

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: P399544

Luminaire Tested: **ARCH-L-PA3-160-722-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399544  
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-PA3-160-722-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18450 lumens  
Efficiency: N/A  
Efficacy: 113.9 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

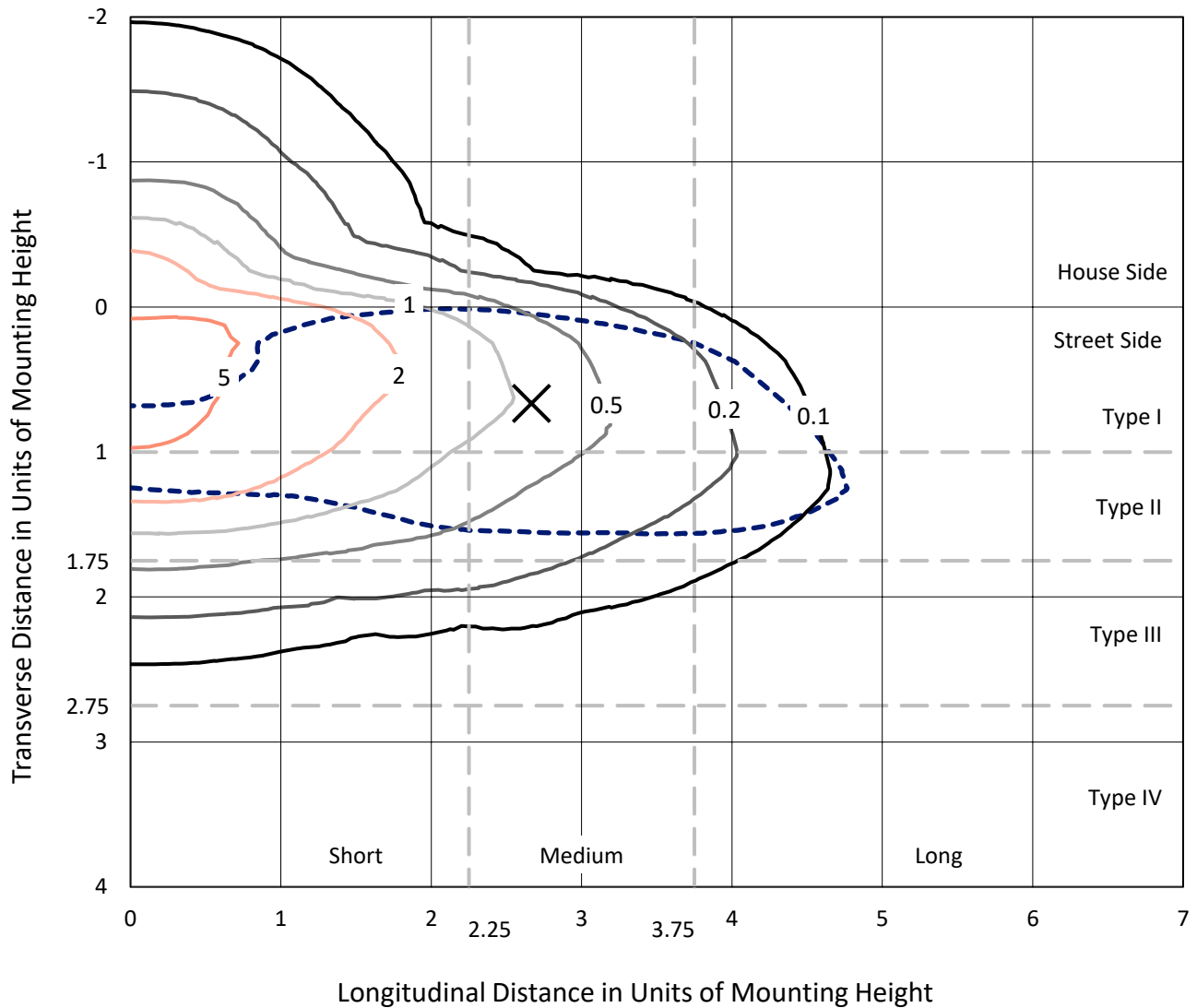
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399544  
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### Iso-Footcandle Lines of Horizontal Illumination

