

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: P236867

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2R-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236867
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-140-D-U-T2R-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19046 lumens
Efficiency: N/A
Efficacy: 133.2 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

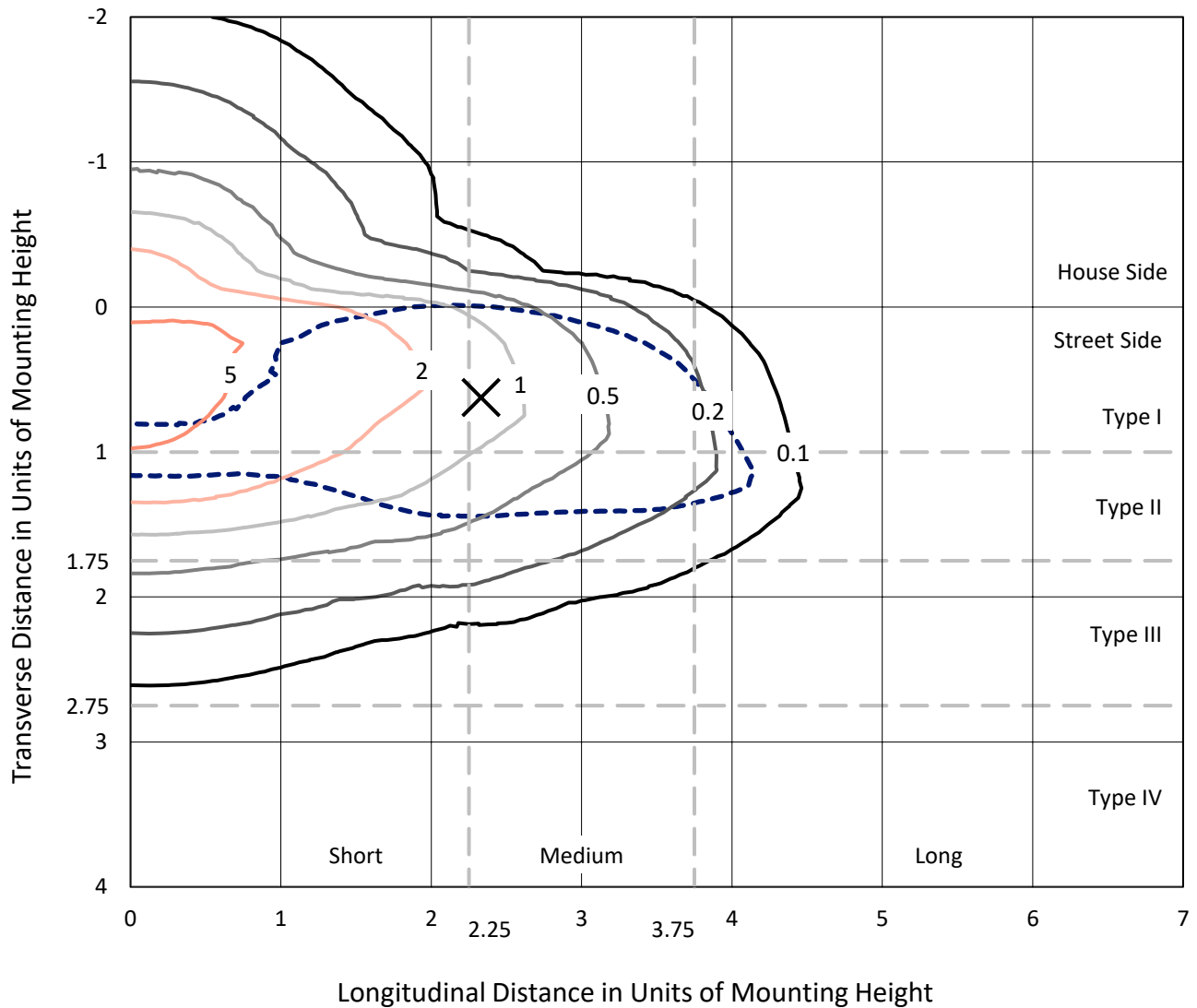
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

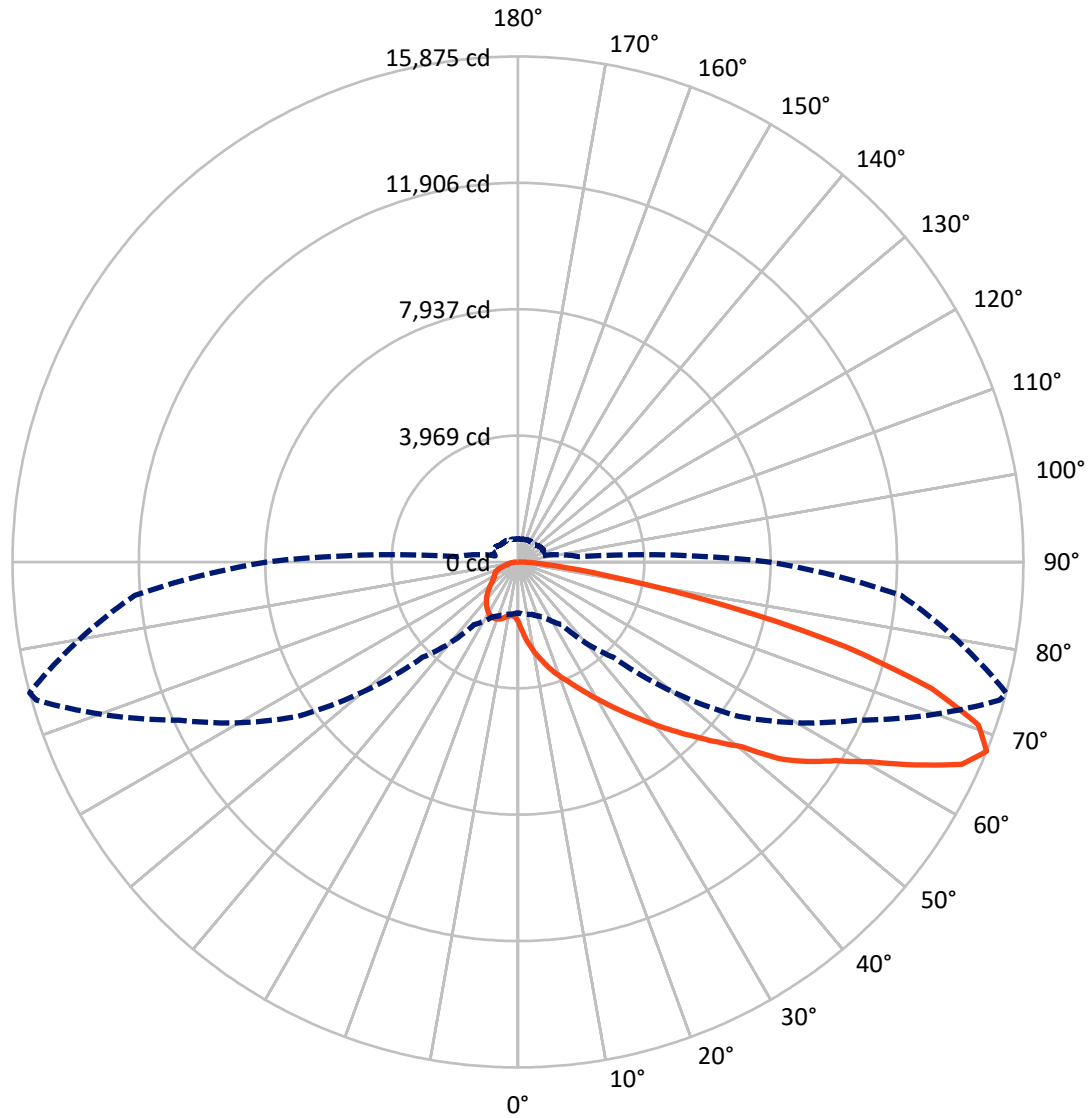
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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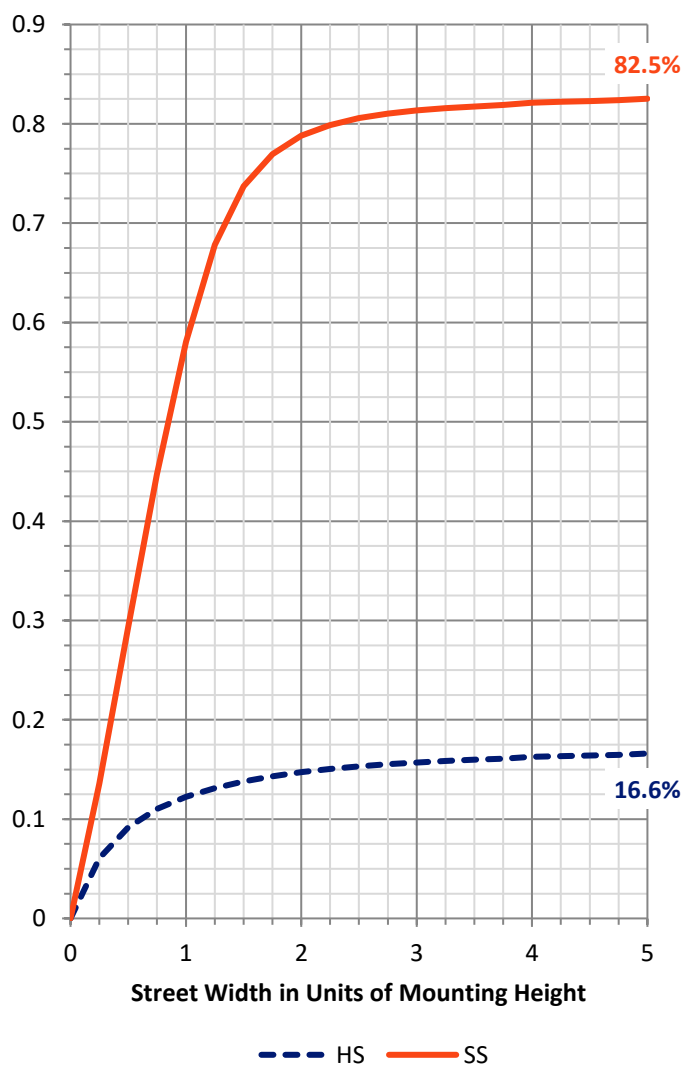
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3252.4	0.0	3252.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	15793.6	0.0	15793.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	19046.0	0.0	19046.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.7	1.2
10°-20°	801.3	4.2
20°-30°	1461.4	7.7
30°-40°	2398.8	12.6
40°-50°	3469.0	18.2
50°-60°	4088.2	21.5
60°-70°	3972.7	20.9
70°-80°	2208.3	11.6
80°-90°	424.6	2.2
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°	19046.0	100.0
0°-180°	19046.0	100.0

Coefficient of Utilization



