

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: P400427

Luminaire Tested: **ARCH-L-PA3-280-730-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400427  
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-PA3-280-730-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 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: 22539 lumens  
Efficiency: N/A  
Efficacy: 80.8 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

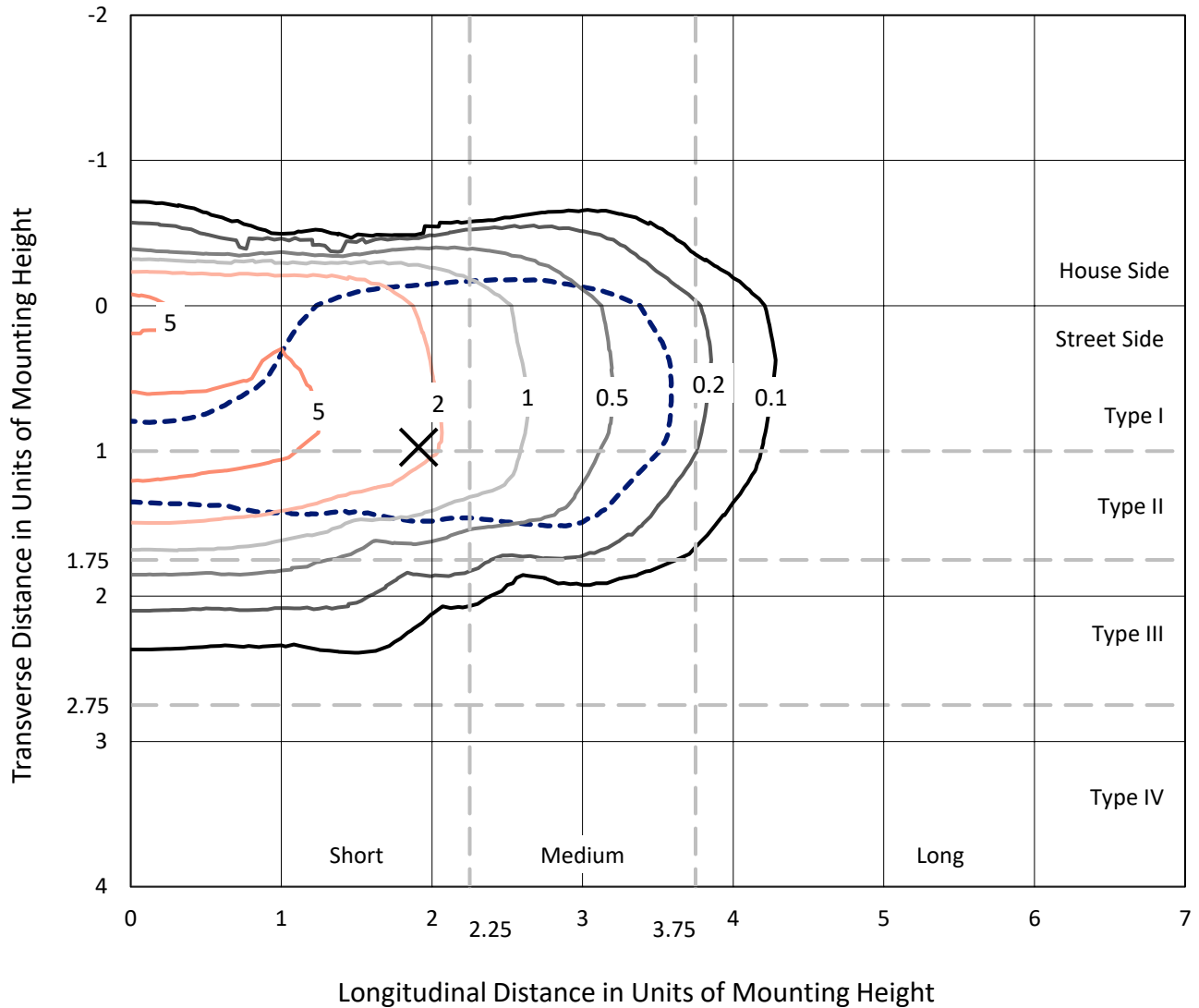
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

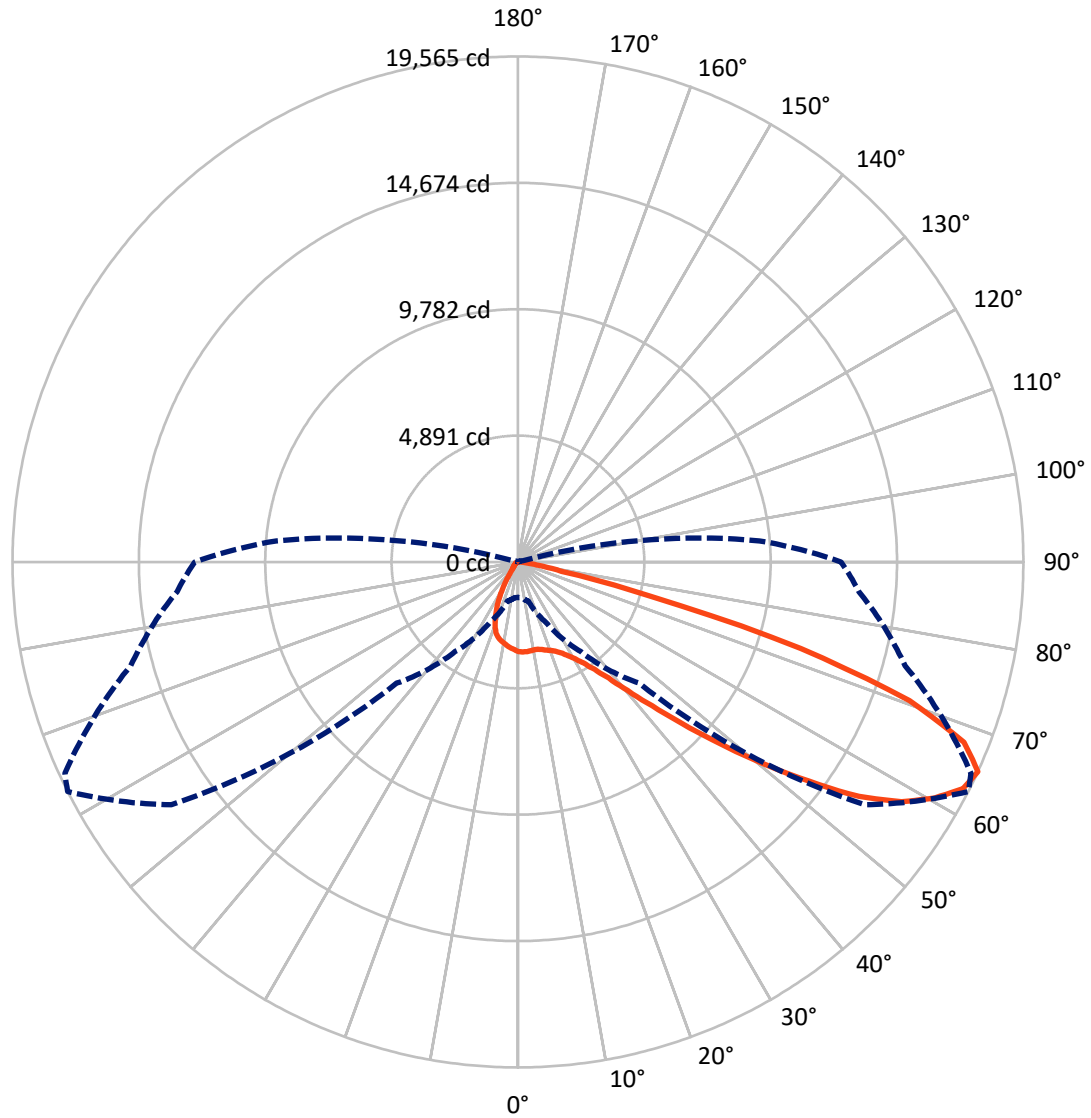
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 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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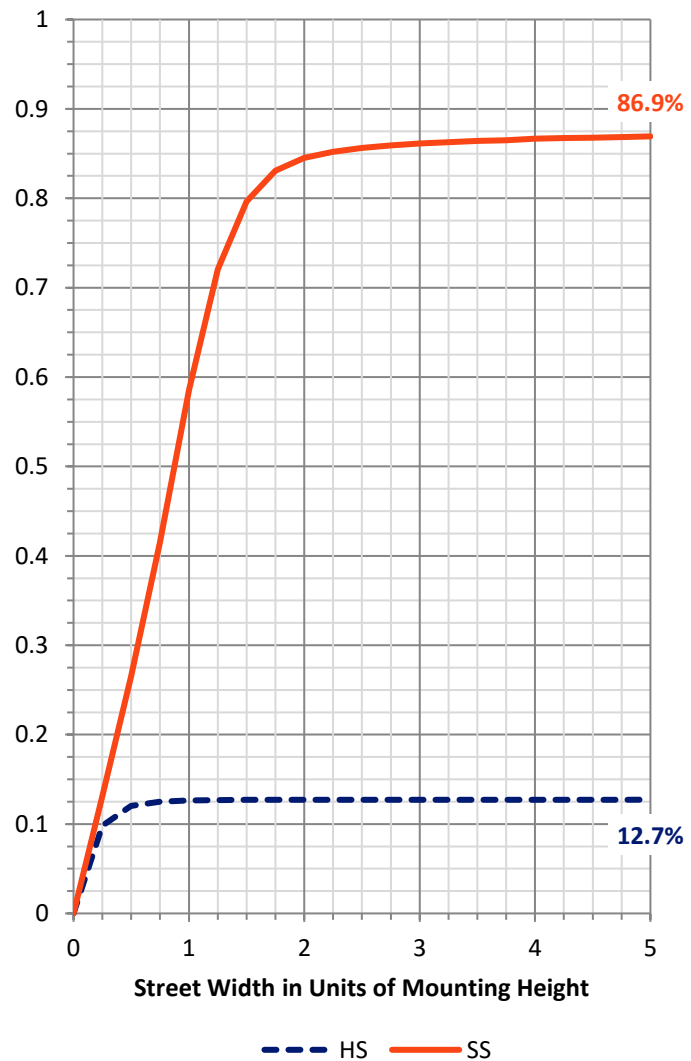
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2900.7	0.0	2900.7
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	19638.3	0.0	19638.3
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	22539.0	0.0	22539.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	316.8	1.4
10°-20°	781.6	3.5
20°-30°	1158.4	5.1
30°-40°	2150.9	9.5
40°-50°	4556.6	20.2
50°-60°	6300.6	28.0
60°-70°	5043.8	22.4
70°-80°	2095.6	9.3
