

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: P237345

Luminaire Tested: **ARCH-L-AF72-120-D-U-T4W-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237345
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-120-D-U-T4W-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 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: 16519 lumens
Efficiency: N/A
Efficacy: 134.3 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

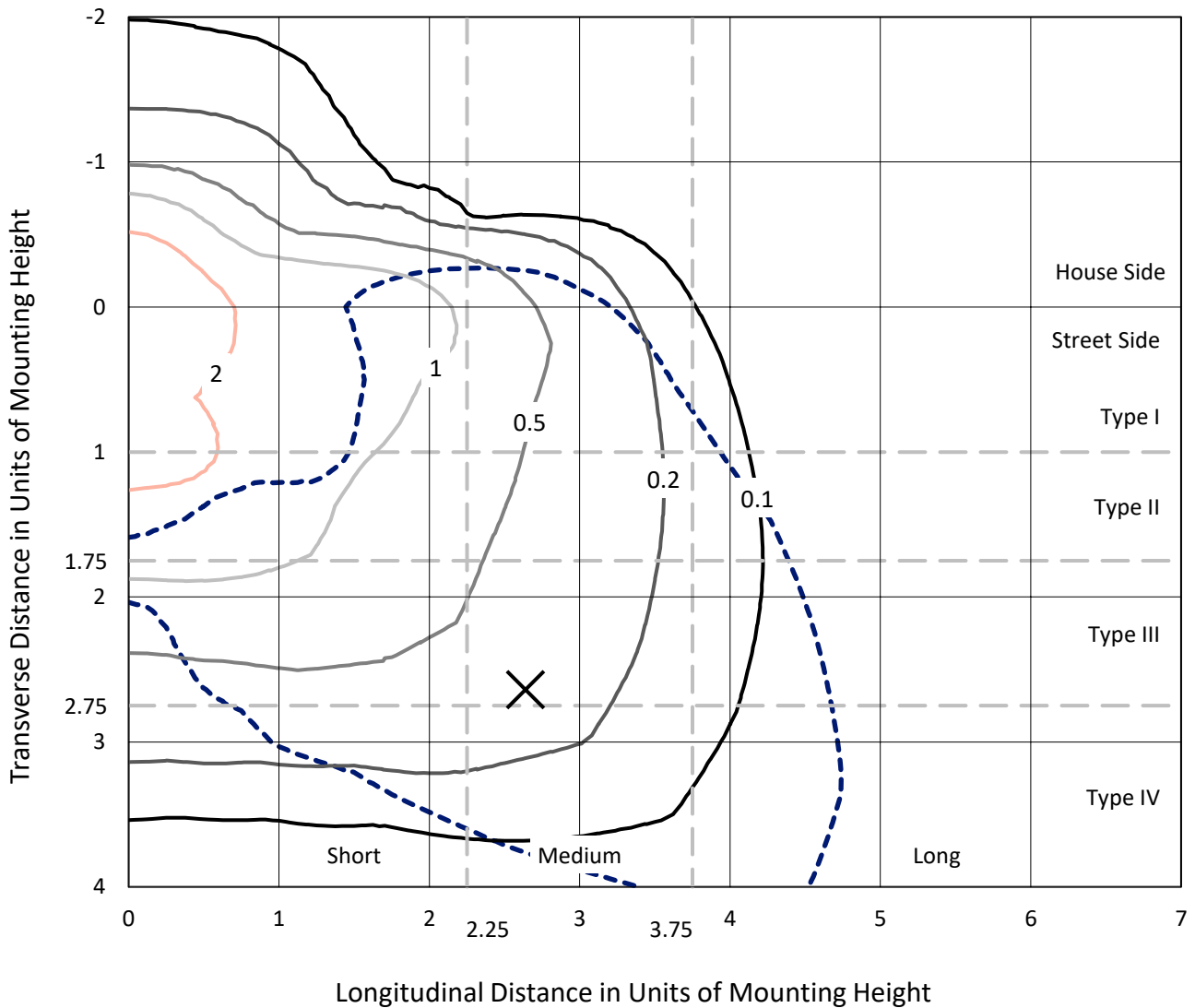
Input Watts (W): 123
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

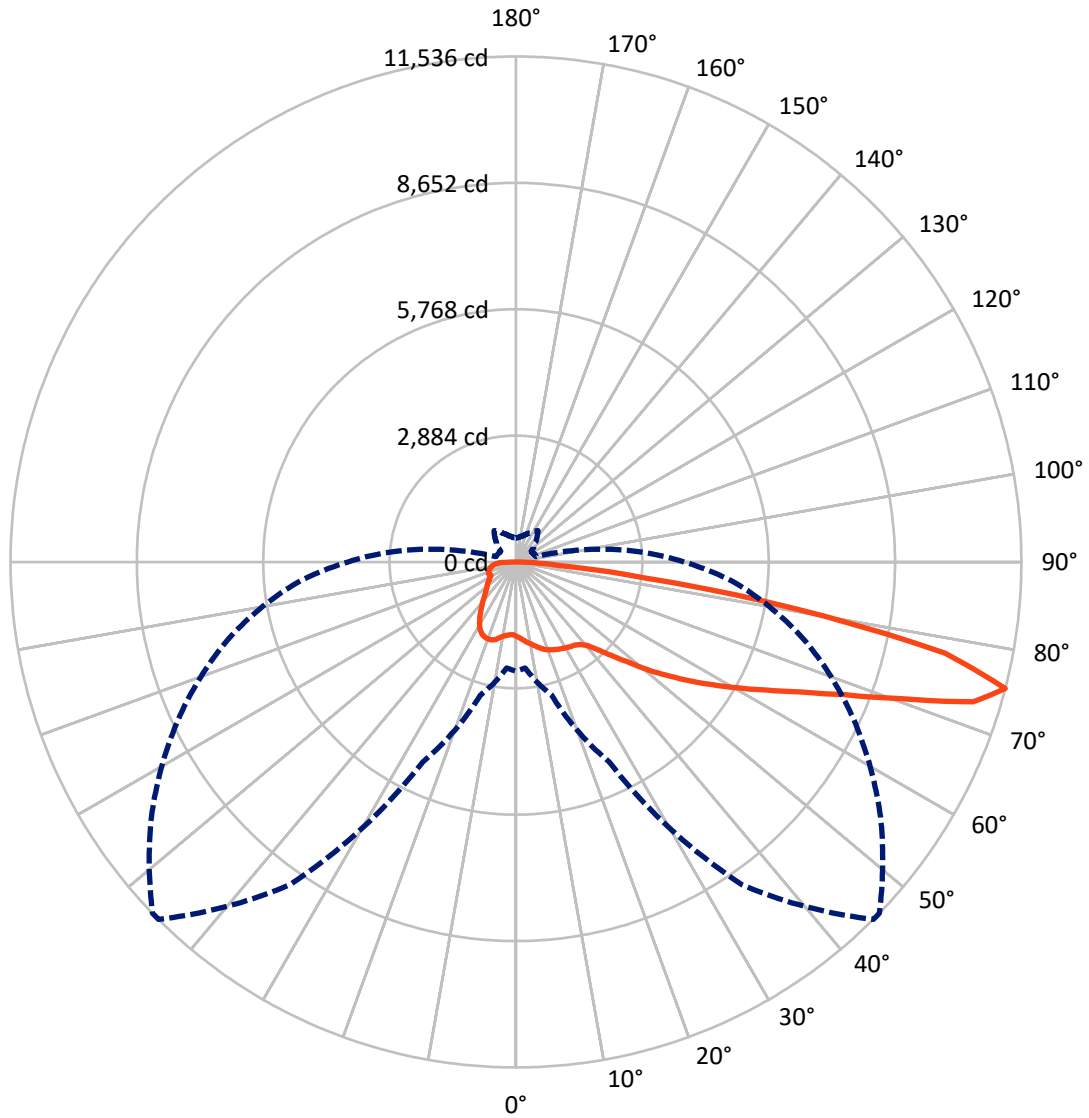
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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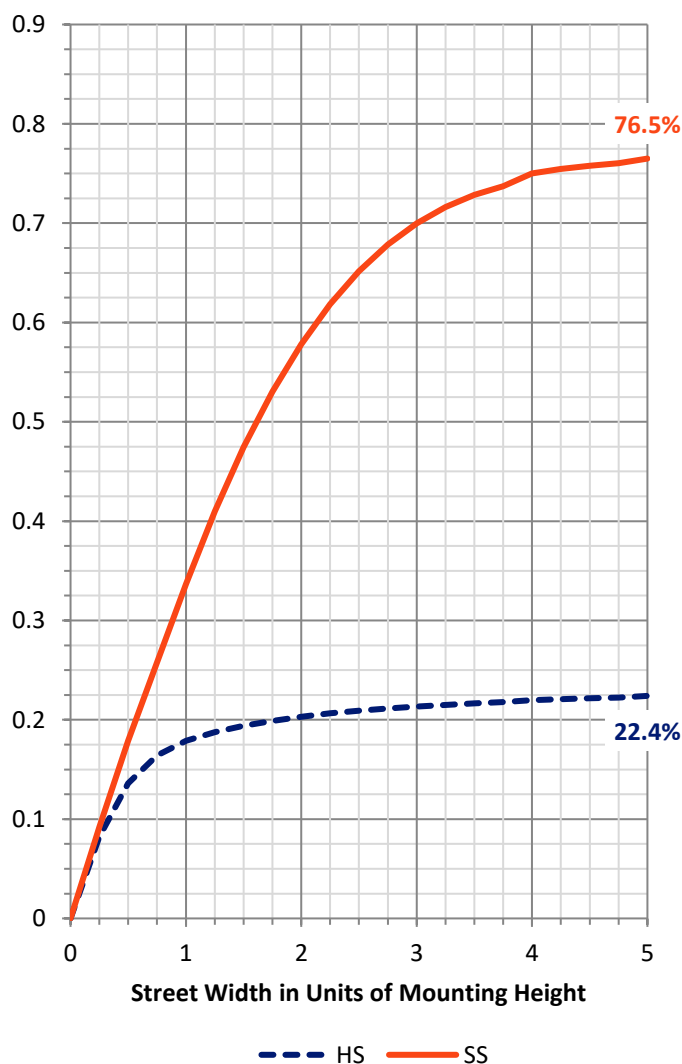
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3826.8	0.0	3826.8
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	12692.2	0.0	12692.2
	% Fixture	76.8	0.0	76.8
Total	Lumens	16519.0	0.0	16519.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	1.0
10°-20°	543.8	3.3
20°-30°	933.2	5.6
30°-40°	1305.2	7.9
40°-50°	1914.6	11.6
50°-60°	2982.4	18.1
60°-70°	4291.5	26.0
70°-80°	3738.4	22.6
80°-90°	642.0	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°	16519.0	100.0
0°-180°	16519.0	100.0

