

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: P399469

Luminaire Tested: **ARCH-L-PA3-140-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399469  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-830-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17786 lumens  
Efficiency: N/A  
Efficacy: 124.4 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

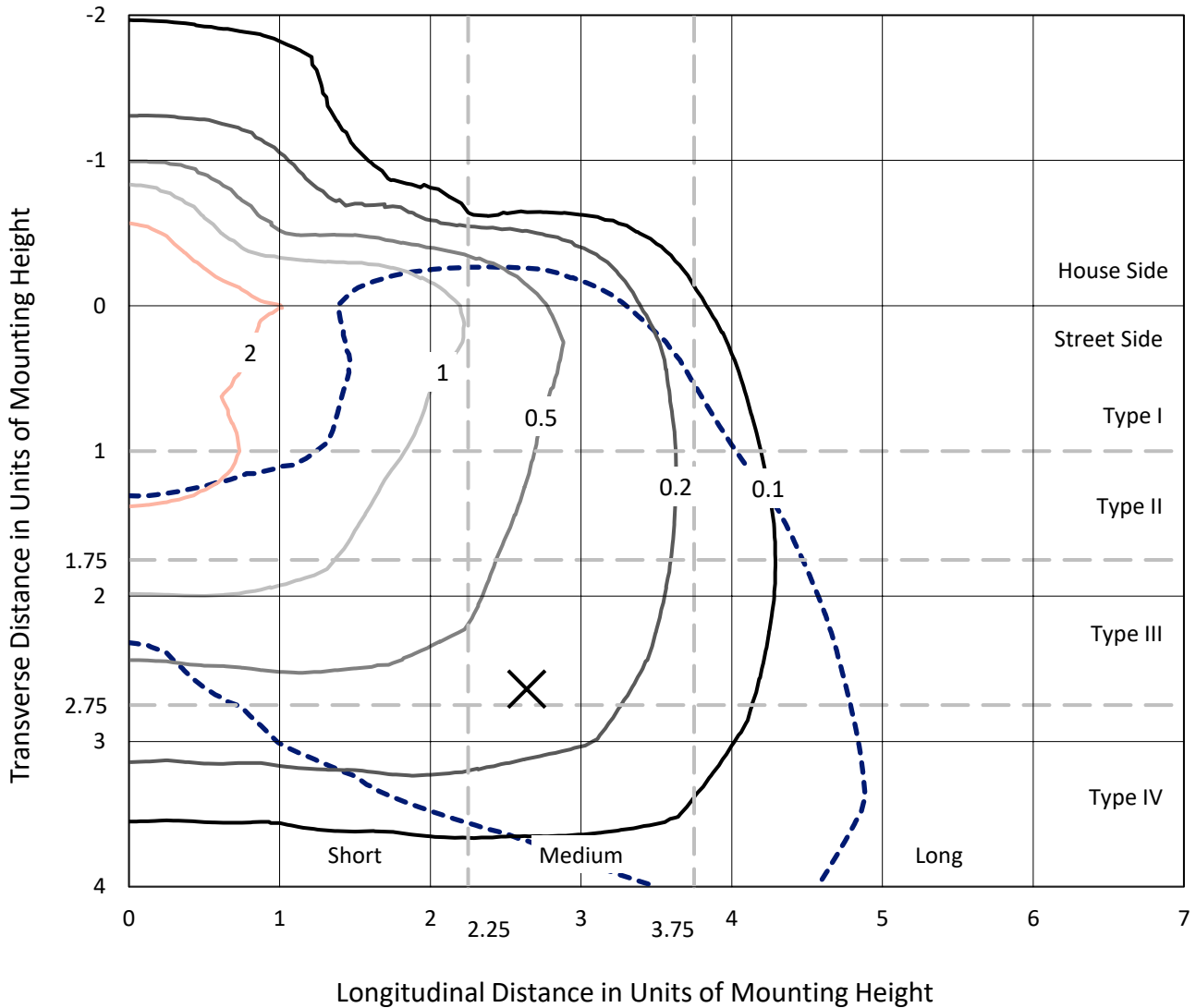
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

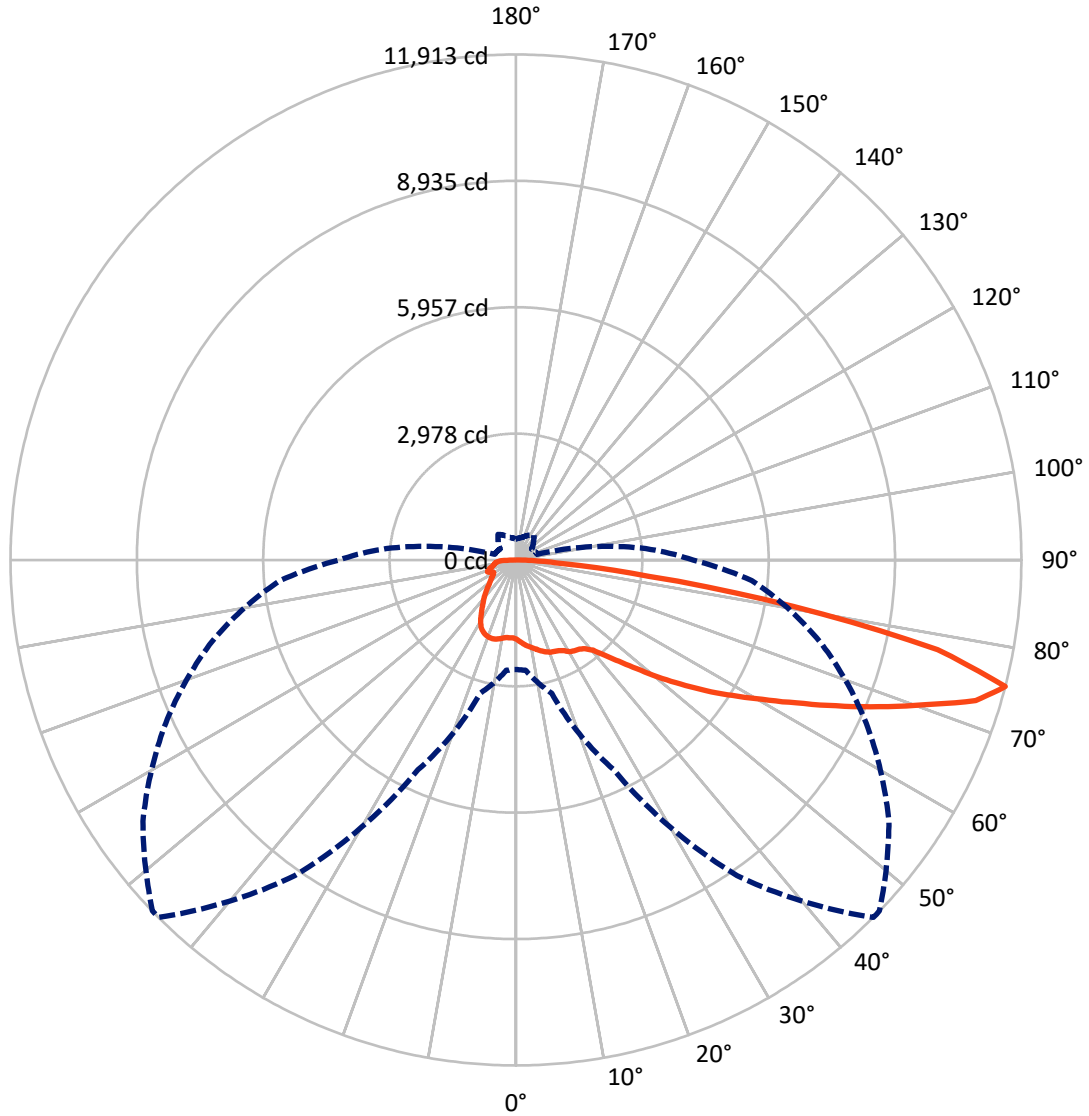
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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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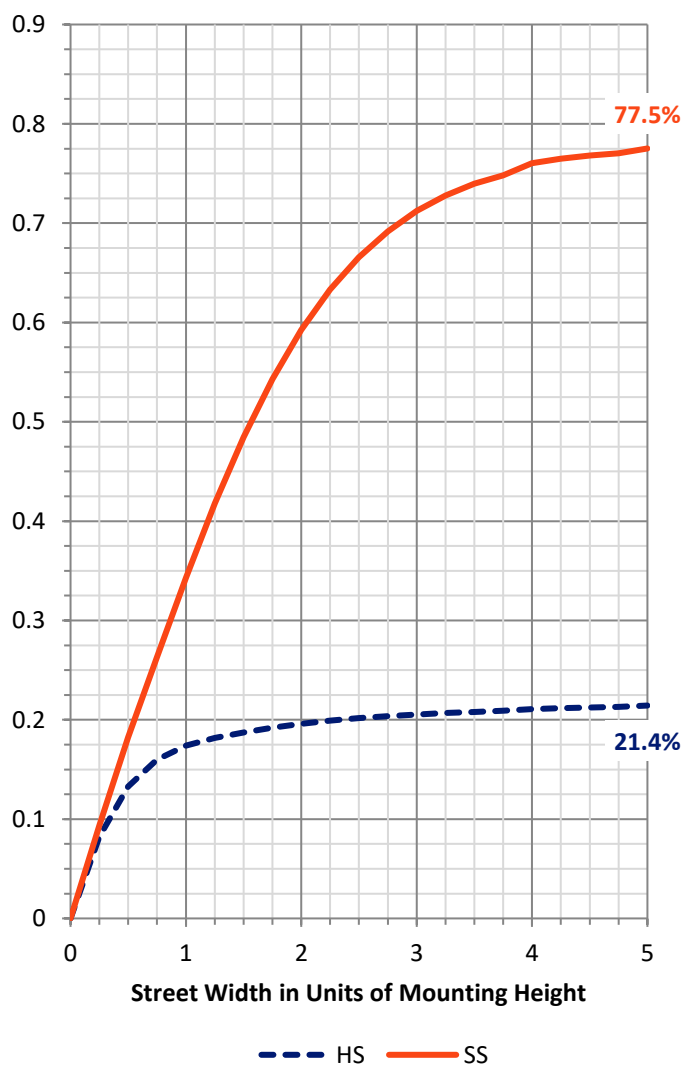
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3930.6	0.0	3930.6
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	13855.4	0.0	13855.4
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	17786.0	0.0	17786.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.8	1.0
10°-20°	587.9	3.3
20°-30°	1002.3	5.6
30°-40°	1404.3	7.9
40°-50°	2063.1	11.6
50°-60°	3283.5	18.5
60°-70°	4670.7	26.3
70°-80°	3910.8	22.0
80°-90°	678.7	3.8
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°	17786.0	100.0
0°-180°	17786.0	100.0

