

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: P236830

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2R-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236830
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T2R-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21407.2 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

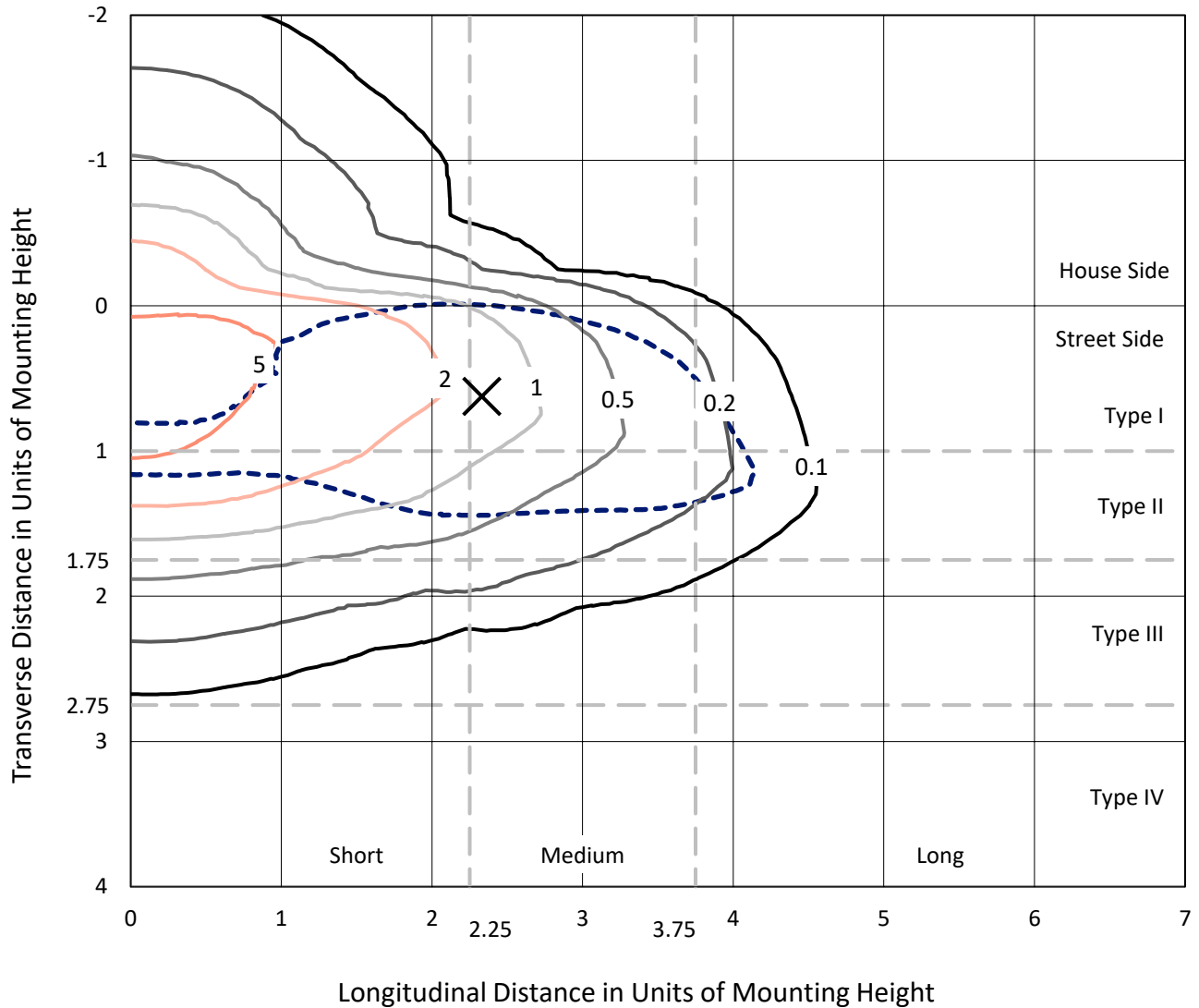
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

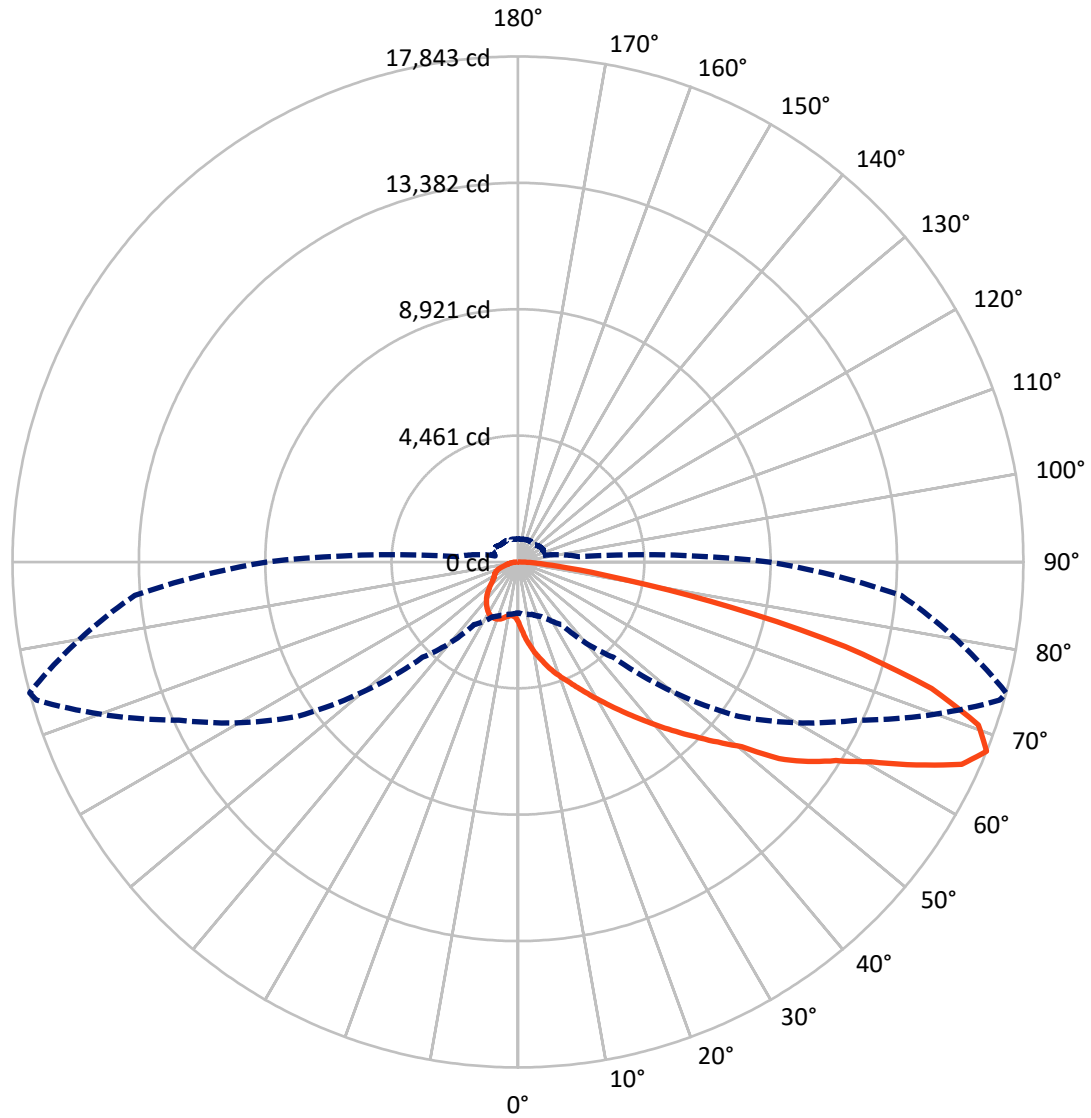
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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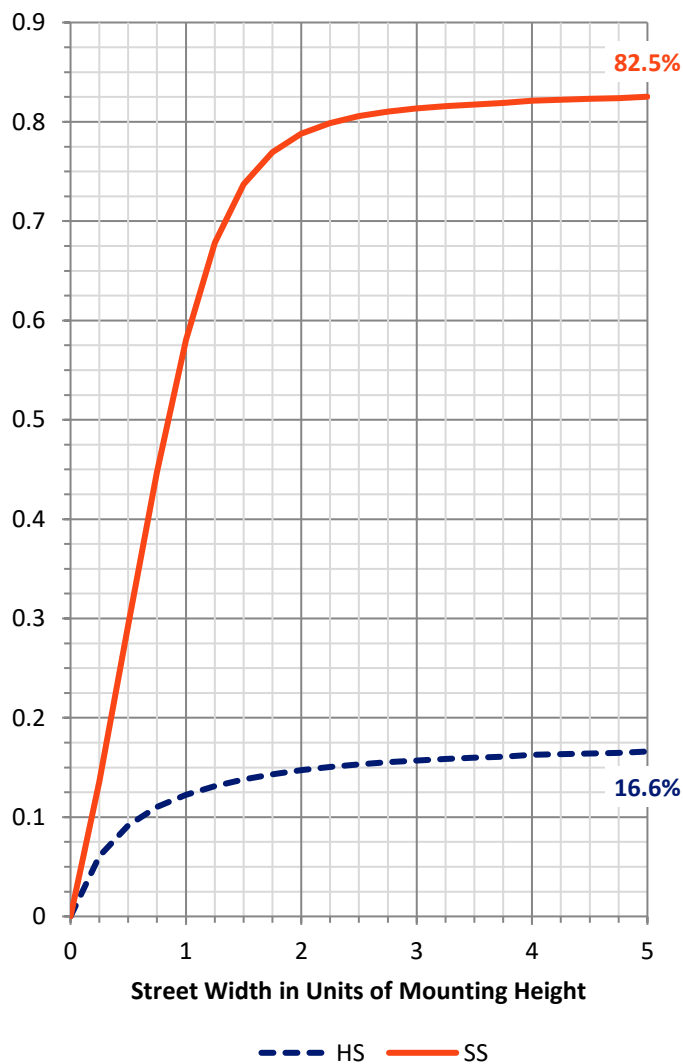
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3655.5	0.0	3655.5
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	17751.6	0.0	17751.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	21407.2	0.0	21407.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.2	1.2
