

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: P258092

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P258092
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T2U-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 705mA 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: 14493 lumens
Efficiency: N/A
Efficacy: 89.5 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

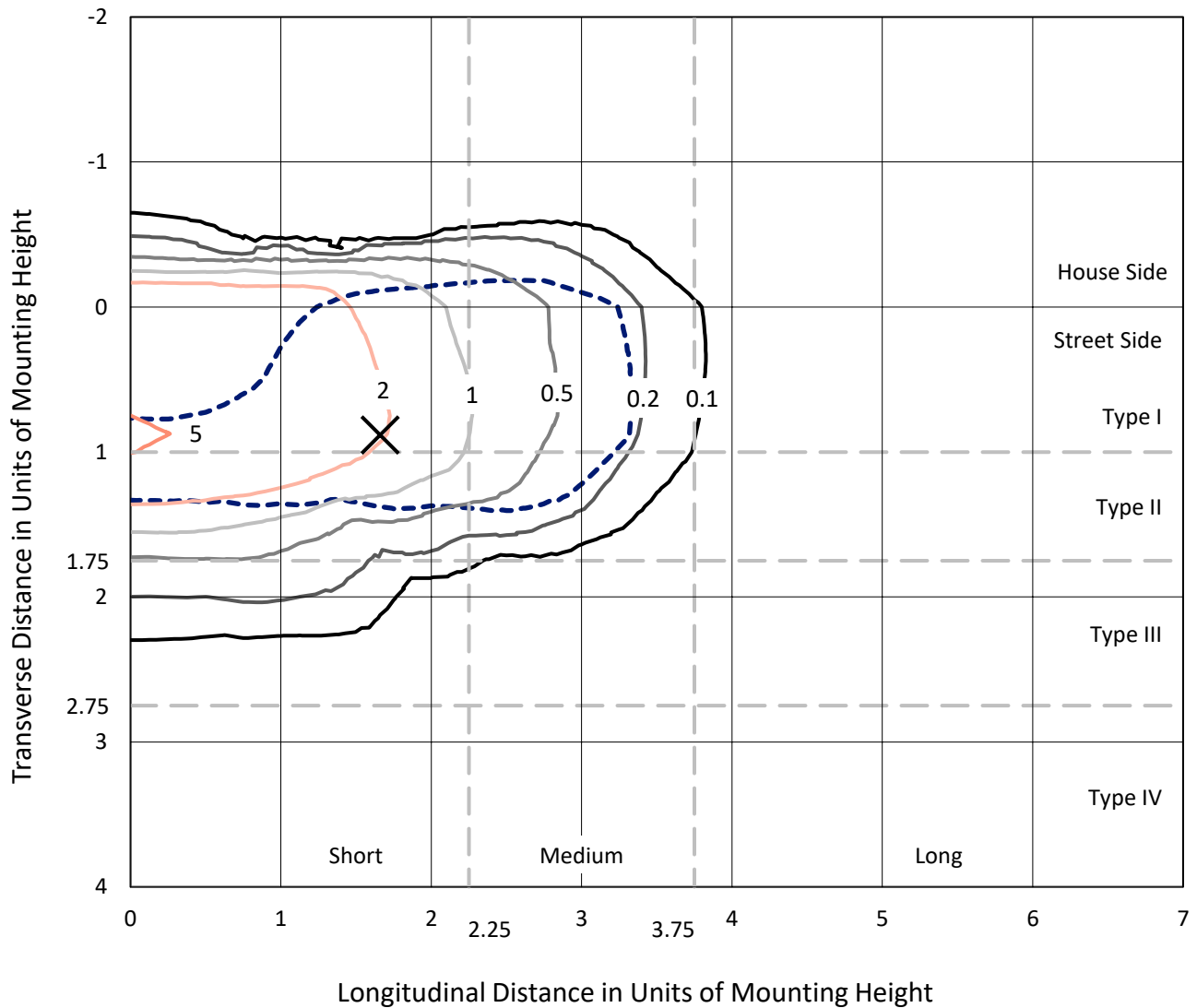
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

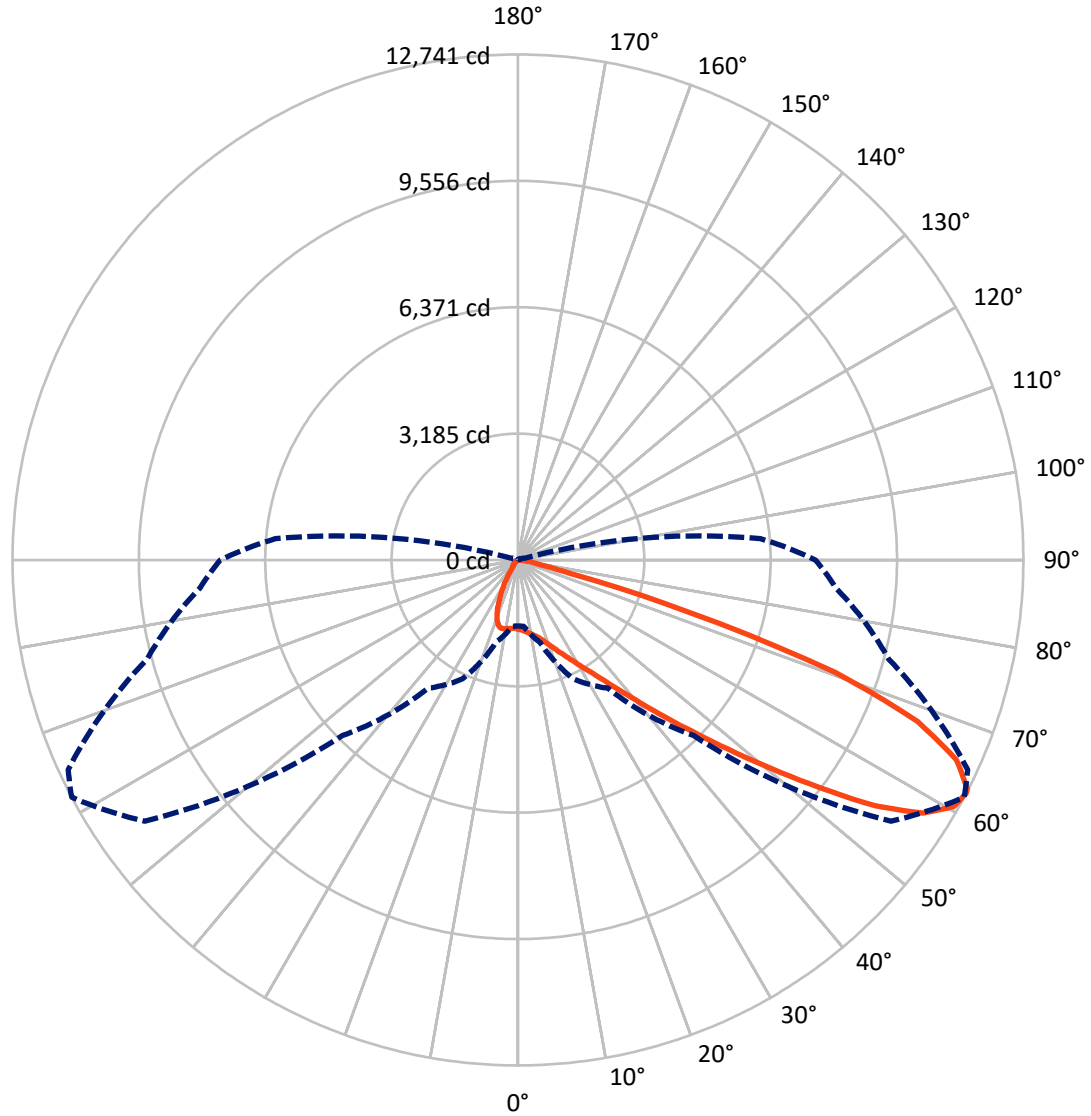
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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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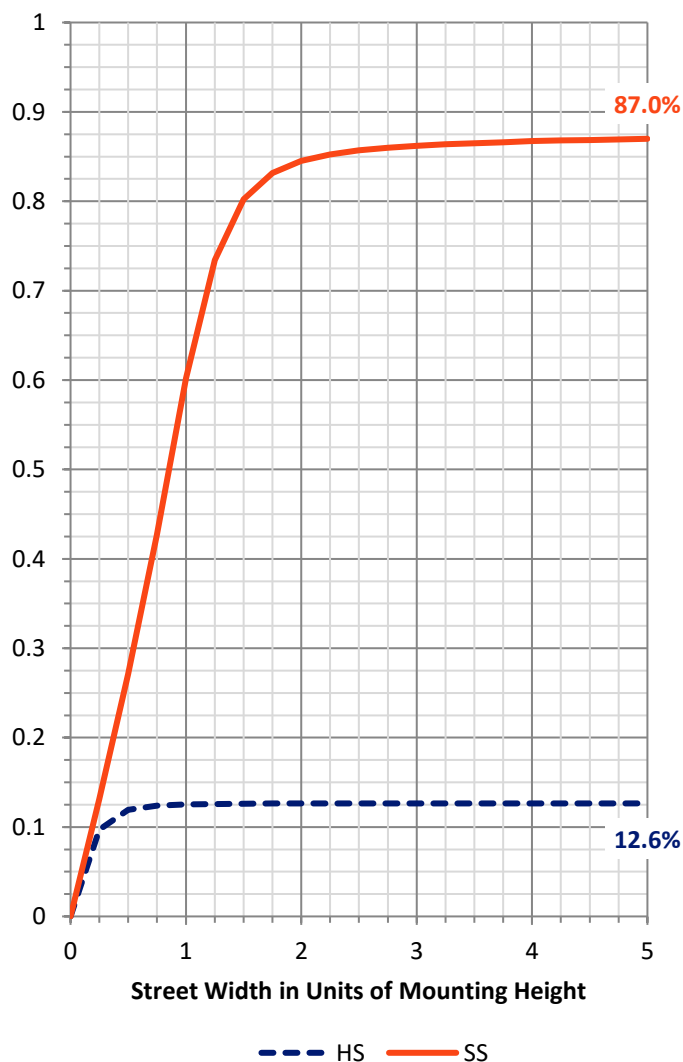
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1853.1	0.0	1853.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12639.9	0.0	12639.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	14493.0	0.0	14493.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.0	1.2
10°-20°	469.2	3.2
20°-30°	788.0	5.4
30°-40°	1510.5	10.4
40°-50°	3085.2	21.3
50°-60°	4082.8	28.2
60°-70°	3171.6	21.9
70°-80°	1144.8	7.9
80°-90°	73.0	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°	14493.0	100.0
