

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: P237191

Luminaire Tested: **ARCH-L-AF72-180-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237191  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-180-D-U-T3-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 775mA 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: 15895.1 lumens  
Efficiency: N/A  
Efficacy: 87.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

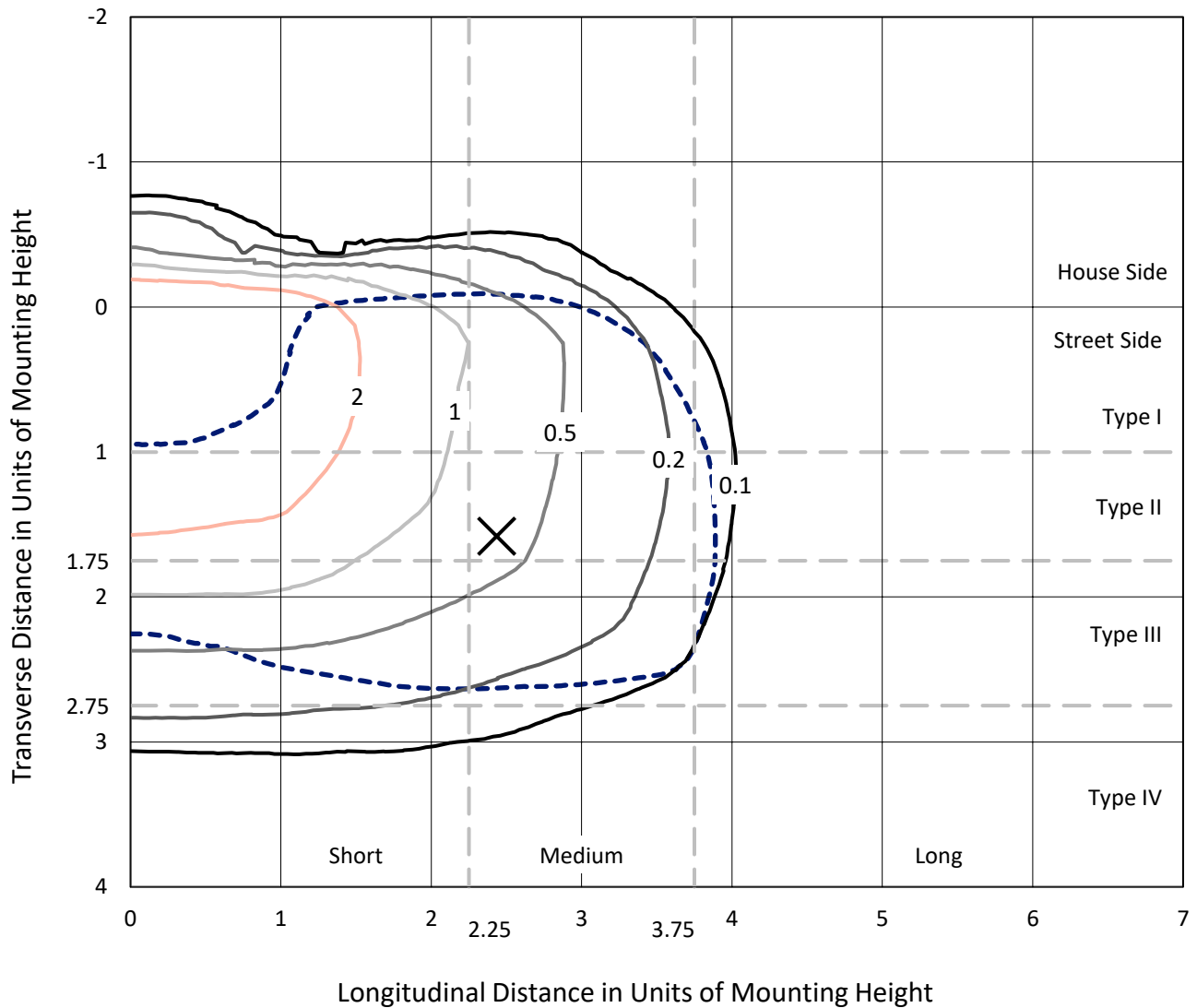
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

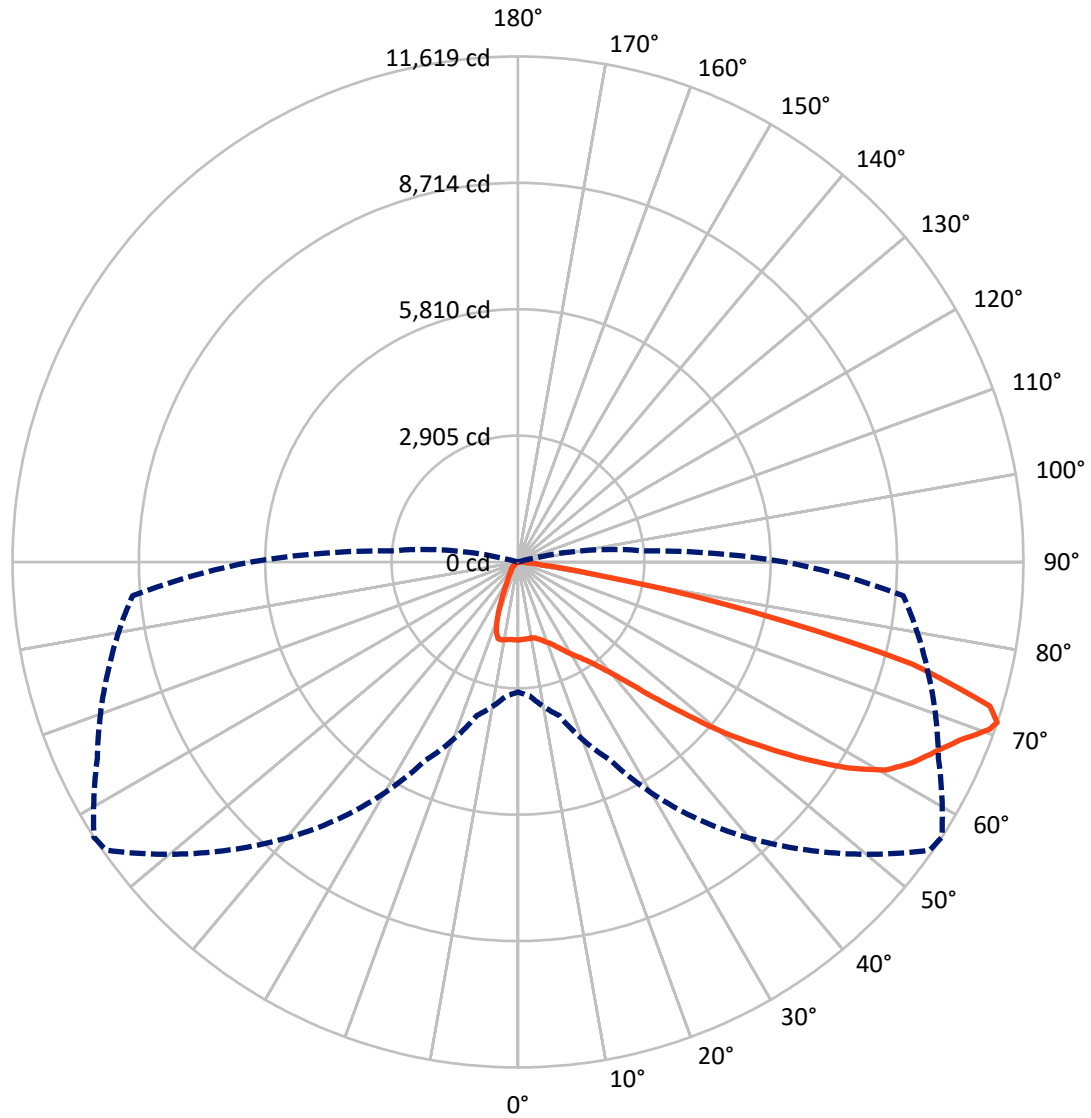
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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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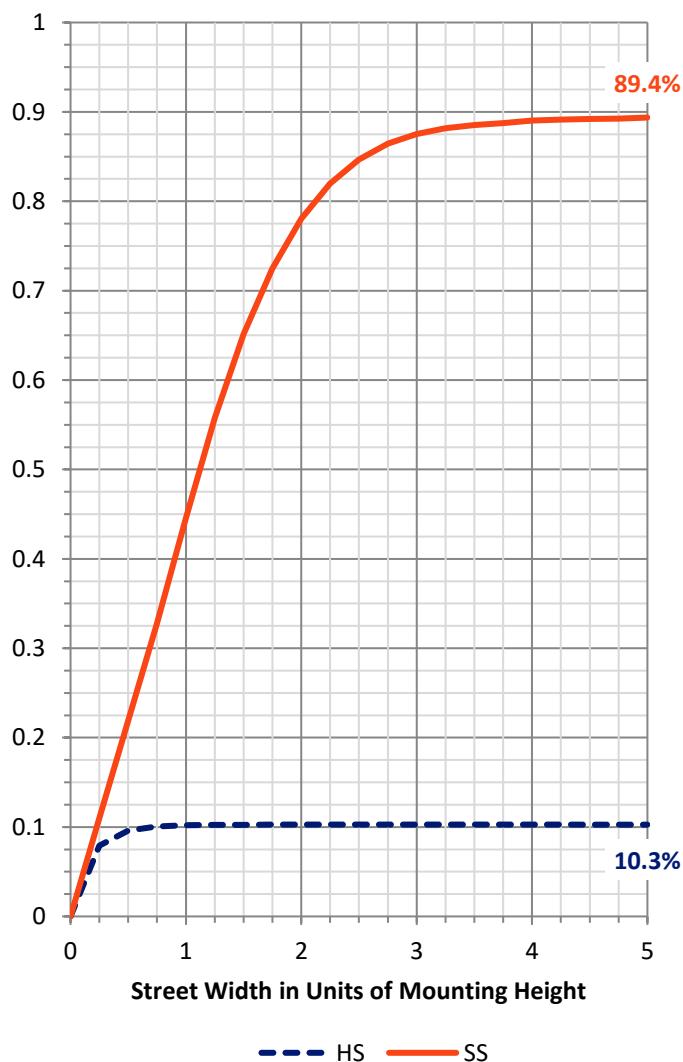
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1647.2	0.0	1647.2
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	14247.8	0.0	14247.8
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	15895.1	0.0	15895.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.7	1.1
10°-20°	451.1	2.8
20°-30°	703.7	4.4
30°-40°	1189.3	7.5
40°-50°	2310.0	14.5
50°-60°	3879.2	24.4
60°-70°	4629.4	29.1
70°-80°	2439.8	15.3
