

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: P400041

Luminaire Tested: **ARCH-L-PA3-220-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400041  
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-PA3-220-830-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24521 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

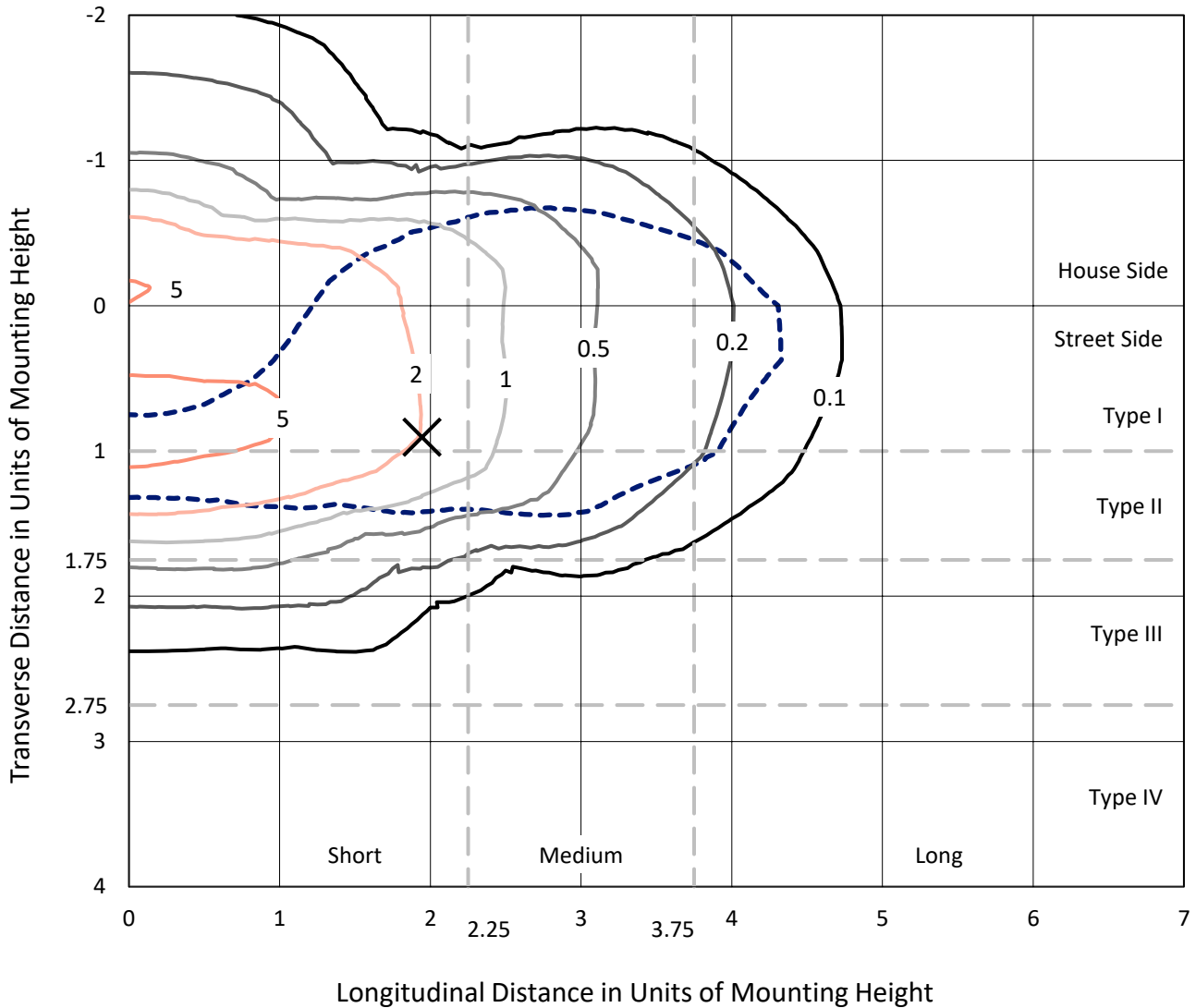
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

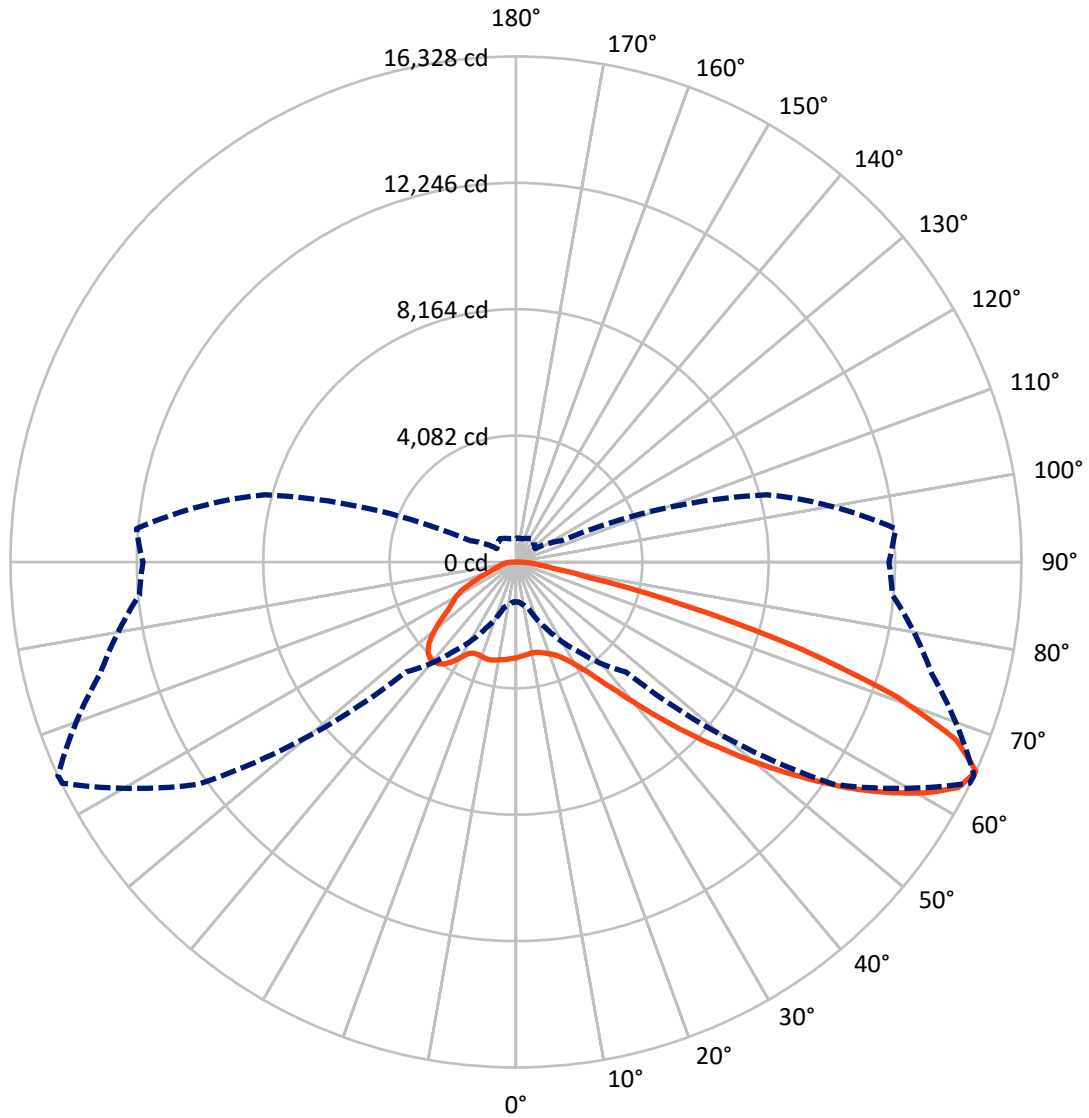
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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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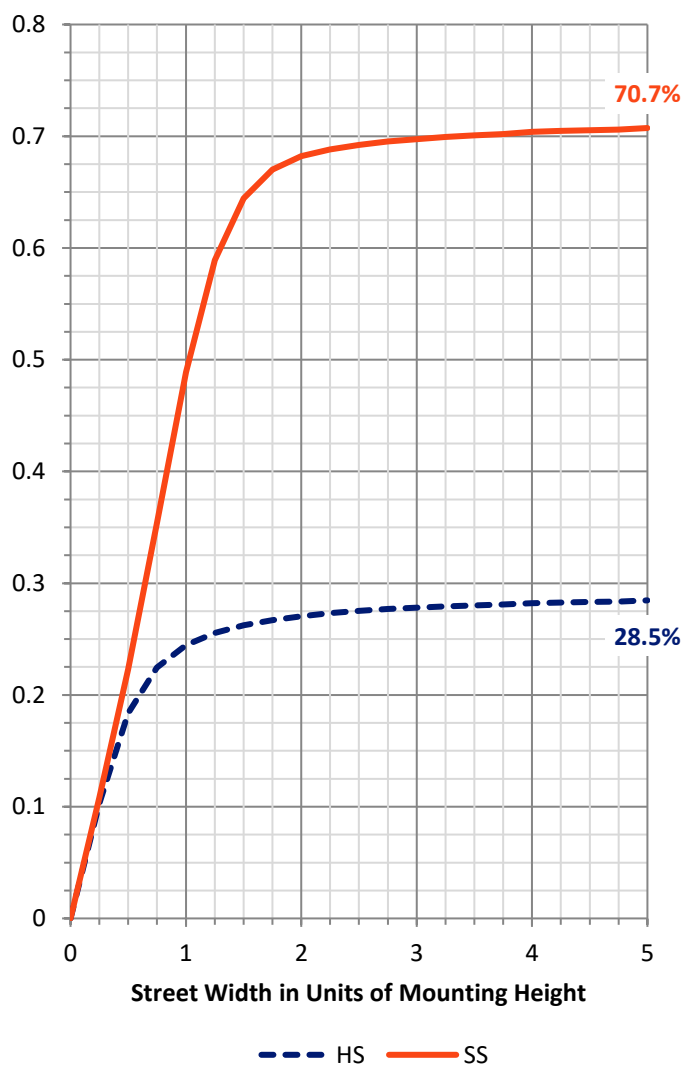
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7089.4	0.0	7089.4
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	17431.6	0.0	17431.6
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	24521.0	0.0	24521.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	295.2	1.2
10°-20°	881.3	3.6
20°-30°	1565.5	6.4
30°-40°	2648.4	10.8
40°-50°	4610.4	18.8
50°-60°	5958.1	24.3
60°-70°	5213.7	21.3
70°-80°	2835.9	11.6
80°-90°	512.4	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°	24521.0	100.0
0°-180°	24521.0	100.0

**Coefficient of Utilization**

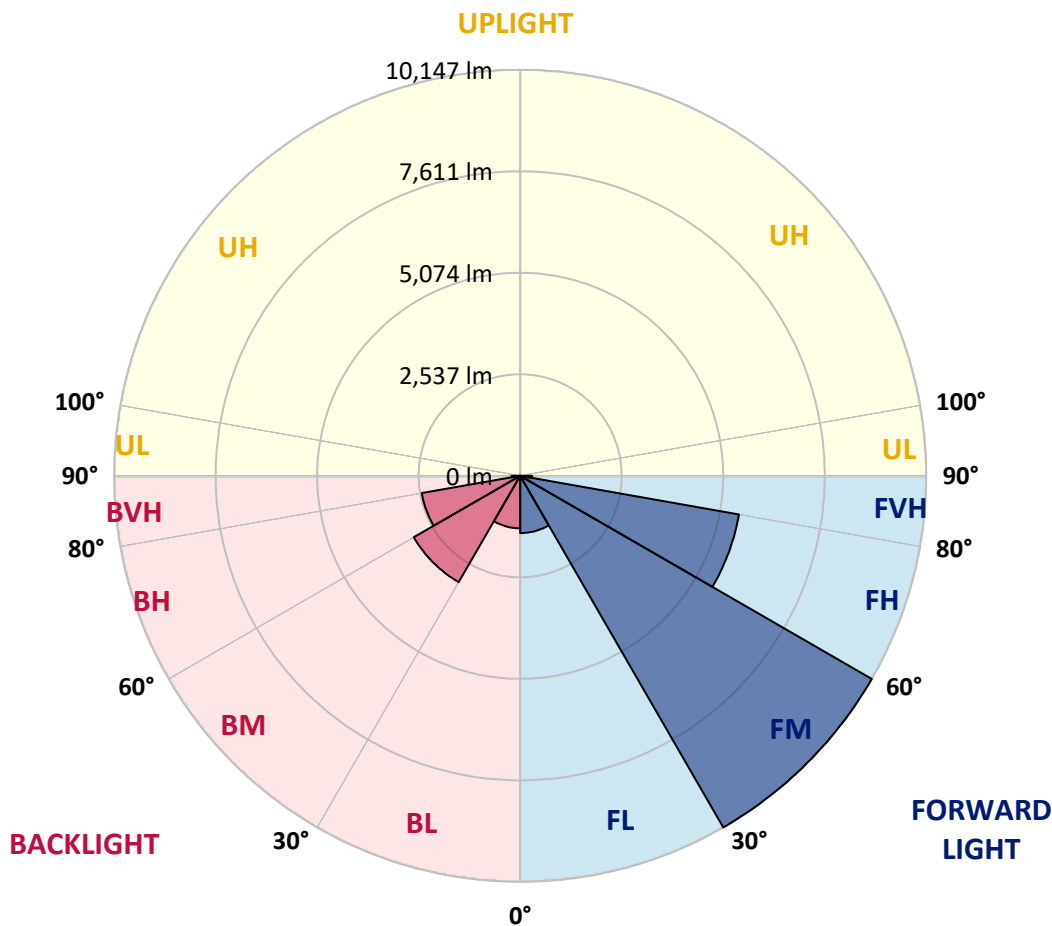


