

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: P258052

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2U-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P258052
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-AF72-160-D-U-T2U-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 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: 14018 lumens
Efficiency: N/A
Efficacy: 86.5 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

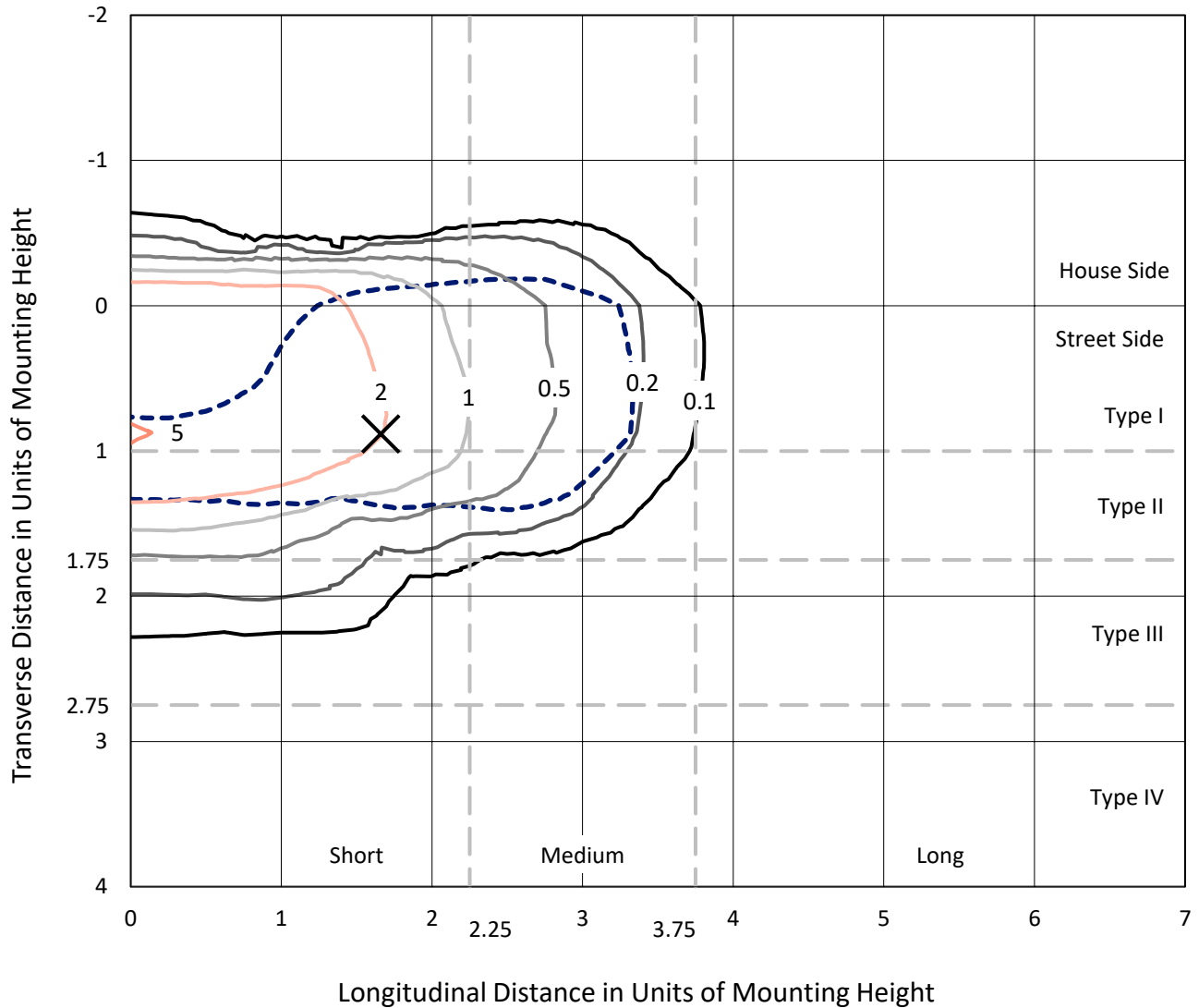
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

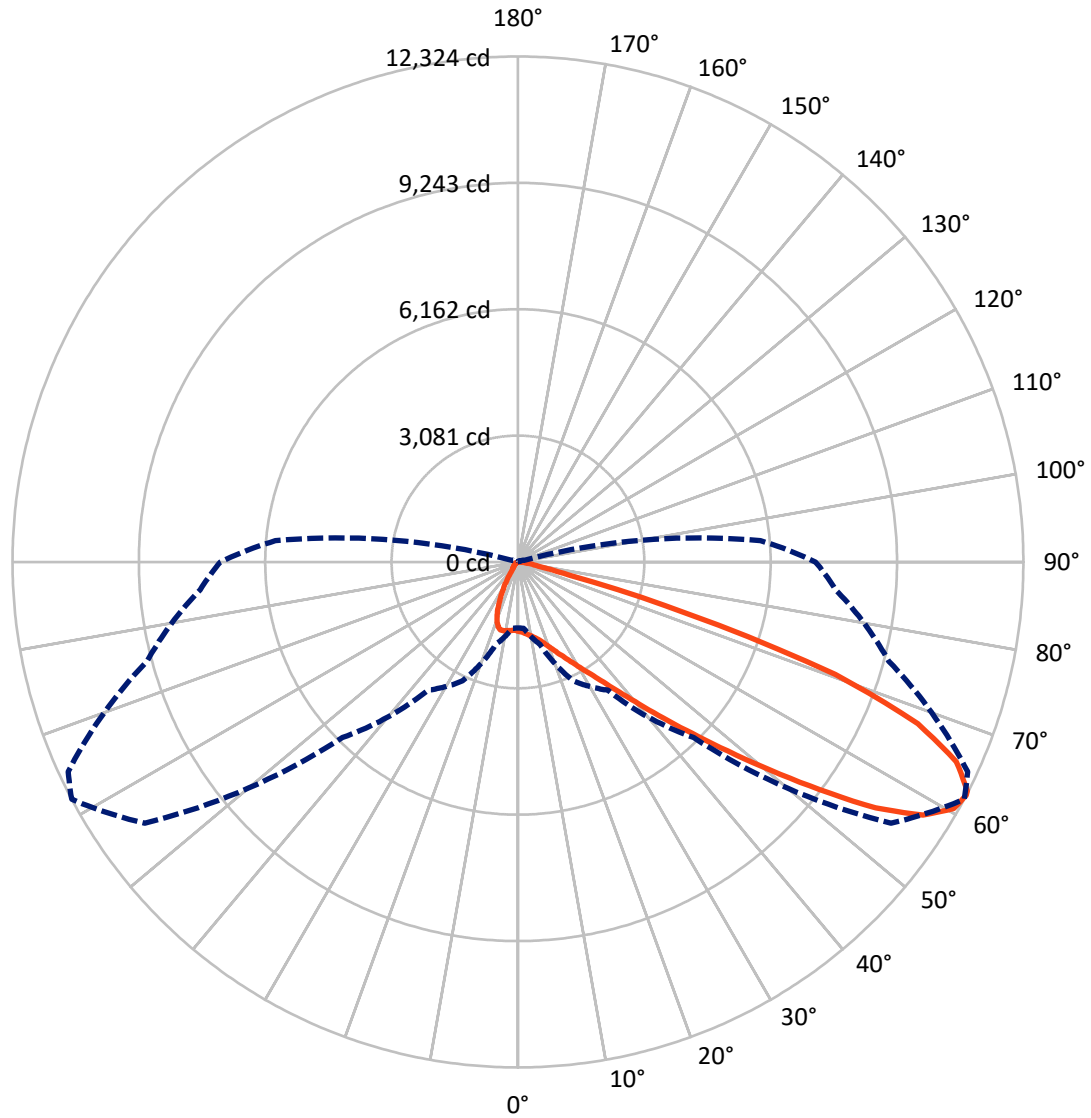
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 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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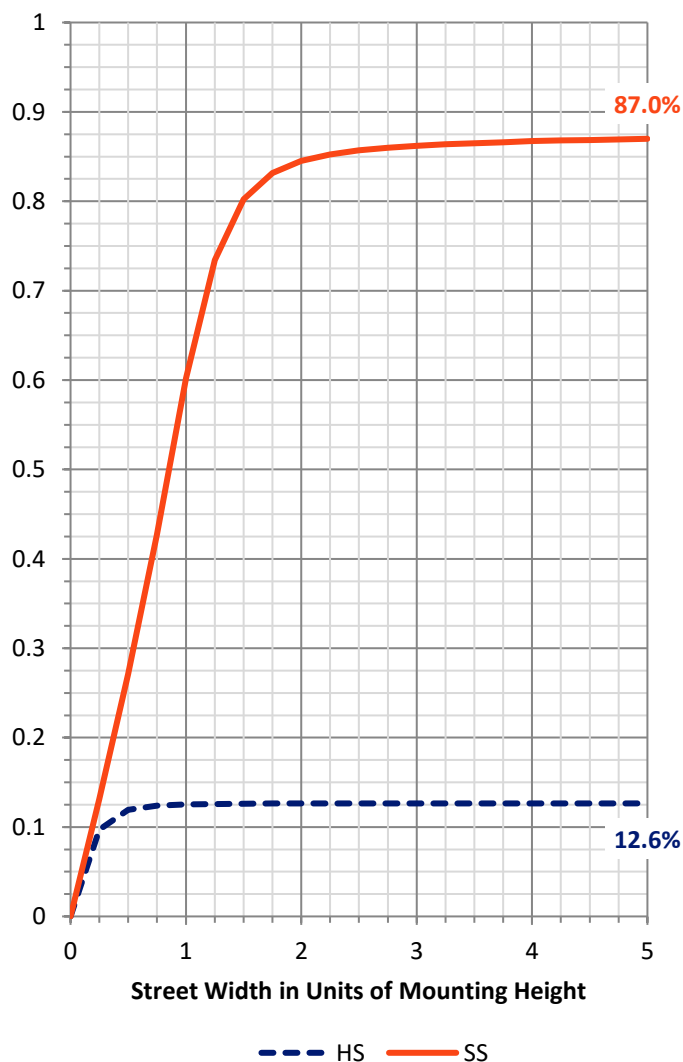
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1792.4	0.0	1792.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12225.6	0.0	12225.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	14018.0	0.0	14018.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	1.2
10°-20°	453.8	3.2
20°-30°	762.1	5.4
30°-40°	1461.0	10.4
40°-50°	2984.1	21.3
50°-60°	3948.9	28.2
60°-70°	3067.7	21.9
70°-80°	1107.3	7.9