Coefficient of Utilization



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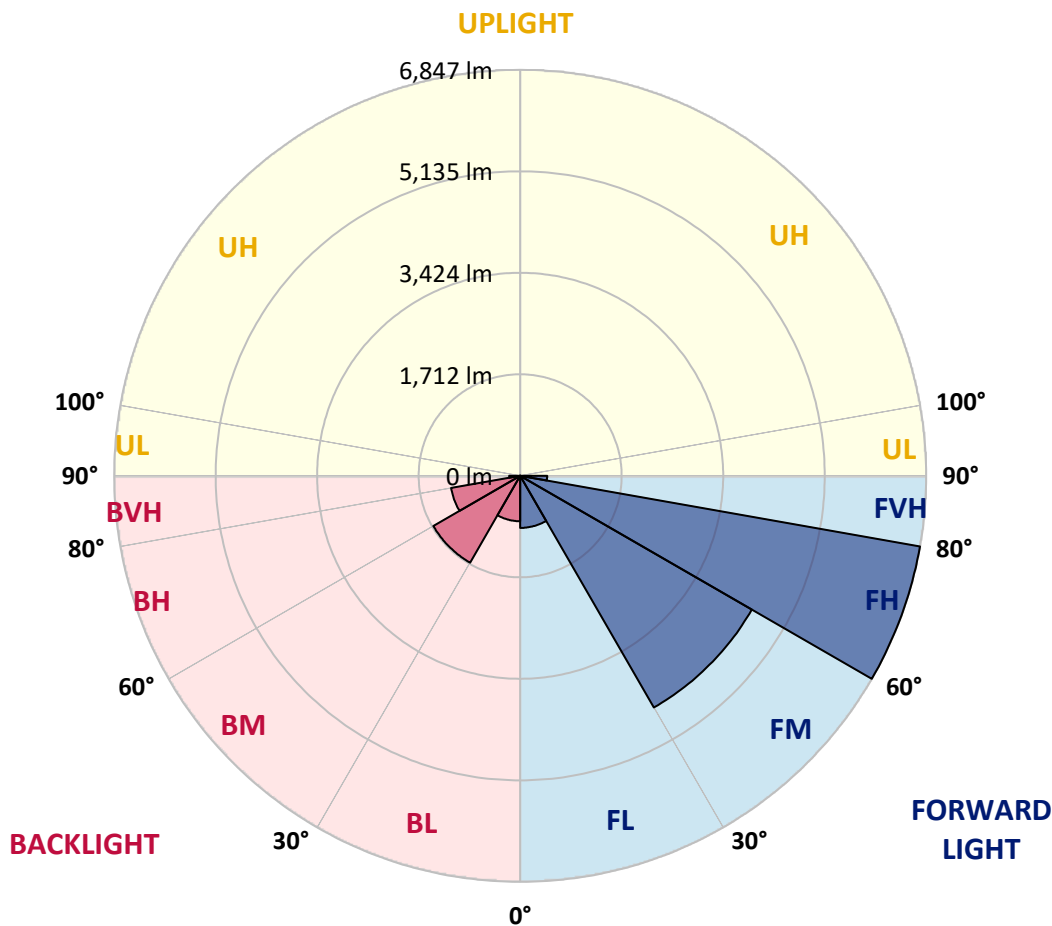
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	878.4	5.3			
FM (30°-60°)	4511.0	27.3			
FH (60°-80°)	6847.3	41.5			G3/7500
FVH (80°-90°)	455.5	2.8			G3/500
BL (0°-30°)	766.4	4.6	B2/1000		
BM (30°-60°)	1691.2	10.2	B2/2500		
BH (60°-80°)	1182.6	7.2	B3/2500		G3/2500
BVH (80°-90°)	186.5	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°	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4
2.5°	1777.0	1764.1	1764.1	1754.5	1754.5	1738.4	1732.0	1728.8	1712.7	1703.1	1693.4
5°	1879.8	1863.7	1860.5	1838.0	1828.4	1793.0	1789.8	1767.3	1738.4	1709.5	1687.0
7.5°	1973.0	1963.4	1947.3	1924.8	1895.9	1850.9	1847.7	1812.3	1764.1	1725.6	1693.4
10°	2040.5	2034.0	2011.6	1982.6	1950.5	1905.5	1902.3	1863.7	1805.9	1760.9	1715.9
12.5°	2120.8	2111.2	2082.2	2043.7	2008.3	1966.6	1963.4	1931.2	1867.0	1809.1	1751.3
15°	2197.9	2185.1	2149.7	2111.2	2072.6	2037.3	2037.3	2001.9	1934.4	1867.0	1799.5
17.5°	2236.5	2230.1	2194.7	2152.9	2120.8	2095.1	2091.9	2059.8	1992.3	1921.6	1847.7
20°	2249.3	2252.6	2220.4	2175.4	2152.9	2140.1	2136.9	2114.4	2040.5	1973.0	1902.3
22.5°	2246.1	2255.8	2230.1	2181.9	2175.4	2175.4	2175.4	2149.7	2091.9	2024.4	1953.7