80°-90°	124.0	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°	15895.1	100.0
0°-180°	15895.1	100.0

**Coefficient of Utilization**



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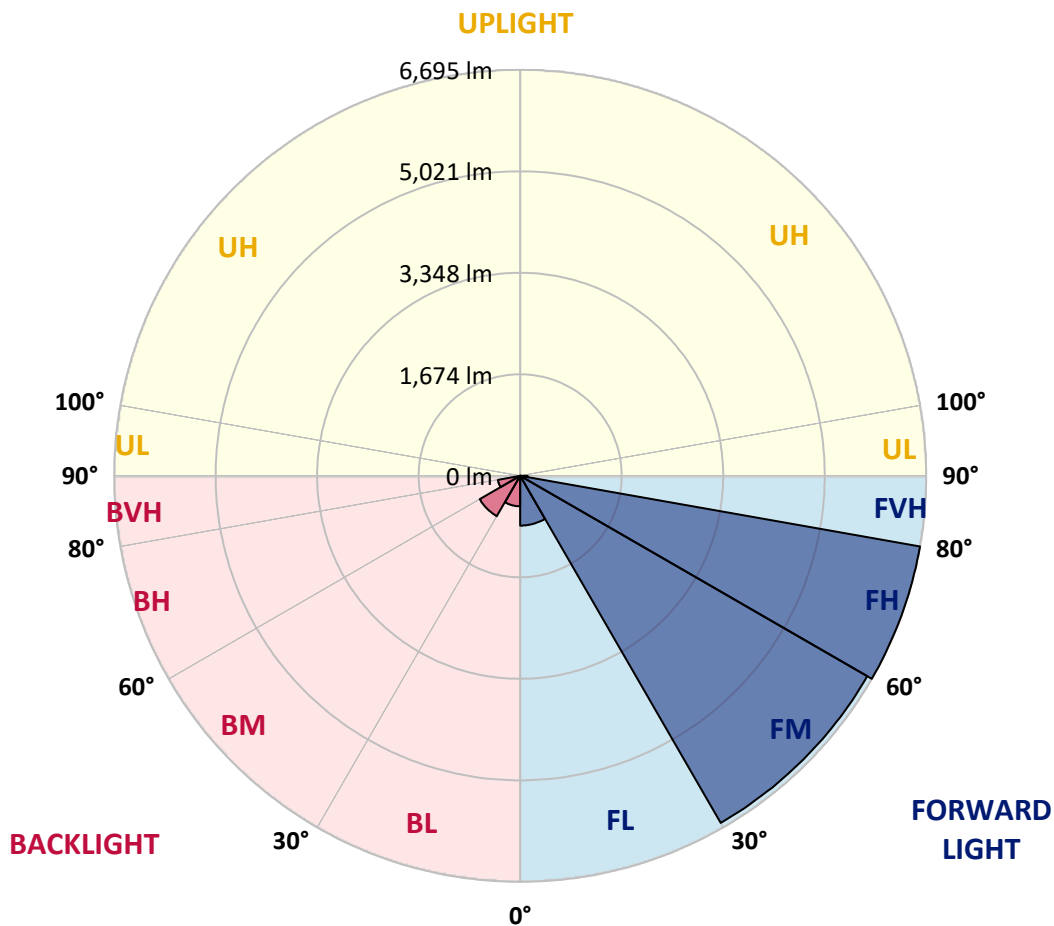
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	820.6	5.2			
FM (30°-60°)	6609.3	41.6			
FH (60°-80°)	6695.1	42.1			G3/7500
FVH (80°-90°)	122.8	0.8			G2/225
BL (0°-30°)	502.8	3.2	B2/1000		
BM (30°-60°)	769.2	4.8	B1/1000		
BH (60°-80°)	374.1	2.4	B1/500		G1/500
BVH (80°-90°)	1.2	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-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3
2.5°	1770.4	1770.4	1770.4	1774.2	1777.8	1777.8	1785.3	1781.6	1781.6	1781.6	1789.0
5°	1722.3	1726.0	1729.7	1737.1	1752.0	1763.0	1781.6	1781.6	1785.3	1792.7	1796.3
7.5°	1655.6	1659.3	1670.5	1685.3	1715.0	1740.8	1770.4	1777.8	1789.0	1807.4	1814.9
10°	1614.9	1622.3	1637.1	1655.6	1688.9	1722.3	1759.3	1770.4	1803.8	1837.0	1855.7
12.5°	1603.8	1607.5	1622.3	1651.9	1692.7	1733.4	1781.6	1792.7	1840.8	1892.7	1922.3
15°	1622.3	1626.0	1633.4	1666.7	1715.0	1766.7	1829.8	1844.6	1903.9	1963.1	2000.1
17.5°	1655.6	1655.6	1663.0	1692.7	1744.6	1803.8	1885.3	1907.4	1974.2	2040.9	2081.6
20°	1677.9	1677.9	1688.9	1718.6	1777.8	1855.7	1951.9	1981.5	2055.6	2129.7	2166.7