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1430.7	5.8			
FM (30°-60°)	10147.5	41.4			
FH (60°-80°)	5551.9	22.6			G3/7500
FVH (80°-90°)	301.5	1.2			G3/500
BL (0°-30°)	1311.3	5.3	B3/2500		
BM (30°-60°)	3069.5	12.5	B3/5000		
BH (60°-80°)	2497.7	10.2	B3/2500		G3/2500
BVH (80°-90°)	210.9	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5
2.5°	3043.6	3040.4	3033.9	3040.4	3043.6	3050.1	3046.8	3053.3	3050.1	3059.7	3075.9
5°	2966.1	2959.7	2956.5	2972.6	2982.3	2998.4	3004.9	3027.5	3024.2	3040.4	3066.2
7.5°	2879.0	2879.0	2875.8	2895.1	2908.0	2937.1	2959.7	2998.4	3001.6	3030.7	3059.7
10°	2811.2	2814.4	2811.2	2827.3	2846.7	2882.2	2920.9	2975.8	2979.0	3021.0	3050.1
12.5°	2785.4	2785.4	2785.4	2808.0	2833.8	2882.2	2927.4	2985.5	2992.0	3037.1	3063.0
15°	2820.9	2824.1	2817.7	2840.3	2869.3	2927.4	2969.4	3030.7	3037.1	3079.1	3095.2
17.5°	2946.8	2959.7	2943.5	2956.5	2950.0	2995.2	3033.9	3095.2	3098.5	3134.0	3140.4
20°	3195.3	3208.2	3182.4	3166.2	3108.1	3104.9	3121.1	3169.5	3169.5	3192.1	3175.9
22.5°	3579.4	3592.3	3547.1	3485.8	3347.0	3279.2	3243.7	3266.3	3263.1	3272.8	3230.8
25°	4089.3	4086.1	4031.2	3918.3	3695.6	3531.0	3443.8	3408.3	3408.3	3388.9	3337.3
27.5°	4721.9	4673.5	4576.7	4441.1	4131.3	3902.1	3714.9	3624.6	3608.4	3550.3	3453.5
