

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: P399742

Luminaire Tested: **ARCH-L-PA3-180-827-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399742  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-180-827-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19797 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G3

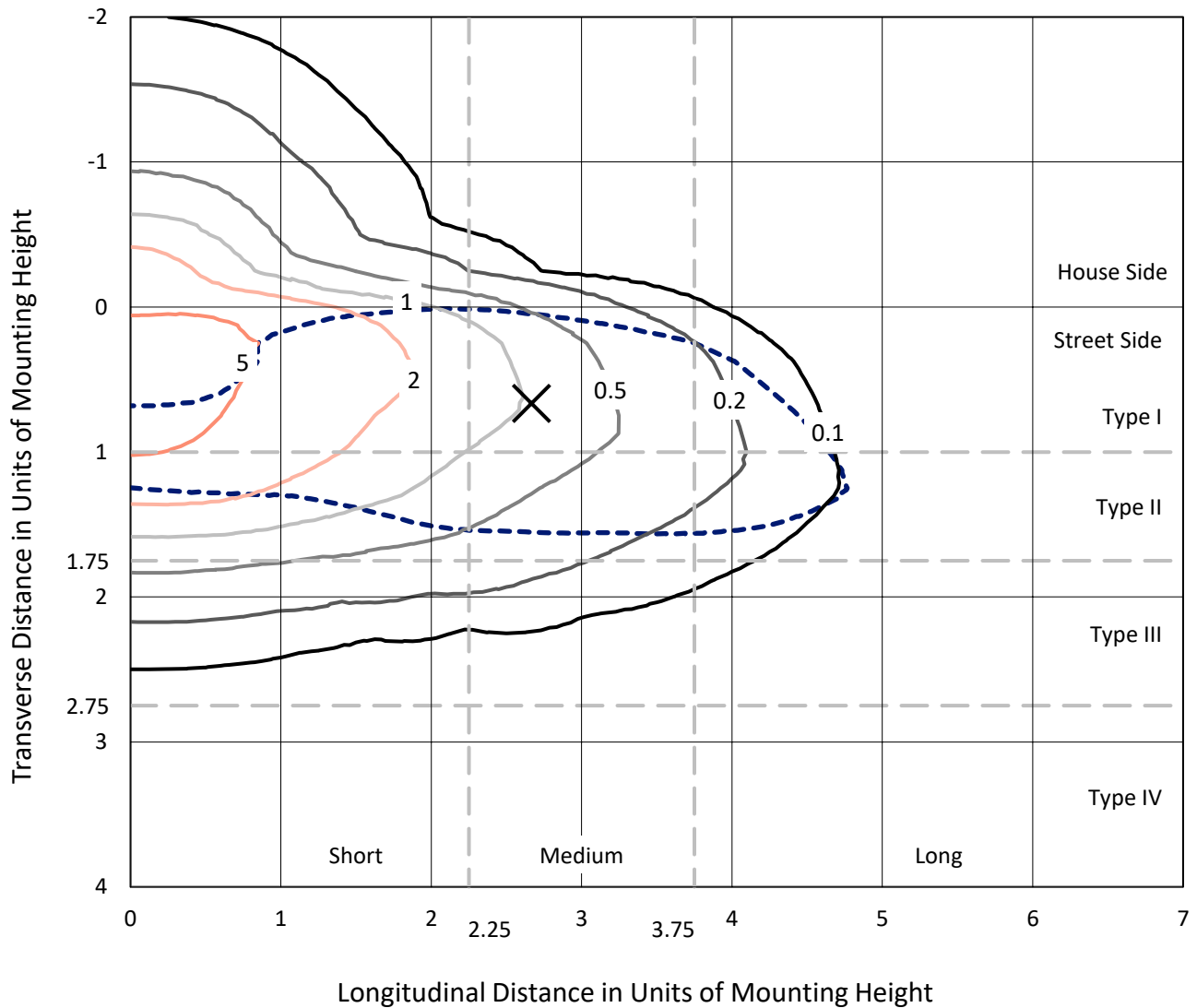
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

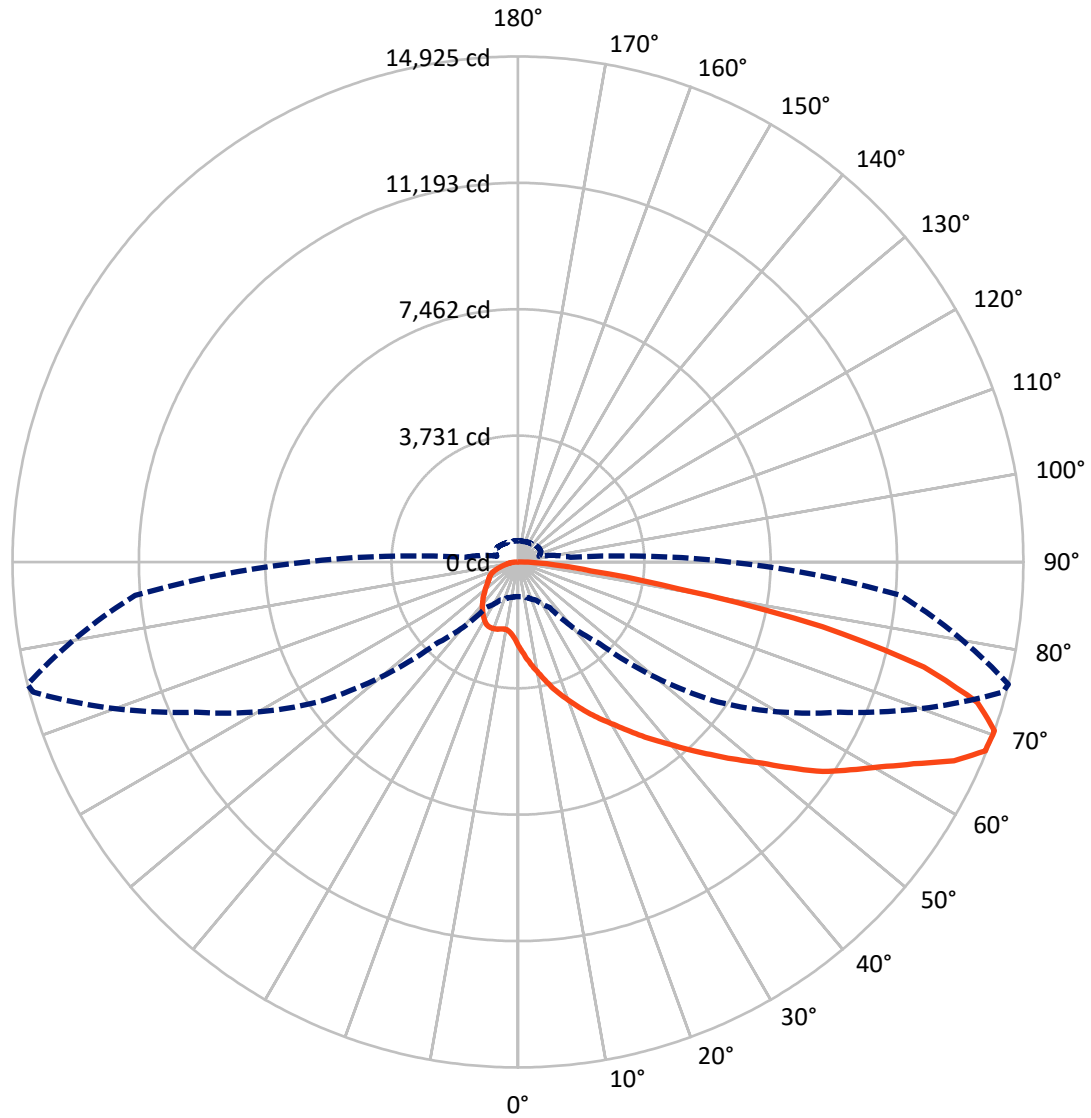
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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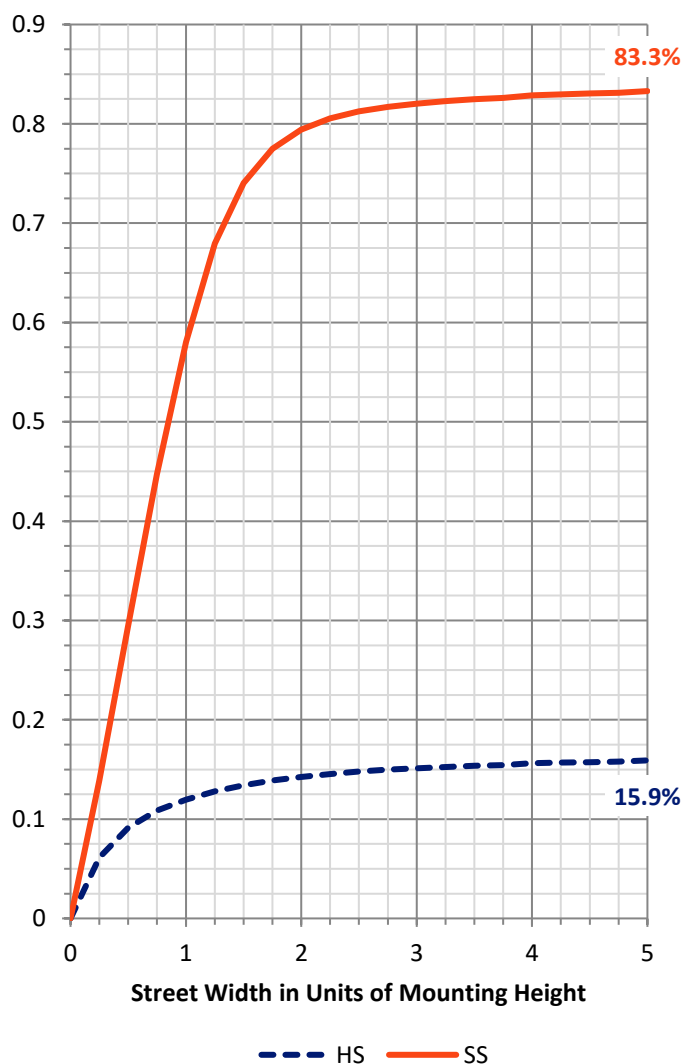
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3232.1	0.0	3232.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	16564.9	0.0	16564.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	19797.0	0.0	19797.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.2	1.3
10°-20°	874.3	4.4
20°-30°	1564.2	7.9
30°-40°	2530.3	12.8
40°-50°	3660.4	18.5
50°-60°	4189.6	21.2
60°-70°	3853.9	19.5
70°-80°	2383.2	12.0
80°-90°	483.9	2.4
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°	19797.0	100.0
0°-180°	19797.0	100.0

**Coefficient of Utilization**



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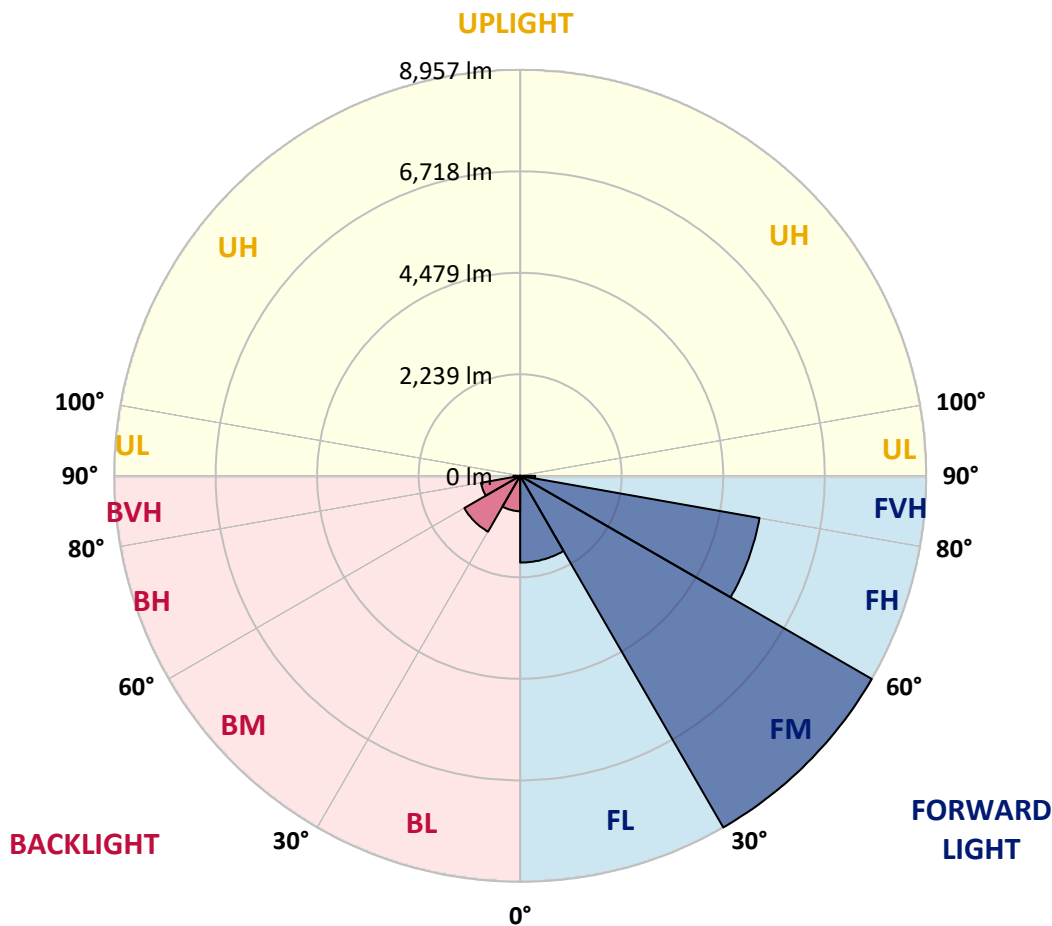
