

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: P258053

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2U-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P258053
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T2U-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 750mA 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: 14689.9 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

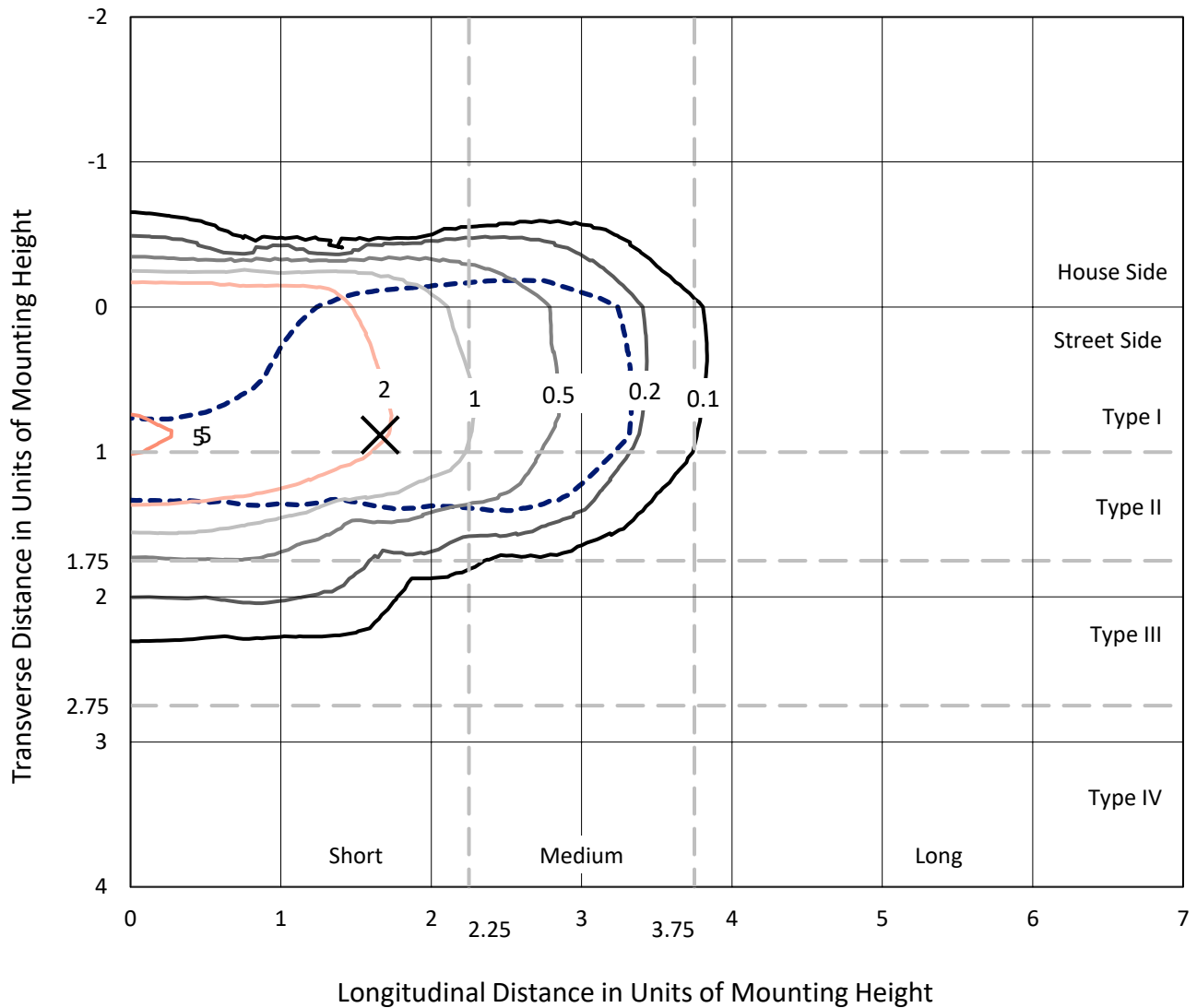
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

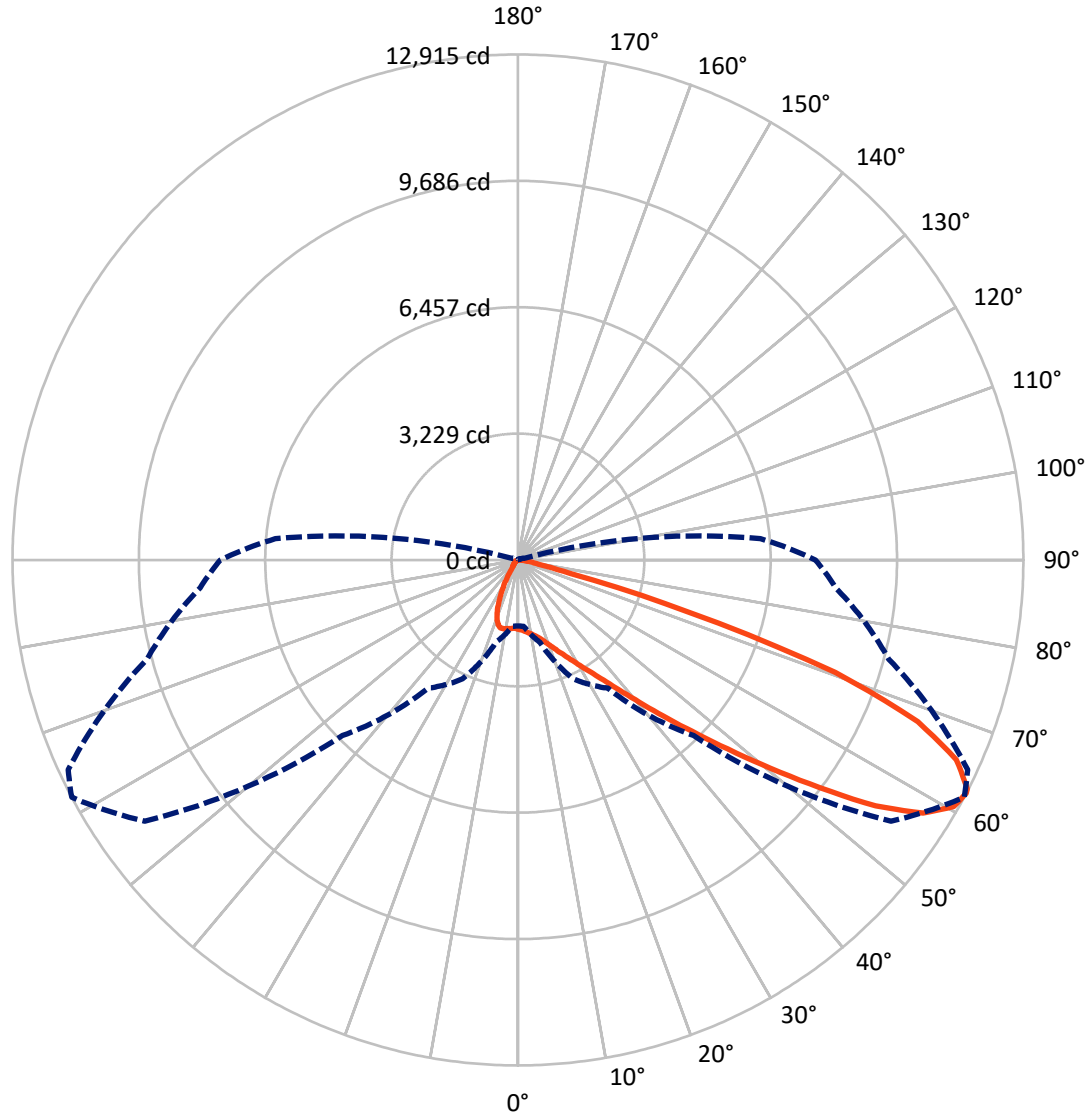
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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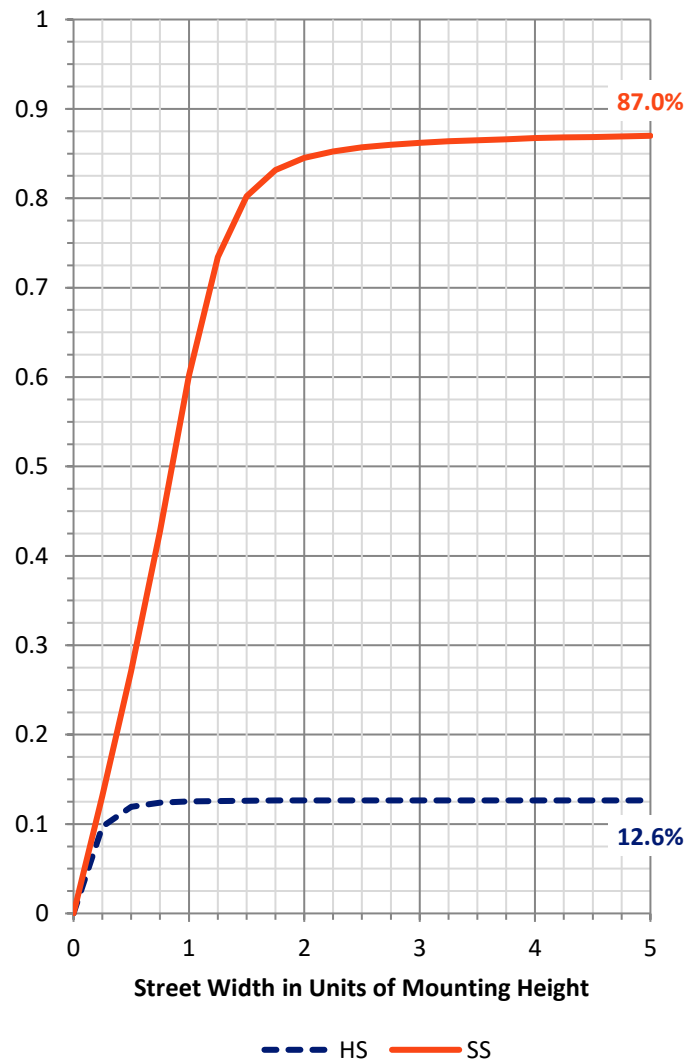
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1878.3	0.0	1878.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12811.6	0.0	12811.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	14689.9	0.0	14689.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.3	1.2
10°-20°	475.6	3.2
20°-30°	798.7	5.4
30°-40°	1531.0	10.4
40°-50°	3127.1	21.3
50°-60°	4138.2	28.2
60°-70°	3214.7	21.9
70°-80°	1160.4	7.9
80°-90°	74.0	0.5
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°	14689.9	100.0