30°	5396.5	5361.0	5222.2	5025.3	4667.1	4373.4	4063.5	3882.8	3873.1	3747.2	3602.0
32.5°	6190.5	6132.4	5977.5	5741.8	5312.6	4899.4	4512.1	4237.8	4221.7	4021.5	3821.4
35°	7210.4	7162.0	6861.8	6626.2	6074.3	5532.1	5073.7	4709.0	4696.1	4450.8	4195.8
37.5°	8433.6	8307.8	8017.3	7575.1	6994.1	6351.9	5770.9	5312.6	5296.4	5025.3	4702.6
40°	9524.6	9411.6	9153.4	8746.7	8123.8	7410.5	6623.0	6067.8	6051.7	5722.5	5315.8
42.5°	10331.4	10254.0	10086.1	9850.5	9405.1	8972.6	8410.7	7910.7	7910.7	7526.1	7019.4
45°	10799.4	10738.1	10641.3	10699.4	10692.9	10612.2	10518.6	10450.9	10450.9	10283.0	10153.9
47.5°	10686.5	10631.6	10670.3	11122.2	11745.1	12213.1	12707.5	13207.5	13707.5	14207.5	14707.5
50°	9869.9	9892.5	10095.8	10960.8	12358.4	13397.6	14165.8	14850.0	15421.3	16044.2	16650.0
52.5°	8382.0	8436.9	8930.7	10141.0	12290.6	14165.8	16165.8	18165.8	20165.8	22165.8	24165.8
55°	6658.5	6797.3	7436.3	8708.0	11406.2	14220.7	17850.0	22078.1	26832.8	32196.3	38078.6
57.5°	4925.3	5131.8	5870.9	7039.3	9711.7	13352.4	18421.3	24336.9	31039.9	38832.3	47650.9
60°	3124.3	3250.2	4102.2	5480.4	7433.1	11228.7	15347.1	20408.4	26150.2	32665.0	39944.8
62.5°	1994.6	2056.0	2485.2	3908.6	5196.4	8314.2	114537.0	15218.5	19044.2	23423.5	281803.2
