

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: P237307

Luminaire Tested: **ARCH-L-AF72-140-D-U-T4W-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237307
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-AF72-140-D-U-T4W-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 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: 18217.9 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

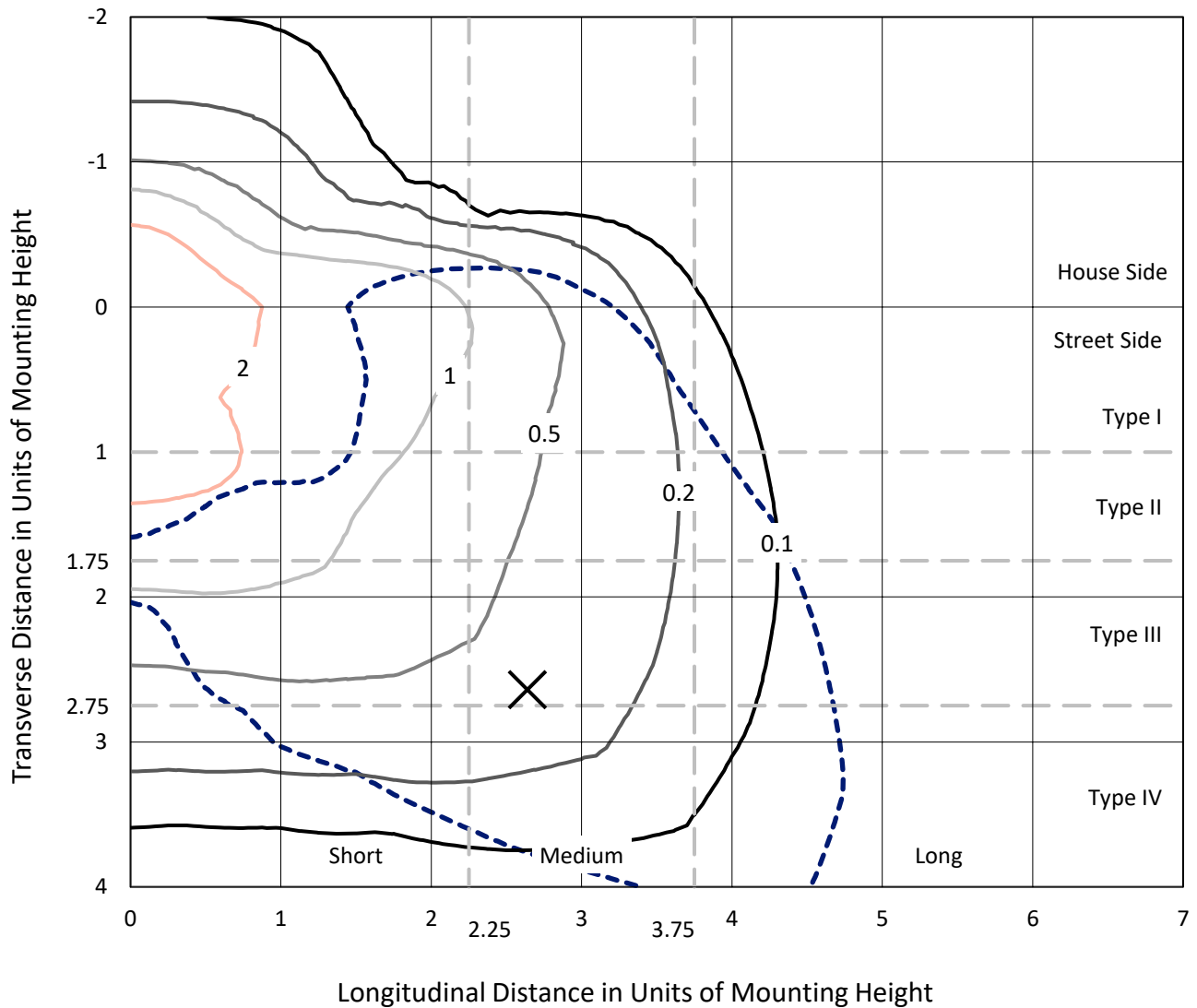
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

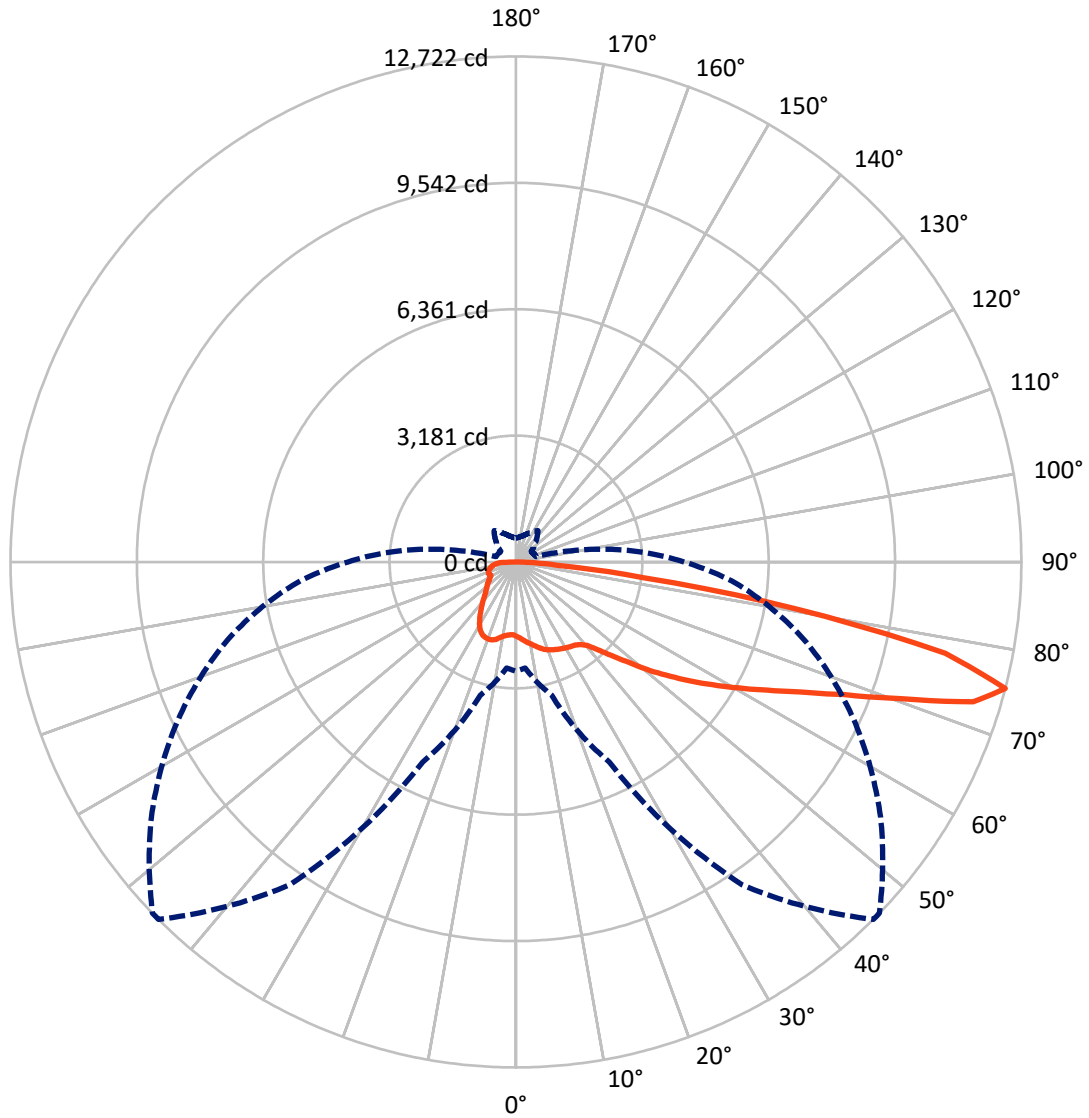
× Max cd
 - - - 1/2 Max cd



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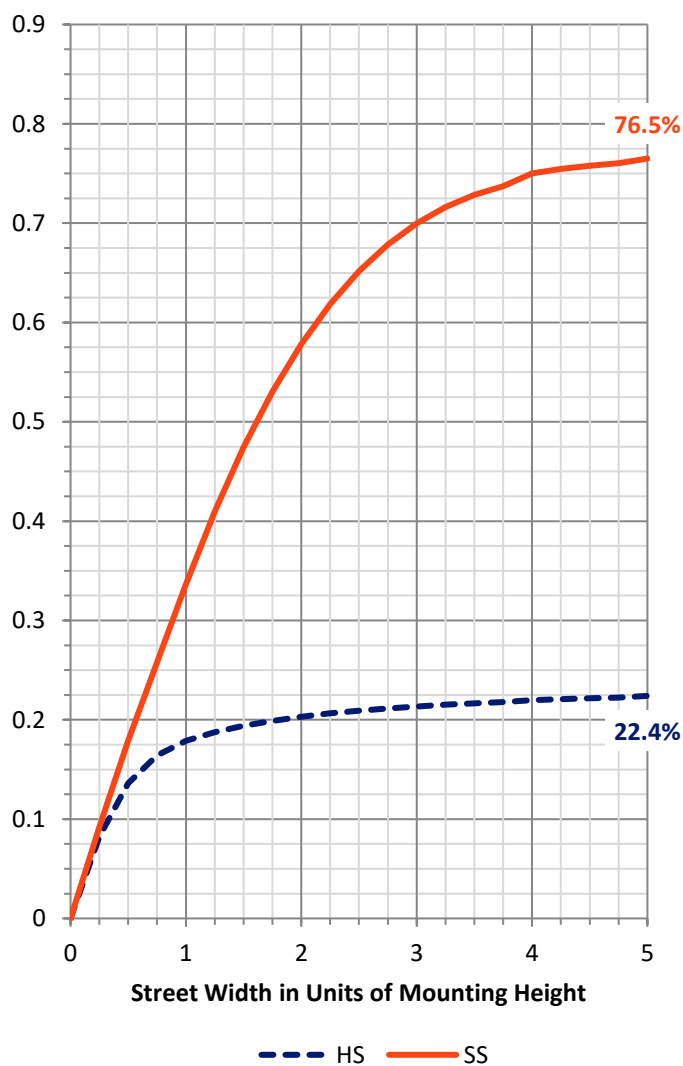
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4220.3	0.0	4220.3
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	13997.5	0.0	13997.5
	% Fixture	76.8	0.0	76.8
Total	Lumens	18217.9	0.0	18217.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.1	1.0
10°-20°	599.8	3.3
20°-30°	1029.2	5.6
30°-40°	1439.4	7.9
40°-50°	2111.5	11.6
50°-60°	3289.2	18.1
60°-70°	4732.9	26.0
70°-80°	4122.8	22.6
80°-90°	708.1	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°	18217.9	100.0
0°-180°	18217.9	100.0

Coefficient of Utilization