10°-20°	900.6	4.2
20°-30°	1642.6	7.7
30°-40°	2696.2	12.6
40°-50°	3899.0	18.2
50°-60°	4595.0	21.5
60°-70°	4465.2	20.9
70°-80°	2482.1	11.6
80°-90°	477.2	2.2
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°	21407.2	100.0
0°-180°	21407.2	100.0

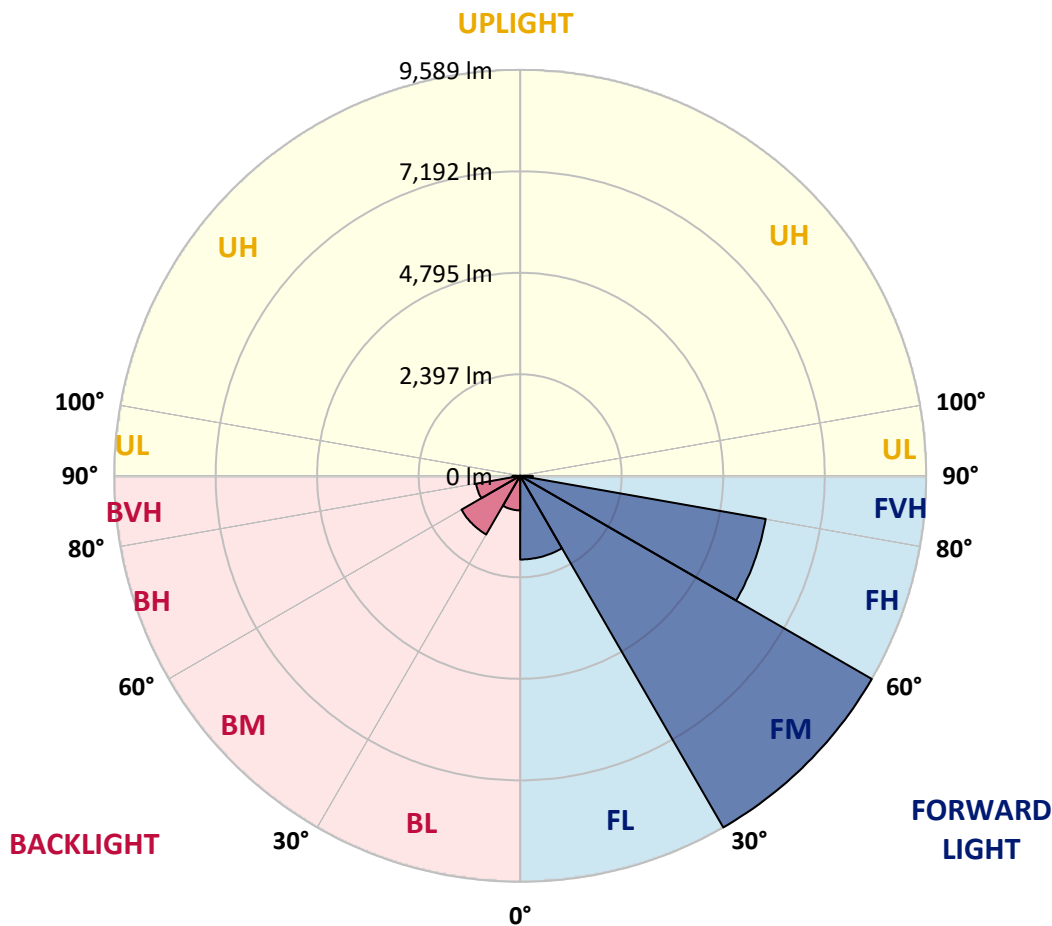


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1976.4	9.2			
FM (30°-60°)	9589.3	44.8			
FH (60°-80°)	5888.9	27.5			G3/7500
FVH (80°-90°)	297.0	1.4			G3/500
BL (0°-30°)	815.9	3.8	B2/1000		
BM (30°-60°)	1601.0	7.5	B2/2500		
BH (60°-80°)	1058.4	4.9	B3/2500		G3/2500
BVH (80°-90°)	180.2	0.8			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3
2.5°	3007.4	3016.3	2998.4	2958.0	2900.0	2792.5	2698.6	2532.9	2385.2	2367.4	2210.8
5°	3535.4	3544.4	3522.0	3472.7	3410.1	3293.7	3163.9	2949.1	2712.0	2667.2	2336.1
