

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: P400006

Luminaire Tested: **ARCH-L-PA3-220-740-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400006  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-220-740-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22603 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G4

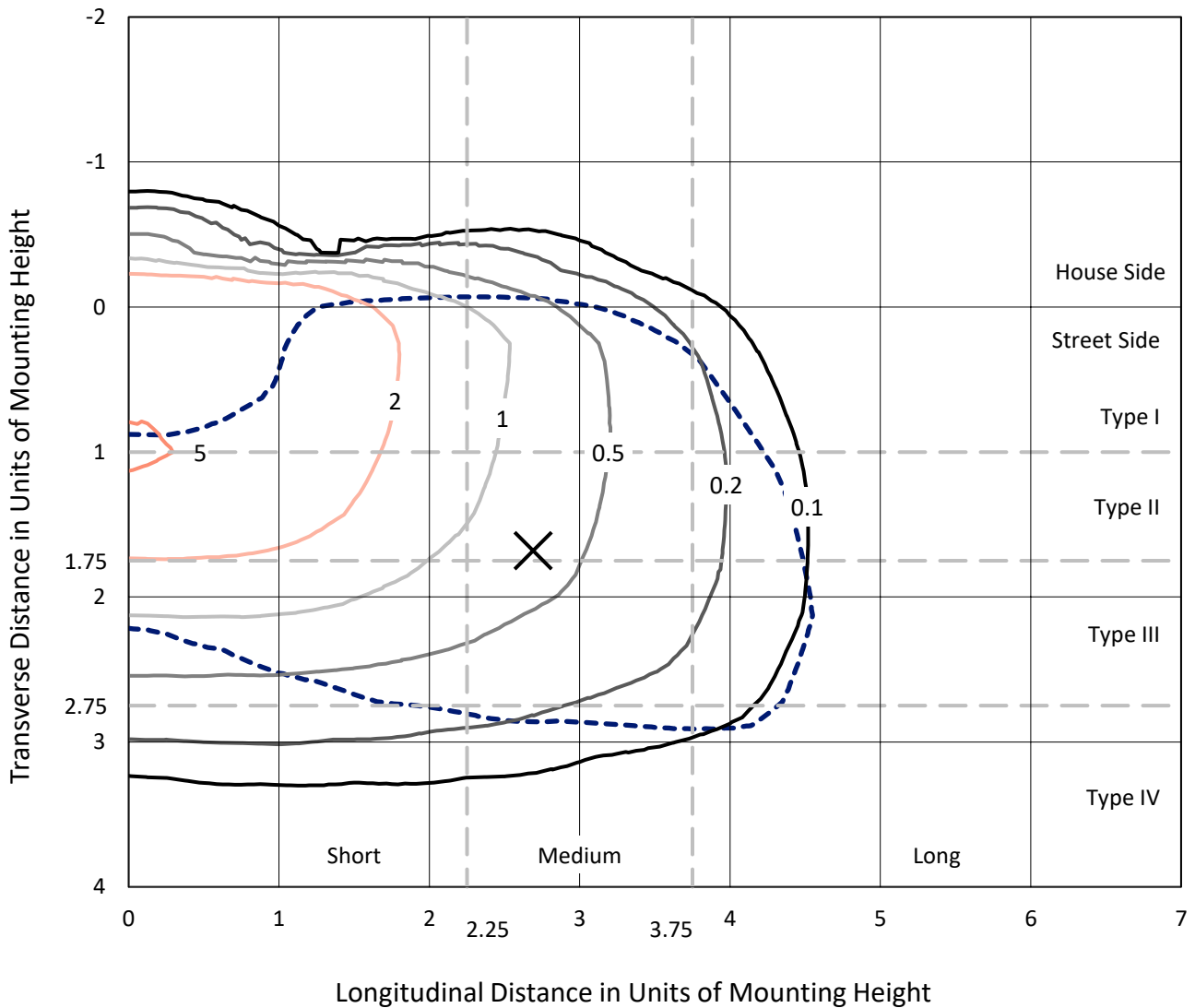
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

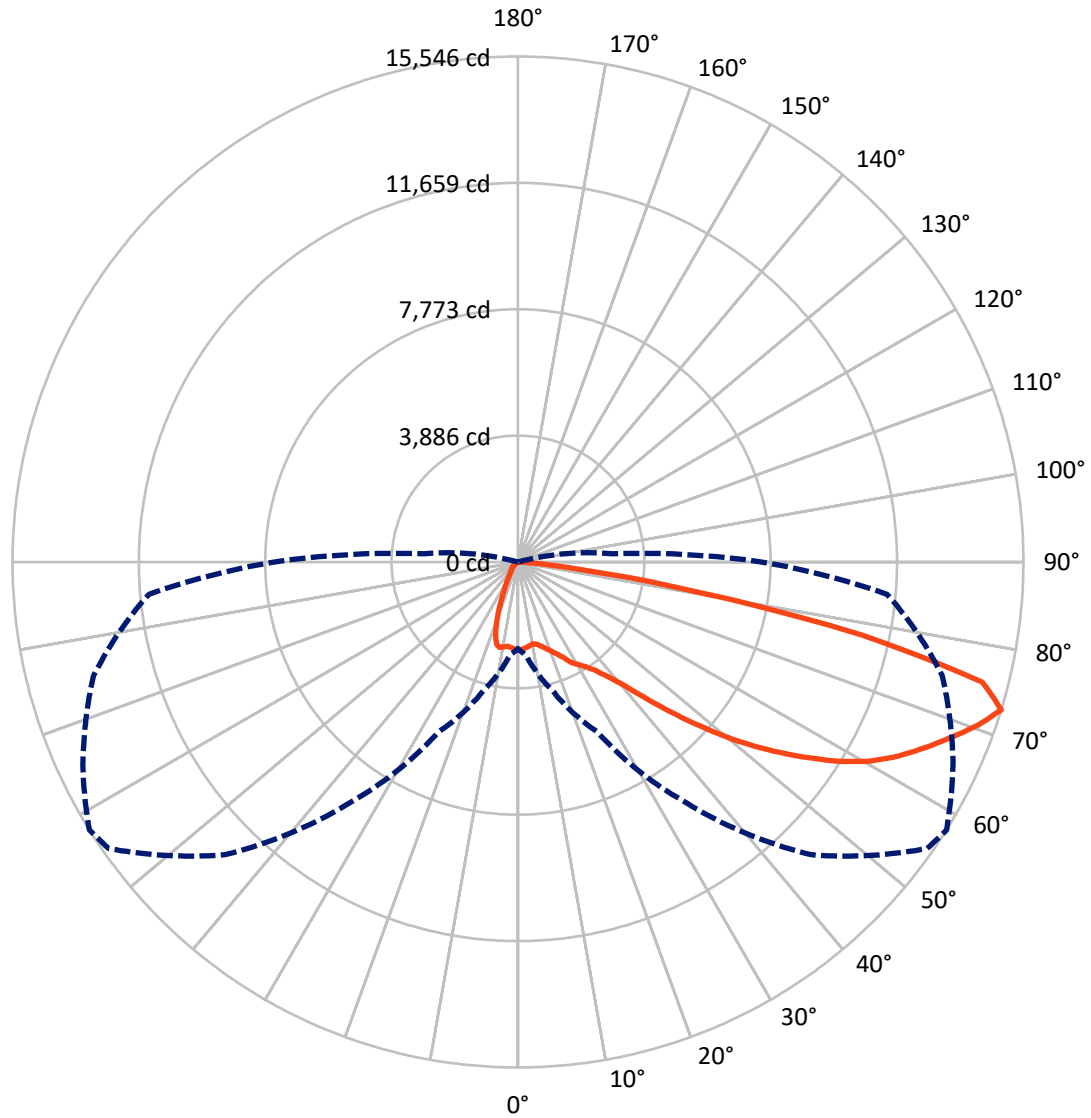
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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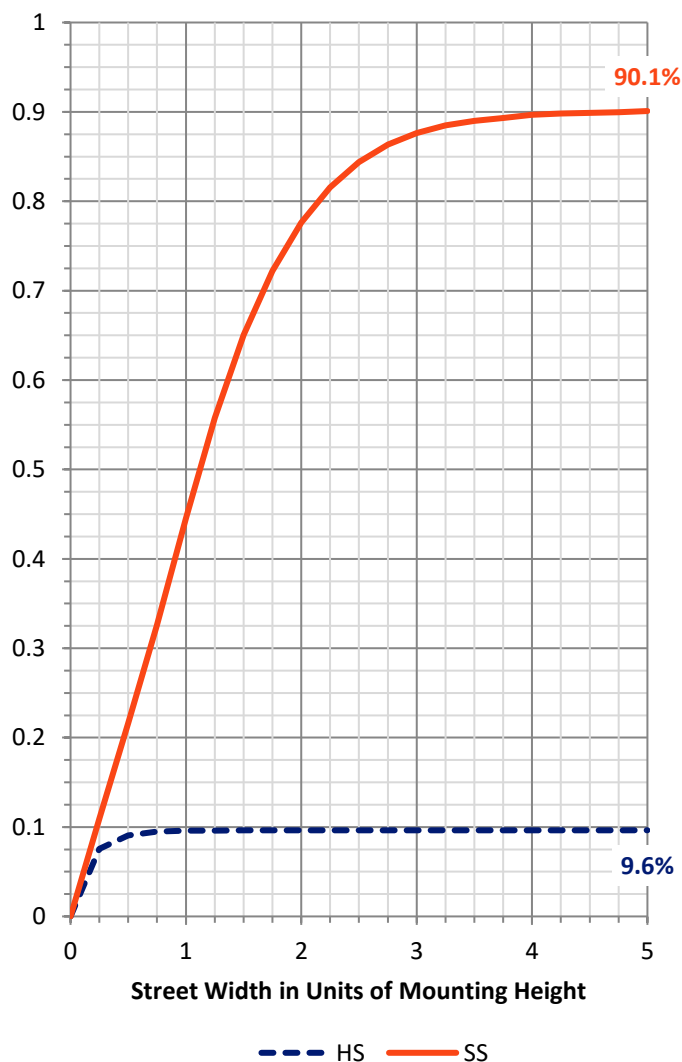
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2198.0	0.0	2198.0
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	20405.0	0.0	20405.0
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	22603.0	0.0	22603.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.9	1.1
10°-20°	648.3	2.9
20°-30°	1018.5	4.5
30°-40°	1756.4	7.8
40°-50°	3341.7	14.8
50°-60°	5292.2	23.4
60°-70°	6175.4	27.3
70°-80°	3867.7	17.1
80°-90°	253.9	1.1
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°	22603.0	100.0
0°-180°	22603.0	100.0