22.5°	1700.1	1703.8	1715.0	1748.2	1814.9	1922.3	2033.5	2063.1	2148.2	2226.0	2263.1
25°	1763.0	1759.3	1763.0	1792.7	1870.4	2003.9	2144.5	2181.6	2270.5	2355.6	2374.2
27.5°	1937.1	1929.7	1881.6	1863.1	1922.3	2089.0	2285.2	2322.3	2426.0	2511.3	2511.3
30°	2337.2	2322.3	2203.8	2052.0	2003.9	2166.7	2418.7	2470.5	2603.8	2678.0	2655.6
32.5°	2844.6	2811.2	2659.4	2400.1	2207.5	2270.5	2559.4	2618.6	2789.1	2852.0	2803.8
35°	3400.1	3396.5	3207.6	2874.2	2600.2	2485.3	2740.9	2811.2	3026.1	3081.6	3003.9
37.5°	3989.0	4004.0	3877.9	3418.7	3096.4	2837.1	2981.5	3063.1	3326.1	3392.7	3318.6
40°	4644.6	4641.0	4592.8	4048.4	3692.8	3337.3	3329.7	3403.9	3722.4	3826.2	3722.4
42.5°	5474.3	5466.9	5292.8	4803.9	4415.0	3989.0	3837.1	3863.2	4218.7	4389.1	4237.2
45°	6318.8	6267.0	6066.9	5644.7	5300.2	4796.5	4507.6	4507.6	4811.3	5044.7	4807.6
47.5°	6789.2	6737.4	6655.8	6422.5	6318.8	5755.8	5329.8	5278.0	5515.1	5752.2	5418.8
50°	7407.8	7407.8	7204.0	7115.2	7292.9	6896.7	6237.3	6185.5	6300.3	6489.2	6052.1
52.5°	7896.7	7807.7	7663.3	7741.1	8248.5	8067.0	7144.8	7044.8	7133.6	7181.8	6604.0
55°	8100.4	8015.2	8004.2	8289.3	9074.5	8822.6	8074.5	7985.5	7978.1	7741.1	7085.5
57.5°	8141.1	8067.0	8207.8	8707.9	9878.2	9441.2	9000.4	8933.8	8726.3	8133.7	7578.1
