

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: P400447

Luminaire Tested: **ARCH-L-PA3-280-750-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400447  
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-PA3-280-750-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1180mA 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: 26155 lumens  
Efficiency: N/A  
Efficacy: 93.7 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

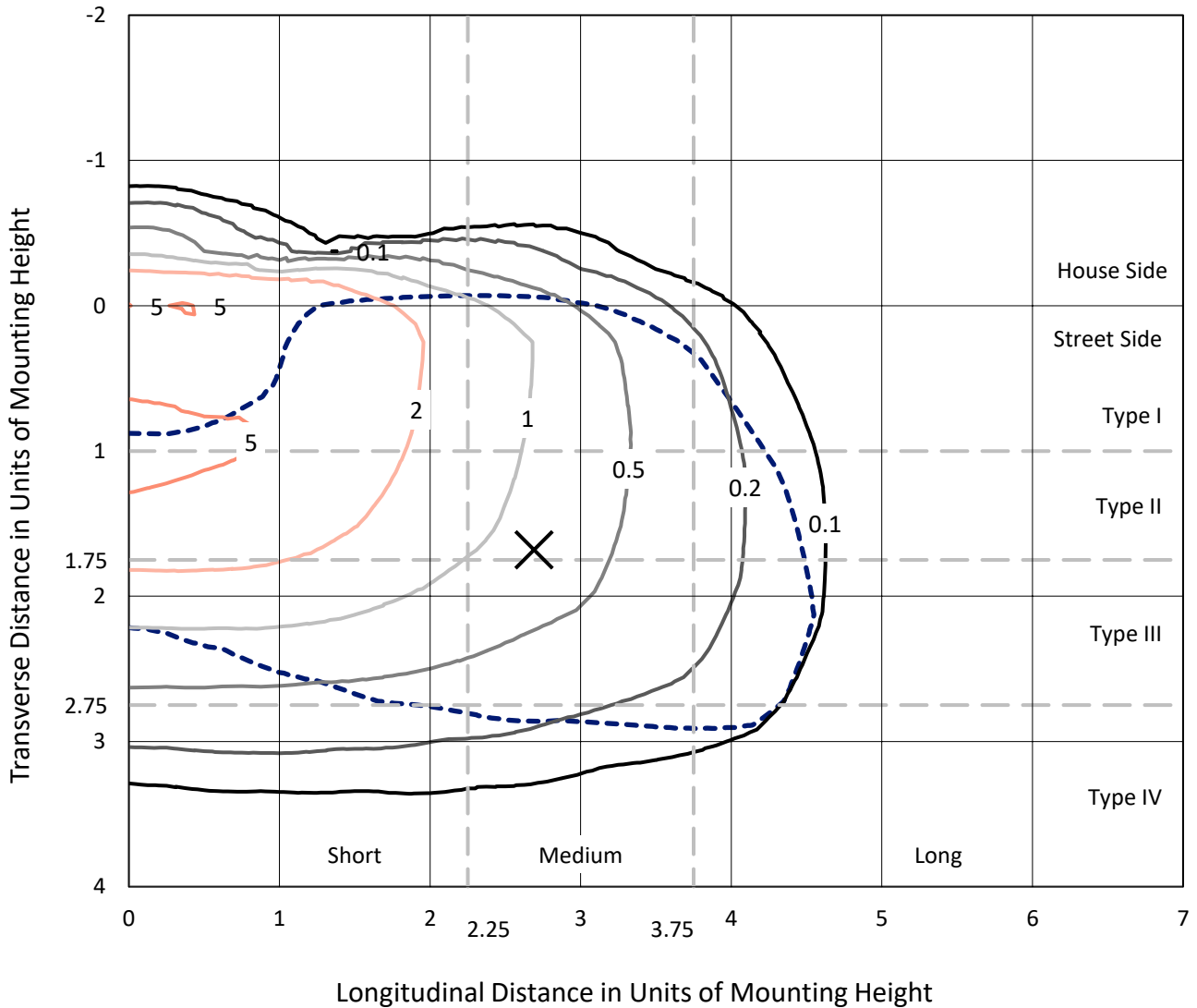
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

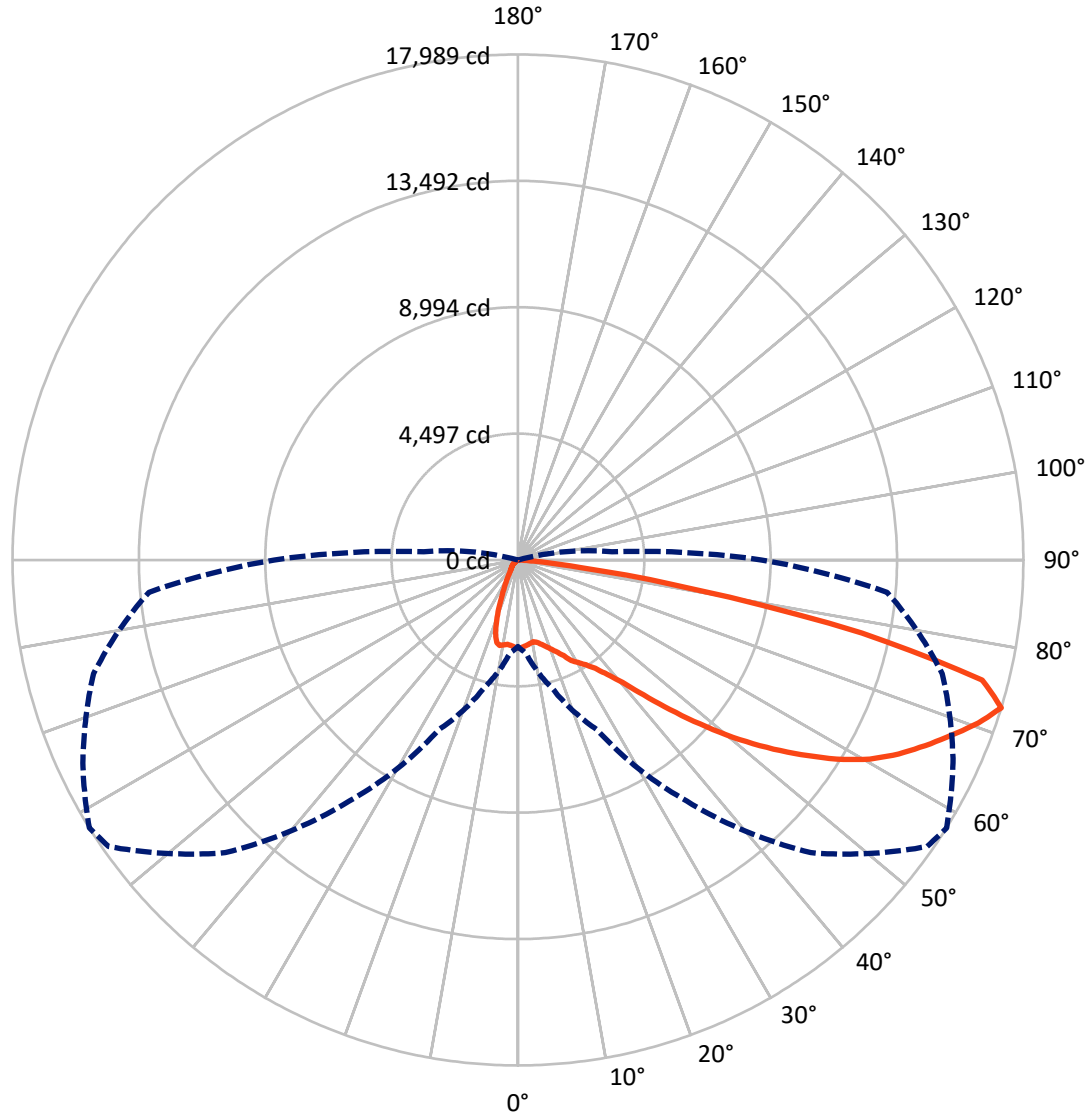
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 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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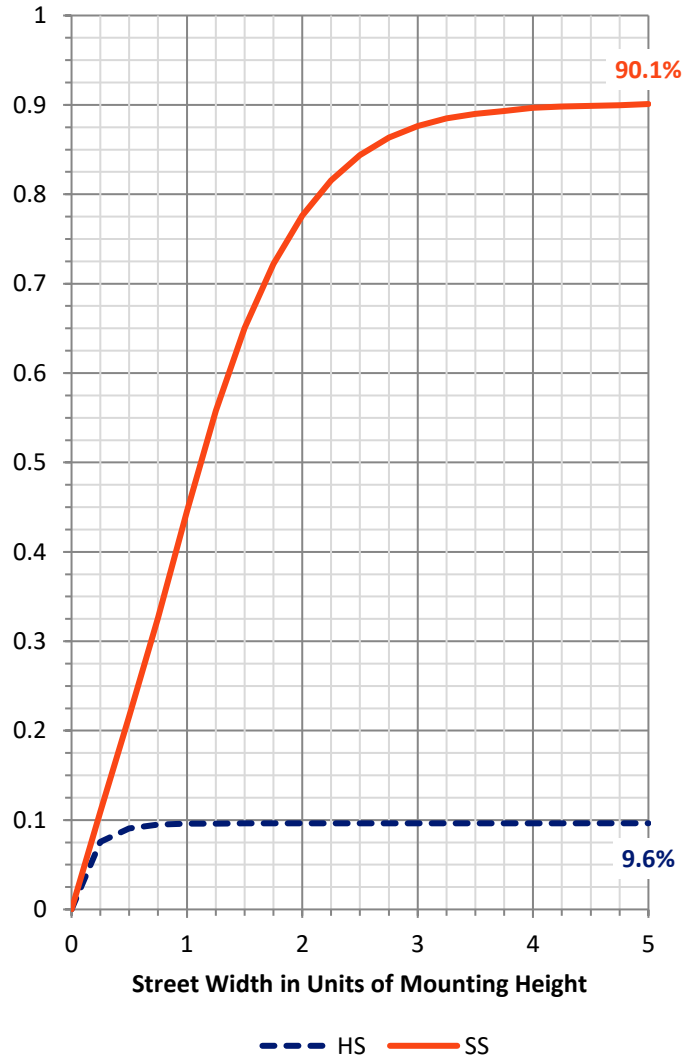
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2543.4	0.0	2543.4
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	23611.6	0.0	23611.6
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	26155.0	0.0	26155.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	288.0	1.1
10°-20°	750.2	2.9
20°-30°	1178.5	4.5
30°-40°	2032.4	7.8
40°-50°	3866.8	14.8
50°-60°	6123.9	23.4
60°-70°	7145.9	27.3
70°-80°	4475.5	17.1
