

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: P400078

Luminaire Tested: **ARCH-L-PA3-230-740-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400078  
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-PA3-230-740-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 980mA 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: 23171 lumens  
Efficiency: N/A  
Efficacy: 101.2 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

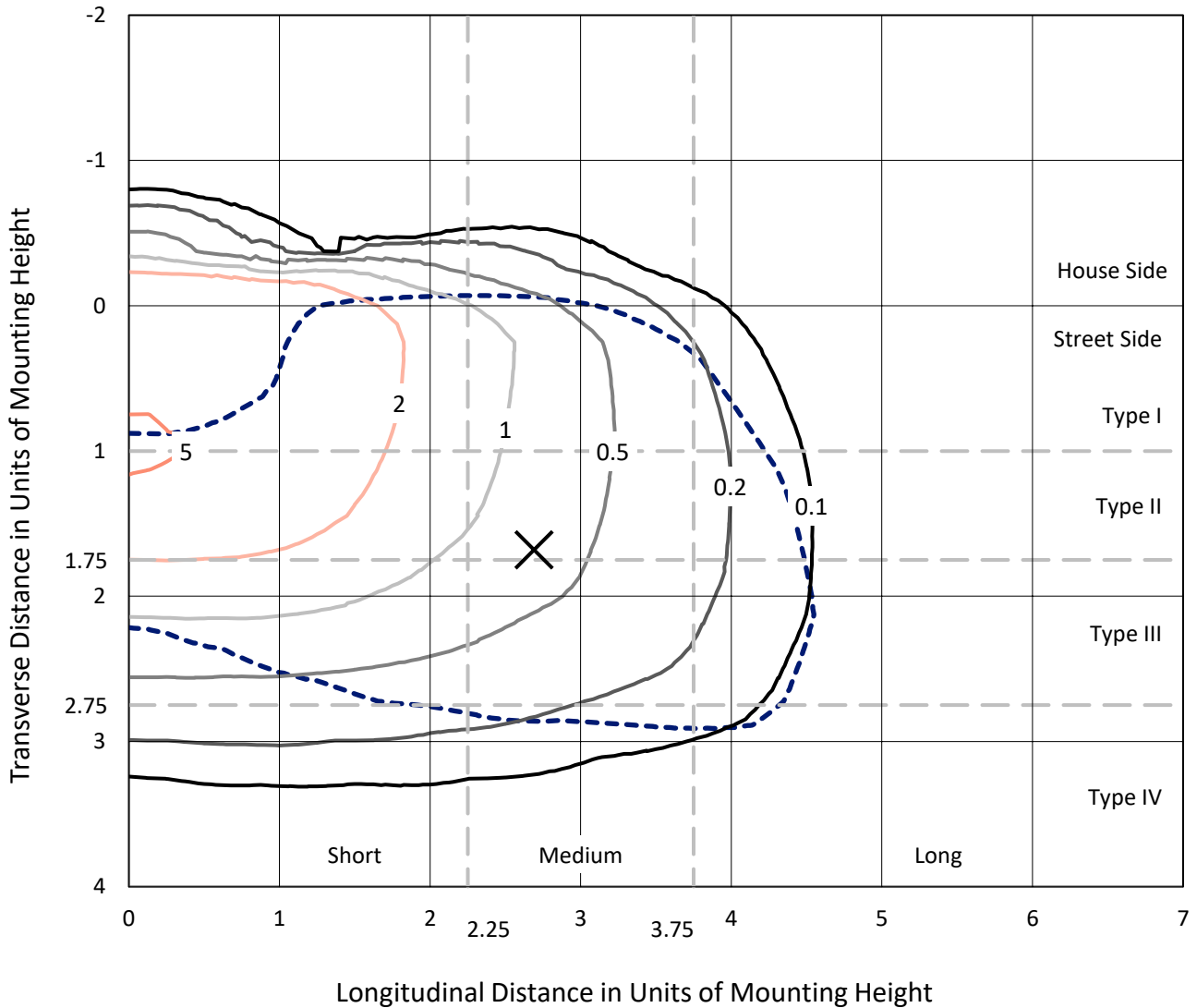
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

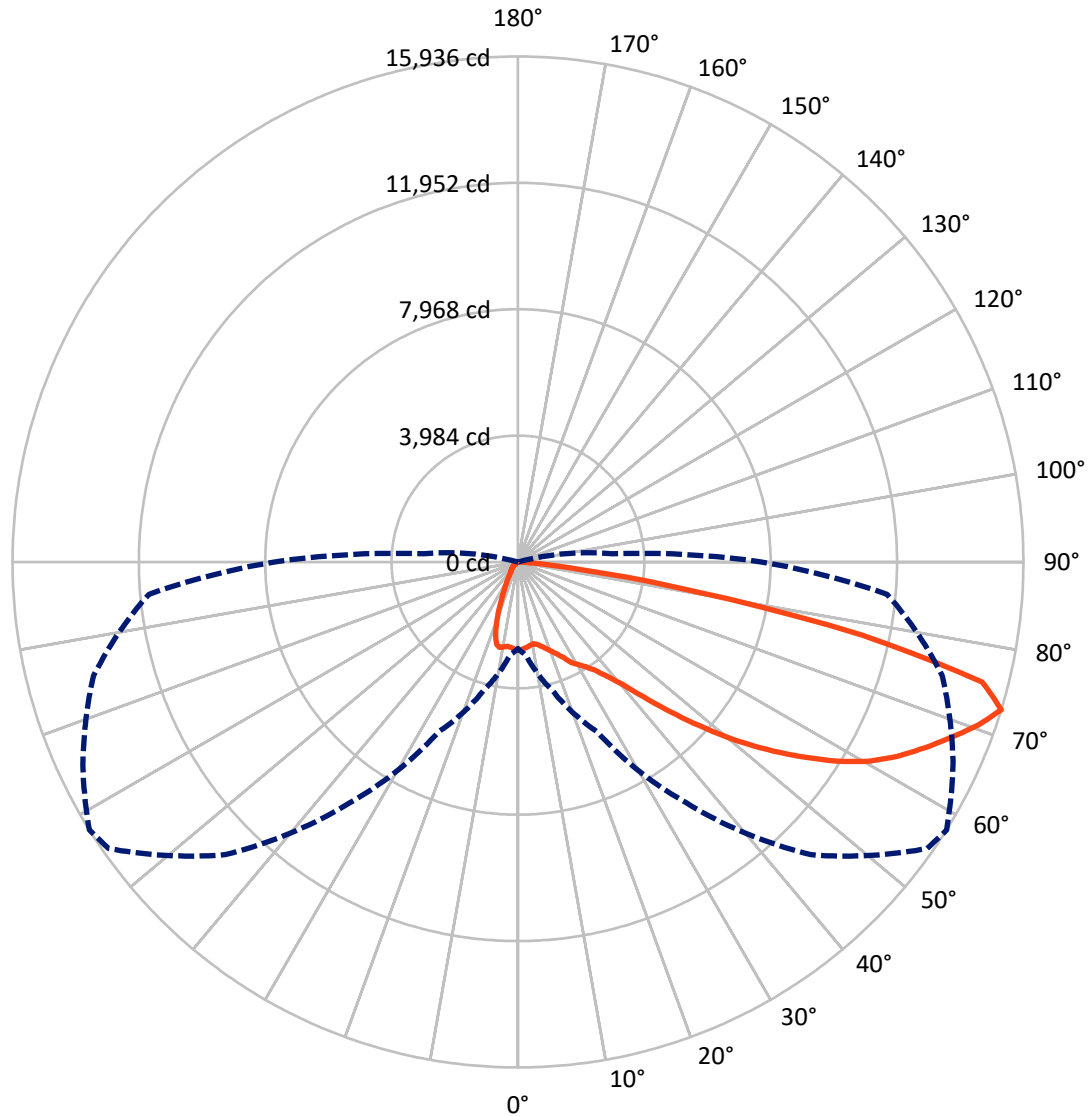
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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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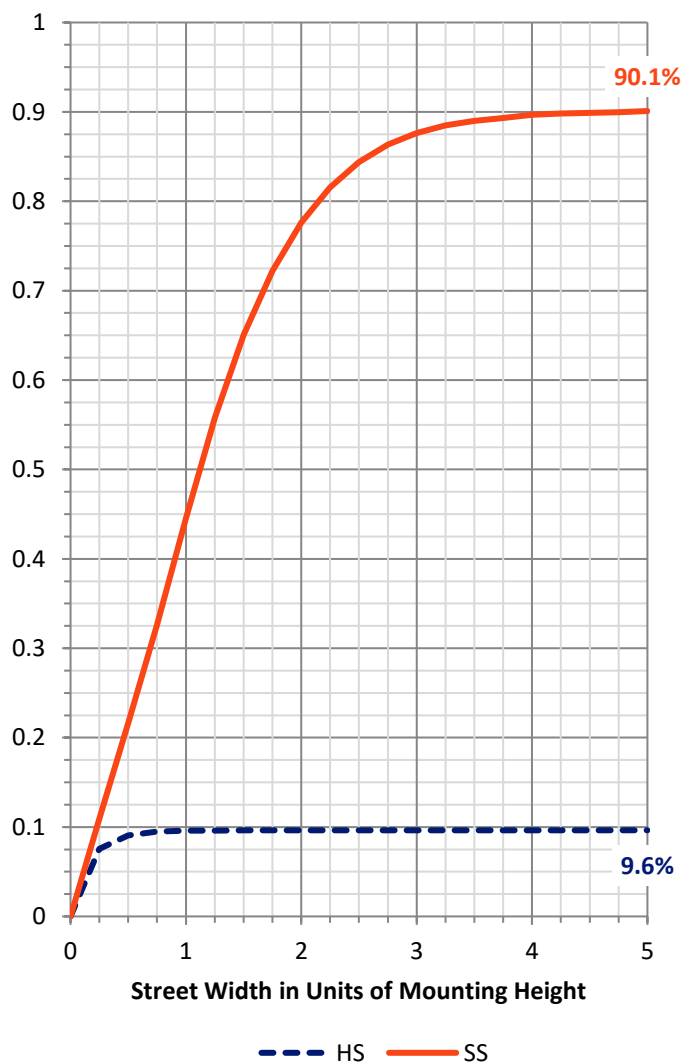
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2253.2	0.0	2253.2
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	20917.8	0.0	20917.8
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	23171.0	0.0	23171.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.2	1.1
10°-20°	664.6	2.9
20°-30°	1044.1	4.5
30°-40°	1800.6	7.8
40°-50°	3425.7	14.8
50°-60°	5425.2	23.4
60°-70°	6330.6	27.3
70°-80°	3964.9	17.1
