

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: P400445

Luminaire Tested: **ARCH-L-PA3-280-750-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400445  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
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-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24749 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G3

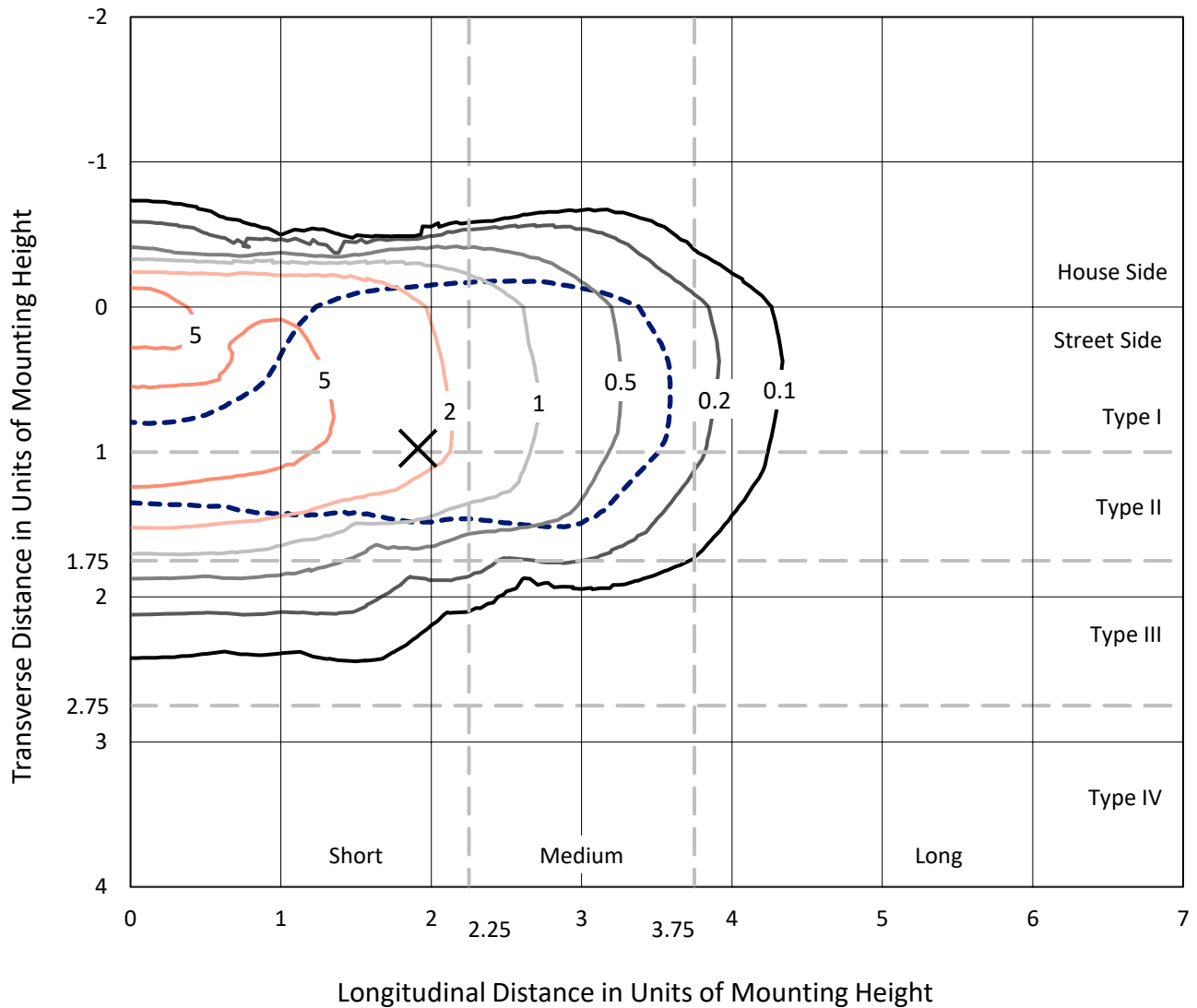
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

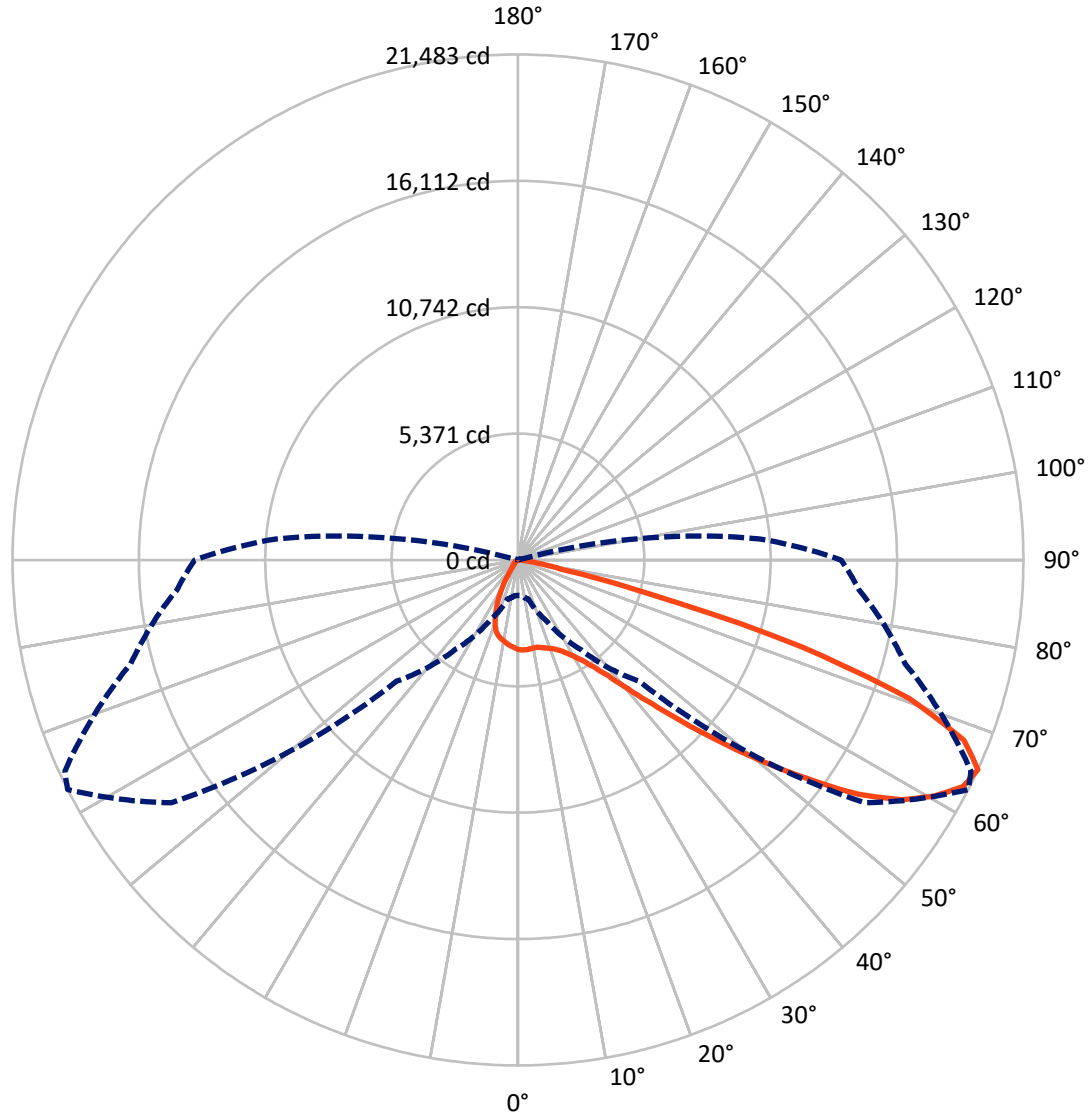
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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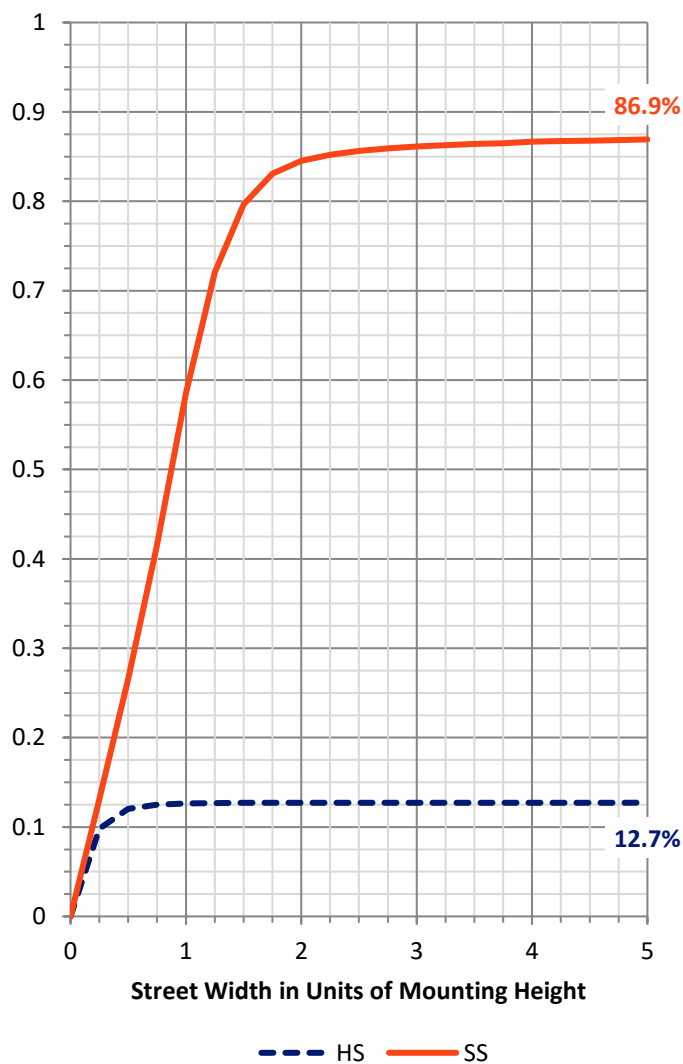
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3185.2	0.0	3185.2
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	21563.8	0.0	21563.8
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	24749.0	0.0	24749.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	347.9	1.4
10°-20°	858.2	3.5
20°-30°	1272.0	5.1
30°-40°	2361.8	9.5
40°-50°	5003.4	20.2
50°-60°	6918.4	28.0
60°-70°	5538.4	22.4
70°-80°	2301.1	9.3
80°-90°	147.7	0.6
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°	24749.0	100.0
0°-180°	24749.0	100.0