0°-180°	14493.0	100.0

Coefficient of Utilization



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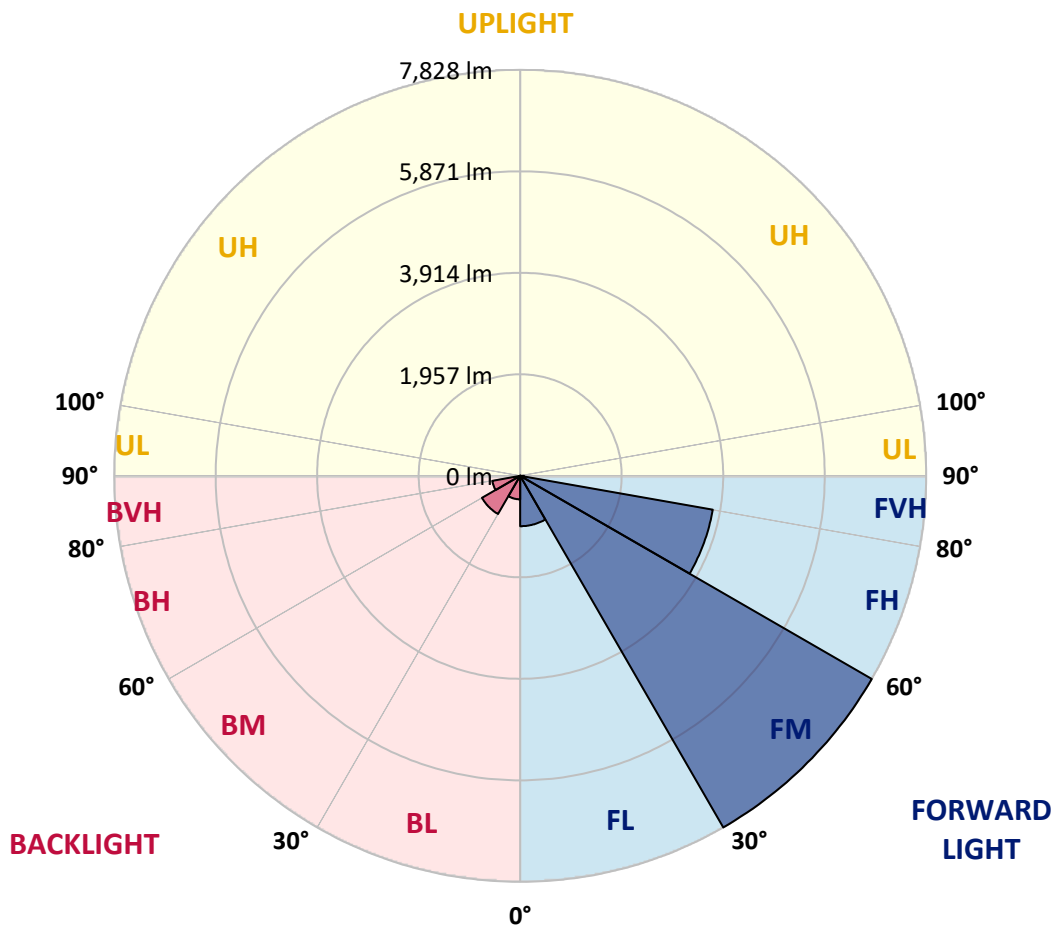
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	971.6	6.7			
FM (30°-60°)	7827.7	54.0			
FH (60°-80°)	3770.8	26.0			G2/5000
FVH (80°-90°)	69.8	0.5			G1/100
BL (0°-30°)	453.5	3.1	B1/500		
BM (30°-60°)	850.7	5.9	B1/1000		
BH (60°-80°)	545.7	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°	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9
2.5°	1792.2	1788.6	1785.1	1781.5	1781.5	1777.9	1774.4	1767.2	1760.1	1753.0	1749.4
5°	1824.3	1820.7	1817.1	1820.7	1817.1	1817.1	1813.6	1806.4	1799.3	1788.6	1777.9
7.5°	1849.2	1845.6	1842.1	1845.6	1849.2	1852.8	1856.3	1849.2	1845.6	1831.4	1820.7
10°	1881.3	1877.7	1874.1	1881.3	1881.3	1899.1	1902.6	1899.1	1895.5	1884.8	1867.0
12.5°	1927.6	1931.1	1931.1	1938.3	1945.4	1966.8	1973.9	1963.2	1963.2	1949.0	1927.6
15°	2013.1	2013.1	2013.1	2020.2	2023.8	2052.3	2059.4	2048.7	2055.9	2030.9	2009.5
17.5°	2095.0	2098.6	2105.7	2120.0	2120.0	2144.9	2159.2	2159.2	2173.4	2141.4	2112.9
20°	2177.0	2180.6	2191.2	2223.3	2223.3	2255.4	2280.3	2291.0	2305.3	2273.2	2223.3