**Coefficient of Utilization**



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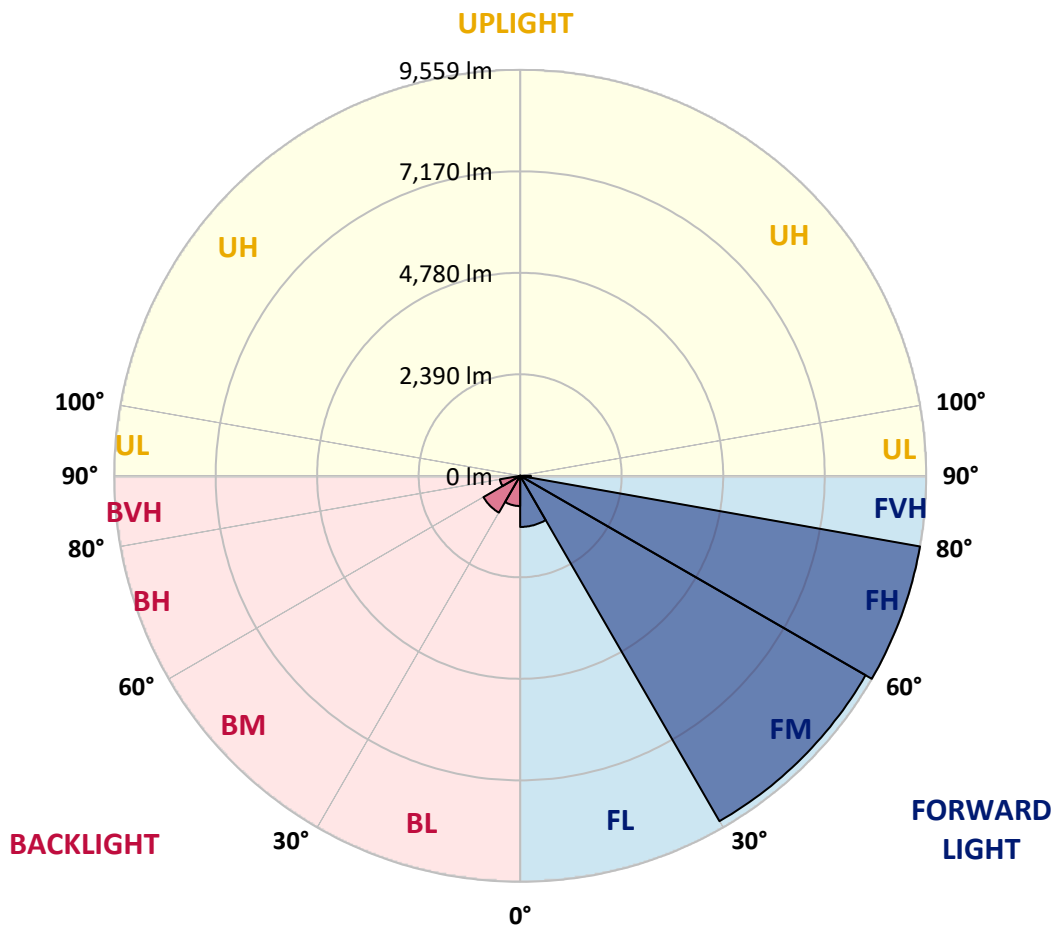
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1203.9	5.3			
FM (30°-60°)	9390.2	41.5			
FH (60°-80°)	9559.5	42.3			G4/12000
FVH (80°-90°)	251.4	1.1			G3/500
BL (0°-30°)	711.8	3.1	B2/1000		
BM (30°-60°)	1000.1	4.4	B2/2500		
BH (60°-80°)	483.6	2.1	B1/500		G1/500
BVH (80°-90°)	2.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2
2.5°	2700.1	2688.0	2683.9	2679.9	2683.9	2688.0	2675.8	2688.0	2679.9	2683.9	2692.0
5°	2603.1	2591.0	2586.9	2591.0	2603.1	2623.3	2631.4	2643.5	2643.5	2655.6	2659.7
7.5°	2494.0	2485.9	2481.8	2489.9	2514.2	2558.6	2582.9	2599.0	2615.2	2639.5	2663.7
10°	2433.3	2429.3	2425.2	2437.4	2461.6	2502.0	2534.4	2558.6	2619.3	2688.0	2732.4
12.5°	2392.9	2392.9	2401.0	2425.2	2457.6	2489.9	2566.7	2599.0	2692.0	2797.1	2857.7
15°	2360.6	2360.6	2372.7	2417.2	2461.6	2538.4	2651.6	2688.0	2797.1	2926.5	3007.3
17.5°	2336.3	2344.4	2352.5	2396.9	2481.8	2611.2	2744.6	2797.1	2930.5	3072.0	3160.9
20°	2340.4	2348.4	2352.5	2396.9	2518.2	2696.1	2865.8	2926.5	3080.0	3229.6	3318.5
22.5°	2364.6	2376.7	2380.8	2441.4	2582.9	2785.0	3003.3	3072.0	3237.7	3395.3	3464.0
