

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: P237229

Luminaire Tested: **ARCH-L-AF72-160-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237229
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15317 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G3

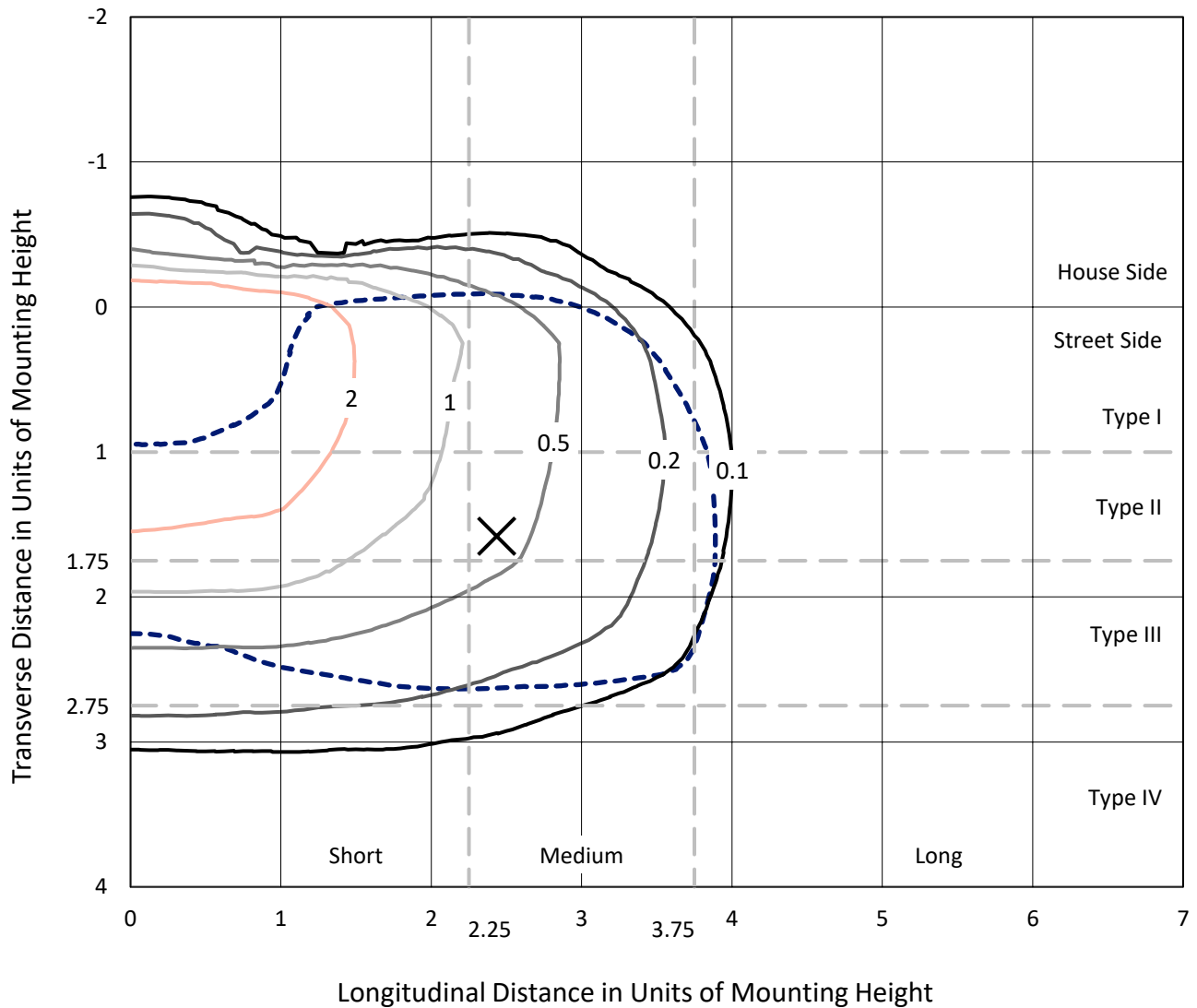
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

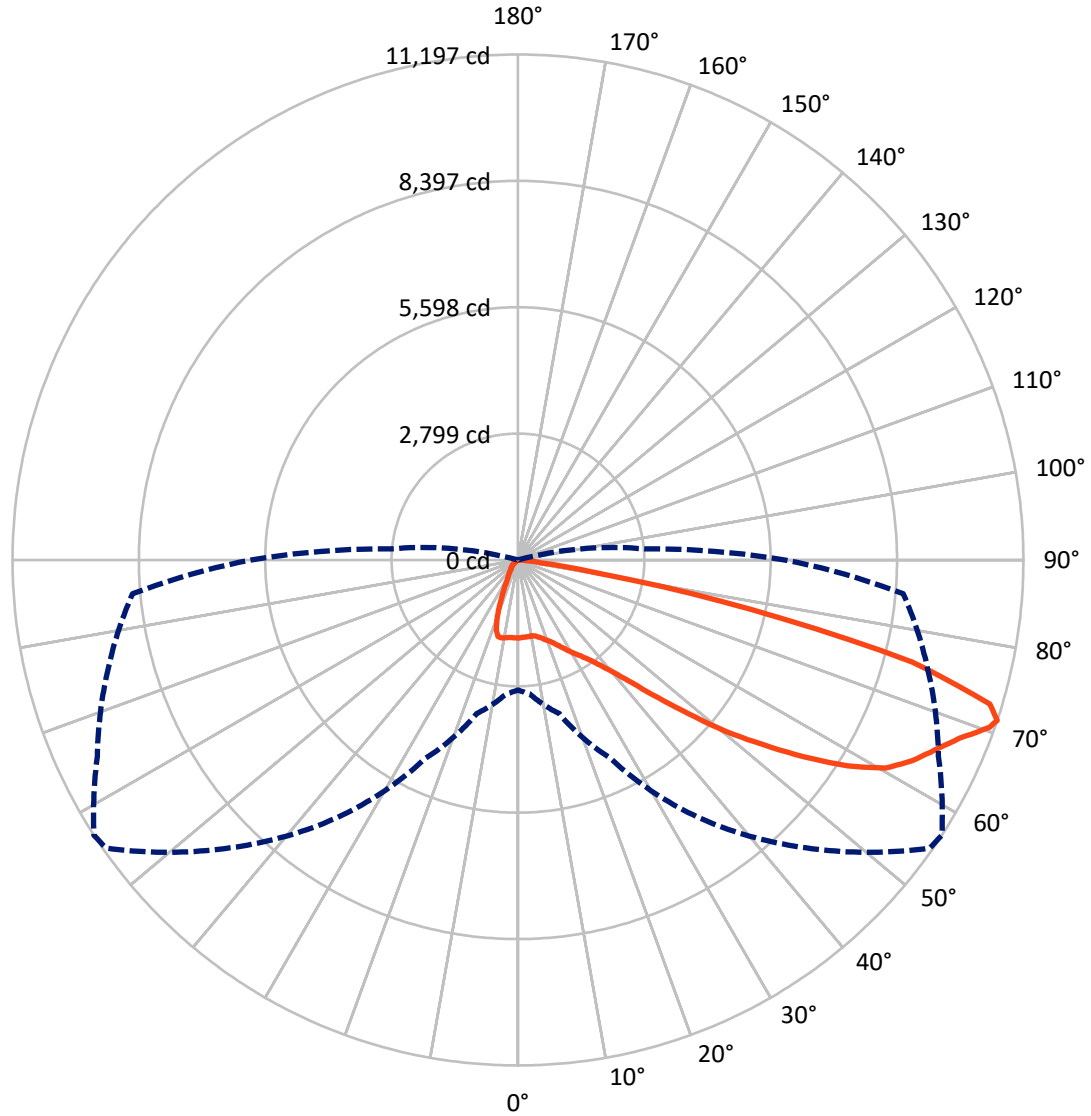
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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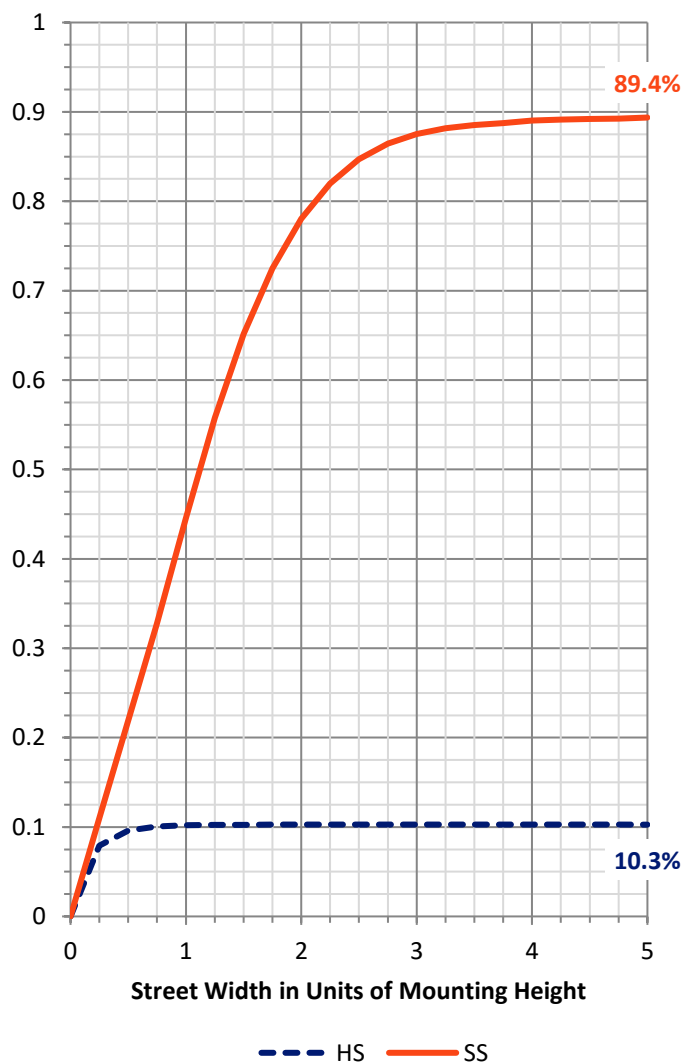
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1587.3	0.0	1587.3
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	13729.7	0.0	13729.7
	% Fixture	89.6	0.0	89.6
Total	Lumens	15317.0	0.0	15317.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	1.1
10°-20°	434.7	2.8
20°-30°	678.1	4.4
30°-40°	1146.1	7.5
40°-50°	2226.0	14.5
50°-60°	3738.1	24.4
60°-70°	4461.1	29.1
70°-80°	2351.0	15.3
80°-90°	119.5	0.8
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°	15317.0	100.0
0°-180°	15317.0	100.0

Coefficient of Utilization



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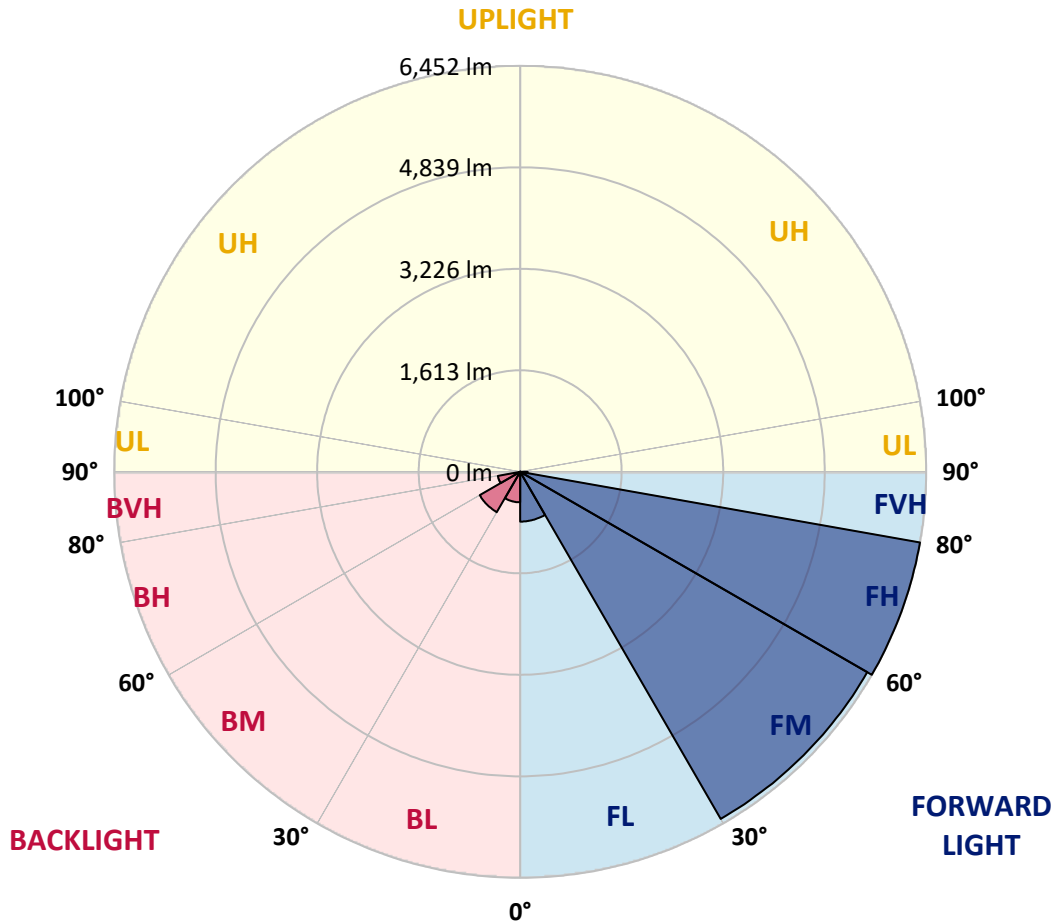