80°-90°	134.6	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°	22539.0	100.0
0°-180°	22539.0	100.0



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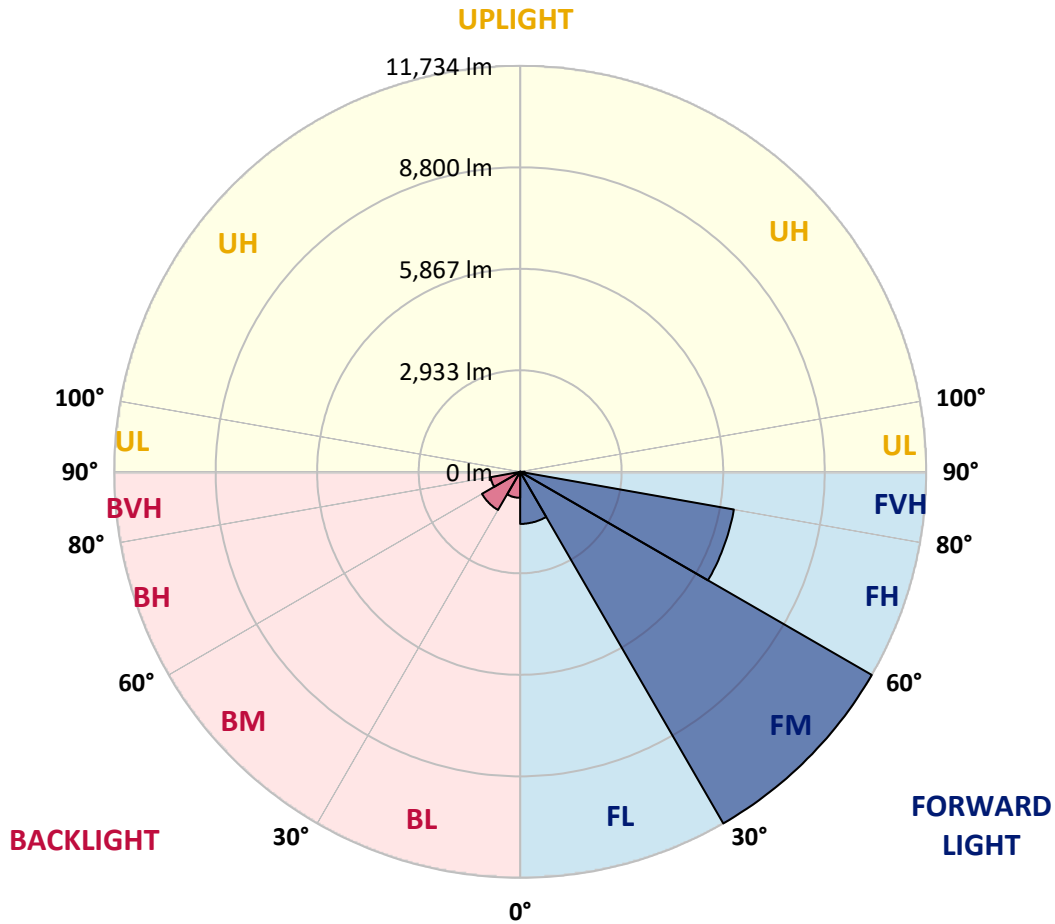
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1505.1	6.7			
FM (30°-60°)	11733.9	52.1			
FH (60°-80°)	6270.9	27.8			G3/7500
FVH (80°-90°)	128.4	0.6			G2/225
BL (0°-30°)	751.8	3.3	B2/1000		
BM (30°-60°)	1274.2	5.7	B2/2500		
BH (60°-80°)	868.6	3.9	B2/1000		G2/1000
BVH (80°-90°)	6.1	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°	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1
2.5°	3531.7	3523.2	3514.7	3510.4	3510.4	3506.2	3489.2	3484.9	3476.4	3467.9	3459.4
5°	3497.7	3484.9	3480.7	3484.9	3489.2	3497.7	3489.2	3489.2	3480.7	3472.1	3455.1
7.5°	3412.6	3404.1	3408.3	3421.1	3425.3	3455.1	3459.4	3472.1	3472.1	3463.6	3450.9
10°	3310.5	3306.2	3306.2	3327.5	3348.7	3391.3	3421.1	3455.1	3459.4	3459.4	3438.1
12.5°	3233.9	3229.6	3242.4	3267.9	3310.5	3365.8	3416.8	3467.9	3476.4	3480.7	3446.6
15°	3187.1	3187.1	3204.1	3255.1	3314.7	3391.3	3450.9	3519.0	3527.5	3523.2	3476.4
17.5°	3144.5	3148.8	3182.8	3267.9	3336.0	3438.1	3510.4	3587.0	3591.3	3587.0	3510.4
20°	3127.5	3136.0	3187.1	3297.7	3374.3	3489.2	3582.8	3659.4	3663.6	3646.6	3544.5