25°	2259.0	2271.8	2252.6	2194.7	2194.7	2207.6	2207.6	2194.7	2143.3	2085.5	2014.8
27.5°	2304.0	2313.6	2297.5	2217.2	2220.4	2239.7	2236.5	2239.7	2207.6	2152.9	2082.2
30°	2358.6	2371.4	2352.2	2252.6	2249.3	2268.6	2268.6	2284.7	2262.2	2204.4	2146.5
32.5°	2506.4	2503.2	2442.1	2291.1	2281.5	2300.8	2300.8	2316.8	2304.0	2259.0	2204.4
35°	2946.6	2898.4	2763.5	2416.4	2320.0	2329.7	2329.7	2358.6	2365.0	2329.7	2281.5
37.5°	3396.5	3380.4	3277.6	2750.6	2461.4	2390.7	2387.5	2429.3	2458.2	2429.3	2397.2
40°	3849.6	3836.7	3814.2	3197.3	2757.0	2500.0	2490.3	2525.7	2577.1	2557.8	2538.5
42.5°	4270.5	4264.1	4286.6	3637.5	3133.0	2734.6	2705.6	2663.9	2737.8	2731.3	2731.3
45°	4601.5	4617.6	4630.4	4048.8	3541.1	3036.6	3001.3	2859.9	2959.5	2985.2	3004.5
47.5°	4787.9	4800.7	4845.7	4450.5	3949.2	3386.9	3361.2	3129.8	3261.5	3338.7	3393.3
50°	5054.6	5019.2	5057.8	4842.5	4440.8	3843.2	3772.5	3492.9	3660.0	3795.0	3923.5
52.5°	5311.7	5253.8	5285.9	5295.6	5000.0	4289.8	4215.9	3920.3	4129.1	4341.2	4569.4
55°	5543.0	5539.8	5571.9	5735.8	5539.8	4768.6	4685.1	4392.6	4694.7	4922.8	5308.4
57.5°	5729.4	5761.5	5902.9	6246.7	6163.2	5289.2	5196.0	4942.1	5298.8	5527.0	6166.4
60°	5947.9	5999.3	6233.9	6680.5	6732.0	5835.4	5739.0	5555.9	5919.0	6150.3	7159.3