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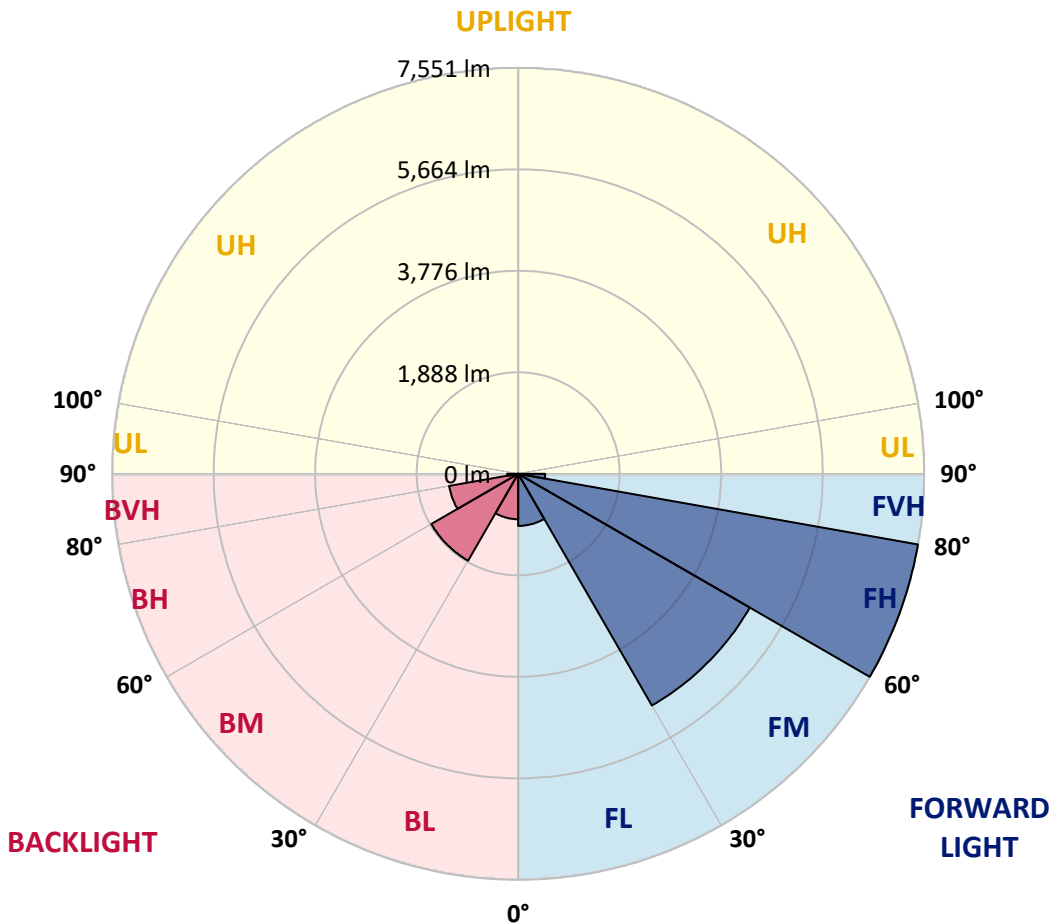
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	968.8	5.3			
FM (30°-60°)	4975.0	27.3			
FH (60°-80°)	7551.5	41.5			G4/12000
FVH (80°-90°)	502.4	2.8			G4/750
BL (0°-30°)	845.3	4.6	B2/1000		
BM (30°-60°)	1865.1	10.2	B2/2500		
BH (60°-80°)	1304.2	7.2	B3/2500		G3/2500
BVH (80°-90°)	205.7	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6
2.5°	1959.8	1945.6	1945.6	1934.9	1934.9	1917.2	1910.1	1906.6	1888.9	1878.2	1867.6
5°	2073.0	2055.3	2051.9	2027.1	2016.4	1977.5	1973.9	1949.0	1917.2	1885.3	1860.4
7.5°	2175.9	2165.3	2147.6	2122.8	2090.9	2041.3	2037.6	1998.7	1945.6	1903.1	1867.6
10°	2250.3	2243.2	2218.4	2186.5	2151.1	2101.5	2097.9	2055.3	1991.6	1942.0	1892.4
12.5°	2338.9	2328.4	2296.4	2253.9	2214.9	2168.8	2165.3	2129.8	2059.0	1995.2	1931.3
15°	2424.0	2409.8	2370.8	2328.4	2285.8	2246.8	2246.8	2207.8	2133.4	2059.0	1984.5
17.5°	2466.5	2459.4	2420.4	2374.3	2338.9	2310.7	2307.0	2271.6	2197.2	2119.2	2037.6
20°	2480.6	2484.2	2448.8	2399.2	2374.3	2360.2	2356.6	2331.8	2250.3	2175.9	2097.9
22.5°	2477.1	2487.8	2459.4	2406.2	2399.2	2399.2	2399.2	2370.8	2307.0	2232.6	2154.6
25°	2491.3	2505.6	2484.2	2420.4	2420.4	2434.7	2434.7	2420.4	2363.8	2299.9	2222.0