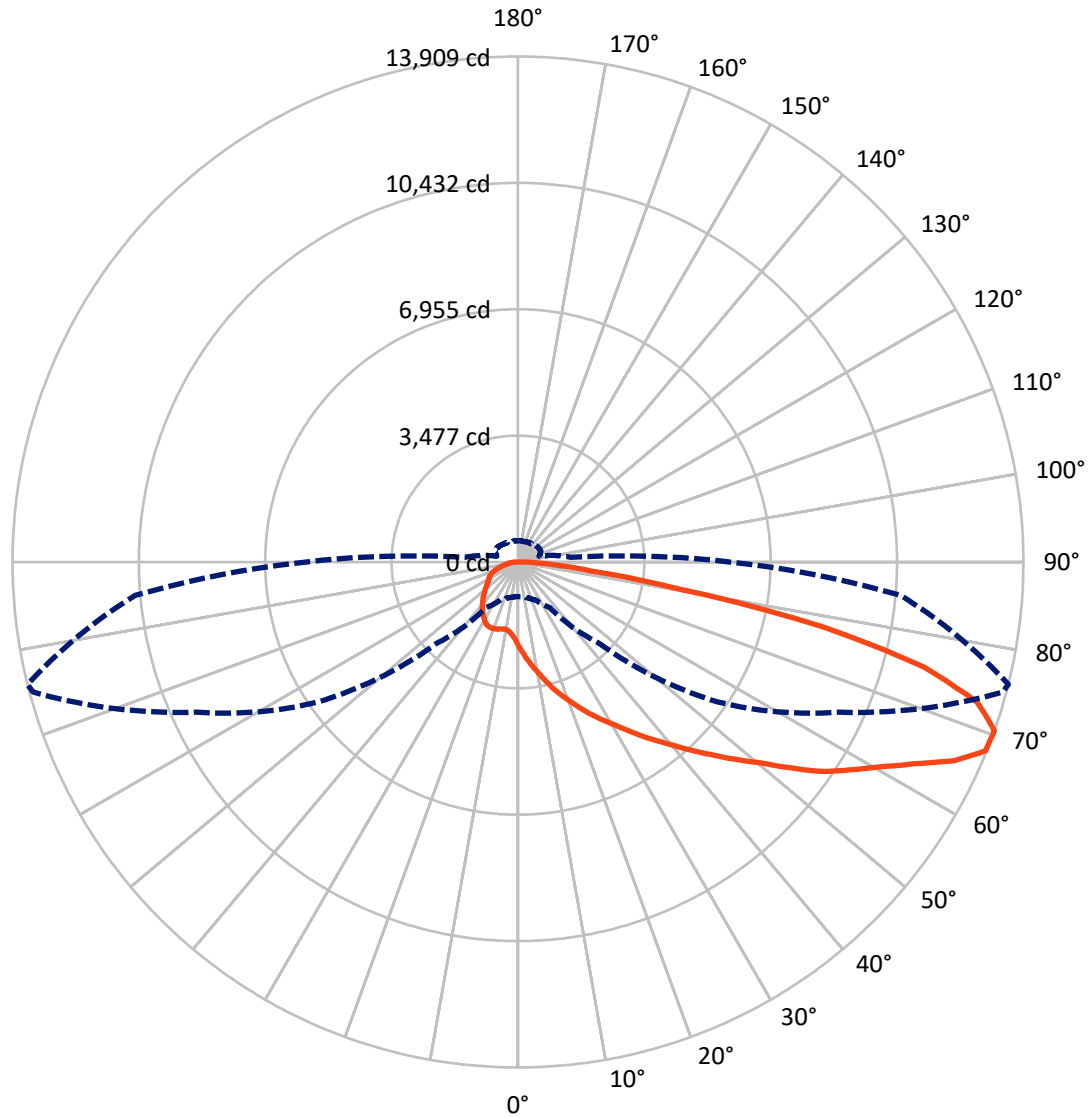
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc  
 Type II - Medium - N/A

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CATALOG NUMBER: ARCH-L-PA3-160-722-U-T2R