80°-90°	293.8	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°	26155.0	100.0
0°-180°	26155.0	100.0

**Coefficient of Utilization**

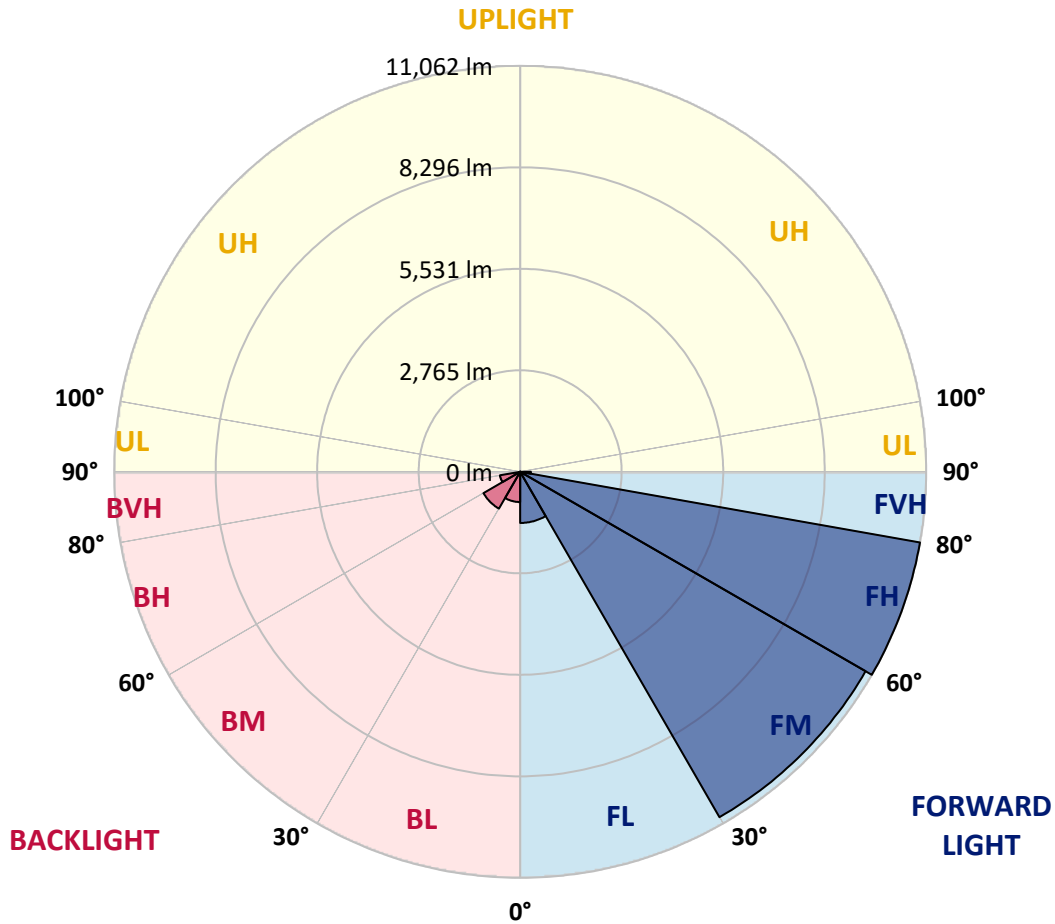


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1393.1	5.3			
FM (30°-60°)	10865.9	41.5			
FH (60°-80°)	11061.7	42.3			G4/12000
FVH (80°-90°)	290.9	1.1			G3/500
BL (0°-30°)	823.6	3.1	B2/1000		
BM (30°-60°)	1157.3	4.4	B2/2500		
BH (60°-80°)	559.7	2.1	B2/1000		G2/1000
BVH (80°-90°)	2.8	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°	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4
2.5°	3124.4	3110.4	3105.7	3101.0	3105.7	3110.4	3096.3	3110.4	3101.0	3105.7	3115.1
5°	3012.2	2998.1	2993.4	2998.1	3012.2	3035.5	3044.9	3058.9	3058.9	3073.0	3077.6
7.5°	2885.9	2876.5	2871.8	2881.2	2909.3	2960.7	2988.8	3007.5	3026.2	3054.2	3082.3
10°	2815.7	2811.0	2806.4	2820.4	2848.5	2895.2	2932.6	2960.7	3030.9	3110.4	3161.8
12.5°	2768.9	2768.9	2778.3	2806.4	2843.8	2881.2	2970.1	3007.5	3115.1	3236.7	3306.8
15°	2731.5	2731.5	2745.6	2797.0	2848.5	2937.3	3068.3	3110.4	3236.7	3386.3	3479.9
17.5°	2703.5	2712.8	2722.2	2773.6	2871.8	3021.5	3175.9	3236.7	3391.0	3554.7	3657.6
20°	2708.1	2717.5	2722.2	2773.6	2913.9	3119.7	3316.2	3386.3	3564.1	3737.1	3840.0