27.5°	2541.0	2551.5	2533.8	2445.2	2448.8	2470.1	2466.5	2470.1	2434.7	2374.3	2296.4
30°	2601.1	2615.3	2594.1	2484.2	2480.6	2501.9	2501.9	2519.6	2494.8	2431.0	2367.3
32.5°	2764.2	2760.7	2693.3	2526.7	2516.1	2537.3	2537.3	2555.1	2541.0	2491.3	2431.0
35°	3249.7	3196.5	3047.7	2665.0	2558.7	2569.2	2569.2	2601.1	2608.2	2569.2	2516.1
37.5°	3745.9	3728.2	3614.8	3033.5	2714.5	2636.7	2633.0	2679.1	2711.0	2679.1	2643.6
40°	4245.5	4231.3	4206.5	3526.2	3040.5	2757.0	2746.4	2785.4	2842.2	2820.8	2799.7
42.5°	4709.7	4702.6	4727.4	4011.6	3455.3	3015.8	2983.9	2937.9	3019.4	3012.3	3012.3
45°	5074.8	5092.5	5106.7	4465.2	3905.3	3348.9	3309.9	3154.0	3263.9	3292.2	3313.5
47.5°	5280.3	5294.4	5344.1	4908.2	4355.4	3735.1	3706.8	3451.7	3597.0	3682.0	3742.2
50°	5574.4	5535.4	5578.0	5340.5	4897.5	4238.3	4160.5	3852.2	4036.4	4185.2	4327.0
52.5°	5857.9	5794.1	5829.5	5840.2	5514.2	4731.0	4649.5	4323.5	4553.8	4787.7	5039.2
55°	6113.0	6109.6	6145.0	6325.7	6109.6	5258.9	5166.9	4844.4	5177.5	5429.1	5854.4
57.5°	6318.7	6354.1	6510.0	6889.3	6797.0	5833.2	5730.3	5450.4	5843.7	6095.3	6800.7
60°	6559.6	6616.3	6875.0	7367.6	7424.2	6435.6	6329.3	6127.3	6527.7	6782.9	7895.6
62.5°	6641.1	6722.6	7254.2	7870.8	8079.9	7094.7	6999.0	6864.3	7247.0	7477.4	8987.1