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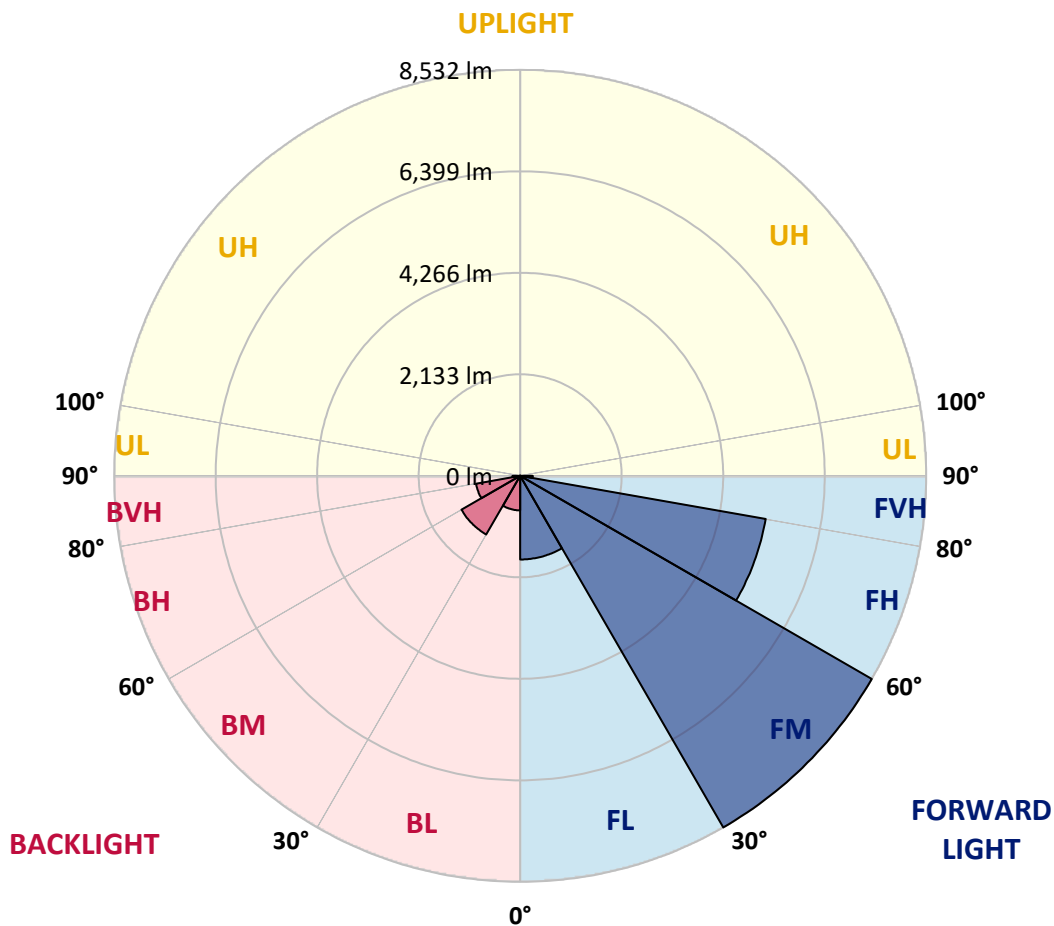
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1758.5	9.2			
FM (30°-60°)	8531.6	44.8			
FH (60°-80°)	5239.3	27.5			G3/7500
FVH (80°-90°)	264.3	1.4			G3/500
BL (0°-30°)	725.9	3.8	B2/1000		
BM (30°-60°)	1424.4	7.5	B2/2500		
BH (60°-80°)	941.7	4.9	B2/1000		G2/1000
BVH (80°-90°)	160.4	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3
2.5°	2675.6	2683.6	2667.7	2631.8	2580.1	2484.5	2400.9	2253.6	2122.2	2106.3	1966.9
5°	3145.5	3153.4	3133.5	3089.7	3034.0	2930.4	2815.0	2623.9	2412.8	2373.0	2078.4
7.5°	3468.0	3471.9	3448.1	3404.3	3360.5	3256.9	3141.5	2926.5	2667.7	2635.8	2221.7
10°	3742.7	3750.7	3718.8	3690.9	3643.2	3539.6	3420.2	3193.2	2926.5	2882.7	2369.0
12.5°	3997.5	4005.5	3985.6	3961.7	3945.8	3850.2	3718.8	3448.1	3161.4	3113.6	2544.2
15°	4168.7	4176.7	4180.7	4212.5	4232.4	4164.7	4033.3	3738.7	3416.2	3372.4	2751.3
17.5°	4120.9	4140.8	4200.6	4316.0	4439.5	4443.5	4335.9	4025.4	3667.0	3619.3	2962.3
20°	3981.6	3997.5	4069.2	4244.4	4487.2	4626.6	4618.6	4316.0	3902.0	3850.2	3157.4
22.5°	4097.1	4117.0	4117.0	4224.5	4463.4	4722.2	4825.7	4602.7	4136.9	4089.1	3352.5
25°	4590.8	4602.7	4519.1	4475.3	4562.9	4801.8	4996.9	4913.3	4423.5	4367.8	3563.5