22.5°	3174.3	3178.5	3242.4	3361.5	3433.8	3561.5	3680.6	3753.0	3757.2	3731.7	3595.5
25°	3336.0	3336.0	3391.3	3493.4	3557.2	3684.9	3812.6	3897.7	3897.7	3867.9	3710.4
27.5°	3714.7	3680.6	3667.9	3697.7	3718.9	3855.1	3991.3	4097.6	4093.4	4050.8	3859.4
30°	4446.6	4361.5	4225.3	4072.1	3995.5	4089.1	4216.8	4352.9	4348.7	4280.6	4042.3
32.5°	5676.3	5552.9	5229.5	4825.3	4497.6	4391.2	4510.4	4659.3	4663.6	4582.7	4335.9
35°	7399.6	7203.8	6625.2	6063.5	5314.6	4910.4	4944.4	5106.1	5157.2	5114.6	4829.5
37.5°	9059.1	8880.4	8327.2	7548.5	6531.5	5706.1	5561.4	5701.8	5761.4	5761.4	5459.3
40°	10731.3	10522.8	10033.5	9250.5	8178.3	6948.5	6429.4	6544.3	6608.1	6620.9	6225.2
42.5°	12071.7	11935.5	11561.1	10952.6	9948.4	9127.1	7680.4	7616.6	7676.2	7629.4	7114.5
45°	12999.3	12892.9	12633.3	12403.6	11914.2	11501.5	9352.7	8922.9	8961.2	8799.5	8114.4
47.5°	13190.7	13071.6	13016.3	13335.4	13684.3	13786.5	11407.9	10476.0	10437.7	10080.3	9152.7
50°	12356.8	12369.5	12573.8	13484.3	14939.6	15858.7	13790.7	12229.1	12088.7	11293.0	10118.6
52.5°	10556.9	10761.1	11276.0	12752.5	15322.5	17365.0	16173.6	14088.6	13871.6	12471.6	10841.9
55°	8259.1	8522.9	9369.7	11067.5	14522.6	18037.3	18182.0	16020.4	15526.8	13356.7	11403.6