22.5°	2266.1	2266.1	2283.9	2333.8	2323.1	2387.2	2433.5	2451.3	2465.6	2422.8	2344.5
25°	2401.5	2387.2	2401.5	2447.8	2440.7	2529.7	2615.2	2633.1	2650.9	2601.0	2483.4
27.5°	2658.0	2636.6	2586.7	2590.3	2590.3	2693.6	2814.8	2839.7	2850.4	2807.6	2661.6
30°	3171.1	3171.1	2985.8	2861.1	2779.1	2871.8	3042.8	3085.6	3099.8	3035.7	2843.3
32.5°	4065.4	4065.4	3723.3	3406.2	3096.2	3096.2	3292.2	3370.6	3384.9	3310.0	3085.6
35°	5205.5	5198.4	4685.3	4250.7	3645.0	3416.9	3584.4	3716.2	3759.0	3659.2	3399.1
37.5°	6417.0	6370.6	5818.4	5319.6	4489.4	3930.0	3979.9	4154.5	4193.7	4111.7	3805.3
40°	7400.4	7346.9	6901.5	6484.7	5579.7	4749.5	4550.0	4710.3	4756.6	4642.6	4289.9
42.5°	8291.1	8159.3	7852.9	7553.6	6833.8	6167.6	5308.9	5373.0	5422.9	5301.7	4835.0
45°	8936.0	8732.9	8576.1	8483.5	8102.3	7724.6	6292.3	6164.0	6181.8	6032.2	5430.0
47.5°	8953.8	8811.3	8825.6	9067.8	9224.6	9210.4	7571.4	7115.3	7047.6	6798.2	6064.2
50°	8098.7	8180.7	8440.8	9132.0	9980.0	10493.0	9092.8	8241.2	8038.1	7589.2	6694.9
52.5°	6673.5	6801.8	7289.9	8455.0	10090.4	11337.5	10671.2	9527.5	9164.0	8373.1	7179.4
55°	5226.9	5234.0	5747.1	6933.6	9352.9	11490.7	11932.5	10942.0	10386.1	8968.1	7500.1
57.5°	3595.1	3791.0	4443.1	5241.2	7689.0	10728.2	12406.4	12039.4	11323.2	9335.1	7724.6