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1915.0	9.7			
FM (30°-60°)	8957.2	45.2			
FH (60°-80°)	5360.5	27.1			G3/7500
FVH (80°-90°)	332.2	1.7			G3/500
BL (0°-30°)	780.6	3.9	B2/1000		
BM (30°-60°)	1423.0	7.2	B2/2500		
BH (60°-80°)	876.6	4.4	B2/1000		G2/1000
BVH (80°-90°)	151.7	0.8			G2/225
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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7
2.5°	3155.2	3131.7	3129.1	3092.7	3058.8	2967.7	2902.6	2788.1	2673.5	2670.9	2556.4
5°	3647.2	3623.7	3610.7	3566.5	3509.2	3389.4	3272.3	3095.3	2900.0	2887.0	2670.9
7.5°	3980.4	3959.6	3933.5	3915.3	3860.6	3753.9	3610.7	3399.9	3131.7	3105.7	2803.7
10°	4204.3	4191.2	4186.0	4173.0	4139.2	4053.3	3915.3	3691.4	3363.4	3334.8	2944.3
12.5°	4300.6	4295.4	4318.8	4355.3	4368.3	4334.4	4201.7	3990.8	3618.5	3587.3	3113.5
15°	4188.6	4193.9	4253.7	4378.7	4511.4	4584.3	4506.2	4300.6	3907.5	3863.2	3311.3
17.5°	4136.6	4144.4	4186.0	4305.8	4493.2	4719.7	4756.2	4594.8	4186.0	4123.6	3519.6
20°	4227.7	4238.1	4269.3	4363.1	4493.2	4735.3	4925.4	4875.9	4459.4	4394.3	3720.1
22.5°	4459.4	4472.4	4469.8	4529.7	4618.2	4784.8	5019.1	5141.4	4745.7	4672.9	3928.3
25°	4954.0	4943.6	4855.1	4826.4	4849.9	4956.6	5144.0	5396.6	5045.1	4972.2	4147.0
