

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: P237305

Luminaire Tested: **ARCH-L-AF72-120-D-U-T4W-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237305  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-120-D-U-T4W-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15975.9 lumens  
Efficiency: N/A  
Efficacy: 129.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G3

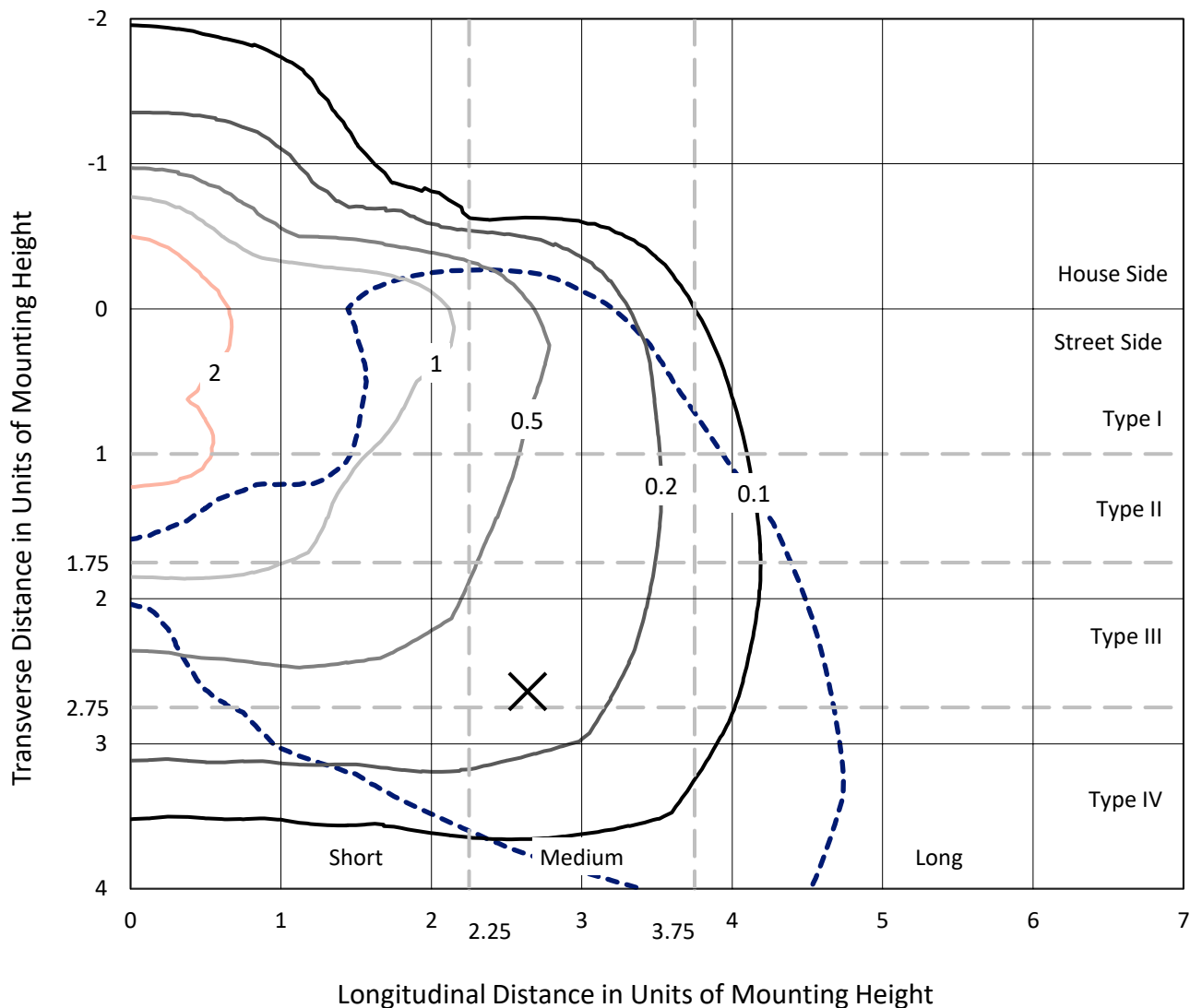
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

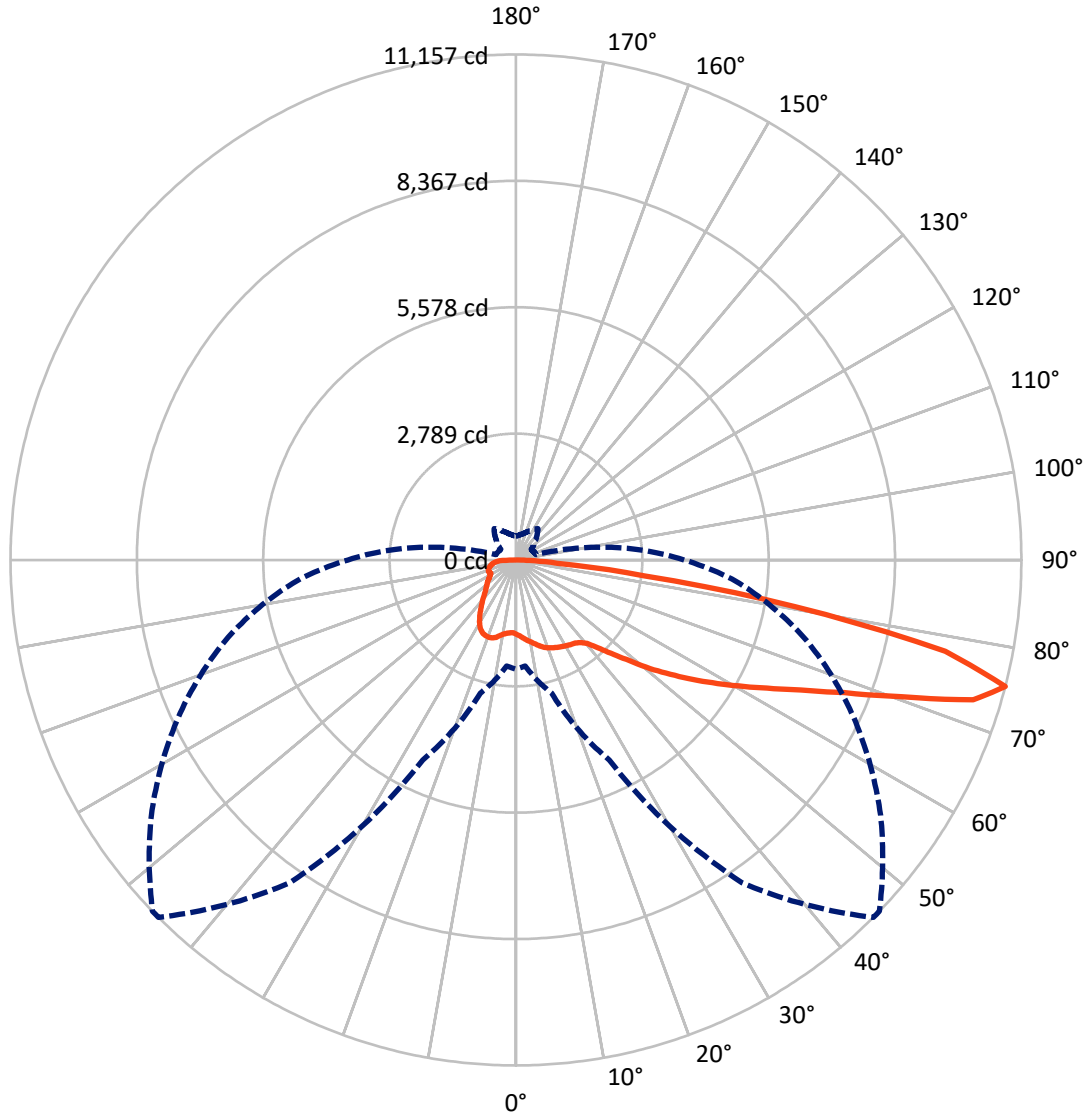
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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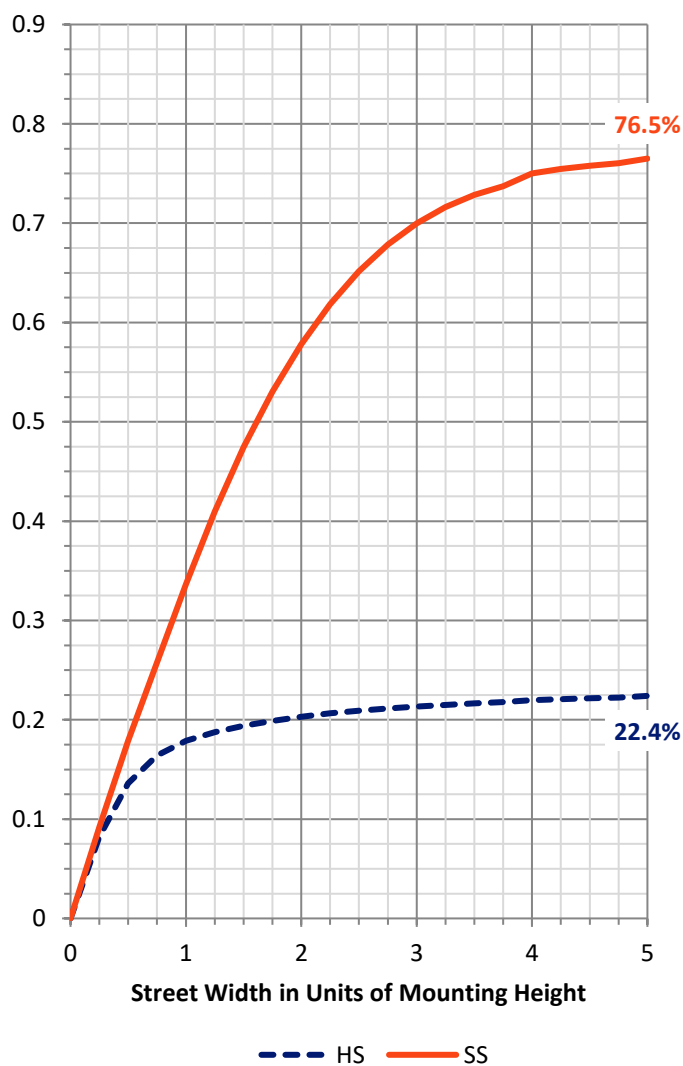
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3700.9	0.0	3700.9
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	12274.9	0.0	12274.9
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	15975.9	0.0	15975.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.3	1.0
10°-20°	525.9	3.3
20°-30°	902.5	5.6
30°-40°	1262.3	7.9
40°-50°	1851.7	11.6
50°-60°	2884.4	18.1
60°-70°	4150.4	26.0
70°-80°	3615.5	22.6
80°-90°	620.9	3.9
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°	15975.9	100.0
0°-180°	15975.9	100.0