### Luminous Intensity Polar Plot



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

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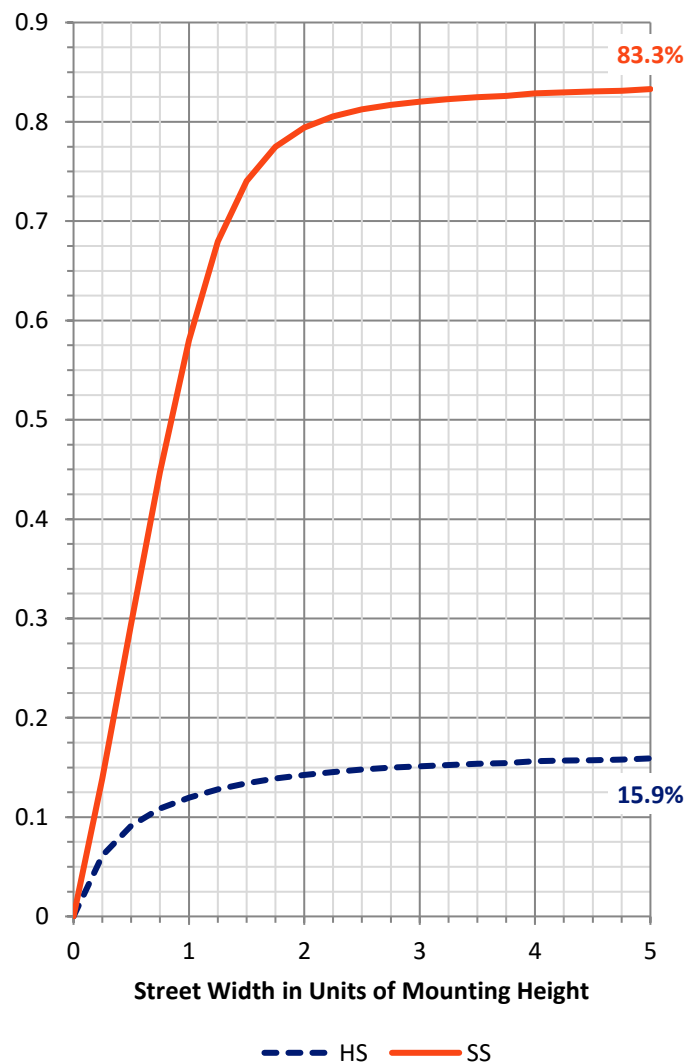
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3012.1	0.0	3012.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	15437.9	0.0	15437.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	18450.0	0.0	18450.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.7	1.3
10°-20°	814.8	4.4
20°-30°	1457.7	7.9
30°-40°	2358.1	12.8
40°-50°	3411.4	18.5
50°-60°	3904.5	21.2
60°-70°	3591.7	19.5
70°-80°	2221.1	12.0
80°-90°	451.0	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°	18450.0	100.0
0°-180°	18450.0	100.0