7.5°	3898.0	3902.4	3875.5	3826.3	3777.1	3660.7	3530.9	3289.2	2998.4	2962.6	2497.1
10°	4206.7	4215.7	4179.8	4148.5	4094.8	3978.4	3844.2	3589.0	3289.2	3240.1	2662.7
12.5°	4493.1	4502.0	4479.6	4452.9	4435.0	4327.5	4179.8	3875.5	3553.3	3499.6	2859.7
15°	4685.5	4694.5	4698.9	4734.8	4757.1	4681.1	4533.3	4202.2	3839.7	3790.5	3092.4
17.5°	4631.8	4654.2	4721.3	4851.1	4989.9	4994.3	4873.5	4524.4	4121.7	4067.9	3329.5
20°	4475.2	4493.1	4573.6	4770.6	5043.5	5200.2	5191.2	4851.1	4385.6	4327.5	3548.8
22.5°	4604.9	4627.3	4627.3	4748.2	5016.6	5307.6	5423.9	5173.3	4649.7	4596.0	3768.2
25°	5159.9	5173.3	5079.4	5030.1	5128.5	5397.1	5616.4	5522.4	4972.0	4909.2	4005.3
27.5°	5934.1	5911.7	5795.3	5598.5	5491.1	5562.6	5786.4	5853.6	5343.4	5267.3	4251.4
30°	6703.8	6690.4	6556.1	6292.1	6050.4	5898.3	5974.4	6148.9	5746.2	5656.7	4488.6