80°-90°	70.6	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°	14018.0	100.0
0°-180°	14018.0	100.0

Coefficient of Utilization



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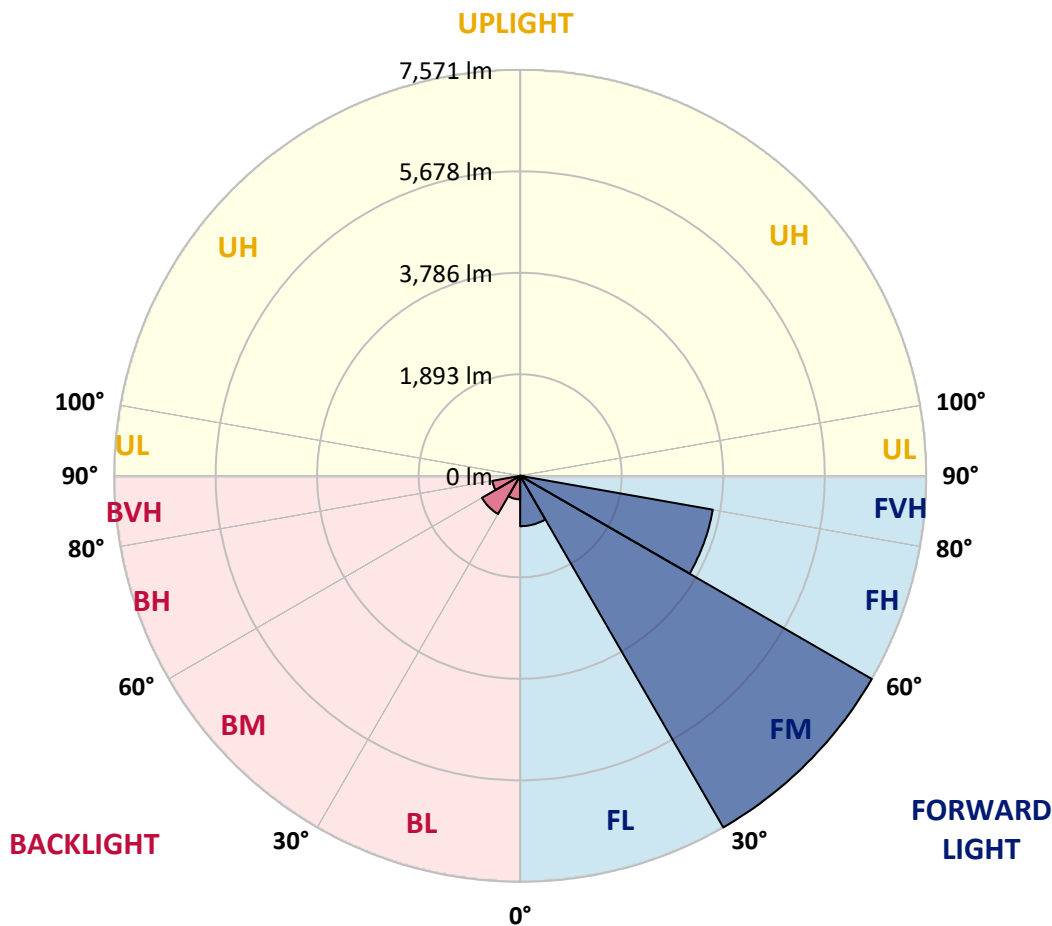
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	939.8	6.7			
FM (30°-60°)	7571.1	54.0			
FH (60°-80°)	3647.2	26.0			G2/5000
FVH (80°-90°)	67.5	0.5			G1/100
BL (0°-30°)	438.7	3.1	B1/500		
BM (30°-60°)	822.8	5.9	B1/1000		
BH (60°-80°)	527.8	3.8	B2/1000		G2/1000
BVH (80°-90°)	3.1	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°	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6
2.5°	1733.4	1730.0	1726.6	1723.1	1723.1	1719.6	1716.3	1709.4	1702.5	1695.4	1692.1
5°	1764.4	1761.0	1757.6	1761.0	1757.6	1757.6	1754.1	1747.3	1740.4	1730.0	1719.6
7.5°	1788.6	1785.2	1781.7	1785.2	1788.6	1792.1	1795.4	1788.6	1785.2	1771.3	1761.0
10°	1819.6	1816.1	1812.7	1819.6	1819.6	1836.8	1840.3	1836.8	1833.4	1823.1	1805.8
12.5°	1864.4	1867.9	1867.9	1874.8	1881.7	1902.3	1909.2	1898.8	1898.8	1885.0	1864.4
15°	1947.1	1947.1	1947.1	1954.0	1957.5	1985.0	1991.9	1981.5	1988.5	1964.4	1943.6
17.5°	2026.3	2029.8	2036.7	2050.5	2050.5	2074.7	2088.4	2088.4	2102.1	2071.2	2043.5
20°	2105.7	2109.0	2119.4	2150.4	2150.4	2181.5	2205.6	2215.9	2229.7	2198.8	2150.4