REPORT NUMBER: P399544

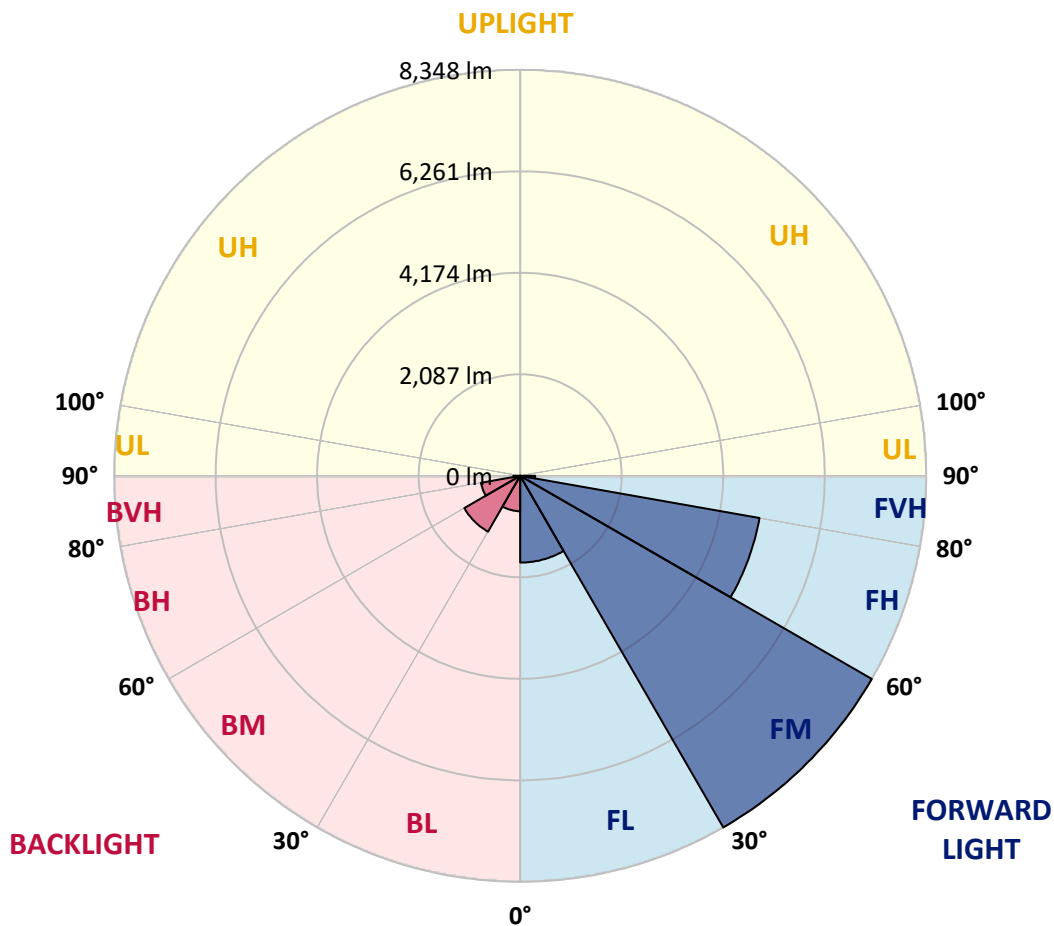
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1784.7	9.7			
FM (30°-60°)	8347.8	45.2			
FH (60°-80°)	4995.8	27.1			G2/5000
FVH (80°-90°)	309.6	1.7			G3/500
BL (0°-30°)	727.5	3.9	B2/1000		
BM (30°-60°)	1326.2	7.2	B2/2500		
BH (60°-80°)	817.0	4.4	B2/1000		G2/1000
BVH (80°-90°)	141.4	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