60°	2355.1	2365.8	3124.8	4047.6	5234.0	8729.4	12117.8	12620.2	12082.1	9552.4	7877.8
62°	1660.4	1678.2	2148.5	3306.5	3944.2	6256.6	11480.0	12741.3	12509.7	9680.7	8038.1
62.5°	1539.2	1553.5	1949.0	3121.2	3705.5	5611.7	11252.0	12712.8	12573.8	9723.4	8095.1
65°	1129.5	1129.5	1275.6	2144.9	2715.0	3032.1	9534.6	12146.3	12488.3	10065.5	8308.9
67.5°	872.9	880.1	929.9	1321.9	2048.7	1838.5	6085.6	10870.7	11597.6	10571.4	8430.1
70°	751.8	748.2	783.9	876.5	1478.6	1222.1	2679.4	8483.5	9712.7	10443.2	8319.6
72.5°	555.8	559.4	641.3	769.6	1029.7	794.5	1211.4	4503.6	6299.4	8173.5	7129.6
75°	356.3	359.9	452.5	605.7	741.1	520.2	698.3	1343.3	2579.6	4532.1	4361.1
77.5°	238.7	245.8	295.7	424.0	648.5	324.2	438.2	563.0	776.7	1699.6	1564.2
80°	160.3	160.3	188.8	285.0	409.7	270.8	235.2	374.1	402.6	527.3	263.7
82.5°	106.9	106.9	124.7	188.8	267.2	242.3	142.5	203.1	235.2	263.7	92.6
85°	64.1	64.1	85.5	117.6	174.6	135.4	92.6	114.0	121.1	167.5	49.9
87.5°	39.2	35.6	57.0	81.9	92.6	81.9	60.6	60.6	64.1	92.6	24.9
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°	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9	1745.9
2.5°	1742.3	1738.7	1735.2	1728.1	1717.4	1710.2	1703.1	1696.0	1688.9	1688.9	1699.6