57.5°	6140.1	6220.9	7208.1	8757.0	12629.1	17377.7	19211.7	17509.7	16875.6	14063.0	11961.0
60°	3825.3	3876.4	4918.9	6667.7	9565.4	14939.6	19211.7	18535.1	17930.9	14697.0	12471.6
62.5°	2378.6	2395.6	2787.1	4570.0	6501.8	11080.2	18416.0	19330.8	18845.7	15152.3	12909.9
65°	1370.1	1387.2	1570.1	2582.8	4229.5	6633.7	16382.1	19564.9	19347.8	15514.0	13250.3
67.5°	999.9	1008.5	1080.8	1451.0	2765.8	3408.3	12305.7	18624.5	18896.8	15692.7	13241.8
70°	868.0	880.8	974.4	1131.9	1995.6	2093.5	6263.5	16084.2	16845.9	15437.4	12846.1
72.5°	668.0	685.1	825.5	1063.8	1463.7	1506.3	2268.0	11446.2	12599.3	13841.8	11761.0
75°	459.5	476.6	617.0	876.5	1208.4	1127.6	1246.7	5267.8	6646.4	9284.6	8952.7
77.5°	293.6	297.9	387.2	638.3	1042.5	800.0	855.3	1719.1	2412.6	4199.8	4225.3
80°	195.7	200.0	238.3	412.7	714.9	740.4	527.6	795.7	872.3	1225.5	851.0
82.5°	119.1	119.1	161.7	259.6	434.0	612.7	344.7	417.0	446.8	472.3	221.3
85°	46.8	46.8	97.9	170.2	272.3	285.1	217.0	242.5	255.3	276.6	102.1
87.5°	12.8	12.8	55.3	93.6	119.1	131.9	131.9	119.1	127.7	157.4	51.1
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°	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1	3472.1
2.5°	3455.1	3442.4	3425.3	3408.3	3391.3	3378.5	3365.8	3365.8	3357.3	3344.5	3336.0