65°	6099.0	6254.9	7463.3	8129.6	8785.1	7888.5	7807.0	7690.1	7963.0	8115.3	9727.8
67.5°	5950.0	6020.9	7055.8	8501.6	9447.8	8909.1	8827.6	8625.7	8632.8	8568.9	9968.7
70°	5741.0	5818.9	6637.6	8781.6	10397.5	10305.5	10206.2	9610.9	9245.8	8859.5	9493.9
72.5°	4890.5	4865.7	5719.7	8026.7	10854.7	12034.8	11917.9	10670.5	9699.4	8607.9	8012.5
75°	2746.4	2675.5	3469.4	5553.2	9912.1	12722.2	12718.8	11205.5	9380.5	7498.7	5453.9
77.5°	797.4	776.1	1144.6	2328.4	6673.0	11053.2	11187.8	10106.9	7828.3	5386.6	2994.6
80°	375.7	382.7	492.5	768.9	2849.3	7133.7	7520.0	6655.3	4677.8	2484.2	1236.9
82.5°	237.4	241.0	336.6	496.1	1204.9	3239.1	3558.0	2994.6	1853.4	1073.8	545.8
85°	148.8	148.8	223.2	326.0	719.4	1034.8	1123.4	1020.6	793.8	584.7	297.7
87.5°	81.5	81.5	134.7	187.8	393.4	333.1	343.7	407.5	496.1	358.0	148.8
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°	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6	1867.6
2.5°	1864.1	1857.0	1846.4	1842.7	1839.3	1835.7	1839.3	1846.4	1839.3	1839.3	1842.7
5°	1853.4	1846.4	1832.2	1832.2	1835.7	1839.3	1857.0	1867.6	1871.2	1871.2	1871.2
7.5°	1853.4	1842.7	1832.2	1835.7	1842.7	1857.0	1885.3	1903.1	1917.2	1920.8	1920.8
10°	1871.2	1857.0	1849.9	1857.0	1878.2	1888.9	1917.2	1945.6	1963.3	1970.4	1970.4