22.5°	2736.2	2750.2	2754.9	2825.1	2988.8	3222.6	3475.2	3554.7	3746.5	3928.9	4008.4
25°	2853.1	2862.5	2834.4	2895.2	3096.3	3381.7	3681.0	3765.2	3957.0	4125.3	4190.8
27.5°	3250.7	3260.0	3105.7	3035.5	3180.5	3512.6	3933.6	4050.5	4289.0	4401.3	4410.7
30°	4111.3	4120.7	3816.6	3484.6	3381.7	3624.9	4073.9	4237.6	4546.3	4672.6	4616.5
32.5°	5219.8	5210.5	4794.2	4303.1	3858.7	3821.3	4275.0	4448.1	4784.8	4906.4	4864.3
35°	6333.0	6347.0	5991.6	5252.6	4616.5	4190.8	4532.3	4733.4	5140.3	5313.4	5238.5
37.5°	7095.4	7188.9	7034.6	6234.8	5547.2	4873.7	4948.5	5163.7	5673.5	5907.4	5748.4
40°	8171.2	8147.8	7773.6	7184.3	6576.2	5884.0	5622.1	5725.0	6309.6	6623.0	6375.1
42.5°	9616.4	9569.7	8933.6	8358.3	7680.1	7114.1	6580.9	6562.2	7039.3	7404.1	7044.0
45°	10926.1	10855.9	10420.9	9864.3	9120.7	8470.5	7750.2	7586.5	7918.6	8227.3	7806.3
47.5°	11969.1	11852.2	11543.5	11248.8	11066.4	10056.1	8975.7	8727.8	8896.1	9125.3	8531.3
50°	13203.9	12881.2	12432.2	12254.4	12633.3	11852.2	10154.3	9915.8	9906.4	10037.4	9279.7
52.5°	13765.2	13180.5	12927.9	13077.6	13746.5	13522.0	11426.5	11085.1	10949.5	10963.5	9976.6
55°	13087.0	13021.5	13157.1	13624.9	14499.5	14368.5	12647.3	12226.4	12025.2	11772.7	10645.4