27.5°	5279.6	5259.7	5156.2	4981.0	4885.4	4949.1	5148.2	5207.9	4754.0	4686.3	3782.5
30°	5964.4	5952.5	5833.0	5598.1	5383.1	5247.7	5315.4	5470.7	5112.4	5032.7	3993.5
32.5°	6605.5	6585.5	6454.2	6179.4	5936.5	5685.7	5554.3	5709.6	5494.6	5403.0	4228.4
35°	7194.7	7143.0	7011.6	6724.9	6474.1	6235.2	5912.7	5936.5	5908.7	5813.1	4487.2
37.5°	7672.5	7632.7	7489.4	7222.6	6955.8	6728.9	6390.4	6195.3	6354.6	6263.0	4785.9
40°	8094.6	8050.8	7903.4	7636.7	7389.8	7174.8	6908.1	6509.9	6856.3	6752.8	5120.3
42.5°	8413.1	8381.2	8261.8	7999.0	7760.1	7565.0	7433.6	6908.1	7377.9	7278.3	5486.6
45°	8584.3	8552.4	8488.7	8277.7	8058.7	7907.4	7919.4	7381.9	7923.4	7839.7	5920.6
47.5°	8373.3	8397.2	8452.9	8413.1	8277.7	8206.0	8353.4	7871.6	8532.5	8452.9	6390.4
50°	7807.9	7831.8	8054.7	8329.5	8377.3	8464.9	8743.6	8437.0	9177.6	9113.9	6971.8
52.5°	6418.3	6549.7	7166.9	7823.8	8273.7	8636.1	9177.6	9277.1	10264.5	10264.5	7999.0
55°	4849.6	4965.0	5669.8	6816.5	7871.6	8652.0	9496.1	9846.5	11048.9	11064.8	8536.5
57.5°	3929.8	4001.5	4347.9	5522.5	7027.5	8452.9	9874.3	10336.2	11701.9	11773.6	9229.3
60°	3189.3	3229.1	3456.0	4272.2	5860.9	7915.4	10145.1	11037.0	12633.6	12733.1	10113.2