**Coefficient of Utilization**



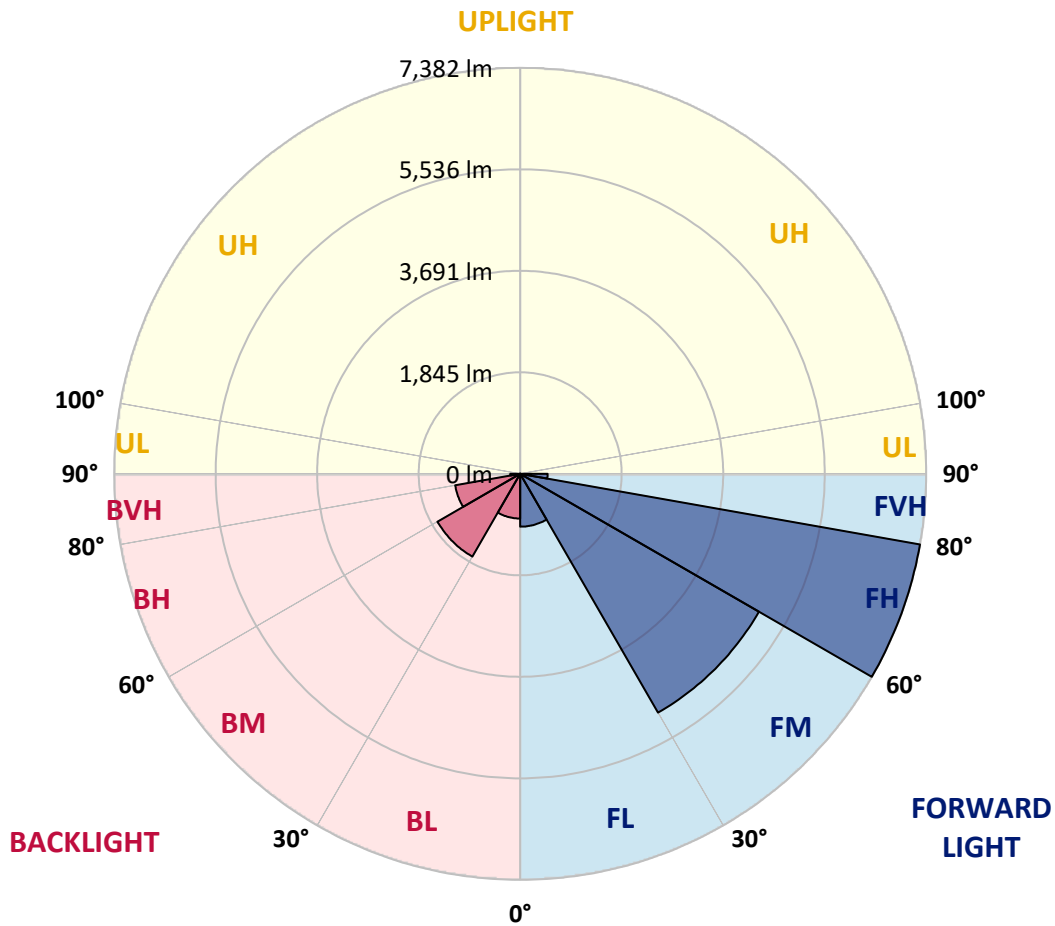
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	961.4	5.4			
FM (30°-60°)	5013.3	28.2			
FH (60°-80°)	7381.6	41.5			G3/7500
FVH (80°-90°)	499.0	2.8			G3/500
BL (0°-30°)	813.5	4.6	B2/1000		
BM (30°-60°)	1737.5	9.8	B2/2500		
BH (60°-80°)	1199.9	6.7	B3/2500		G3/2500
BVH (80°-90°)	179.7	1.0			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°	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1974.9	1965.4	1960.6	1960.6	1941.6	1929.7	1927.3	1910.7	1896.4	1882.2	1870.3
5°	2088.9	2081.8	2067.5	2055.7	2029.5	1996.2	1991.5	1955.8	1920.2	1886.9	1858.4
7.5°	2193.5	2179.2	2162.6	2138.8	2096.1	2050.9	2043.8	1993.9	1944.0	1894.1	1856.0
10°	2281.4	2267.2	2243.4	2210.1	2155.5	2100.8	2093.7	2041.4	1989.1	1929.7	1875.0
12.5°	2364.6	2352.7	2317.1	2271.9	2207.8	2157.9	2150.7	2105.6	2050.9	1984.4	1913.1
15°	2435.9	2424.0	2386.0	2333.7	2260.0	2222.0	2212.5	2169.7	2115.1	2043.8	1970.1
17.5°	2471.5	2471.5	2431.1	2374.1	2305.2	2276.7	2269.5	2217.3	2167.4	2098.4	2024.8
20°	2483.4	2488.2	2459.7	2390.7	2331.3	2319.5	2312.3	2269.5	2212.5	2146.0	2077.1
22.5°	2490.6	2500.1	2476.3	2397.9	2348.0	2340.8	2336.1	2307.6	2262.4	2198.3	2129.3