0°-180°	14689.9	100.0



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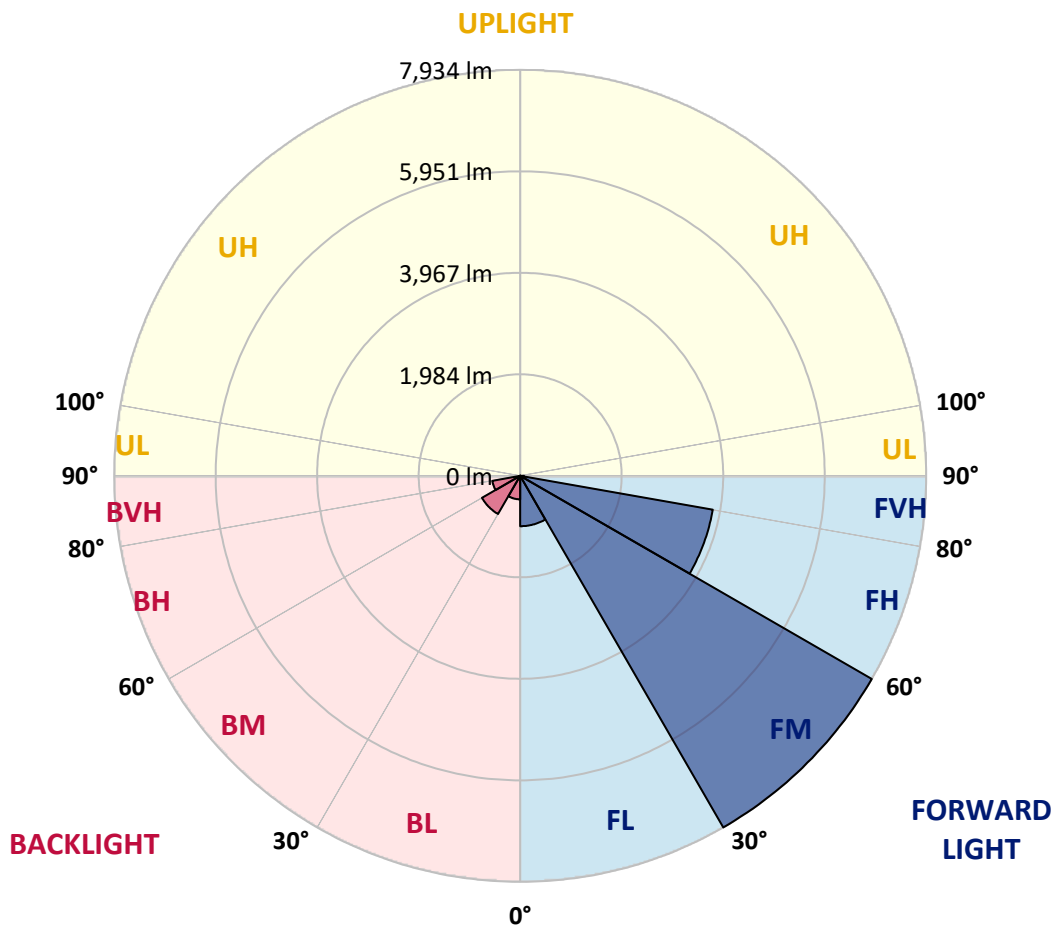
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	984.8	6.7			
FM (30°-60°)	7934.1	54.0			
FH (60°-80°)	3822.0	26.0			G2/5000
FVH (80°-90°)	70.7	0.5			G1/100
BL (0°-30°)	459.7	3.1	B1/500		
BM (30°-60°)	862.3	5.9	B1/1000		
BH (60°-80°)	553.1	3.8	B2/1000		G2/1000
BVH (80°-90°)	3.2	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6
2.5°	1816.6	1812.9	1809.4	1805.7	1805.7	1802.1	1798.5	1791.3	1783.9	1776.8	1773.2
5°	1849.0	1845.4	1841.8	1845.4	1841.8	1841.8	1838.2	1830.9	1823.7	1812.9	1802.1
7.5°	1874.4	1870.7	1867.1	1870.7	1874.4	1877.9	1881.6	1874.4	1870.7	1856.4	1845.4
10°	1906.8	1903.2	1899.6	1906.8	1906.8	1924.9	1928.5	1924.9	1921.4	1910.4	1892.4
12.5°	1953.8	1957.4	1957.4	1964.6	1971.8	1993.6	2000.7	1989.9	1989.9	1975.4	1953.8
15°	2040.4	2040.4	2040.4	2047.6	2051.3	2080.2	2087.4	2076.6	2083.8	2058.6	2036.8
17.5°	2123.6	2127.2	2134.4	2148.8	2148.8	2174.0	2188.5	2188.5	2203.0	2170.4	2141.6
20°	2206.6	2210.2	2221.0	2253.5	2253.5	2286.0	2311.3	2322.1	2336.6	2304.1	2253.5
22.5°	2296.8	2296.8	2314.8	2365.5	2354.6	2419.6	2466.6	2484.7	2499.1	2455.7	2376.3