80°-90°	260.2	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°	23171.0	100.0
0°-180°	23171.0	100.0

**Coefficient of Utilization**



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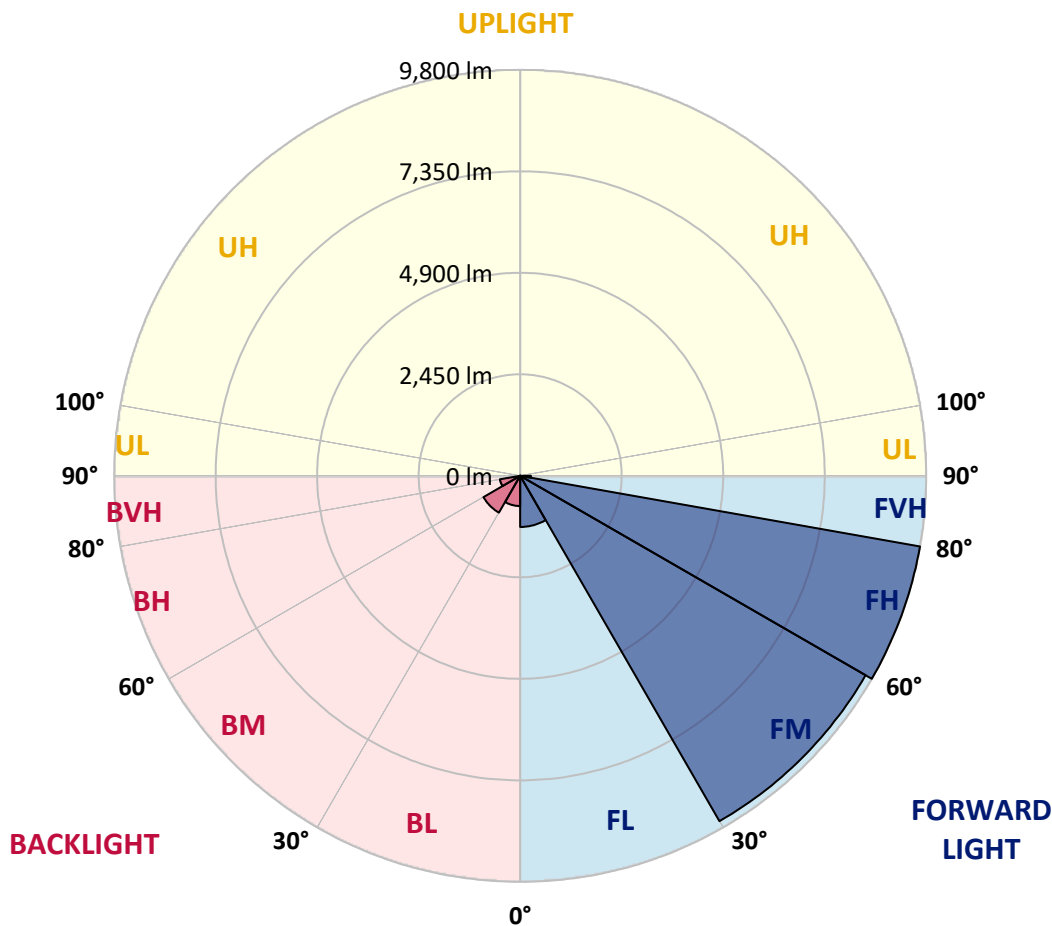
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1234.2	5.3			
FM (30°-60°)	9626.2	41.5			
FH (60°-80°)	9799.7	42.3			G4/12000
FVH (80°-90°)	257.7	1.1			G3/500
BL (0°-30°)	729.7	3.1	B2/1000		
BM (30°-60°)	1025.2	4.4	B2/2500		
BH (60°-80°)	495.8	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°	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4
2.5°	2767.9	2755.5	2751.4	2747.2	2751.4	2755.5	2743.1	2755.5	2747.2	2751.4	2759.7
5°	2668.5	2656.1	2651.9	2656.1	2668.5	2689.2	2697.5	2709.9	2709.9	2722.4	2726.5
7.5°	2556.6	2548.3	2544.2	2552.5	2577.3	2622.9	2647.8	2664.4	2680.9	2705.8	2730.7
10°	2494.5	2490.3	2486.2	2498.6	2523.5	2564.9	2598.1	2622.9	2685.1	2755.5	2801.1
12.5°	2453.0	2453.0	2461.3	2486.2	2519.3	2552.5	2631.2	2664.4	2759.7	2867.4	2929.5
15°	2419.9	2419.9	2432.3	2477.9	2523.5	2602.2	2718.2	2755.5	2867.4	3000.0	3082.9
17.5°	2395.0	2403.3	2411.6	2457.2	2544.2	2676.8	2813.5	2867.4	3004.1	3149.2	3240.3
20°	2399.2	2407.5	2411.6	2457.2	2581.5	2763.8	2937.8	3000.0	3157.4	3310.8	3401.9