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	790.8	5.2			
FM (30°-60°)	6368.9	41.6			
FH (60°-80°)	6451.6	42.1			G3/7500
FVH (80°-90°)	118.3	0.8			G2/225
BL (0°-30°)	484.5	3.2	B1/500		
BM (30°-60°)	741.2	4.8	B1/1000		
BH (60°-80°)	360.5	2.4	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1
2.5°	1706.1	1706.1	1706.1	1709.6	1713.2	1713.2	1720.3	1716.8	1716.8	1716.8	1723.9
5°	1659.7	1663.2	1666.8	1673.9	1688.2	1698.9	1716.8	1716.8	1720.3	1727.5	1731.1
7.5°	1595.4	1599.0	1609.7	1624.0	1652.5	1677.5	1706.1	1713.2	1723.9	1741.8	1748.9
10°	1556.2	1563.3	1577.6	1595.4	1627.5	1659.7	1695.4	1706.1	1738.2	1770.3	1788.2
12.5°	1545.5	1549.0	1563.3	1591.9	1631.1	1670.4	1716.8	1727.5	1773.9	1823.9	1852.4
15°	1563.3	1566.9	1574.0	1606.1	1652.5	1702.5	1763.2	1777.5	1834.6	1891.7	1927.4
17.5°	1595.4	1595.4	1602.6	1631.1	1681.1	1738.2	1816.7	1838.1	1902.4	1966.6	2005.9
20°	1616.8	1616.8	1627.5	1656.1	1713.2	1788.2	1881.0	1909.5	1980.9	2052.3	2088.0
22.5°	1638.3	1641.8	1652.5	1684.7	1748.9	1852.4	1959.5	1988.0	2070.1	2145.1	2180.8
25°	1698.9	1695.4	1698.9	1727.5	1802.4	1930.9	2066.6	2102.2	2187.9	2270.0	2287.8