5°	1774.4	1763.7	1749.4	1735.2	1713.8	1699.6	1688.9	1674.6	1667.5	1667.5	1671.0
7.5°	1813.6	1802.9	1777.9	1753.0	1720.9	1696.0	1671.0	1639.0	1614.0	1603.4	1614.0
10°	1856.3	1842.1	1806.4	1767.2	1731.6	1667.5	1585.5	1485.8	1400.3	1361.1	1378.9
12.5°	1909.8	1892.0	1849.2	1795.8	1713.8	1557.0	1353.9	1122.3	976.3	908.6	922.8
15°	1988.2	1963.2	1902.6	1820.7	1639.0	1300.5	969.1	701.9	566.5	509.5	516.6
17.5°	2080.8	2048.7	1966.8	1813.6	1446.6	937.1	577.2	409.7	352.7	338.5	338.5
20°	2180.6	2137.8	2030.9	1760.1	1154.4	587.9	359.9	313.5	292.2	281.5	281.5
22.5°	2283.9	2226.9	2084.4	1635.4	823.1	367.0	295.7	263.7	238.7	228.0	228.0
25°	2408.6	2333.8	2137.8	1418.1	523.8	295.7	253.0	220.9	196.0	181.7	185.3
27.5°	2554.7	2458.5	2184.1	1147.3	338.5	256.5	210.2	178.2	156.8	149.6	149.6
30°	2707.9	2593.9	2194.8	858.7	274.4	220.9	174.6	146.1	131.8	124.7	124.7
32.5°	2918.1	2768.5	2162.7	570.1	231.6	185.3	146.1	121.1	110.5	106.9	106.9
35°	3196.0	2996.5	2087.9	352.7	196.0	153.2	121.1	106.9	96.2	92.6	92.6
37.5°	3548.7	3313.6	1956.1	242.3	167.5	124.7	103.3	92.6	85.5	81.9	81.9
40°	4019.1	3698.4	1785.1	210.2	142.5	106.9	89.1	81.9	74.8	74.8	74.8
42.5°	4517.9	4165.1	1564.2	185.3	121.1	92.6	78.4	71.3	67.7	64.1	64.1
