27.3			
FH (60°-80°)	12034.2	41.5			G5
FVH (80°-90°)	800.6	2.8			G5
BL (0°-30°)	1347.0	4.6	B3/2500		
BM (30°-60°)	2972.3	10.2	B3/5000		
BH (60°-80°)	2078.4	7.2	B3/2500		G3/2500
BVH (80°-90°)	327.8	1.1			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2
2.5°	3123.0	3100.4	3100.4	3083.6	3083.6	3055.3	3044.0	3038.4	3010.1	2993.1	2976.2
5°	3303.8	3275.6	3269.9	3230.4	3213.5	3151.2	3145.7	3106.1	3055.3	3004.5	2965.0
7.5°	3467.6	3450.6	3422.3	3382.8	3332.0	3252.9	3247.3	3185.2	3100.4	3032.7	2976.2
10°	3586.1	3574.9	3535.3	3484.5	3428.0	3349.1	3343.4	3275.6	3173.9	3094.9	3015.8
12.5°	3727.4	3710.5	3659.5	3591.8	3529.7	3456.3	3450.6	3394.1	3281.2	3179.6	3077.9
15°	3862.9	3840.3	3778.1	3710.5	3642.6	3580.5	3580.5	3518.3	3399.8	3281.2	3162.6
17.5°	3930.7	3919.3	3857.3	3783.8	3727.4	3682.1	3676.5	3620.1	3501.4	3377.2	3247.3
20°	3953.2	3958.9	3902.4	3823.3	3783.8	3761.2	3755.6	3716.0	3586.1	3467.6	3343.4
22.5°	3947.6	3964.6	3919.3	3834.7	3823.3	3823.3	3823.3	3778.1	3676.5	3557.9	3433.7
25°	3970.2	3992.8	3958.9	3857.3	3857.3	3879.8	3879.8	3857.3	3766.9	3665.2	3541.0
27.5°	4049.2	4066.2	4038.0	3896.7	3902.4	3936.3	3930.7	3936.3	3879.8	3783.8	3659.5
30°	4145.3	4167.8	4134.0	3958.9	3953.2	3987.1	3987.1	4015.4	3975.8	3874.3	3772.5
32.5°	4405.0	4399.5	4292.1	4026.6	4009.7	4043.5	4043.5	4071.9	4049.2	3970.2	3874.3
35°	5178.8	5094.0	4856.8	4246.9	4077.4	4094.4	4094.4	4145.3	4156.5	4094.4	4009.7
37.5°	5969.4	5941.2	5760.4	4834.2	4326.0	4201.8	4196.1	4269.6	4320.3	4269.6	4213.0
40°	6765.7	6743.2	6703.6	5619.2	4845.5	4393.8	4376.8	4438.9	4529.4	4495.4	4461.5
42.5°	7505.6	7494.2	7533.8	6393.0	5506.3	4806.0	4755.2	4681.8	4811.7	4800.5	4800.5
45°	8087.3	8115.4	8138.0	7115.8	6223.5	5336.9	5274.7	5026.3	5201.4	5246.5	5280.4
47.5°	8414.8	8437.3	8516.4	7821.8	6940.8	5952.5	5907.3	5500.6	5732.2	5867.8	5963.8
50°	8883.6	8821.4	8889.2	8510.8	7804.8	6754.4	6630.2	6138.8	6432.5	6669.7	6895.6
52.5°	9335.3	9233.6	9290.1	9307.0	8787.5	7539.4	7409.5	6890.0	7257.0	7629.8	8030.8
55°	9741.9	9736.3	9792.8	10080.8	9736.3	8380.8	8234.0	7720.2	8251.0	8651.9	9329.6
57.5°	10069.5	10125.9	10374.5	10978.7	10831.9	9295.8	9132.0	8685.9	9312.7	9713.7	10837.5
60°	10453.5	10543.8	10956.2	11741.1	11831.4	10255.8	10086.4	9764.5	10402.7	10809.3	12582.7
62.5°	10583.4	10713.3	11560.4	12543.1	12876.3	11306.2	11153.8	10939.1	11549.1	11916.3	14322.0
65°	9719.3	9967.8	11893.6	12955.3	14000.2	12571.4	12441.5	12255.1	12689.9	12932.8	15502.4
67.5°	9482.2	9595.1	11244.2	13548.3	15056.3	14197.8	14067.9	13746.0	13757.3	13655.7	15886.4
70°	9149.0	9273.2	10577.7	13994.5	16569.7	16422.9	16264.8	15316.0	14734.2	14118.7	15129.6
72.5°	7793.6	7754.0	9115.1	12791.5	17298.3	19179.0	18992.5	17004.6	15457.2	13717.7	12769.0
75°	4376.8	4263.9	5528.8	8849.7	15796.0	20274.4	20268.9	17857.4	14949.0	11950.1	8691.5
77.5°	1270.6	1236.9	1824.2	3710.5	10634.2	17614.6	17829.2	16106.7	12475.3	8584.2	4772.1
80°	598.6	609.8	785.0	1225.5	4540.6	11368.4	11984.0	10606.1	7454.6	3958.9	1970.9
82.5°	378.4	384.0	536.5	790.6	1920.1	5161.9	5670.1	4772.1	2953.6	1711.2	869.7
85°	237.2	237.2	355.7	519.5	1146.4	1649.0	1790.2	1626.5	1265.0	931.9	474.4