27.5°	1866.7	1859.5	1813.1	1795.3	1852.4	2013.0	2202.2	2237.9	2337.8	2419.9	2419.9
30°	2252.2	2237.9	2123.7	1977.3	1930.9	2088.0	2330.7	2380.6	2509.1	2580.5	2559.1
32.5°	2741.1	2709.0	2562.7	2312.8	2127.2	2187.9	2466.3	2523.4	2687.6	2748.3	2701.9
35°	3276.5	3272.9	3090.9	2769.7	2505.6	2394.9	2641.2	2709.0	2916.0	2969.6	2894.6
37.5°	3844.0	3858.3	3736.9	3294.4	2983.8	2734.0	2873.2	2951.7	3205.1	3269.4	3198.0
40°	4475.8	4472.2	4425.8	3901.1	3558.5	3215.8	3208.7	3280.1	3587.0	3687.0	3587.0
42.5°	5275.3	5268.1	5100.4	4629.2	4254.5	3844.0	3697.7	3722.7	4065.3	4229.5	4083.1
45°	6089.0	6039.1	5846.3	5439.4	5107.5	4622.1	4343.7	4343.7	4636.4	4861.2	4632.8
47.5°	6542.3	6492.3	6413.8	6189.0	6089.0	5546.5	5136.1	5086.1	5314.5	5542.9	5221.7
50°	7138.4	7138.4	6942.1	6856.4	7027.7	6645.8	6010.5	5960.5	6071.2	6253.2	5832.0
52.5°	7609.5	7523.8	7384.6	7459.6	7948.6	7773.7	6885.0	6788.6	6874.2	6920.6	6363.9
55°	7805.8	7723.7	7713.0	7987.8	8744.5	8501.8	7780.8	7695.2	7688.0	7459.6	6827.8
57.5°	7845.1	7773.7	7909.3	8391.1	9519.0	9097.8	8673.1	8608.9	8409.0	7837.9	7302.5
60°	7513.1	7548.8	7877.2	8612.4	9975.9	9615.4	9426.2	9358.4	8898.0	8159.1	7830.8
62.5°	6831.4	6917.1	7531.0	8633.9	9808.1	9826.0	9843.8	9797.4	9276.3	8451.8	8362.6