60°	7796.6	7833.7	8174.4	8937.4	10352.4	9978.2	9782.0	9711.6	9233.7	8467.0	8126.2
62.5°	7089.2	7178.2	7815.2	8959.7	10178.3	10196.7	10215.3	10167.1	9626.4	8770.8	8678.1
65°	6252.2	6278.0	7044.8	8652.2	9874.6	10130.1	10533.8	10530.1	9926.4	9111.5	9300.4
67.5°	5152.1	5196.6	5859.6	7615.2	9267.2	10100.5	10952.3	10941.2	10267.1	9500.4	9670.9
70°	3833.5	3889.1	4426.1	5922.5	7911.5	9730.1	11500.5	11507.9	10626.4	9796.7	9415.3
71°	2989.0	3089.1	3652.0	5029.9	7218.9	9356.0	11552.4	11619.0	10667.2	9756.0	8889.4
72.5°	1466.7	1585.3	2292.7	3540.9	5941.0	8519.0	11211.6	11341.2	10411.7	9248.6	7600.4
75°	381.6	403.7	685.2	1448.2	3185.4	5644.7	9041.2	9370.8	8511.6	7041.1	4644.6
77.5°	240.7	248.1	322.2	563.0	1192.7	2144.5	5311.3	5474.3	4863.2	3566.9	1637.1
80°	170.3	174.0	203.7	363.0	696.3	625.9	1911.2	1981.5	1759.3	944.4	292.6
82.5°	103.7	103.7	148.1	233.4	429.6	340.8	503.6	537.0	474.0	263.0	96.2
85°	59.2	63.0	92.6	159.3	203.7	166.6	188.9	200.1	203.7	174.0	40.8
87.5°	48.2	51.9	81.5	133.3	111.1	81.5	81.5	85.2	88.9	103.7	18.5
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°	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3	1796.3
2.5°	1789.0	1789.0	1792.7	1789.0	1789.0	1789.0	1792.7	1792.7	1792.7	1800.0	1803.8