22.5°	2424.0	2436.5	2440.6	2502.8	2647.8	2855.0	3078.7	3149.2	3319.1	3480.7	3551.1
25°	2527.6	2535.9	2511.0	2564.9	2743.1	2995.8	3261.0	3335.6	3505.5	3654.7	3712.7
27.5°	2879.8	2888.1	2751.4	2689.2	2817.7	3111.9	3484.8	3588.4	3799.7	3899.2	3907.4
30°	3642.3	3650.5	3381.2	3087.0	2995.8	3211.3	3609.1	3754.1	4027.6	4139.5	4089.8
32.5°	4624.3	4616.0	4247.2	3812.1	3418.5	3385.3	3787.3	3940.6	4238.9	4346.7	4309.4
35°	5610.5	5622.9	5308.0	4653.3	4089.8	3712.7	4015.2	4193.4	4553.9	4707.2	4640.9
37.5°	6285.9	6368.8	6232.0	5523.5	4914.4	4317.7	4384.0	4574.6	5026.2	5233.4	5092.5
40°	7238.9	7218.2	6886.7	6364.6	5826.0	5212.7	4980.6	5071.8	5589.8	5867.4	5647.8
42.5°	8519.3	8477.9	7914.3	7404.7	6803.8	6302.5	5830.1	5813.5	6236.2	6559.4	6240.3
45°	9679.5	9617.4	9232.0	8738.9	8080.1	7504.1	6866.0	6721.0	7015.2	7288.7	6915.7
47.5°	10603.6	10500.0	10226.5	9965.4	9803.8	8908.8	7951.6	7732.0	7881.2	8084.2	7558.0
50°	11697.5	11411.6	11013.8	10856.3	11192.0	10500.0	8995.8	8784.5	8776.2	8892.2	8221.0
52.5°	12194.7	11676.8	11453.0	11585.6	12178.1	11979.2	10122.9	9820.4	9700.2	9712.7	8838.4
55°	11593.9	11535.9	11656.0	12070.4	12845.3	12729.2	11204.4	10831.5	10653.3	10429.5	9430.9