65°	6024.8	6049.8	6788.6	8337.6	9515.4	9761.7	10150.8	10147.2	9565.4	8780.2	8962.2
67.5°	4964.7	5007.6	5646.4	7338.2	8930.1	9733.2	10554.1	10543.4	9893.8	9155.0	9319.1
70°	3694.1	3747.6	4265.2	5707.1	7623.8	9376.2	11082.3	11089.4	10240.0	9440.5	9072.9
71°	2880.3	2976.7	3519.2	4846.9	6956.3	9015.8	11132.3	11196.5	10279.2	9401.2	8566.0
72.5°	1413.4	1527.6	2209.3	3412.1	5725.0	8209.1	10803.9	10928.8	10033.0	8912.2	7324.0
75°	367.6	389.0	660.3	1395.6	3069.5	5439.4	8712.4	9030.0	8202.0	6785.0	4475.8
77.5°	232.0	239.1	310.5	542.5	1149.3	2066.6	5118.2	5275.3	4686.3	3437.1	1577.6
80°	164.2	167.8	196.3	349.8	671.0	603.2	1841.7	1909.5	1695.4	910.1	282.0
82.5°	99.9	99.9	142.8	224.9	414.0	328.4	485.4	517.5	456.9	253.4	92.8
85°	57.1	60.7	89.2	153.5	196.3	160.6	182.0	192.7	196.3	167.8	39.3
87.5°	46.4	50.0	78.5	128.5	107.1	78.5	78.5	82.1	85.7	99.9	17.8
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°	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1	1731.1
2.5°	1723.9	1723.9	1727.5	1723.9	1723.9	1723.9	1727.5	1727.5	1727.5	1734.6	1738.2
5°	1731.1	1731.1	1731.1	1727.5	1723.9	1723.9	1731.1	1734.6	1734.6	1745.3	1745.3