REPORT NUMBER: P399544

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3
2.5°	2940.5	2918.6	2916.2	2882.2	2850.7	2765.8	2705.1	2598.4	2491.6	2489.2	2382.5
5°	3399.0	3377.2	3365.0	3323.8	3270.4	3158.8	3049.6	2884.7	2702.7	2690.6	2489.2
7.5°	3709.6	3690.1	3665.9	3648.9	3598.0	3498.5	3365.0	3168.5	2918.6	2894.4	2612.9
10°	3918.2	3906.1	3901.2	3889.1	3857.5	3777.5	3648.9	3440.3	3134.6	3107.9	2744.0
12.5°	4008.0	4003.1	4025.0	4058.9	4071.0	4039.5	3915.8	3719.3	3372.3	3343.2	2901.7
15°	3903.6	3908.5	3964.3	4080.8	4204.5	4272.4	4199.6	4008.0	3641.6	3600.4	3086.0
17.5°	3855.1	3862.4	3901.2	4012.8	4187.5	4398.6	4432.5	4282.1	3901.2	3843.0	3280.1
20°	3940.0	3949.7	3978.9	4066.2	4187.5	4413.1	4590.2	4544.1	4156.0	4095.3	3466.9
22.5°	4156.0	4168.1	4165.7	4221.5	4304.0	4459.2	4677.6	4791.6	4422.8	4354.9	3661.0
25°	4616.9	4607.2	4524.7	4498.0	4519.9	4619.4	4794.0	5029.4	4701.8	4633.9	3864.8
27.5°	5242.9	5230.7	5080.3	4944.5	4823.2	4866.8	4959.0	5221.0	4985.7	4908.1	4058.9
30°	5912.5	5897.9	5723.2	5502.5	5233.2	5170.1	5158.0	5388.4	5272.0	5189.5	4265.1
32.5°	6565.1	6553.0	6366.2	6109.0	5737.8	5548.6	5432.1	5575.3	5597.1	5517.0	4490.8
35°	7159.5	7159.5	6999.4	6693.7	6274.0	5987.7	5796.0	5805.7	5970.7	5878.5	4747.9
37.5°	7688.4	7686.0	7511.3	7210.5	6807.7	6480.2	6242.4	6084.7	6327.4	6247.3	5017.2
40°	8108.1	8091.1	7962.6	7700.5	7295.4	6970.3	6730.1	6412.3	6725.2	6652.5	5303.5
42.5°	8413.8	8404.1	8316.8	8088.7	7703.0	7397.3	7232.3	6824.7	7176.5	7103.7	5638.3
45°	8532.7	8552.1	8552.1	8336.2	8030.5	7751.5	7678.7	7278.4	7664.2	7591.4	5997.4
47.5°	8341.0	8392.0	8496.3	8510.9	8241.6	8052.3	8076.6	7734.5	8166.4	8127.5	6390.4
50°	7741.8	7836.4	8064.5	8476.9	8326.5	8282.8	8416.3	8200.3	8705.0	8692.8	6868.4
52.5°	6196.3	6426.8	7137.7	7877.7	8268.3	8389.6	8753.5	8724.4	9398.8	9418.2	7491.9
55°	4752.8	4840.1	5662.6	6921.8	7911.6	8355.6	8979.1	9236.3	10150.9	10175.2	8064.5
57.5°	3843.0	3901.2	4350.1	5662.6	7098.9	8171.2	9156.2	9534.7	10728.4	10791.4	8574.0
60°	3044.8	3129.7	3430.6	4333.1	5961.0	7727.2	9280.0	9867.1	11349.4	11444.1	9182.9
62.5°	2263.6	2304.8	2588.7	3209.8	4718.8	6929.0	9214.4	10228.6	12111.3	12225.3	9915.6
65°	1611.0	1647.3	1848.7	2283.0	3488.8	5849.4	8833.5	10497.9	13067.1	13183.6	10653.1
67.5°	1205.8	1220.3	1334.4	1596.4	2350.9	4544.1	8062.0	10451.8	13765.9	13870.2	10949.1
70°	953.5	958.3	1014.1	1154.8	1528.5	3163.7	6710.7	9774.9	13816.8	13909.0	10575.5
72.5°	790.9	788.5	820.0	888.0	1065.1	2001.6	4971.1	8518.1	13161.8	13224.8	9532.3
75°	652.6	657.5	679.3	718.1	812.8	1319.8	3221.9	6795.6	11611.5	11543.5	7999.0
77.5°	548.3	545.9	555.6	589.6	657.5	948.6	1887.5	4910.5	8605.5	8571.5	5250.1
80°	441.6	446.4	461.0	490.1	553.2	723.0	1116.0	3064.2	4616.9	4493.2	2508.6
82.5°	296.0	342.1	371.2	405.2	477.9	533.7	708.4	1557.6	2064.6	2033.1	1137.9
85°	140.7	186.8	276.6	315.4	388.2	334.8	480.4	742.4	1033.5	1021.4	410.0
87.5°	29.1	29.1	148.0	177.1	240.2	143.1	266.9	322.7	499.8	468.2	167.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399544