25°	2514.3	2514.3	2497.7	2409.8	2369.4	2367.0	2367.0	2350.3	2319.5	2264.8	2195.9
27.5°	2550.0	2547.6	2526.2	2435.9	2416.9	2424.0	2421.6	2419.3	2397.9	2343.2	2269.5
30°	2609.4	2609.4	2585.6	2488.2	2476.3	2507.2	2509.6	2514.3	2481.1	2395.5	2336.1
32.5°	2699.7	2690.2	2666.4	2540.5	2521.5	2550.0	2554.7	2552.3	2523.8	2443.0	2414.5
35°	2977.7	2956.4	2870.8	2656.9	2561.9	2578.5	2580.9	2592.7	2597.5	2533.3	2519.1
37.5°	3464.9	3436.4	3305.7	2932.6	2690.2	2649.8	2647.4	2678.3	2704.4	2647.4	2647.4
40°	3994.9	3971.1	3895.1	3407.9	2927.8	2794.7	2785.2	2813.8	2847.0	2806.6	2818.5
42.5°	4451.2	4470.2	4477.3	3911.7	3284.3	3065.7	3039.5	2999.1	3051.4	3015.8	3063.3
45°	4793.4	4783.9	4914.6	4427.4	3745.3	3405.5	3369.9	3260.5	3327.1	3324.7	3429.3
47.5°	5157.0	5140.3	5195.0	4912.2	4270.5	3821.4	3766.7	3605.1	3704.9	3773.9	3947.3
50°	5501.6	5506.3	5525.3	5294.8	4840.9	4327.6	4258.7	4042.4	4185.0	4330.0	4574.7
52.5°	5950.7	5917.5	5893.7	5741.6	5480.2	4855.2	4810.0	4562.9	4762.5	4933.6	5259.2
55°	6342.8	6321.5	6307.2	6300.1	6014.9	5437.4	5389.9	5133.2	5420.8	5542.0	6022.0
57.5°	6761.1	6749.2	6825.3	6946.5	6832.4	6029.1	5979.2	5732.1	6052.9	6138.5	6849.0
60°	7067.7	7074.8	7283.9	7592.9	7514.5	6670.8	6611.4	6392.8	6668.4	6744.5	7676.1