62.5°	2564.1	2604.0	2755.3	3245.0	4598.7	6908.1	10097.3	11765.6	13875.8	14039.1	11271.9
65°	2046.5	2090.3	2189.9	2492.5	3408.2	5657.8	9607.6	12139.9	15161.9	15321.1	12040.3
67.5°	1596.6	1636.4	1704.1	1903.2	2400.9	4232.4	8448.9	11745.7	15739.2	15874.6	12080.1
70°	1206.4	1226.3	1282.1	1409.5	1716.1	2811.0	6613.4	10423.8	15221.6	15345.0	11283.8
72.5°	935.7	931.7	963.5	1027.2	1198.5	1935.1	4383.7	8476.8	13457.8	13585.2	9627.5
75°	764.5	760.5	780.4	800.3	868.0	1298.0	2588.0	6382.5	10861.8	10618.9	7222.6
77.5°	645.0	641.0	660.9	664.9	692.8	895.9	1473.2	4200.6	7246.5	6828.4	4069.2
80°	545.5	541.5	565.4	573.3	593.3	657.0	848.1	2273.5	3639.2	3448.1	1943.0
82.5°	410.1	426.0	469.8	489.7	513.6	485.8	525.6	1003.4	1688.2	1612.5	844.1
85°	199.1	234.9	354.4	394.2	422.0	306.6	358.3	473.8	760.5	724.6	342.4
87.5°	67.7	59.7	211.0	250.8	274.7	139.4	199.1	262.8	314.5	286.7	107.5
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°	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3	1887.3
2.5°	1907.2	1847.5	1759.9	1692.2	1648.4	1612.5	1596.6	1592.6	1584.7	1580.7	1580.7
5°	1947.0	1839.5	1704.1	1632.5	1612.5	1596.6	1604.6	1608.6	1608.6	1608.6	1608.6
7.5°	2006.7	1855.4	1692.2	1644.4	1640.4	1640.4	1664.3	1676.2	1684.2	1684.2	1684.2