57.5°	10910.2	11088.4	11564.9	12356.3	13690.6	13512.4	12269.3	11846.7	11519.3	11005.5	10089.8
60°	10280.4	10462.7	11250.0	12422.6	14154.7	14266.5	13156.0	12754.1	12269.3	11593.9	10814.9
62.5°	9323.2	9464.1	10570.4	12327.3	13951.6	14705.8	13773.4	13471.0	13019.3	12153.3	11647.8
65°	8245.8	8337.0	9430.9	11564.9	13553.8	14656.0	14283.1	14113.2	13674.0	12737.5	12472.3
67.5°	7064.9	7172.6	8084.2	10193.3	12774.8	14424.0	14763.8	14747.2	14245.8	13383.9	13069.0
70°	5705.8	5714.1	6468.2	8453.0	11415.7	13959.9	15360.5	15397.7	14792.8	13868.7	13093.9
72.5°	2730.7	2954.4	4193.4	5900.5	9277.6	13048.3	15750.0	15936.4	15136.7	13852.2	11680.9
75°	625.7	646.4	1222.4	2805.2	5440.6	10015.2	14776.2	15124.3	14299.7	11979.2	8229.3
77.5°	227.9	240.3	343.9	820.4	2092.5	5175.4	10574.6	11084.2	10570.4	7744.5	3890.9
80°	153.3	149.2	178.2	364.6	961.3	1466.8	5407.4	5709.9	5212.7	2643.6	932.3
82.5°	78.7	82.9	124.3	203.0	646.4	509.7	1806.6	1964.1	1616.0	530.4	174.0
85°	37.3	37.3	70.4	128.5	273.5	178.2	401.9	484.8	435.1	232.0	58.0
87.5°	37.3	37.3	66.3	82.9	140.9	74.6	99.4	124.3	116.0	124.3	20.7
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°	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4	2780.4