62.5°	6021.8	6095.7	6577.7	7136.8	7326.4	6433.1	6346.4	6224.2	6571.3	6780.2	8149.0
65°	5530.2	5671.6	6767.3	7371.4	7965.9	7152.9	7079.0	6973.0	7220.4	7358.6	8820.6
67.5°	5395.2	5459.5	6397.8	7708.8	8566.8	8078.3	8004.4	7821.3	7827.7	7769.9	9039.1
70°	5205.6	5276.3	6018.6	7962.7	9427.9	9344.4	9254.4	8714.6	8383.6	8033.4	8608.5
72.5°	4434.4	4411.9	5186.3	7278.2	9842.5	10912.5	10806.5	9675.4	8794.9	7805.2	7265.4
75°	2490.3	2426.1	3145.9	5035.3	8987.7	11535.9	11532.7	10160.6	8505.7	6799.4	4945.3
77.5°	723.0	703.7	1037.9	2111.2	6050.7	10022.4	10144.5	9164.5	7098.3	4884.3	2715.3
80°	340.6	347.0	446.7	697.3	2583.5	6468.5	6818.7	6034.7	4241.6	2252.6	1121.5
82.5°	215.3	218.5	305.3	449.9	1092.5	2937.0	3226.2	2715.3	1680.6	973.6	494.9
85°	135.0	135.0	202.4	295.6	652.3	938.3	1018.6	925.4	719.8	530.2	269.9
87.5°	73.9	73.9	122.1	170.3	356.7	302.1	311.7	369.5	449.9	324.5	135.0
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°	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4	1693.4
2.5°	1690.2	1683.8	1674.2	1670.9	1667.7	1664.5	1667.7	1674.2	1667.7	1667.7	1670.9
5°	1680.6	1674.2	1661.3	1661.3	1664.5	1667.7	1683.8	1693.4	1696.6	1696.6	1696.6
7.5°	1680.6	1670.9	1661.3	1664.5	1670.9	1683.8	1709.5	1725.6	1738.4	1741.6	1741.6