**Coefficient of Utilization**

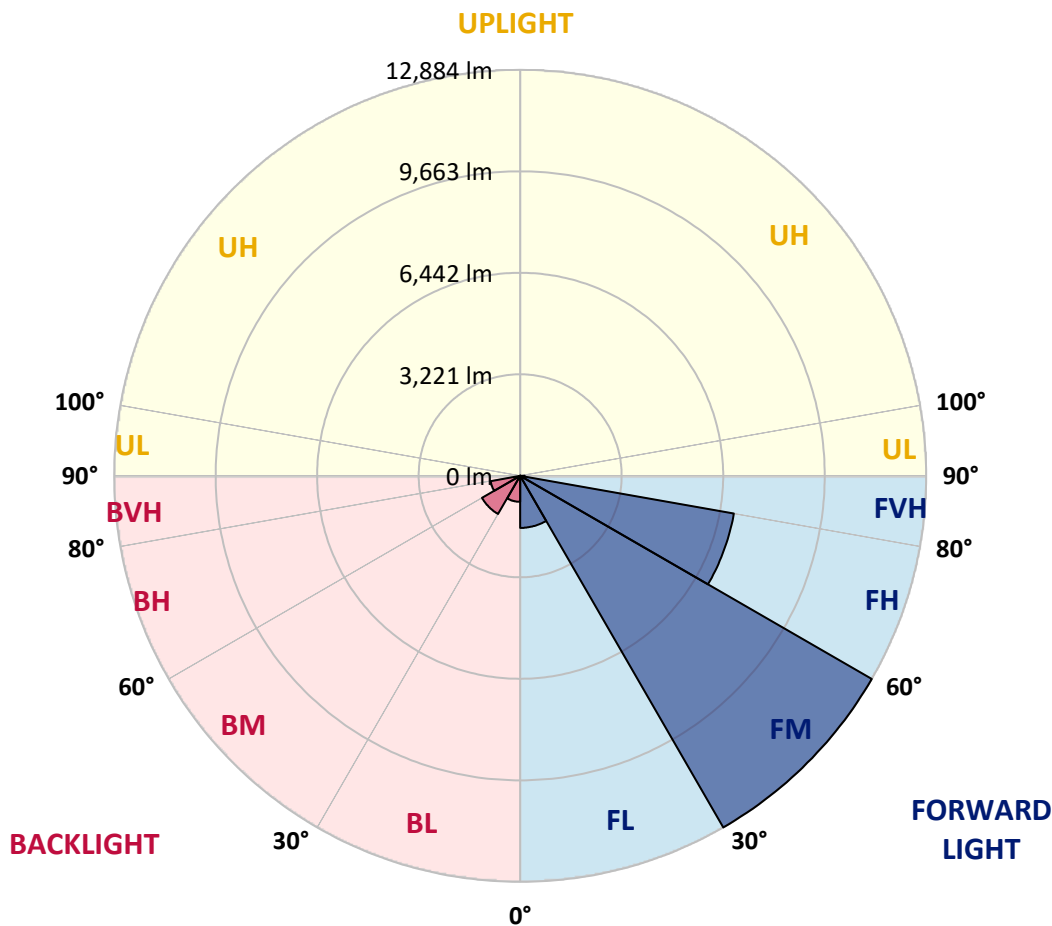


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1652.6	6.7			
FM (30°-60°)	12884.4	52.1			
FH (60°-80°)	6885.7	27.8			G3/7500
FVH (80°-90°)	141.0	0.6			G2/225
BL (0°-30°)	825.5	3.3	B2/1000		
BM (30°-60°)	1399.2	5.7	B2/2500		
BH (60°-80°)	953.7	3.9	B2/1000		G2/1000
BVH (80°-90°)	6.7	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-G3**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6
2.5°	3878.0	3868.7	3859.3	3854.6	3854.6	3850.0	3831.3	3826.6	3817.3	3807.9	3798.6
5°	3840.6	3826.6	3821.9	3826.6	3831.3	3840.6	3831.3	3831.3	3821.9	3812.6	3793.9
7.5°	3747.2	3737.8	3742.5	3756.5	3761.2	3793.9	3798.6	3812.6	3812.6	3803.3	3789.2
10°	3635.0	3630.4	3630.4	3653.7	3677.1	3723.8	3756.5	3793.9	3798.6	3798.6	3775.2
12.5°	3550.9	3546.3	3560.3	3588.3	3635.0	3695.8	3751.9	3807.9	3817.3	3821.9	3784.6
15°	3499.6	3499.6	3518.2	3574.3	3639.7	3723.8	3789.2	3864.0	3873.3	3868.7	3817.3
17.5°	3452.8	3457.5	3494.9	3588.3	3663.1	3775.2	3854.6	3938.7	3943.4	3938.7	3854.6
20°	3434.1	3443.5	3499.6	3621.0	3705.1	3831.3	3934.1	4018.2	4022.9	4004.2	3892.0
22.5°	3485.5	3490.2	3560.3	3691.1	3770.5	3910.7	4041.5	4121.0	4125.6	4097.6	3948.1