5°	3446.6	3425.3	3387.0	3357.3	3310.5	3276.4	3250.9	3229.6	3216.8	3187.1	3182.8
7.5°	3433.8	3408.3	3353.0	3293.4	3216.8	3157.3	3097.7	3055.1	3012.6	2978.6	2970.0
10°	3412.6	3382.8	3301.9	3216.8	3110.5	2999.8	2859.4	2697.7	2548.8	2463.7	2438.2
12.5°	3412.6	3374.3	3267.9	3153.0	2999.8	2727.5	2370.1	2012.7	1736.1	1612.7	1578.6
15°	3433.8	3382.8	3242.4	3084.9	2799.8	2246.7	1668.0	1195.7	893.6	800.0	778.7
17.5°	3455.1	3382.8	3204.1	2991.3	2433.9	1629.7	948.9	629.8	531.9	510.6	510.6
20°	3463.6	3374.3	3153.0	2816.9	1944.6	1012.7	565.9	472.3	434.0	421.3	421.3
22.5°	3497.7	3378.5	3114.7	2565.8	1412.7	595.7	446.8	395.7	357.4	344.7	344.7
25°	3582.8	3429.6	3123.2	2246.7	906.3	451.0	378.7	327.6	289.3	272.3	272.3
27.5°	3718.9	3544.5	3170.0	1876.5	570.2	387.2	319.1	263.8	234.0	217.0	217.0
30°	3872.1	3672.1	3191.3	1451.0	425.5	327.6	259.6	208.5	187.2	174.5	170.2
32.5°	4140.2	3893.4	3174.3	995.7	348.9	276.6	208.5	165.9	148.9	144.7	144.7
35°	4570.0	4280.6	3140.2	625.5	289.3	221.3	165.9	136.2	123.4	119.1	114.9
37.5°	5152.9	4846.5	3038.1	412.7	238.3	174.5	136.2	114.9	102.1	97.9	97.9
40°	5863.5	5493.3	2842.4	314.9	204.2	140.4	114.9	97.9	89.4	85.1	85.1