7.5°	1748.9	1748.9	1741.8	1734.6	1727.5	1716.8	1720.3	1723.9	1720.3	1723.9	1723.9
10°	1788.2	1788.2	1777.5	1763.2	1741.8	1709.6	1666.8	1613.3	1563.3	1545.5	1538.3
12.5°	1852.4	1848.8	1827.4	1802.4	1756.0	1645.4	1484.8	1295.6	1138.6	1095.7	1081.5
15°	1923.8	1916.7	1891.7	1848.8	1723.9	1431.2	1095.7	853.0	703.1	667.4	660.3
17.5°	1998.7	1988.0	1952.3	1866.7	1577.6	1063.6	706.7	535.4	453.3	446.1	449.7
20°	2077.3	2063.0	2013.0	1831.0	1274.2	710.3	456.9	414.0	406.9	406.9	410.5
22.5°	2166.5	2148.6	2080.8	1702.5	928.0	471.1	392.6	389.0	385.5	381.9	381.9
25°	2270.0	2248.6	2145.1	1470.5	638.9	385.5	374.8	364.1	356.9	349.8	346.2
27.5°	2394.9	2366.4	2195.0	1185.0	439.0	360.5	353.3	335.5	321.2	306.9	306.9
30°	2519.8	2484.2	2180.8	892.3	356.9	335.5	321.2	299.8	278.4	264.1	260.6
32.5°	2651.9	2616.2	2088.0	599.6	324.8	306.9	289.1	257.0	232.0	214.2	210.6
35°	2848.2	2819.7	1905.9	396.2	292.7	271.3	246.3	214.2	182.0	164.2	160.6
37.5°	3140.9	3105.2	1681.1	303.4	257.0	224.9	203.4	167.8	135.6	117.8	114.2
40°	3533.5	3426.4	1413.4	267.7	224.9	185.6	157.0	121.4	96.4	85.7	85.7
42.5°	3990.3	3736.9	1124.3	242.7	199.9	153.5	114.2	82.1	67.8	64.2	64.2
45°	4475.8	4026.0	835.2	224.9	174.9	121.4	82.1	57.1	50.0	46.4	46.4