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3	2307.3
2.5°	2319.4	2253.9	2122.9	2018.5	1911.8	1851.1	1775.9	1739.5	1732.3	1712.8	1727.4
5°	2360.6	2232.0	1984.6	1822.0	1712.8	1659.5	1632.8	1623.1	1620.7	1615.8	1615.8
7.5°	2416.4	2219.9	1897.2	1732.3	1661.9	1644.9	1652.2	1666.8	1669.2	1674.0	1671.6
10°	2484.4	2222.3	1848.7	1710.4	1676.5	1678.9	1703.1	1722.6	1732.3	1739.5	1737.1
12.5°	2579.0	2251.5	1841.4	1725.0	1710.4	1720.1	1744.4	1763.8	1773.5	1775.9	1775.9
15°	2702.7	2312.1	1858.4	1756.5	1744.4	1751.7	1766.2	1773.5	1775.9	1773.5	1773.5
17.5°	2838.6	2384.9	1882.7	1775.9	1756.5	1749.2	1744.4	1737.1	1722.6	1712.8	1712.8
20°	2969.6	2450.4	1894.8	1773.5	1739.5	1710.4	1681.3	1644.9	1620.7	1601.2	1601.2
22.5°	3100.6	2511.0	1894.8	1746.8	1693.4	1637.6	1577.0	1518.8	1482.4	1458.1	1458.1
25°	3238.9	2569.3	1880.3	1700.7	1620.7	1540.6	1458.1	1385.3	1348.9	1324.7	1319.8
27.5°	3355.3	2603.2	1841.4	1635.2	1530.9	1429.0	1334.4	1259.2	1232.5	1210.6	1210.6
30°	3479.1	2625.1	1768.7	1550.3	1429.0	1312.5	1215.5	1154.8	1125.7	1094.2	1091.8
32.5°	3617.4	2639.6	1686.2	1460.5	1324.7	1200.9	1118.4	1069.9	1006.8	972.9	968.0
35°	3777.5	2659.0	1598.8	1358.6	1220.3	1108.7	1060.2	980.2	919.5	890.4	888.0
37.5°	3947.3	2673.6	1504.2	1268.9	1125.7	1048.1	999.6	904.9	851.6	807.9	803.0
40°	4126.9	2673.6	1407.2	1181.5	1050.5	1021.4	929.2	844.3	754.5	732.7	727.8
42.5°	4325.8	2668.7	1310.1	1096.6	980.2	960.7	888.0	798.2	752.1	732.7	727.8
45°	4536.9	2651.8	1217.9	999.6	907.4	868.6	812.8	788.5	769.1	769.1	769.1
47.5°	4777.1	2637.2	1113.6	912.2	854.0	810.3	769.1	754.5	752.1	759.4	766.7
50°	5085.2	2632.4	1026.3	849.1	812.8	761.8	757.0	744.8	747.2	747.2	747.2
52.5°	5458.8	2588.7	943.8	803.0	771.5	710.9	725.4	737.5	742.4	740.0	737.5
55°	5732.9	2511.0	873.4	771.5	742.4	691.4	710.9	730.3	735.1	727.8	727.8
57.5°	5980.4	2401.9	817.6	747.2	723.0	679.3	701.2	720.6	715.7	713.3	710.9
60°	6264.3	2297.5	773.9	735.1	703.6	674.5	693.9	706.0	698.7	693.9	691.4
62.5°	6572.4	2195.6	742.4	735.1	689.0	672.0	686.6	691.4	676.9	672.0	672.0
65°	6715.5	2035.5	708.4	735.1	681.7	667.2	672.0	667.2	652.6	652.6	650.2
67.5°	6480.2	1771.1	664.8	725.4	691.4	659.9	650.2	642.9	625.9	625.9	621.1
70°	5830.0	1455.7	601.7	693.9	693.9	657.5	621.1	604.1	584.7	592.0	582.3
72.5°	4980.8	1154.8	524.0	640.5	679.3	655.1	589.6	562.9	545.9	553.2	538.6
75°	4034.7	895.2	431.9	555.6	642.9	642.9	558.0	521.6	502.2	502.2	485.2
77.5°	2571.7	662.3	351.8	461.0	577.4	625.9	531.3	475.5	446.4	439.1	427.0
80°	1273.7	465.8	288.7	366.3	492.5	587.1	511.9	422.1	380.9	366.3	344.5
82.5°	676.9	322.7	230.5	286.3	393.0	528.9	487.7	363.9	313.0	291.1	266.9
85°	303.3	198.9	184.4	218.4	298.4	434.3	439.1	298.4	240.2	286.3	211.1
87.5°	111.6	89.8	89.8	111.6	172.3	182.0	310.5	191.7	152.8	104.3	82.5
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)