**Coefficient of Utilization**



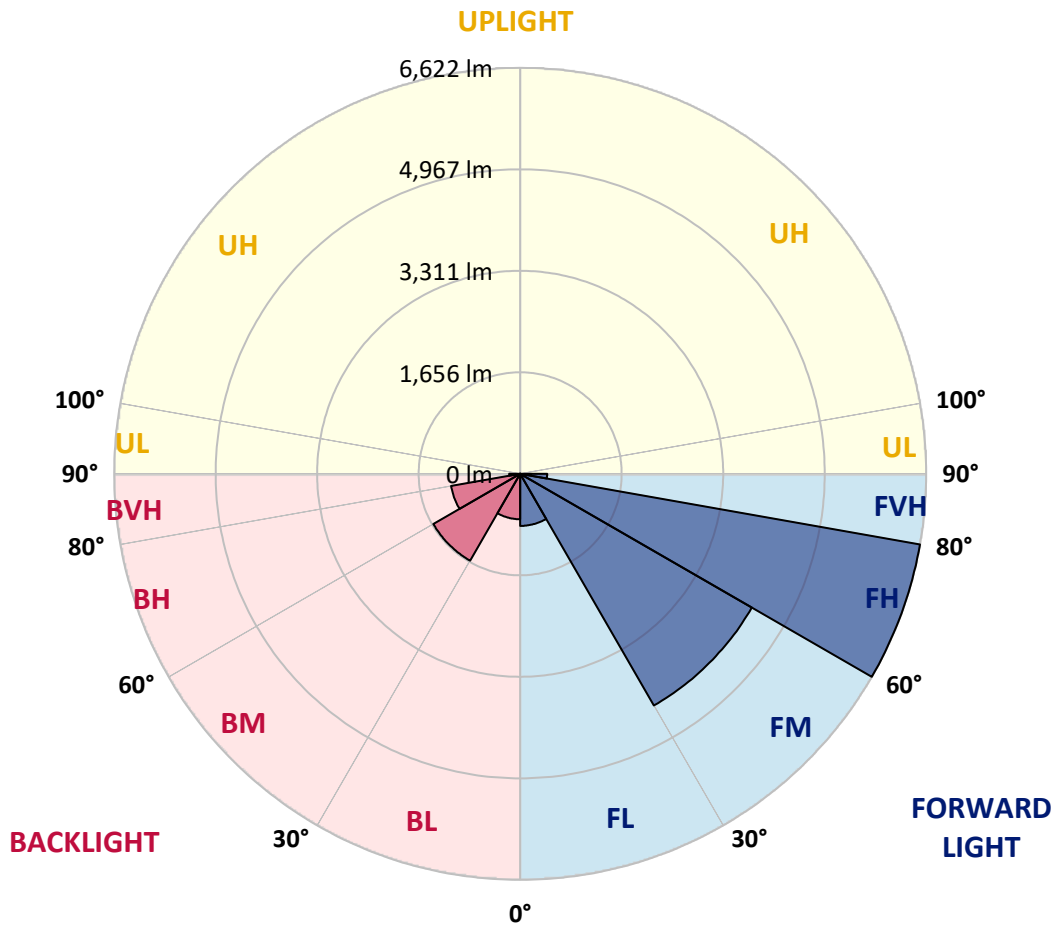
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	849.5	5.3			
FM (30°-60°)	4362.7	27.3			
FH (60°-80°)	6622.2	41.5			G3/7500
FVH (80°-90°)	440.5	2.8			G3/500
BL (0°-30°)	741.2	4.6	B2/1000		
BM (30°-60°)	1635.6	10.2	B2/2500		
BH (60°-80°)	1143.7	7.2	B3/2500		G3/2500
BVH (80°-90°)	180.4	1.1			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8
2.5°	1718.5	1706.1	1706.1	1696.8	1696.8	1681.3	1675.1	1672.0	1656.4	1647.1	1637.8
5°	1818.0	1802.4	1799.4	1777.6	1768.3	1734.1	1731.0	1709.3	1681.3	1653.3	1631.6
7.5°	1908.1	1898.8	1883.3	1861.6	1833.6	1790.0	1786.9	1752.7	1706.1	1668.8	1637.8
10°	1973.4	1967.2	1945.5	1917.5	1886.4	1842.8	1839.7	1802.4	1746.5	1703.1	1659.5
12.5°	2051.2	2041.7	2013.7	1976.5	1942.3	1901.8	1898.8	1867.7	1805.6	1749.7	1693.7
15°	2125.6	2113.2	2079.1	2041.7	2004.5	1970.3	1970.3	1936.1	1870.8	1805.6	1740.3
17.5°	2163.0	2156.8	2122.6	2082.2	2051.2	2026.2	2023.2	1992.1	1926.8	1858.4	1786.9
20°	2175.4	2178.5	2147.4	2103.9	2082.2	2069.7	2066.6	2044.9	1973.4	1908.1	1839.7
22.5°	2172.3	2181.6	2156.8	2110.2	2103.9	2103.9	2103.9	2079.1	2023.2	1957.8	1889.5
25°	2184.7	2197.1	2178.5	2122.6	2122.6	2135.0	2135.0	2122.6	2072.8	2016.9	1948.5