22.5°	2191.7	2191.7	2209.0	2257.3	2246.9	2308.9	2353.8	2371.0	2384.8	2343.4	2267.5
25°	2322.8	2308.9	2322.8	2367.5	2360.6	2446.9	2529.6	2546.8	2564.0	2515.7	2402.1
27.5°	2570.9	2550.2	2501.9	2505.5	2505.5	2605.3	2722.5	2746.7	2756.9	2715.6	2574.3
30°	3067.1	3067.1	2887.9	2767.3	2688.0	2777.7	2943.1	2984.4	2998.2	2936.2	2750.0
32.5°	3932.1	3932.1	3601.3	3294.6	2994.8	2994.8	3184.3	3260.1	3274.0	3201.6	2984.4
35°	5034.8	5028.0	4531.7	4111.3	3525.5	3304.9	3466.9	3594.4	3635.7	3539.2	3287.7
37.5°	6206.7	6161.7	5627.7	5145.2	4342.2	3801.1	3849.4	4018.3	4056.2	3976.9	3680.5
40°	7157.8	7106.1	6675.3	6272.1	5396.8	4593.8	4400.9	4555.9	4600.7	4490.4	4149.2
42.5°	8019.3	7891.8	7595.4	7305.9	6609.8	5965.4	5134.8	5196.9	5245.1	5128.0	4676.6
45°	8643.1	8446.8	8295.1	8205.5	7836.7	7471.3	6086.1	5961.9	5979.2	5834.5	5252.0
47.5°	8660.3	8522.4	8536.3	8770.6	8922.2	8908.5	7323.2	6882.1	6816.5	6575.3	5865.5
50°	7833.3	7912.5	8164.1	8832.6	9652.8	10149.1	8794.8	7971.1	7774.7	7340.5	6475.5
52.5°	6454.8	6578.8	7050.9	8177.8	9759.7	10966.0	10321.4	9215.2	8863.6	8098.7	6944.1
55°	5055.7	5062.5	5558.8	6706.4	9046.3	11114.1	11541.4	10583.3	10045.8	8674.1	7254.3