25°	2434.1	2419.6	2434.1	2481.1	2473.8	2564.1	2650.7	2668.8	2686.9	2636.3	2517.2
27.5°	2694.2	2672.5	2621.9	2625.5	2625.5	2730.3	2853.0	2878.3	2889.2	2845.7	2697.7
30°	3214.2	3214.2	3026.4	2900.0	2816.9	2910.7	3084.2	3127.4	3142.0	3077.0	2881.9
32.5°	4120.6	4120.6	3774.0	3452.5	3138.4	3138.4	3337.0	3416.4	3430.8	3355.1	3127.4
35°	5276.2	5269.0	4749.0	4308.4	3694.5	3463.3	3633.1	3766.7	3810.1	3709.0	3445.3
37.5°	6504.2	6457.2	5897.4	5391.8	4550.4	3983.4	4034.0	4210.9	4250.6	4167.5	3857.0
40°	7500.8	7446.7	6995.4	6572.8	5655.5	4814.0	4611.8	4774.3	4821.3	4705.7	4348.2
42.5°	8403.7	8270.2	7959.5	7656.3	6926.7	6251.4	5381.0	5446.0	5496.7	5373.8	4900.8
45°	9057.4	8851.5	8692.6	8598.8	8212.4	7829.5	6377.8	6247.8	6265.8	6114.1	5503.8
47.5°	9075.5	8931.1	8945.5	9191.0	9350.0	9335.5	7674.3	7211.9	7143.4	6890.6	6146.6
50°	8208.7	8291.8	8555.4	9256.0	10115.6	10635.7	9216.3	8353.2	8147.4	7692.3	6785.9
52.5°	6764.1	6894.2	7388.9	8569.9	10227.5	11491.5	10816.1	9656.9	9288.5	8486.8	7277.0
55°	5298.0	5305.2	5825.1	7027.8	9480.0	11646.8	12094.6	11090.7	10527.2	9090.0	7602.0
57.5°	3643.9	3842.5	4503.4	5312.4	7793.5	10873.9	12574.9	12202.9	11477.0	9461.9	7829.5