25°	2465.7	2473.7	2449.5	2502.0	2675.8	2922.4	3181.1	3253.9	3419.6	3565.1	3621.7
27.5°	2809.2	2817.3	2683.9	2623.3	2748.6	3035.6	3399.4	3500.4	3706.6	3803.6	3811.7
30°	3553.0	3561.1	3298.3	3011.3	2922.4	3132.6	3520.6	3662.1	3928.9	4038.0	3989.5
32.5°	4510.9	4502.9	4143.1	3718.7	3334.7	3302.4	3694.4	3844.0	4135.0	4240.1	4203.7
35°	5472.9	5485.1	5177.9	4539.2	3989.5	3621.7	3916.8	4090.6	4442.2	4591.8	4527.1
37.5°	6131.8	6212.6	6079.3	5388.1	4793.9	4211.8	4276.5	4462.4	4903.0	5105.1	4967.7
40°	7061.5	7041.3	6717.9	6208.6	5683.1	5084.9	4858.6	4947.5	5452.7	5723.6	5509.3
42.5°	8310.5	8270.1	7720.3	7223.2	6637.1	6148.0	5687.2	5671.0	6083.3	6398.6	6087.3
45°	9442.3	9381.6	9005.7	8524.7	7882.0	7320.2	6697.7	6556.2	6843.2	7110.0	6746.2
47.5°	10343.6	10242.6	9975.8	9721.2	9563.5	8690.4	7756.7	7542.5	7688.0	7886.1	7372.7
50°	11410.7	11131.8	10743.8	10590.2	10917.6	10242.6	8775.3	8569.2	8561.1	8674.3	8019.4
52.5°	11895.8	11390.5	11172.3	11301.6	11879.6	11685.6	9874.8	9579.7	9462.5	9474.6	8621.7
55°	11309.7	11253.1	11370.3	11774.5	12530.4	12417.2	10929.7	10565.9	10392.1	10173.9	9199.7
57.5°	10642.7	10816.6	11281.4	12053.4	13355.0	13181.2	11968.5	11556.2	11236.9	10735.7	9842.4