57.5°	12315.2	12516.3	13054.2	13947.6	15453.7	15252.5	13849.4	13372.3	13002.8	12422.8	11389.1
60°	11604.3	11810.1	12698.8	14022.4	15977.5	16103.8	14850.3	14396.6	13849.4	13087.0	12207.6
62.5°	10523.8	10682.9	11931.7	13914.8	15748.3	16599.6	15547.2	15205.8	14695.9	13718.4	13147.8
65°	9307.7	9410.6	10645.4	13054.2	15299.3	16543.5	16122.5	15930.7	15435.0	14377.9	14078.5
67.5°	7974.7	8096.3	9125.3	11506.1	14420.0	16281.5	16665.1	16646.4	16080.4	15107.5	14752.1
70°	6440.6	6449.9	7301.2	9541.6	12885.8	15757.7	17338.6	17380.7	16697.8	15654.8	14780.1
72.5°	3082.3	3334.9	4733.4	6660.4	10472.4	14728.7	17778.3	17988.7	17086.0	15636.1	13185.2
75°	706.3	729.7	1379.8	3166.5	6141.2	11304.9	16679.1	17072.0	16141.2	13522.0	9289.0
77.5°	257.2	271.3	388.2	926.1	2362.0	5841.9	11936.4	12511.7	11931.7	8741.8	4391.9
80°	173.1	168.4	201.1	411.6	1085.1	1655.7	6103.8	6445.3	5884.0	2984.1	1052.4
82.5°	88.9	93.5	140.3	229.2	729.7	575.3	2039.3	2217.0	1824.1	598.7	196.4
85°	42.1	42.1	79.5	145.0	308.7	201.1	453.7	547.2	491.1	261.9	65.5
87.5°	42.1	42.1	74.8	93.5	159.0	84.2	112.3	140.3	131.0	140.3	23.4
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°	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4	3138.4