25°	3663.1	3663.1	3723.8	3836.0	3906.0	4046.2	4186.4	4279.8	4279.8	4247.1	4074.2
27.5°	4078.9	4041.5	4027.5	4060.2	4083.6	4233.1	4382.6	4499.4	4494.8	4448.0	4237.8
30°	4882.6	4789.1	4639.6	4471.4	4387.3	4490.1	4630.2	4779.8	4775.1	4700.3	4438.7
32.5°	6232.8	6097.4	5742.3	5298.4	4938.6	4821.8	4952.6	5116.2	5120.8	5032.1	4761.1
35°	8125.1	7910.2	7274.8	6658.0	5835.7	5391.8	5429.2	5606.8	5662.8	5616.1	5303.1
37.5°	9947.3	9751.1	9143.7	8288.7	7172.0	6265.6	6106.7	6260.9	6326.3	6326.3	5994.6
40°	11783.5	11554.6	11017.3	10157.6	8980.2	7629.9	7059.8	7186.0	7256.1	7270.1	6835.6
42.5°	13255.3	13105.8	12694.6	12026.5	10923.8	10022.1	8433.5	8363.4	8428.8	8377.4	7812.1
45°	14273.9	14157.1	13872.1	13619.8	13082.4	12629.2	10269.7	9797.8	9839.9	9662.3	8910.1
47.5°	14484.1	14353.3	14292.6	14643.0	15026.1	15138.3	12526.4	11503.2	11461.2	11068.7	10050.1
50°	13568.4	13582.4	13806.6	14806.5	16404.4	17413.7	15142.9	13428.2	13274.0	12400.3	11110.7
52.5°	11592.0	11816.2	12381.6	14002.9	16825.0	19067.7	17759.4	15470.0	15231.7	13694.5	11905.0
55°	9068.9	9358.6	10288.4	12152.7	15946.6	19805.9	19964.7	17591.2	17049.2	14666.3	12521.8
57.5°	6742.1	6830.9	7914.9	9615.6	13867.4	19081.7	21095.4	19226.5	18530.3	15442.0	13133.8