27.5°	2228.3	2237.5	2222.0	2144.3	2147.4	2166.1	2163.0	2166.1	2135.0	2082.2	2013.7
30°	2281.0	2293.5	2274.9	2178.5	2175.4	2194.0	2194.0	2209.5	2187.8	2131.8	2075.9
32.5°	2424.0	2420.8	2361.8	2215.8	2206.5	2225.1	2225.1	2240.7	2228.3	2184.7	2131.8
35°	2849.8	2803.1	2672.6	2336.9	2243.7	2253.0	2253.0	2281.0	2287.3	2253.0	2206.5
37.5°	3284.9	3269.2	3169.8	2660.1	2380.5	2312.2	2308.9	2349.4	2377.4	2349.4	2318.4
40°	3723.0	3710.6	3688.8	3092.1	2666.4	2417.8	2408.5	2442.6	2492.4	2473.7	2455.0
42.5°	4130.1	4123.9	4145.7	3517.9	3030.0	2644.6	2616.6	2576.4	2647.8	2641.6	2641.6
45°	4450.2	4465.8	4478.2	3915.8	3424.7	2936.8	2902.6	2765.9	2862.1	2887.0	2905.6
47.5°	4630.5	4642.9	4686.4	4304.2	3819.3	3275.5	3250.7	3026.9	3154.4	3228.9	3281.7
50°	4888.4	4854.2	4891.5	4683.3	4294.9	3716.8	3648.3	3378.1	3539.7	3670.2	3794.5
52.5°	5137.1	5081.1	5112.1	5121.5	4835.6	4148.8	4077.3	3791.4	3993.4	4198.5	4419.1
55°	5360.8	5357.6	5388.7	5547.2	5357.6	4611.9	4531.0	4248.2	4540.4	4761.0	5133.9
57.5°	5541.0	5572.1	5708.8	6041.4	5960.5	5115.3	5025.2	4779.6	5124.6	5345.2	5963.7
60°	5752.4	5802.1	6028.9	6460.9	6510.6	5643.6	5550.4	5373.2	5724.4	5948.1	6924.0
62.5°	5823.8	5895.3	6361.4	6902.2	7085.6	6221.7	6137.7	6019.6	6355.3	6557.2	7881.1