5°	1796.3	1796.3	1796.3	1792.7	1789.0	1789.0	1796.3	1800.0	1800.0	1811.2	1811.2
7.5°	1814.9	1814.9	1807.4	1800.0	1792.7	1781.6	1785.3	1789.0	1785.3	1789.0	1789.0
10°	1855.7	1855.7	1844.6	1829.8	1807.4	1774.2	1729.7	1674.2	1622.3	1603.8	1596.4
12.5°	1922.3	1918.6	1896.4	1870.4	1822.3	1707.5	1540.8	1344.6	1181.5	1137.1	1122.3
15°	1996.3	1988.9	1963.1	1918.6	1789.0	1485.3	1137.1	885.2	729.7	692.6	685.2
17.5°	2074.2	2063.1	2026.0	1937.1	1637.1	1103.7	733.3	555.6	470.4	462.9	466.6
20°	2155.6	2140.8	2089.0	1900.1	1322.2	737.1	474.0	429.6	422.3	422.3	425.9
22.5°	2248.2	2229.8	2159.4	1766.7	963.0	488.9	407.4	403.7	400.0	396.3	396.3
25°	2355.6	2333.4	2226.0	1526.1	662.9	400.0	388.9	377.8	370.4	363.0	359.3
27.5°	2485.3	2455.7	2277.8	1229.7	455.6	374.1	366.7	348.2	333.3	318.5	318.5
30°	2614.9	2577.9	2263.1	926.0	370.4	348.2	333.3	311.2	288.9	274.1	270.4
32.5°	2752.0	2715.0	2166.7	622.2	337.1	318.5	300.0	266.7	240.7	222.3	218.5
35°	2955.7	2926.1	1977.9	411.2	303.7	281.5	255.5	222.3	188.9	170.3	166.6
37.5°	3259.4	3222.4	1744.6	314.7	266.7	233.4	211.1	174.0	140.7	122.3	118.5
40°	3666.8	3555.8	1466.7	277.7	233.4	192.7	163.1	125.9	100.0	88.9	88.9
42.5°	4140.9	3877.9	1166.7	251.9	207.4	159.3	118.5	85.2	70.4	66.6	66.6