87.5°	129.9	129.9	214.5	299.4	626.8	530.9	547.8	649.4	790.6	570.5	237.2
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°	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2	2976.2
2.5°	2970.5	2959.3	2942.4	2936.7	2931.1	2925.4	2931.1	2942.4	2931.1	2931.1	2936.7
5°	2953.6	2942.4	2919.7	2919.7	2925.4	2931.1	2959.3	2976.2	2981.9	2981.9	2981.9
7.5°	2953.6	2936.7	2919.7	2925.4	2936.7	2959.3	3004.5	3032.7	3055.3	3060.9	3060.9
10°	2981.9	2959.3	2948.1	2959.3	2993.1	3010.1	3055.3	3100.4	3128.7	3140.0	3140.0
12.5°	3032.7	3010.1	3010.1	3032.7	3077.9	3100.4	3140.0	3173.9	3207.8	3224.7	3224.7
15°	3117.3	3089.2	3094.9	3134.3	3185.2	3207.8	3236.0	3247.3	3275.6	3298.1	3298.1
17.5°	3196.5	3168.2	3179.6	3224.7	3258.6	3269.9	3286.8	3281.2	3292.5	3309.5	3315.0
20°	3286.8	3258.6	3264.2	3292.5	3298.1	3286.8	3286.8	3269.9	3264.2	3292.5	3303.8
22.5°	3377.2	3349.1	3343.4	3326.4	3298.1	3269.9	3252.9	3236.0	3224.7	3252.9	3264.2
25°	3484.5	3445.0	3416.7	3343.4	3269.9	3219.1	3196.5	3185.2	3179.6	3207.8	3219.1
27.5°	3603.2	3563.6	3478.9	3320.7	3202.2	3117.3	3100.4	3100.4	3111.8	3128.7	3140.0
30°	3716.0	3676.5	3524.0	3269.9	3083.6	2959.3	2942.4	2959.3	2987.4	3004.5	3021.4
32.5°	3829.0	3789.4	3552.2	3190.8	2908.5	2750.4	2739.0	2767.3	2812.5	2823.7	2835.1
35°	3981.5	3942.0	3586.1	3077.9	2688.3	2518.8	2507.5	2524.4	2564.0	2580.9	2597.8
37.5°	4196.1	4173.4	3637.0	2953.6	2484.9	2298.5	2264.6	2253.4	2276.0	2270.3	2293.0
40°	4478.4	4495.4	3727.4	2789.8	2287.3	2095.3	2021.9	1988.0	1965.3	1920.1	1942.7
42.5°	4890.8	4902.0	3829.0	2603.5	2117.8	1903.2	1807.1	1745.1	1699.8	1626.5	1637.8
45°	5494.9	5399.0	3947.6	2405.8	1965.3	1750.8	1637.8	1564.4	1502.2	1440.1	1445.7
47.5°	6296.9	6003.2	4077.4	2242.1	1812.8	1626.5	1524.8	1440.1	1366.8	1315.9	1321.5
50°	7285.3	6754.4	4207.3	2089.6	1660.4	1530.5	1440.1	1349.8	1276.3	1225.5	1219.9
52.5°	8589.9	7658.0	4292.1	1920.1	1507.9	1445.7	1366.8	1281.9	1191.6	1129.5	1123.8
55°	9945.3	8708.4	4365.6	1716.8	1361.1	1349.8	1310.2	1214.2	1106.9	1027.8	1016.5
57.5°	11436.1	9832.2	4421.9	1519.1	1248.1	1270.6	1259.4	1146.4	1027.8	954.4	948.8
60°	12791.5	10995.7	4241.2	1344.1	1146.4	1191.6	1203.0	1106.9	1044.7	1061.8	1067.4
62.5°	14158.3	11893.6	3552.2	1214.2	1078.7	1140.7	1236.9	1231.2	1203.0	1231.2	1236.9
65°	14649.6	12080.0	2518.8	1106.9	1010.8	1163.4	1344.1	1332.9	1203.0	1152.1	1140.7
67.5°	14372.8	11526.6	1694.3	1022.2	960.1	1191.6	1457.1	1332.9	1157.7	1090.0	1067.4
70°	13057.0	10165.5	1242.5	937.5	914.9	1186.0	1519.1	1327.2	1135.1	1061.8	1033.5
72.5°	10413.9	7844.4	999.6	858.4	847.1	1157.7	1553.0	1315.9	1112.6	1033.5	999.6
75°	6743.2	4879.4	841.6	779.3	745.4	1112.6	1536.0	1281.9	1084.3	982.7	960.1
77.5°	3128.7	2100.8	717.2	689.0	649.4	1044.7	1485.3	1214.2	1022.2	926.2	898.0
80°	1457.1	993.9	604.3	598.6	581.7	988.4	1417.5	1135.1	948.8	869.7	824.6
82.5°	779.3	598.6	491.3	491.3	508.3	920.5	1332.9	1039.2	852.8	813.2	694.7
85°	412.2	344.5	355.7	384.0	434.9	813.2	1219.9	937.5	745.4	621.2	604.3
87.5°	208.9	220.2	220.2	259.8	333.2	660.8	1005.3	773.7	632.5	508.3	497.0
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)