42.5°	6676.2	6212.4	2531.8	272.3	170.2	119.1	97.9	80.8	76.6	72.3	72.3
45°	7565.5	6965.6	2102.0	242.5	144.7	97.9	80.8	72.3	63.8	63.8	59.6
47.5°	8510.2	7723.0	1616.9	212.8	123.4	85.1	72.3	59.6	55.3	51.1	51.1
50°	9420.7	8399.5	1136.1	183.0	102.1	72.3	59.6	51.1	46.8	42.6	42.6
52.5°	10063.3	8808.0	804.2	157.4	85.1	63.8	46.8	38.3	34.0	34.0	34.0
55°	10578.1	9063.3	561.7	131.9	72.3	55.3	38.3	29.8	29.8	25.5	25.5
57.5°	11063.2	9229.3	412.7	110.6	59.6	42.6	29.8	21.3	21.3	17.0	17.0
60°	11565.3	9318.6	314.9	89.4	51.1	34.0	21.3	17.0	12.8	12.8	12.8
62.5°	12071.7	9373.9	242.5	72.3	42.6	25.5	17.0	12.8	8.5	4.3	4.3
65°	12514.2	9391.0	187.2	55.3	34.0	17.0	12.8	4.3	0.0	0.0	0.0
67.5°	12646.1	9195.2	144.7	42.6	25.5	12.8	8.5	0.0	0.0	0.0	0.0
70°	12288.7	8676.1	110.6	34.0	21.3	8.5	4.3	0.0	0.0	0.0	0.0
72.5°	10905.8	7276.2	85.1	21.3	17.0	8.5	4.3	0.0	0.0	0.0	0.0
75°	7803.8	3880.6	59.6	17.0	12.8	4.3	0.0	0.0	0.0	0.0	0.0
77.5°	3591.3	1502.0	42.6	12.8	8.5	4.3	0.0	0.0	0.0	0.0	0.0
80°	702.1	374.4	17.0	8.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	161.7	63.8	8.5	8.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	55.3	21.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	21.3	8.5	4.3	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)