10°	1696.6	1683.8	1677.4	1683.8	1703.1	1712.7	1738.4	1764.1	1780.2	1786.6	1786.6
12.5°	1725.6	1712.7	1712.7	1725.6	1751.3	1764.1	1786.6	1805.9	1825.2	1834.8	1834.8
15°	1773.8	1757.7	1760.9	1783.4	1812.3	1825.2	1841.2	1847.7	1863.7	1876.6	1876.6
17.5°	1818.8	1802.7	1809.1	1834.8	1854.1	1860.5	1870.2	1867.0	1873.4	1883.0	1886.2
20°	1870.2	1854.1	1857.3	1873.4	1876.6	1870.2	1870.2	1860.5	1857.3	1873.4	1879.8
22.5°	1921.6	1905.5	1902.3	1892.7	1876.6	1860.5	1850.9	1841.2	1834.8	1850.9	1857.3
25°	1982.6	1960.1	1944.1	1902.3	1860.5	1831.6	1818.8	1812.3	1809.1	1825.2	1831.6
27.5°	2050.1	2027.6	1979.4	1889.4	1822.0	1773.8	1764.1	1764.1	1770.6	1780.2	1786.6
30°	2114.4	2091.9	2005.1	1860.5	1754.5	1683.8	1674.2	1683.8	1699.9	1709.5	1719.1
32.5°	2178.6	2156.2	2021.2	1815.5	1654.9	1564.9	1558.5	1574.5	1600.2	1606.7	1613.1
35°	2265.4	2242.9	2040.5	1751.3	1529.6	1433.2	1426.7	1436.4	1458.9	1468.5	1478.1
37.5°	2387.5	2374.7	2069.4	1680.6	1413.9	1307.8	1288.6	1282.1	1295.0	1291.8	1304.6
40°	2548.2	2557.8	2120.8	1587.4	1301.4	1192.2	1150.4	1131.1	1118.2	1092.5	1105.4
42.5°	2782.8	2789.2	2178.6	1481.4	1205.0	1082.9	1028.3	992.9	967.2	925.4	931.9
45°	3126.6	3072.0	2246.1	1368.9	1118.2	996.1	931.9	890.1	854.7	819.4	822.6
47.5°	3582.9	3415.8	2320.0	1275.7	1031.5	925.4	867.6	819.4	777.6	748.7	751.9