2.5°	2759.7	2755.5	2751.4	2759.7	2755.5	2763.8	2763.8	2772.1	2772.1	2763.8	2759.7
5°	2722.4	2714.1	2705.8	2705.8	2701.6	2709.9	2734.8	2755.5	2759.7	2747.2	2743.1
7.5°	2726.5	2726.5	2718.2	2701.6	2672.6	2672.6	2672.6	2697.5	2709.9	2701.6	2697.5
10°	2801.1	2805.2	2784.5	2747.2	2697.5	2651.9	2564.9	2436.5	2316.3	2283.1	2270.7
12.5°	2929.5	2933.7	2892.3	2826.0	2722.4	2453.0	2121.5	1814.9	1578.7	1512.4	1500.0
15°	3082.9	3087.0	3012.4	2904.7	2589.8	1964.1	1471.0	1122.9	915.7	866.0	861.9
17.5°	3240.3	3232.0	3120.2	2913.0	2196.1	1392.3	895.0	716.8	663.0	650.6	654.7
20°	3393.6	3368.8	3215.5	2759.7	1690.6	911.6	654.7	613.3	600.8	592.5	592.5
22.5°	3534.5	3484.8	3294.2	2457.2	1185.1	654.7	584.3	576.0	559.4	547.0	542.8
25°	3675.4	3605.0	3343.9	2063.5	795.6	571.8	551.1	534.5	513.8	497.2	493.1
27.5°	3845.3	3745.8	3319.1	1566.3	596.7	530.4	513.8	488.9	459.9	435.1	426.8
30°	4006.9	3895.0	3178.2	1081.5	509.7	488.9	464.1	426.8	389.5	360.5	352.2
32.5°	4209.9	4081.5	2925.4	708.6	443.4	426.8	401.9	356.4	306.6	273.5	265.2
35°	4500.0	4355.0	2602.2	497.2	389.5	360.5	327.3	277.6	223.8	198.9	194.8
37.5°	4906.1	4711.3	2196.1	401.9	343.9	302.5	252.8	203.0	165.7	145.0	140.9
40°	5403.3	5105.0	1744.5	356.4	306.6	252.8	190.6	145.0	120.2	103.6	103.6