12.5°	1903.1	1888.9	1888.9	1903.1	1931.3	1945.6	1970.4	1991.6	2012.9	2023.5	2023.5
15°	1956.2	1938.5	1942.0	1966.7	1998.7	2012.9	2030.6	2037.6	2055.3	2069.6	2069.6
17.5°	2005.8	1988.1	1995.2	2023.5	2044.8	2051.9	2062.5	2059.0	2066.1	2076.7	2080.2
20°	2062.5	2044.8	2048.3	2066.1	2069.6	2062.5	2062.5	2051.9	2048.3	2066.1	2073.0
22.5°	2119.2	2101.5	2097.9	2087.3	2069.6	2051.9	2041.3	2030.6	2023.5	2041.3	2048.3
25°	2186.5	2161.7	2144.0	2097.9	2051.9	2019.9	2005.8	1998.7	1995.2	2012.9	2019.9
27.5°	2260.9	2236.1	2183.0	2083.8	2009.4	1956.2	1945.6	1945.6	1952.7	1963.3	1970.4
30°	2331.8	2307.0	2211.3	2051.9	1934.9	1857.0	1846.4	1857.0	1874.7	1885.3	1895.9
32.5°	2402.7	2377.9	2229.1	2002.2	1825.0	1725.9	1718.7	1736.4	1764.9	1771.8	1779.0
35°	2498.4	2473.6	2250.3	1931.3	1686.9	1580.6	1573.5	1584.0	1608.9	1619.5	1630.1
37.5°	2633.0	2618.8	2282.2	1853.4	1559.2	1442.3	1421.0	1414.1	1428.1	1424.6	1438.8
40°	2810.2	2820.8	2338.9	1750.7	1435.2	1314.7	1268.7	1247.4	1233.2	1204.9	1219.2
42.5°	3069.0	3076.0	2402.7	1633.8	1328.9	1194.3	1134.0	1095.0	1066.7	1020.6	1027.7
45°	3448.1	3387.9	2477.1	1509.6	1233.2	1098.6	1027.7	981.5	942.7	903.7	907.2
47.5°	3951.4	3767.0	2558.7	1406.9	1137.6	1020.6	956.8	903.7	857.5	825.7	829.3