57.5°	3477.2	3666.7	4297.3	5069.4	7436.9	10376.6	11999.7	11644.8	10952.0	9029.0	7471.3
60°	2277.9	2288.3	3022.3	3914.9	5062.5	8443.2	11720.6	12206.6	11686.2	9239.3	7619.6
62°	1605.9	1623.1	2078.1	3198.1	3815.0	6051.6	11103.7	12323.7	12099.7	9363.4	7774.7
62.5°	1488.7	1502.6	1885.0	3018.9	3584.0	5427.8	10883.2	12296.1	12161.6	9404.7	7829.8
65°	1092.5	1092.5	1233.7	2074.7	2626.0	2932.7	9222.0	11748.1	12078.9	9735.5	8036.6
67.5°	844.3	851.2	899.4	1278.6	1981.5	1778.2	5886.2	10514.4	11217.4	10224.9	8153.8
70°	727.1	723.8	758.1	847.8	1430.2	1182.0	2591.5	8205.5	9394.4	10100.9	8047.0
72.5°	537.5	541.1	620.3	744.4	996.0	768.5	1171.7	4356.0	6093.0	7905.7	6895.9
75°	344.6	348.1	437.7	585.8	716.8	503.1	675.4	1299.2	2495.1	4383.6	4218.2
77.5°	230.9	237.7	286.0	410.0	627.2	313.6	423.9	544.5	751.2	1643.8	1512.9
80°	155.0	155.0	182.7	275.7	396.3	261.9	227.5	361.8	389.4	510.0	255.0
82.5°	103.4	103.4	120.6	182.7	258.5	234.4	137.8	196.4	227.5	255.0	89.6
85°	62.1	62.1	82.7	113.7	169.0	131.0	89.6	110.3	117.1	161.9	48.3
87.5°	37.9	34.4	55.1	79.2	89.6	79.2	58.6	58.6	62.1	89.6	24.1
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°	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6	1688.6
2.5°	1685.3	1681.7	1678.3	1671.4	1661.1	1654.1	1647.3	1640.4	1633.5	1633.5	1643.8