65°	1281.3	1307.2	1526.6	2404.5	3537.4	5018.9	72519.7	10305.7	13328.3	17897.9	23209.9
67.5°	1042.5	1055.4	1136.1	1484.7	2501.4	3772.5	5270.9	75066.3	10340.6	13775.3	18071.1
70°	948.9	965.0	1049.0	1184.5	1936.5	2913.9	4221.7	60606.9	83055.5	11068.4	14454.6
72.5°	800.4	823.0	936.0	1120.0	1497.6	2105.5	2788.1	3979.1	5440.7	7468.6	10282.3
75°	668.1	681.0	777.8	987.6	1268.4	1707.1	2255.5	3160.7	4316.0	5966.4	8143.9
77.5°	542.2	555.1	626.1	787.5	1126.4	1539.2	2087.6	2872.0	3936.8	5358.3	7301.0
80°	387.3	400.2	480.9	613.2	852.1	1145.6	1573.7	2108.7	2811.3	3837.4	5067.3
82.5°	277.6	287.3	364.7	438.9	590.6	848.9	1151.9	1573.1	2174.6	2923.4	3943.1
85°	187.2	187.2	251.8	290.5	380.9	535.8	745.4	1000.3	1322.9	1723.0	2251.9
87.5°	80.7	80.7	135.6	148.5	200.1	248.5	332.4	451.8	605.2	819.5	1025.9
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°	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5	3098.5
2.5°	3085.6	3088.8	3095.2	3114.6	3127.5	3146.9	3156.6	3169.5	3169.5	3163.0	3166.2
5°	3079.1	3088.8	3111.4	3146.9	3169.5	3205.0	3230.8	3250.2	3256.6	3250.2	3253.4
7.5°	3075.9	3092.0	3130.7	3182.4	3214.7	3259.8	3295.3	3317.9	3334.1	3327.6	3330.8
10°	3066.2	3092.0	3140.4	3205.0	3253.4	3298.6	3330.8	3340.5	3350.2	3343.8	3340.5