60°	2387.1	2398.0	3167.2	4102.5	5305.2	8848.0	12282.4	12791.6	12246.4	9682.2	7984.7
62°	1682.9	1700.9	2177.6	3351.4	3997.8	6341.6	11636.0	12914.5	12679.6	9812.2	8147.4
62.5°	1560.1	1574.5	1975.4	3163.6	3755.9	5687.9	11404.8	12885.5	12744.6	9855.5	8205.2
65°	1144.8	1144.8	1292.9	2174.0	2751.9	3073.4	9664.1	12311.4	12658.0	10202.2	8421.8
67.5°	884.8	892.0	942.6	1339.8	2076.6	1863.5	6168.3	11018.4	11755.1	10715.0	8544.6
70°	762.0	758.4	794.6	888.4	1498.7	1238.7	2715.7	8598.8	9844.7	10585.0	8432.6
72.5°	563.3	566.9	650.1	780.1	1043.7	805.4	1227.8	4564.9	6385.0	8284.6	7226.4
75°	361.1	364.7	458.7	613.9	751.1	527.2	707.9	1361.5	2614.7	4593.7	4420.4
77.5°	242.0	249.2	299.7	429.7	657.3	328.7	444.2	570.6	787.3	1722.7	1585.5
80°	162.5	162.5	191.4	288.9	415.3	274.5	238.4	379.2	408.1	534.5	267.2
82.5°	108.3	108.3	126.4	191.4	270.9	245.7	144.4	205.9	238.4	267.2	93.9
85°	65.0	65.0	86.7	119.2	177.0	137.2	93.9	115.6	122.8	169.8	50.6
87.5°	39.8	36.2	57.8	83.0	93.9	83.0	61.4	61.4	65.0	93.9	25.2
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°	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6	1769.6
2.5°	1765.9	1762.4	1758.7	1751.5	1740.7	1733.5	1726.3	1719.0	1711.8	1711.8	1722.7