60°	10028.4	10206.2	10974.2	12118.1	13807.7	13916.8	12833.5	12441.5	11968.5	11309.7	10549.8
62.5°	9094.6	9232.1	10311.3	12025.1	13609.6	14345.3	13435.8	13140.7	12700.2	11855.4	11362.2
65°	8043.7	8132.6	9199.7	11281.4	13221.6	14296.8	13933.0	13767.3	13338.8	12425.3	12166.6
67.5°	6891.7	6996.8	7886.1	9943.5	12461.7	14070.4	14401.9	14385.7	13896.6	13055.9	12748.7
70°	5565.9	5574.0	6309.7	8245.8	11135.9	13617.7	14983.9	15020.3	14430.2	13528.8	12772.9
72.5°	2663.7	2882.0	4090.6	5755.9	9050.2	12728.4	15363.9	15545.8	14765.6	13512.6	11394.6
75°	610.4	630.6	1192.4	2736.5	5307.2	9769.7	14414.0	14753.5	13949.1	11685.6	8027.5
77.5°	222.3	234.4	335.5	800.3	2041.2	5048.5	10315.3	10812.5	10311.3	7554.6	3795.5
80°	149.6	145.5	173.8	355.7	937.8	1430.9	5274.9	5570.0	5084.9	2578.8	909.5
82.5°	76.8	80.8	121.3	198.1	630.6	497.2	1762.3	1915.9	1576.4	517.4	169.8
85°	36.4	36.4	68.7	125.3	266.8	173.8	392.1	472.9	424.4	226.4	56.6
87.5°	36.4	36.4	64.7	80.8	137.4	72.8	97.0	121.3	113.2	121.3	20.2
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°	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2	2712.2
2.5°	2692.0	2688.0	2683.9	2692.0	2688.0	2696.1	2696.1	2704.1	2704.1	2696.1	2692.0