45°	5063.0	4642.6	1289.8	163.9	103.3	81.9	71.3	60.6	57.0	57.0	57.0
47.5°	5604.6	5134.3	990.5	142.5	89.1	71.3	60.6	53.4	49.9	46.3	46.3
50°	6160.4	5579.7	726.9	124.7	78.4	64.1	53.4	46.3	39.2	35.6	35.6
52.5°	6563.0	5846.9	530.9	106.9	67.7	53.4	42.8	35.6	28.5	24.9	24.9
55°	6858.8	6010.8	388.4	89.1	60.6	46.3	35.6	28.5	21.4	21.4	17.8
57.5°	7090.4	6089.2	292.2	78.4	53.4	39.2	28.5	21.4	17.8	14.3	14.3
60°	7268.5	6092.7	217.3	64.1	46.3	32.1	21.4	14.3	10.7	10.7	10.7
62°	7503.7	6139.1	178.2	53.4	42.8	28.5	17.8	10.7	7.1	3.6	3.6
62.5°	7571.4	6156.9	171.0	53.4	39.2	24.9	14.3	10.7	7.1	3.6	3.6
65°	7884.9	6188.9	131.8	42.8	32.1	21.4	10.7	7.1	0.0	0.0	0.0
67.5°	8170.0	6139.1	96.2	32.1	24.9	14.3	10.7	3.6	0.0	0.0	0.0
70°	8141.5	5797.0	67.7	21.4	17.8	10.7	7.1	0.0	0.0	0.0	0.0
72.5°	6709.1	4339.7	46.3	17.8	10.7	7.1	3.6	0.0	0.0	0.0	0.0
75°	4051.1	1899.1	32.1	10.7	10.7	7.1	3.6	0.0	0.0	0.0	0.0
77.5°	1329.0	687.7	21.4	7.1	7.1	3.6	3.6	0.0	0.0	0.0	0.0
80°	217.3	114.0	10.7	7.1	7.1	3.6	3.6	0.0	0.0	0.0	0.0
82.5°	67.7	28.5	7.1	7.1	3.6	3.6	0.0	0.0	0.0	0.0	0.0
85°	24.9	10.7	7.1	7.1	3.6	3.6	0.0	0.0	0.0	0.0	0.0
87.5°	10.7	7.1	7.1	7.1	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)