5°	1798.5	1787.7	1773.2	1758.7	1737.1	1722.7	1711.8	1697.4	1690.1	1690.1	1693.7
7.5°	1838.2	1827.4	1802.1	1776.8	1744.4	1719.0	1693.7	1661.3	1635.9	1625.1	1635.9
10°	1881.6	1867.1	1830.9	1791.3	1755.1	1690.1	1607.1	1505.9	1419.3	1379.5	1397.7
12.5°	1935.7	1917.6	1874.4	1820.2	1737.1	1578.1	1372.3	1137.6	989.6	920.9	935.4
15°	2015.2	1989.9	1928.5	1845.4	1661.3	1318.2	982.4	711.5	574.2	516.5	523.7
17.5°	2109.0	2076.6	1993.6	1838.2	1466.3	949.8	585.1	415.3	357.5	343.1	343.1
20°	2210.2	2166.8	2058.6	1783.9	1170.0	595.9	364.7	317.8	296.1	285.2	285.2
22.5°	2314.8	2257.1	2112.6	1657.7	834.2	372.0	299.7	267.2	242.0	231.1	231.1
25°	2441.3	2365.5	2166.8	1437.3	530.9	299.7	256.4	223.9	198.7	184.2	187.8
27.5°	2589.3	2491.8	2213.8	1162.8	343.1	260.0	213.0	180.6	158.9	151.7	151.7
30°	2744.7	2629.1	2224.6	870.4	278.1	223.9	177.0	148.0	133.7	126.4	126.4
32.5°	2957.7	2806.1	2192.2	577.9	234.7	187.8	148.0	122.8	112.0	108.3	108.3
35°	3239.4	3037.2	2116.3	357.5	198.7	155.2	122.8	108.3	97.5	93.9	93.9
37.5°	3597.0	3358.6	1982.6	245.7	169.8	126.4	104.8	93.9	86.7	83.0	83.0
40°	4073.6	3748.6	1809.4	213.0	144.4	108.3	90.2	83.0	75.8	75.8	75.8
42.5°	4579.3	4221.8	1585.5	187.8	122.8	93.9	79.4	72.2	68.7	65.0	65.0