60°	4200.4	4256.5	5401.2	7321.5	10503.3	16404.4	21095.4	20352.5	19689.1	16138.1	13694.5
62.5°	2611.8	2630.5	3060.4	5018.1	7139.3	12166.7	20221.7	21226.3	20693.6	16638.1	14175.8
65°	1504.5	1523.2	1724.1	2836.1	4644.3	7284.1	17988.4	21483.2	21244.9	17035.2	14549.5
67.5°	1098.0	1107.3	1186.8	1593.3	3037.0	3742.5	13512.3	20450.7	20749.7	17231.4	14540.2
70°	953.1	967.2	1070.0	1242.8	2191.3	2298.8	6877.6	17661.3	18497.6	16951.1	14105.7
72.5°	733.6	752.2	906.4	1168.1	1607.3	1654.0	2490.3	12568.5	13834.7	15199.0	12914.2
75°	504.6	523.3	677.5	962.5	1326.9	1238.2	1369.0	5784.3	7298.1	10195.0	9830.5
77.5°	322.4	327.1	425.2	700.8	1144.7	878.4	939.1	1887.6	2649.2	4611.6	4639.6
80°	214.9	219.6	261.6	453.2	784.9	813.0	579.4	873.7	957.8	1345.6	934.5
82.5°	130.8	130.8	177.5	285.0	476.6	672.8	378.5	457.9	490.6	518.6	243.0
85°	51.4	51.4	107.5	186.9	299.0	313.0	238.3	266.3	280.3	303.7	112.1
87.5°	14.0	14.0	60.7	102.8	130.8	144.8	144.8	130.8	140.2	172.9	56.1
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°	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6	3812.6
2.5°	3793.9	3779.9	3761.2	3742.5	3723.8	3709.8	3695.8	3695.8	3686.4	3672.4	3663.1