5°	1716.3	1705.9	1692.1	1678.3	1657.7	1643.8	1633.5	1619.8	1612.7	1612.7	1616.3
7.5°	1754.1	1743.8	1719.6	1695.4	1664.6	1640.4	1616.3	1585.3	1561.1	1550.8	1561.1
10°	1795.4	1781.7	1747.3	1709.4	1674.8	1612.7	1533.6	1437.1	1354.4	1316.5	1333.7
12.5°	1847.1	1830.0	1788.6	1736.9	1657.7	1506.0	1309.6	1085.6	944.2	878.8	892.5
15°	1923.0	1898.8	1840.3	1761.0	1585.3	1257.9	937.3	678.9	547.9	492.8	499.8
17.5°	2012.5	1981.5	1902.3	1754.1	1399.2	906.3	558.4	396.3	341.2	327.3	327.3
20°	2109.0	2067.7	1964.4	1702.5	1116.5	568.5	348.1	303.3	282.6	272.3	272.3
22.5°	2209.0	2153.9	2016.1	1581.8	796.1	355.0	286.0	255.0	230.9	220.6	220.6
25°	2329.6	2257.3	2067.7	1371.6	506.6	286.0	244.6	213.7	189.6	175.8	179.1
27.5°	2470.9	2377.9	2112.5	1109.6	327.3	248.1	203.3	172.3	151.7	144.8	144.8
30°	2619.2	2508.8	2122.9	830.6	265.4	213.7	169.0	141.3	127.5	120.6	120.6
32.5°	2822.5	2677.7	2091.9	551.4	224.0	179.1	141.3	117.1	106.8	103.4	103.4
35°	3091.3	2898.3	2019.4	341.2	189.6	148.1	117.1	103.4	93.1	89.6	89.6
37.5°	3432.4	3205.0	1892.0	234.4	161.9	120.6	100.0	89.6	82.7	79.2	79.2
40°	3887.3	3577.1	1726.6	203.3	137.8	103.4	86.2	79.2	72.3	72.3	72.3
42.5°	4369.9	4028.6	1512.9	179.1	117.1	89.6	75.8	69.0	65.4	62.1	62.1