50°	4145.2	3843.2	2393.9	1188.9	944.7	870.8	819.4	768.0	726.2	697.3	694.1
52.5°	4887.5	4357.3	2442.1	1092.5	858.0	822.6	777.6	729.4	678.0	642.7	639.5
55°	5658.7	4955.0	2483.9	976.9	774.4	768.0	745.5	690.9	629.8	584.8	578.4
57.5°	6507.0	5594.4	2516.0	864.4	710.1	723.0	716.6	652.3	584.8	543.1	539.8
60°	7278.2	6256.4	2413.2	764.8	652.3	678.0	684.4	629.8	594.5	604.1	607.3
62.5°	8055.9	6767.3	2021.2	690.9	613.7	649.1	703.7	700.5	684.4	700.5	703.7
65°	8335.4	6873.3	1433.2	629.8	575.2	661.9	764.8	758.3	684.4	655.5	649.1
67.5°	8178.0	6558.4	964.0	581.6	546.3	678.0	829.0	758.3	658.7	620.2	607.3
70°	7429.2	5784.0	706.9	533.4	520.6	674.8	864.4	755.1	645.9	604.1	588.0
72.5°	5925.4	4463.3	568.8	488.4	482.0	658.7	883.7	748.7	633.0	588.0	568.8
75°	3836.7	2776.3	478.8	443.4	424.2	633.0	874.0	729.4	617.0	559.1	546.3
77.5°	1780.2	1195.4	408.1	392.0	369.5	594.5	845.1	690.9	581.6	527.0	510.9
80°	829.0	565.5	343.8	340.6	331.0	562.3	806.5	645.9	539.8	494.9	469.1
82.5°	443.4	340.6	279.6	279.6	289.2	523.8	758.3	591.3	485.2	462.7	395.2
85°	234.6	196.0	202.4	218.5	247.4	462.7	694.1	533.4	424.2	353.5	343.8
87.5°	118.9	125.3	125.3	147.8	189.6	376.0	572.0	440.2	359.9	289.2	282.8
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)