10°	2086.4	1883.3	1712.1	1672.3	1684.2	1692.2	1720.0	1736.0	1743.9	1747.9	1751.9
12.5°	2193.9	1943.0	1751.9	1720.0	1736.0	1740.0	1759.9	1767.8	1775.8	1779.8	1779.8
15°	2337.2	2030.6	1815.6	1775.8	1779.8	1775.8	1775.8	1767.8	1763.8	1763.8	1771.8
17.5°	2484.5	2114.2	1871.3	1815.6	1799.7	1767.8	1743.9	1724.0	1712.1	1704.1	1708.1
20°	2631.8	2189.9	1903.2	1823.6	1779.8	1728.0	1684.2	1656.3	1640.4	1624.5	1632.5
22.5°	2779.1	2261.5	1915.1	1799.7	1736.0	1660.3	1612.5	1568.7	1532.9	1509.0	1513.0
25°	2942.4	2341.2	1915.1	1771.8	1676.2	1596.6	1536.9	1465.2	1413.5	1393.6	1401.5
27.5°	3105.6	2408.9	1895.2	1720.0	1608.6	1528.9	1441.3	1357.7	1325.9	1313.9	1317.9
30°	3268.9	2460.6	1851.4	1656.3	1536.9	1449.3	1333.8	1278.1	1238.3	1206.4	1210.4
32.5°	3432.1	2496.5	1791.7	1576.7	1461.2	1349.8	1254.2	1190.5	1118.8	1079.0	1083.0
35°	3619.3	2524.3	1720.0	1497.1	1377.6	1262.2	1190.5	1087.0	1011.3	979.5	971.5
37.5°	3814.4	2544.2	1644.4	1409.5	1294.0	1198.5	1126.8	999.4	927.7	883.9	879.9
40°	4025.4	2552.2	1552.8	1317.9	1214.4	1158.6	1043.2	947.6	824.2	796.3	796.3
42.5°	4276.2	2548.2	1461.2	1226.3	1126.8	1067.1	983.5	939.7	832.2	804.3	788.4
45°	4562.9	2548.2	1361.7	1118.8	1039.2	951.6	915.8	887.9	816.2	828.2	836.1
47.5°	4889.4	2540.3	1242.3	1031.2	967.5	891.9	872.0	812.2	784.4	792.3	800.3