47.5°	4975.4	4261.6	581.8	203.4	146.3	92.8	57.1	42.8	35.7	32.1	32.1
50°	5443.0	4415.1	410.5	182.0	124.9	67.8	42.8	32.1	25.0	25.0	25.0
52.5°	5767.8	4400.8	296.2	157.0	96.4	46.4	28.6	21.4	21.4	21.4	21.4
55°	6053.3	4347.3	232.0	135.6	75.0	32.1	21.4	17.8	17.8	14.3	14.3
57.5°	6296.0	4261.6	196.3	110.6	53.5	25.0	14.3	14.3	10.7	10.7	10.7
60°	6503.0	4154.5	164.2	92.8	35.7	17.8	10.7	7.1	7.1	3.6	7.1
62.5°	6785.0	4086.7	142.8	71.4	25.0	10.7	7.1	3.6	3.6	0.0	0.0
65°	6992.0	3958.2	121.4	50.0	14.3	7.1	3.6	3.6	0.0	0.0	0.0
67.5°	6999.2	3726.2	89.2	28.6	10.7	7.1	3.6	0.0	0.0	0.0	0.0
70°	6435.2	3176.6	57.1	14.3	7.1	3.6	3.6	0.0	0.0	0.0	0.0
71°	5917.7	2812.5	46.4	10.7	7.1	3.6	0.0	0.0	0.0	0.0	0.0
72.5°	4875.5	2066.6	35.7	10.7	3.6	3.6	0.0	0.0	0.0	0.0	0.0
75°	2687.6	749.5	17.8	7.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	860.2	228.4	10.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	146.3	35.7	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	50.0	14.3	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.3	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.1	3.6	0.0	0.0	0.0	0.0	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)