62.5°	7070.1	7141.3	7626.1	8179.9	8270.2	7409.9	7341.0	7103.3	7300.6	7300.6	8417.5
65°	6395.1	6475.9	7564.4	8324.8	9035.4	8289.2	8222.6	7849.5	7923.2	7823.4	9113.8
67.5°	5722.6	5817.6	6841.9	8336.7	9572.5	9230.3	9151.9	8595.8	8469.8	8217.9	9601.0
70°	5275.8	5342.3	6197.9	8182.2	9895.7	10214.1	10154.7	9303.9	8899.9	8548.2	9498.8
72.5°	4441.7	4417.9	5235.4	7447.9	10076.3	11331.1	11281.2	10073.9	9273.1	8391.4	8101.4
75°	2578.5	2607.0	3248.7	5456.4	9082.9	11913.3	11908.6	10732.2	9109.1	7412.3	5582.4
77.5°	743.8	765.2	1067.0	2397.9	5744.0	10161.9	10487.4	9814.9	7699.8	5282.9	2894.6
80°	325.6	342.2	463.4	798.5	2473.9	6637.5	6922.7	6637.5	4643.7	2424.0	1136.0
82.5°	192.5	204.4	301.8	494.3	1185.9	3158.4	3543.3	3094.2	2003.4	1029.0	470.5
85°	109.3	114.1	173.5	313.7	746.2	1105.1	1240.5	1162.1	976.7	584.6	247.2
87.5°	49.9	52.3	85.6	147.3	418.3	373.1	387.4	513.3	565.6	356.5	123.6
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°	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1865.5	1858.4	1844.2	1839.4	1832.3	1834.6	1837.0	1837.0	1839.4	1832.3	1832.3
5°	1846.5	1834.6	1820.4	1820.4	1820.4	1839.4	1856.0	1865.5	1870.3	1870.3	1865.5
7.5°	1839.4	1825.1	1808.5	1813.3	1818.0	1841.8	1872.7	1903.6	1913.1	1913.1	1908.3
10°	1853.7	1839.4	1827.5	1834.6	1846.5	1865.5	1889.3	1917.8	1941.6	1944.0	1941.6