27.5°	5625.6	5612.6	5451.2	5305.4	5175.3	5222.1	5321.1	5602.2	5349.7	5266.4	4355.3
30°	6344.1	6328.5	6141.1	5904.2	5615.2	5547.5	5534.5	5781.8	5656.9	5568.4	4576.5
32.5°	7044.4	7031.4	6831.0	6555.0	6156.7	5953.7	5828.7	5982.3	6005.7	5919.8	4818.6
35°	7682.2	7682.2	7510.4	7182.4	6732.0	6424.8	6219.2	6229.6	6406.6	6307.7	5094.6
37.5°	8249.7	8247.1	8059.7	7736.9	7304.7	6953.3	6698.2	6529.0	6789.3	6703.4	5383.5
40°	8700.1	8681.9	8543.9	8262.7	7828.0	7479.2	7221.4	6880.4	7216.2	7138.1	5690.7
42.5°	9028.1	9017.7	8924.0	8679.3	8265.3	7937.3	7760.3	7323.0	7700.4	7622.3	6050.0
45°	9155.7	9176.5	9176.5	8944.8	8616.8	8317.4	8239.3	7809.8	8223.7	8145.6	6435.3
47.5°	8950.0	9004.7	9116.6	9132.2	8843.3	8640.2	8666.3	8299.2	8762.6	8720.9	6857.0
50°	8307.0	8408.5	8653.2	9095.8	8934.4	8887.5	9030.7	8799.0	9340.5	9327.5	7369.8
52.5°	6648.7	6896.0	7658.8	8452.8	8871.9	9002.1	9392.6	9361.3	10085.0	10105.9	8038.9
55°	5099.8	5193.5	6076.0	7427.1	8489.2	8965.6	9634.7	9910.6	10892.0	10918.1	8653.2
57.5°	4123.6	4186.0	4667.6	6076.0	7617.1	8767.8	9824.7	10230.8	11511.6	11579.3	9199.9
60°	3267.1	3358.2	3681.0	4649.4	6396.2	8291.4	9957.5	10587.5	12178.0	12279.6	9853.3