42.5°	5942.0	5473.7	1284.5	327.3	269.3	207.2	140.9	103.6	87.0	78.7	74.6
45°	6497.2	5801.1	866.0	302.5	236.2	157.5	99.4	70.4	58.0	58.0	53.9
47.5°	7073.2	6020.7	559.4	273.5	198.9	116.0	66.3	49.7	41.4	41.4	41.4
50°	7645.0	6136.7	397.8	248.6	161.6	78.7	49.7	37.3	33.1	33.1	33.1
52.5°	8059.4	6062.1	319.1	215.5	124.3	58.0	37.3	29.0	24.9	24.9	24.9
55°	8419.9	5933.7	277.6	186.5	91.2	41.4	29.0	24.9	20.7	20.7	20.7
57.5°	8788.6	5767.9	248.6	157.5	66.3	29.0	20.7	16.6	16.6	16.6	16.6
60°	9124.3	5486.2	215.5	124.3	45.6	20.7	16.6	12.4	12.4	12.4	12.4
62.5°	9451.6	5245.8	186.5	95.3	33.1	16.6	8.3	8.3	4.1	4.1	4.1
65°	9638.1	4922.6	149.2	62.2	20.7	12.4	4.1	4.1	0.0	0.0	0.0
67.5°	9580.1	4537.3	103.6	37.3	12.4	8.3	4.1	0.0	0.0	0.0	0.0
70°	9178.2	4019.3	62.2	20.7	12.4	8.3	4.1	0.0	0.0	0.0	0.0
72.5°	7686.4	2975.1	37.3	16.6	8.3	4.1	0.0	0.0	0.0	0.0	0.0
75°	5134.0	1367.4	20.7	12.4	4.1	4.1	0.0	0.0	0.0	0.0	0.0
77.5°	2349.4	410.2	12.4	8.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	472.4	107.7	8.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	99.4	20.7	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.7	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.3	4.1	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)