2.5°	3115.1	3110.4	3105.7	3115.1	3110.4	3119.7	3119.7	3129.1	3129.1	3119.7	3115.1
5°	3073.0	3063.6	3054.2	3054.2	3049.6	3058.9	3087.0	3110.4	3115.1	3101.0	3096.3
7.5°	3077.6	3077.6	3068.3	3049.6	3016.8	3016.8	3016.8	3044.9	3058.9	3049.6	3044.9
10°	3161.8	3166.5	3143.1	3101.0	3044.9	2993.4	2895.2	2750.2	2614.6	2577.2	2563.1
12.5°	3306.8	3311.5	3264.7	3189.9	3073.0	2768.9	2394.8	2048.6	1782.0	1707.2	1693.2
15°	3479.9	3484.6	3400.4	3278.8	2923.3	2217.0	1660.4	1267.5	1033.7	977.5	972.9
17.5°	3657.6	3648.3	3522.0	3288.1	2478.9	1571.6	1010.3	809.2	748.4	734.3	739.0
20°	3830.7	3802.6	3629.6	3115.1	1908.3	1029.0	739.0	692.2	678.2	668.8	668.8
22.5°	3989.7	3933.6	3718.4	2773.6	1337.7	739.0	659.5	650.1	631.4	617.4	612.7
25°	4148.7	4069.2	3774.5	2329.3	898.0	645.5	622.1	603.4	580.0	561.3	556.6
27.5°	4340.5	4228.2	3746.5	1768.0	673.5	598.7	580.0	551.9	519.2	491.1	481.8
30°	4522.9	4396.6	3587.5	1220.8	575.3	551.9	523.9	481.8	439.7	406.9	397.6
32.5°	4752.1	4607.1	3302.1	799.8	500.5	481.8	453.7	402.2	346.1	308.7	299.3
35°	5079.5	4915.8	2937.3	561.3	439.7	406.9	369.5	313.4	252.6	224.5	219.8
37.5°	5537.9	5318.0	2478.9	453.7	388.2	341.4	285.3	229.2	187.1	163.7	159.0
40°	6099.1	5762.4	1969.1	402.2	346.1	285.3	215.2	163.7	135.6	116.9	116.9