62.5°	2428.8	2473.1	2777.7	3444.1	5063.3	7434.9	9887.2	10975.3	12995.5	13117.8	10639.5
65°	1728.6	1767.6	1983.7	2449.7	3743.5	6276.5	9478.5	11264.3	14021.2	14146.1	11430.9
67.5°	1293.8	1309.4	1431.8	1712.9	2522.6	4875.9	8650.6	11214.8	14770.9	14882.8	11748.5
70°	1023.1	1028.3	1088.2	1239.2	1640.1	3394.7	7200.6	10488.5	14825.6	14924.5	11347.6
72.5°	848.7	846.1	879.9	952.8	1142.8	2147.7	5334.1	9140.0	14122.7	14190.4	10228.2
75°	700.3	705.5	728.9	770.6	872.1	1416.2	3457.1	7291.7	12459.2	12386.3	8582.9
77.5°	588.3	585.7	596.1	632.6	705.5	1017.9	2025.3	5269.0	9233.8	9197.3	5633.5
80°	473.8	479.0	494.6	525.9	593.5	775.8	1197.5	3287.9	4954.0	4821.2	2691.8
82.5°	317.6	367.1	398.3	434.7	512.8	572.7	760.2	1671.3	2215.4	2181.5	1220.9
85°	151.0	200.5	296.8	338.4	416.5	359.2	515.4	796.6	1109.0	1096.0	440.0
87.5°	31.2	31.2	158.8	190.0	257.7	153.6	286.4	346.2	536.3	502.4	179.6
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°	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7	2475.7
2.5°	2488.7	2418.4	2277.9	2165.9	2051.4	1986.3	1905.6	1866.5	1858.7	1837.9	1853.5
5°	2533.0	2395.0	2129.5	1955.0	1837.9	1780.6	1752.0	1741.6	1739.0	1733.8	1733.8
7.5°	2592.8	2382.0	2035.7	1858.7	1783.2	1765.0	1772.8	1788.4	1791.0	1796.2	1793.6