5°	2655.6	2647.5	2639.5	2639.5	2635.4	2643.5	2667.8	2688.0	2692.0	2679.9	2675.8
7.5°	2659.7	2659.7	2651.6	2635.4	2607.1	2607.1	2607.1	2631.4	2643.5	2635.4	2631.4
10°	2732.4	2736.5	2716.3	2679.9	2631.4	2586.9	2502.0	2376.7	2259.5	2227.2	2215.0
12.5°	2857.7	2861.8	2821.4	2756.7	2655.6	2392.9	2069.5	1770.4	1540.0	1475.4	1463.2
15°	3007.3	3011.3	2938.6	2833.5	2526.3	1915.9	1434.9	1095.4	893.3	844.8	840.7
17.5°	3160.9	3152.8	3043.7	2841.6	2142.3	1358.1	873.1	699.3	646.7	634.6	638.6
20°	3310.4	3286.2	3136.6	2692.0	1649.2	889.3	638.6	598.2	586.1	578.0	578.0
22.5°	3447.9	3399.4	3213.4	2396.9	1156.0	638.6	569.9	561.8	545.7	533.6	529.5
25°	3585.3	3516.6	3261.9	2012.9	776.1	557.8	537.6	521.4	501.2	485.0	481.0
27.5°	3751.0	3654.0	3237.7	1527.9	582.1	517.4	501.2	477.0	448.7	424.4	416.3
30°	3908.7	3799.5	3100.3	1055.0	497.2	477.0	452.7	416.3	380.0	351.7	343.6
32.5°	4106.7	3981.4	2853.7	691.2	432.5	416.3	392.1	347.6	299.1	266.8	258.7
35°	4389.7	4248.2	2538.4	485.0	380.0	351.7	319.3	270.8	218.3	194.0	190.0
37.5°	4785.8	4595.8	2142.3	392.1	335.5	295.1	246.6	198.1	161.7	141.5	137.4
40°	5270.8	4979.8	1701.7	347.6	299.1	246.6	185.9	141.5	117.2	101.1	101.1