12.5°	1886.9	1870.3	1858.4	1872.7	1886.9	1898.8	1910.7	1922.6	1953.5	1958.2	1958.2
15°	1941.6	1925.0	1910.7	1922.6	1927.3	1927.3	1927.3	1927.3	1958.2	1963.0	1963.0
17.5°	1996.2	1982.0	1967.7	1970.1	1955.8	1936.8	1929.7	1927.3	1944.0	1958.2	1960.6
20°	2048.5	2036.6	2022.4	1998.6	1963.0	1927.3	1915.4	1915.4	1925.0	1946.3	1946.3
22.5°	2105.6	2091.3	2067.5	2012.9	1953.5	1903.6	1891.7	1898.8	1910.7	1939.2	1936.8
25°	2169.7	2150.7	2110.3	2008.1	1922.6	1863.2	1865.5	1886.9	1908.3	1939.2	1939.2
27.5°	2241.0	2214.9	2134.1	1970.1	1853.7	1796.6	1818.0	1867.9	1898.8	1932.1	1936.8
30°	2319.5	2295.7	2153.1	1903.6	1742.0	1689.7	1742.0	1822.8	1870.3	1901.2	1908.3
32.5°	2414.5	2395.5	2169.7	1818.0	1597.0	1551.8	1627.9	1727.7	1803.8	1839.4	1846.5
35°	2533.3	2514.3	2191.1	1720.6	1461.5	1414.0	1482.9	1585.1	1684.9	1730.1	1744.3
37.5°	2687.8	2659.3	2210.1	1616.0	1347.5	1292.8	1326.1	1418.8	1509.1	1570.9	1587.5
40°	2885.1	2839.9	2226.8	1497.2	1247.7	1185.9	1197.7	1242.9	1295.2	1349.8	1371.2
42.5°	3163.1	3072.8	2229.1	1371.2	1145.5	1088.4	1083.7	1097.9	1097.9	1097.9	1105.1
45°	3550.5	3379.4	2233.9	1252.4	1040.9	981.5	967.2	962.5	926.8	857.9	853.2
47.5°	4040.0	3781.0	2255.3	1152.6	931.6	879.3	860.3	841.3	774.7	703.4	689.2