65°	5348.3	5485.1	6544.8	7129.0	7704.0	6917.7	6846.3	6743.7	6983.0	7116.6	8530.6
67.5°	5217.7	5280.0	6187.5	7455.5	8285.1	7812.7	7741.2	7564.1	7570.3	7514.5	8742.0
70°	5034.4	5102.9	5820.7	7700.9	9118.0	9037.2	8950.2	8428.0	8108.0	7769.2	8325.5
72.5°	4288.7	4266.9	5015.9	7038.9	9518.8	10553.7	10451.2	9357.3	8505.8	7548.6	7026.5
75°	2408.5	2346.4	3042.5	4869.8	8692.2	11156.6	11153.5	9826.6	8226.0	6575.9	4782.8
77.5°	699.3	680.5	1003.8	2041.7	5851.8	9692.9	9811.1	8863.1	6864.9	4723.8	2626.0
80°	329.4	335.7	432.0	674.3	2498.5	6255.7	6594.6	5836.3	4102.1	2178.5	1084.6
82.5°	208.2	211.3	295.2	435.1	1056.6	2840.4	3120.1	2626.0	1625.3	941.6	478.5
85°	130.6	130.6	195.8	285.9	630.9	907.4	985.2	895.1	696.1	512.8	261.0
87.5°	71.4	71.4	118.1	164.7	344.9	292.2	301.4	357.4	435.1	313.9	130.6
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°	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8	1637.8
2.5°	1634.6	1628.4	1619.1	1616.1	1612.8	1609.8	1612.8	1619.1	1612.8	1612.8	1616.1
5°	1625.3	1619.1	1606.6	1606.6	1609.8	1612.8	1628.4	1637.8	1640.8	1640.8	1640.8
7.5°	1625.3	1616.1	1606.6	1609.8	1616.1	1628.4	1653.3	1668.8	1681.3	1684.3	1684.3
10°	1640.8	1628.4	1622.2	1628.4	1647.1	1656.4	1681.3	1706.1	1721.7	1727.8	1727.8