10°	2665.7	2384.6	1983.7	1835.3	1798.9	1801.5	1827.5	1848.3	1858.7	1866.5	1863.9
12.5°	2767.3	2415.8	1975.9	1850.9	1835.3	1845.7	1871.7	1892.6	1903.0	1905.6	1905.6
15°	2900.0	2480.9	1994.1	1884.8	1871.7	1879.6	1895.2	1903.0	1905.6	1903.0	1903.0
17.5°	3045.8	2559.0	2020.1	1905.6	1884.8	1876.9	1871.7	1863.9	1848.3	1837.9	1837.9
20°	3186.4	2629.3	2033.1	1903.0	1866.5	1835.3	1804.1	1765.0	1739.0	1718.2	1718.2
22.5°	3327.0	2694.4	2033.1	1874.3	1817.1	1757.2	1692.1	1629.6	1590.6	1564.6	1564.6
25°	3475.4	2756.9	2017.5	1824.9	1739.0	1653.1	1564.6	1486.5	1447.4	1421.4	1416.2
27.5°	3600.3	2793.3	1975.9	1754.6	1642.7	1533.3	1431.8	1351.1	1322.5	1299.0	1299.0
30°	3733.1	2816.7	1897.8	1663.5	1533.3	1408.4	1304.2	1239.2	1207.9	1174.1	1171.5
32.5°	3881.5	2832.3	1809.3	1567.2	1421.4	1288.6	1200.1	1148.0	1080.4	1043.9	1038.7
35°	4053.3	2853.2	1715.5	1457.8	1309.4	1189.7	1137.6	1051.7	986.6	955.4	952.8
37.5°	4235.5	2868.8	1614.0	1361.5	1207.9	1124.6	1072.5	971.0	913.7	866.9	861.7
40°	4428.1	2868.8	1509.9	1267.8	1127.2	1096.0	997.0	905.9	809.6	786.2	781.0
42.5°	4641.6	2863.6	1405.8	1176.7	1051.7	1030.9	952.8	856.5	807.0	786.2	781.0
45°	4868.1	2845.4	1306.8	1072.5	973.6	932.0	872.1	846.1	825.2	825.2	825.2
47.5°	5125.8	2829.7	1194.9	978.8	916.3	869.5	825.2	809.6	807.0	814.8	822.6