45°	4897.1	4490.4	1247.5	158.5	100.0	79.2	69.0	58.6	55.1	55.1	55.1
47.5°	5420.9	4966.1	958.1	137.8	86.2	69.0	58.6	51.7	48.3	44.8	44.8
50°	5958.6	5396.8	703.0	120.6	75.8	62.1	51.7	44.8	37.9	34.4	34.4
52.5°	6348.0	5655.3	513.5	103.4	65.4	51.7	41.3	34.4	27.6	24.1	24.1
55°	6634.0	5813.8	375.7	86.2	58.6	44.8	34.4	27.6	20.6	20.6	17.3
57.5°	6857.9	5889.6	282.6	75.8	51.7	37.9	27.6	20.6	17.3	13.7	13.7
60°	7030.3	5893.0	210.3	62.1	44.8	31.0	20.6	13.7	10.4	10.4	10.4
62°	7257.8	5937.8	172.3	51.7	41.3	27.6	17.3	10.4	6.9	3.5	3.5
62.5°	7323.2	5955.0	165.4	51.7	37.9	24.1	13.7	10.4	6.9	3.5	3.5
65°	7626.6	5986.1	127.5	41.3	31.0	20.6	10.4	6.9	0.0	0.0	0.0
67.5°	7902.1	5937.8	93.1	31.0	24.1	13.7	10.4	3.5	0.0	0.0	0.0
70°	7874.7	5606.9	65.4	20.6	17.3	10.4	6.9	0.0	0.0	0.0	0.0
72.5°	6489.2	4197.5	44.8	17.3	10.4	6.9	3.5	0.0	0.0	0.0	0.0
75°	3918.4	1836.8	31.0	10.4	10.4	6.9	3.5	0.0	0.0	0.0	0.0
77.5°	1285.4	665.2	20.6	6.9	6.9	3.5	3.5	0.0	0.0	0.0	0.0
80°	210.3	110.3	10.4	6.9	6.9	3.5	3.5	0.0	0.0	0.0	0.0
82.5°	65.4	27.6	6.9	6.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0
85°	24.1	10.4	6.9	6.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0
87.5°	10.4	6.9	6.9	6.9	3.5	3.5	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)