12.5°	1668.8	1656.4	1656.4	1668.8	1693.7	1706.1	1727.8	1746.5	1765.2	1774.5	1774.5
15°	1715.5	1699.8	1703.1	1724.7	1752.7	1765.2	1780.7	1786.9	1802.4	1814.9	1814.9
17.5°	1759.0	1743.4	1749.7	1774.5	1793.2	1799.4	1808.7	1805.6	1811.7	1821.2	1824.2
20°	1808.7	1793.2	1796.2	1811.7	1814.9	1808.7	1808.7	1799.4	1796.2	1811.7	1818.0
22.5°	1858.4	1842.8	1839.7	1830.4	1814.9	1799.4	1790.0	1780.7	1774.5	1790.0	1796.2
25°	1917.5	1895.6	1880.2	1839.7	1799.4	1771.4	1759.0	1752.7	1749.7	1765.2	1771.4
27.5°	1982.7	1960.9	1914.3	1827.4	1762.1	1715.5	1706.1	1706.1	1712.3	1721.7	1727.8
30°	2044.9	2023.2	1939.3	1799.4	1696.8	1628.4	1619.1	1628.4	1644.1	1653.3	1662.6
32.5°	2107.1	2085.2	1954.7	1755.8	1600.4	1513.5	1507.2	1522.7	1547.6	1553.8	1560.1
35°	2190.9	2169.2	1973.4	1693.7	1479.3	1386.1	1379.8	1389.1	1410.9	1420.3	1429.5
37.5°	2308.9	2296.6	2001.3	1625.3	1367.4	1264.7	1246.2	1240.0	1252.4	1249.3	1261.7
40°	2464.5	2473.7	2051.2	1535.2	1258.6	1152.9	1112.6	1093.9	1081.4	1056.6	1069.0
42.5°	2691.3	2697.5	2107.1	1432.6	1165.4	1047.2	994.5	960.3	935.4	895.1	901.3
45°	3023.7	2971.0	2172.3	1323.9	1081.4	963.3	901.3	860.9	826.6	792.4	795.5
47.5°	3465.0	3303.5	2243.7	1233.7	997.5	895.1	839.1	792.4	752.0	724.1	727.2