45°	4644.6	4178.0	866.8	233.4	181.5	125.9	85.2	59.2	51.9	48.2	48.2
47.5°	5163.1	4422.4	603.7	211.1	151.9	96.2	59.2	44.5	37.0	33.4	33.4
50°	5648.3	4581.7	425.9	188.9	129.6	70.4	44.5	33.4	25.9	25.9	25.9
52.5°	5985.4	4566.9	307.4	163.1	100.0	48.2	29.6	22.2	22.2	22.2	22.2
55°	6281.8	4511.4	240.7	140.7	77.8	33.4	22.2	18.5	18.5	14.9	14.9
57.5°	6533.6	4422.4	203.7	114.8	55.5	25.9	14.9	14.9	11.2	11.2	11.2
60°	6748.5	4311.3	170.3	96.2	37.0	18.5	11.2	7.4	7.4	3.8	7.4
62.5°	7041.1	4240.9	148.1	74.1	25.9	11.2	7.4	3.8	3.8	0.0	0.0
65°	7255.9	4107.6	125.9	51.9	14.9	7.4	3.8	3.8	0.0	0.0	0.0
67.5°	7263.3	3866.8	92.6	29.6	11.2	7.4	3.8	0.0	0.0	0.0	0.0
70°	6678.0	3296.5	59.2	14.9	7.4	3.8	3.8	0.0	0.0	0.0	0.0
71°	6141.0	2918.7	48.2	11.2	7.4	3.8	0.0	0.0	0.0	0.0	0.0
72.5°	5059.5	2144.5	37.0	11.2	3.8	3.8	0.0	0.0	0.0	0.0	0.0
75°	2789.1	777.8	18.5	7.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	892.6	237.1	11.2	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	151.9	37.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.9	14.9	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.9	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.4	3.8	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)