12.5°	3079.1	3108.1	3159.8	3237.2	3292.1	3327.6	3337.3	3321.2	3298.6	3285.7	3282.4
15°	3104.9	3134.0	3185.6	3266.3	3314.7	3327.6	3305.0	3253.4	3201.7	3172.7	3169.5
17.5°	3140.4	3159.8	3201.7	3272.8	3311.5	3295.3	3250.2	3188.8	3150.1	3127.5	3130.7
20°	3163.0	3163.0	3195.3	3250.2	3282.4	3269.5	3214.7	3146.9	3085.6	3056.5	3046.8
22.5°	3195.3	3179.2	3182.4	3230.8	3276.0	3256.6	3140.4	3021.0	2933.9	2901.6	2898.4
25°	3282.4	3237.2	3208.2	3237.2	3343.8	3185.6	2953.2	2814.4	2733.7	2704.7	2707.9
27.5°	3388.9	3327.6	3266.3	3314.7	3398.6	3024.2	2714.4	2556.2	2507.8	2485.2	2494.9
30°	3495.5	3414.8	3334.1	3508.4	3359.9	2772.5	2407.8	2252.8	2210.9	2194.7	2207.7
32.5°	3692.3	3560.0	3463.2	3766.6	3240.5	2485.2	2075.3	1933.3	1894.6	1875.2	1868.8
35°	4021.5	3853.7	3756.9	3992.5	3072.6	2165.7	1771.9	1671.9	1629.9	1588.0	1581.5
37.5°	4496.0	4292.7	4205.5	4121.6	2837.0	1849.4	1539.5	1471.8	1410.4	1345.9	1342.7
40°	5064.1	4799.4	4734.8	4179.7	2511.0	1552.5	1378.2	1313.6	1236.2	1174.8	1178.1
42.5°	5719.2	5380.4	5241.6	4163.6	2107.6	1394.3	1262.0	1191.0	1123.2	1068.3	1065.1
45°	6419.6	6035.6	5716.0	4050.6	1707.4	1284.6	1191.0	1107.1	1039.3	978.0	971.5
47.5°	7194.2	6765.0	6155.0	3831.1	1410.4	1207.1	1149.0	1029.6	968.3	929.5	929.5