5°	3784.6	3761.2	3719.2	3686.4	3635.0	3597.7	3569.6	3546.3	3532.3	3499.6	3494.9
7.5°	3770.5	3742.5	3681.8	3616.4	3532.3	3466.8	3401.4	3354.7	3308.0	3270.6	3261.3
10°	3747.2	3714.5	3625.7	3532.3	3415.5	3294.0	3139.8	2962.2	2798.7	2705.3	2677.2
12.5°	3747.2	3705.1	3588.3	3462.2	3294.0	2994.9	2602.5	2210.0	1906.3	1770.8	1733.4
15°	3770.5	3714.5	3560.3	3387.4	3074.4	2467.0	1831.5	1312.9	981.2	878.4	855.0
17.5°	3793.9	3714.5	3518.2	3284.6	2672.6	1789.5	1041.9	691.5	584.0	560.7	560.7
20°	3803.3	3705.1	3462.2	3093.1	2135.2	1112.0	621.4	518.6	476.6	462.6	462.6
22.5°	3840.6	3709.8	3420.1	2817.4	1551.2	654.1	490.6	434.5	392.5	378.5	378.5
25°	3934.1	3765.9	3429.5	2467.0	995.2	495.3	415.8	359.8	317.7	299.0	299.0
27.5°	4083.6	3892.0	3480.9	2060.5	626.1	425.2	350.4	289.7	257.0	238.3	238.3
30°	4251.8	4032.2	3504.2	1593.3	467.2	359.8	285.0	228.9	205.6	191.6	186.9
32.5°	4546.1	4275.2	3485.5	1093.3	383.1	303.7	228.9	182.2	163.5	158.9	158.9
35°	5018.1	4700.3	3448.2	686.8	317.7	243.0	182.2	149.5	135.5	130.8	126.2
37.5°	5658.2	5321.7	3336.0	453.2	261.6	191.6	149.5	126.2	112.1	107.5	107.5
40°	6438.4	6031.9	3121.1	345.8	224.3	154.2	126.2	107.5	98.1	93.4	93.4
42.5°	7330.8	6821.6	2780.0	299.0	186.9	130.8	107.5	88.8	84.1	79.4	79.4