50°	5339.3	2552.2	1134.8	959.6	915.8	852.1	828.2	796.3	784.4	788.4	784.4
52.5°	5964.4	2512.4	1031.2	915.8	875.9	792.3	792.3	788.4	792.3	788.4	788.4
55°	6306.8	2424.8	955.6	891.9	848.1	764.5	780.4	788.4	796.3	792.3	792.3
57.5°	6792.6	2365.1	895.9	875.9	832.2	756.5	772.4	788.4	792.3	788.4	788.4
60°	7365.9	2325.2	856.0	879.9	820.2	756.5	776.4	788.4	784.4	780.4	780.4
62.5°	8030.9	2309.3	828.2	891.9	808.3	760.5	776.4	788.4	772.4	768.4	768.4
65°	8281.7	2166.0	792.3	899.8	816.2	760.5	772.4	776.4	756.5	752.5	748.5
67.5°	7895.5	1919.1	740.6	883.9	840.1	760.5	760.5	756.5	732.6	728.6	720.7
70°	7031.5	1592.6	660.9	832.2	856.0	764.5	744.6	724.6	700.8	700.8	684.8
72.5°	5757.4	1254.2	557.4	740.6	844.1	776.4	712.7	684.8	657.0	657.0	641.0
75°	4148.8	935.7	445.9	617.1	792.3	772.4	672.9	637.1	605.2	601.2	581.3
77.5°	2365.1	657.0	362.3	481.8	704.7	752.5	637.1	581.3	545.5	533.5	521.6
80°	1214.4	442.0	294.6	378.3	585.3	696.8	609.2	517.6	477.8	457.9	438.0
82.5°	577.3	294.6	227.0	278.7	442.0	609.2	573.3	445.9	402.1	378.3	354.4
85°	258.8	175.2	151.3	179.2	314.5	473.8	505.7	366.3	314.5	394.2	290.7
87.5°	83.6	79.6	79.6	83.6	151.3	207.0	370.3	270.7	250.8	207.0	175.2
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)