50°	7975.3	7462.1	6558.4	3498.7	1236.2	1149.0	1087.7	987.6	939.2	906.9	906.9
52.5°	8643.4	8188.3	6890.9	3101.7	1126.4	1100.6	1045.7	968.3	916.6	887.6	884.4
55°	9292.2	8862.9	7187.8	2707.9	1036.0	1036.0	1036.0	952.1	894.0	868.2	865.0
57.5°	9937.7	9573.0	7497.6	2449.7	955.4	981.2	1016.7	932.8	874.7	852.1	848.9
60°	10667.1	10425.0	7855.9	2269.0	884.4	923.1	990.9	910.2	842.4	823.0	819.8
62.5°	11441.7	11441.7	8181.9	2014.0	819.8	874.7	952.1	881.1	813.3	797.2	794.0
65°	12048.5	12309.9	8391.7	1633.1	755.3	826.3	906.9	842.4	774.6	771.4	764.9
67.5°	12119.5	12529.4	8259.3	1232.9	697.2	774.6	861.8	800.4	735.9	735.9	726.2
70°	11609.6	12025.9	7846.2	923.1	655.2	723.0	803.7	748.8	687.5	693.9	677.8
72.5°	10757.5	10860.8	6819.8	729.4	606.8	668.1	732.7	690.7	635.8	635.8	613.2
75°	9634.3	9059.8	4954.3	610.0	548.7	603.6	661.7	626.1	577.7	561.6	548.7
77.5°	7668.7	6564.9	2879.0	526.1	500.3	542.2	581.0	555.1	513.2	477.7	477.7
80°	4673.5	3847.3	1271.7	455.1	442.2	474.5	500.3	471.2	435.7	400.2	390.5
82.5°	1778.4	1484.7	616.5	390.5	387.3	406.7	426.0	397.0	371.2	355.0	306.6
85°	487.4	448.6	422.8	326.0	319.5	316.3	338.9	326.0	290.5	238.8	213.0
87.5°	184.0	209.8	229.2	200.1	213.0	196.9	225.9	206.6	184.0	119.4	106.5
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)