50°	4571.5	4238.3	2640.1	1311.2	1041.9	960.4	903.7	847.0	800.9	768.9	765.5
52.5°	5390.2	4805.4	2693.3	1204.9	946.1	907.2	857.5	804.4	747.8	708.8	705.3
55°	6240.7	5464.6	2739.3	1077.3	854.1	847.0	822.1	762.0	694.6	644.9	637.8
57.5°	7176.2	6169.8	2774.8	953.3	783.2	797.4	790.3	719.4	644.9	599.0	595.4
60°	8026.7	6899.8	2661.4	843.5	719.4	747.8	754.9	694.6	655.5	666.3	669.8
62.5°	8884.3	7463.3	2229.1	762.0	676.9	715.8	776.1	772.6	754.9	772.6	776.1
65°	9192.6	7580.2	1580.6	694.6	634.4	730.1	843.5	836.4	754.9	723.0	715.8
67.5°	9019.1	7233.0	1063.1	641.5	602.4	747.8	914.3	836.4	726.5	684.0	669.8
70°	8193.4	6378.9	779.7	588.3	574.0	744.2	953.3	832.8	712.3	666.3	648.6
72.5°	6534.8	4922.3	627.2	538.6	531.5	726.5	974.6	825.7	698.1	648.6	627.2
75°	4231.3	3061.9	528.0	489.1	467.7	698.1	963.8	804.4	680.4	616.7	602.4
77.5°	1963.3	1318.3	450.0	432.3	407.5	655.5	932.0	762.0	641.5	581.1	563.4
80°	914.3	623.8	379.2	375.7	365.0	620.1	889.5	712.3	595.4	545.8	517.5
82.5°	489.1	375.7	308.3	308.3	318.9	577.7	836.4	652.1	535.2	510.4	435.8
85°	258.7	216.3	223.2	241.0	272.8	510.4	765.5	588.3	467.7	389.8	379.2
87.5°	131.1	138.2	138.2	163.1	209.1	414.6	630.8	485.5	396.9	318.9	311.8
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)