42.5°	5796.3	5339.6	1253.0	319.3	262.7	202.1	137.4	101.1	84.9	76.8	72.8
45°	6338.0	5658.9	844.8	295.1	230.4	153.6	97.0	68.7	56.6	56.6	52.5
47.5°	6899.8	5873.1	545.7	266.8	194.0	113.2	64.7	48.5	40.4	40.4	40.4
50°	7457.6	5986.3	388.0	242.5	157.6	76.8	48.5	36.4	32.3	32.3	32.3
52.5°	7861.8	5913.5	311.2	210.2	121.3	56.6	36.4	28.3	24.3	24.3	24.3
55°	8213.5	5788.2	270.8	181.9	88.9	40.4	28.3	24.3	20.2	20.2	20.2
57.5°	8573.2	5626.5	242.5	153.6	64.7	28.3	20.2	16.2	16.2	16.2	16.2
60°	8900.6	5351.7	210.2	121.3	44.5	20.2	16.2	12.1	12.1	12.1	12.1
62.5°	9219.9	5117.2	181.9	93.0	32.3	16.2	8.1	8.1	4.0	4.0	4.0
65°	9401.8	4802.0	145.5	60.6	20.2	12.1	4.0	4.0	0.0	0.0	0.0
67.5°	9345.2	4426.1	101.1	36.4	12.1	8.1	4.0	0.0	0.0	0.0	0.0
70°	8953.2	3920.8	60.6	20.2	12.1	8.1	4.0	0.0	0.0	0.0	0.0
72.5°	7498.0	2902.2	36.4	16.2	8.1	4.0	0.0	0.0	0.0	0.0	0.0
75°	5008.1	1333.9	20.2	12.1	4.0	4.0	0.0	0.0	0.0	0.0	0.0
77.5°	2291.8	400.2	12.1	8.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	460.8	105.1	8.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	97.0	20.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.2	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)