45°	5131.8	4705.7	1307.3	166.1	104.8	83.0	72.2	61.4	57.8	57.8	57.8
47.5°	5680.7	5204.0	1004.0	144.4	90.2	72.2	61.4	54.2	50.6	47.0	47.0
50°	6244.1	5655.5	736.7	126.4	79.4	65.0	54.2	47.0	39.8	36.2	36.2
52.5°	6652.2	5926.3	538.1	108.3	68.7	54.2	43.3	36.2	28.9	25.2	25.2
55°	6951.9	6092.4	393.7	90.2	61.4	47.0	36.2	28.9	21.7	21.7	18.0
57.5°	7186.7	6171.9	296.1	79.4	54.2	39.8	28.9	21.7	18.0	14.4	14.4
60°	7367.3	6175.6	220.2	65.0	47.0	32.4	21.7	14.4	10.8	10.8	10.8
62°	7605.6	6222.5	180.6	54.2	43.3	28.9	18.0	10.8	7.2	3.6	3.6
62.5°	7674.3	6240.6	173.4	54.2	39.8	25.2	14.4	10.8	7.2	3.6	3.6
65°	7992.1	6273.0	133.7	43.3	32.4	21.7	10.8	7.2	0.0	0.0	0.0
67.5°	8281.0	6222.5	97.5	32.4	25.2	14.4	10.8	3.6	0.0	0.0	0.0
70°	8252.1	5875.8	68.7	21.7	18.0	10.8	7.2	0.0	0.0	0.0	0.0
72.5°	6800.3	4398.7	47.0	18.0	10.8	7.2	3.6	0.0	0.0	0.0	0.0
75°	4106.2	1924.9	32.4	10.8	10.8	7.2	3.6	0.0	0.0	0.0	0.0
77.5°	1347.0	697.0	21.7	7.2	7.2	3.6	3.6	0.0	0.0	0.0	0.0
80°	220.2	115.6	10.8	7.2	7.2	3.6	3.6	0.0	0.0	0.0	0.0
82.5°	68.7	28.9	7.2	7.2	3.6	3.6	0.0	0.0	0.0	0.0	0.0
85°	25.2	10.8	7.2	7.2	3.6	3.6	0.0	0.0	0.0	0.0	0.0
87.5°	10.8	7.2	7.2	7.2	3.6	3.6	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)