50°	4008.9	3716.8	2315.2	1149.9	913.6	842.2	792.4	742.8	702.3	674.3	671.3
52.5°	4726.8	4214.0	2361.8	1056.6	829.8	795.5	752.0	705.5	655.8	621.5	618.4
55°	5472.7	4792.1	2402.3	944.8	749.0	742.8	721.0	668.1	609.1	565.6	559.4
57.5°	6293.2	5410.5	2433.3	836.0	686.8	699.3	693.0	630.9	565.6	525.2	522.0
60°	7038.9	6050.7	2333.9	739.6	630.9	655.8	661.9	609.1	574.9	584.2	587.4
62.5°	7790.9	6544.8	1954.7	668.1	593.6	627.8	680.5	677.5	661.9	677.5	680.5
65°	8061.3	6647.4	1386.1	609.1	556.2	640.1	739.6	733.4	661.9	633.9	627.8
67.5°	7909.1	6342.8	932.3	562.4	528.3	655.8	801.8	733.4	637.1	599.9	587.4
70°	7185.0	5593.8	683.8	515.9	503.4	652.6	836.0	730.3	624.6	584.2	568.7
72.5°	5730.5	4316.7	550.0	472.3	466.1	637.1	854.6	724.1	612.2	568.7	550.0
75°	3710.6	2685.0	463.0	428.9	410.3	612.2	845.3	705.5	596.7	540.8	528.3
77.5°	1721.7	1156.1	394.7	379.1	357.4	574.9	817.4	668.1	562.4	509.7	494.1
80°	801.8	547.0	332.4	329.4	320.1	543.9	780.0	624.6	522.0	478.5	453.8
82.5°	428.9	329.4	270.4	270.4	279.7	506.5	733.4	571.9	469.3	447.5	382.3
85°	226.8	189.6	195.8	211.3	239.3	447.5	671.3	515.9	410.3	341.9	332.4
87.5°	114.9	121.2	121.2	142.9	183.3	363.7	553.2	425.8	348.1	279.7	273.4
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)