50°	5456.4	2824.5	1101.2	911.1	872.1	817.4	812.2	799.2	801.8	801.8	801.8
52.5°	5857.3	2777.7	1012.7	861.7	827.8	762.8	778.4	791.4	796.6	794.0	791.4
55°	6151.5	2694.4	937.2	827.8	796.6	741.9	762.8	783.6	788.8	781.0	781.0
57.5°	6417.0	2577.2	877.3	801.8	775.8	728.9	752.3	773.2	768.0	765.4	762.8
60°	6721.6	2465.3	830.4	788.8	754.9	723.7	744.5	757.5	749.7	744.5	741.9
62.5°	7052.2	2355.9	796.6	788.8	739.3	721.1	736.7	741.9	726.3	721.1	721.1
65°	7205.8	2184.1	760.2	788.8	731.5	715.9	721.1	715.9	700.3	700.3	697.7
67.5°	6953.3	1900.4	713.3	778.4	741.9	708.1	697.7	689.9	671.6	671.6	666.4
70°	6255.6	1562.0	645.6	744.5	744.5	705.5	666.4	648.2	627.4	635.2	624.8
72.5°	5344.5	1239.2	562.3	687.3	728.9	702.9	632.6	604.0	585.7	593.5	577.9
75°	4329.2	960.6	463.4	596.1	689.9	689.9	598.7	559.7	538.9	538.9	520.7
77.5°	2759.5	710.7	377.5	494.6	619.6	671.6	570.1	510.2	479.0	471.2	458.2
80°	1366.7	499.8	309.8	393.1	528.5	630.0	549.3	453.0	408.7	393.1	369.7
82.5°	726.3	346.2	247.3	307.2	421.7	567.5	523.3	390.5	335.8	312.4	286.4
85°	325.4	213.5	197.8	234.3	320.2	466.0	471.2	320.2	257.7	307.2	226.5
87.5°	119.7	96.3	96.3	119.7	184.8	195.2	333.2	205.7	164.0	111.9	88.5
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)