42.5°	6707.2	6178.7	1450.0	369.5	304.0	233.9	159.0	116.9	98.2	88.9	84.2
45°	7333.9	6548.2	977.5	341.4	266.6	177.7	112.3	79.5	65.5	65.5	60.8
47.5°	7984.1	6796.1	631.4	308.7	224.5	131.0	74.8	56.1	46.8	46.8	46.8
50°	8629.5	6927.0	449.0	280.6	182.4	88.9	56.1	42.1	37.4	37.4	37.4
52.5°	9097.3	6842.8	360.1	243.2	140.3	65.5	42.1	32.7	28.1	28.1	28.1
55°	9504.2	6697.8	313.4	210.5	102.9	46.8	32.7	28.1	23.4	23.4	23.4
57.5°	9920.5	6510.7	280.6	177.7	74.8	32.7	23.4	18.7	18.7	18.7	18.7
60°	10299.3	6192.7	243.2	140.3	51.4	23.4	18.7	14.0	14.0	14.0	14.0
62.5°	10668.8	5921.4	210.5	107.6	37.4	18.7	9.4	9.4	4.7	4.7	4.7
65°	10879.3	5556.6	168.4	70.2	23.4	14.0	4.7	4.7	0.0	0.0	0.0
67.5°	10813.8	5121.6	116.9	42.1	14.0	9.4	4.7	0.0	0.0	0.0	0.0
70°	10360.1	4536.9	70.2	23.4	14.0	9.4	4.7	0.0	0.0	0.0	0.0
72.5°	8676.3	3358.3	42.1	18.7	9.4	4.7	0.0	0.0	0.0	0.0	0.0
75°	5795.1	1543.5	23.4	14.0	4.7	4.7	0.0	0.0	0.0	0.0	0.0
77.5°	2652.0	463.0	14.0	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	533.2	121.6	9.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	112.3	23.4	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	23.4	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.4	4.7	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)