45°	8307.3	7648.6	2308.1	266.3	158.9	107.5	88.8	79.4	70.1	70.1	65.4
47.5°	9344.6	8480.2	1775.5	233.6	135.5	93.4	79.4	65.4	60.7	56.1	56.1
50°	10344.5	9223.1	1247.5	200.9	112.1	79.4	65.4	56.1	51.4	46.7	46.7
52.5°	11050.0	9671.7	883.1	172.9	93.4	70.1	51.4	42.1	37.4	37.4	37.4
55°	11615.3	9952.0	616.7	144.8	79.4	60.7	42.1	32.7	32.7	28.0	28.0
57.5°	12148.0	10134.2	453.2	121.5	65.4	46.7	32.7	23.4	23.4	18.7	18.7
60°	12699.3	10232.3	345.8	98.1	56.1	37.4	23.4	18.7	14.0	14.0	14.0
62.5°	13255.3	10293.1	266.3	79.4	46.7	28.0	18.7	14.0	9.3	4.7	4.7
65°	13741.2	10311.8	205.6	60.7	37.4	18.7	14.0	4.7	0.0	0.0	0.0
67.5°	13886.1	10096.8	158.9	46.7	28.0	14.0	9.3	0.0	0.0	0.0	0.0
70°	13493.6	9526.8	121.5	37.4	23.4	9.3	4.7	0.0	0.0	0.0	0.0
72.5°	11975.1	7989.6	93.4	23.4	18.7	9.3	4.7	0.0	0.0	0.0	0.0
75°	8569.0	4261.1	65.4	18.7	14.0	4.7	0.0	0.0	0.0	0.0	0.0
77.5°	3943.4	1649.3	46.7	14.0	9.3	4.7	0.0	0.0	0.0	0.0	0.0
80°	770.9	411.2	18.7	9.3	4.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	177.5	70.1	9.3	9.3	4.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	60.7	23.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	23.4	9.3	4.7	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)