50°	4667.4	4246.8	2298.1	1057.5	838.9	803.3	779.5	734.3	660.7	606.0	591.7
52.5°	5389.9	4800.5	2338.5	957.7	770.0	746.2	717.7	663.0	584.6	551.3	546.6
55°	6219.3	5418.4	2419.3	869.8	710.6	693.9	667.8	615.5	556.1	532.3	530.0
57.5°	7067.7	6109.9	2533.3	791.4	653.5	644.0	644.0	598.9	560.9	551.3	551.3
60°	7885.2	6704.1	2445.4	717.7	601.3	606.0	651.2	639.3	610.8	622.6	629.8
62.5°	8519.7	7053.4	1984.4	658.3	563.2	606.0	722.5	722.5	689.2	684.4	684.4
65°	8790.6	7048.7	1395.0	613.1	549.0	665.4	805.6	767.6	679.7	646.4	639.3
67.5°	8721.7	6739.7	962.5	582.2	544.2	727.2	843.7	736.7	636.9	608.4	587.0
70°	8115.7	6086.2	741.5	553.7	537.1	701.1	831.8	701.1	603.6	577.5	558.5
72.5°	6547.2	4881.3	615.5	525.2	508.6	648.8	791.4	667.8	577.5	549.0	530.0
75°	4175.5	3070.4	520.5	487.2	453.9	582.2	736.7	634.5	549.0	510.9	496.7
77.5°	2008.1	1323.7	453.9	442.0	408.8	539.5	682.1	591.7	510.9	480.1	470.5
80°	812.8	606.0	394.5	396.9	375.5	513.3	644.0	551.3	472.9	439.7	423.0
82.5°	423.0	351.7	332.7	342.2	342.2	489.6	615.5	518.1	439.7	425.4	370.7
85°	228.1	218.6	256.7	275.7	297.1	442.0	572.7	482.4	401.6	344.6	332.7
87.5°	111.7	142.6	145.0	166.4	206.8	354.1	482.4	404.0	335.1	278.0	273.3
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)