32.5°	7424.3	7402.0	7254.3	6945.5	6672.5	6390.6	6242.8	6417.5	6175.8	6072.8	4752.7
35°	8086.8	8028.5	7880.8	7558.5	7276.6	7008.1	6645.7	6672.5	6641.3	6533.8	5043.5
37.5°	8623.8	8578.9	8417.9	8118.0	7818.1	7563.0	7182.7	6963.4	7142.4	7039.5	5379.2
40°	9098.0	9048.9	8883.3	8583.4	8306.0	8064.3	7764.5	7317.0	7706.3	7589.9	5755.1
42.5°	9456.1	9420.3	9286.1	8990.6	8722.1	8502.9	8355.2	7764.5	8292.6	8180.7	6166.8
45°	9648.4	9612.7	9541.1	9304.0	9057.8	8887.7	8901.2	8297.0	8905.6	8811.6	6654.7
47.5°	9411.4	9438.2	9500.8	9456.1	9304.0	9223.3	9388.9	8847.5	9590.3	9500.8	7182.7
50°	8775.8	8802.7	9053.3	9362.1	9415.9	9514.3	9827.6	9482.9	10315.2	10243.7	7836.1
52.5°	7214.1	7361.7	8055.3	8793.7	9299.5	9706.7	10315.2	10427.1	11537.0	11537.0	8990.6
55°	5450.8	5580.5	6372.6	7661.5	8847.5	9724.6	10673.3	11067.2	12418.6	12436.6	9594.8
57.5°	4417.1	4497.5	4886.9	6207.1	7898.7	9500.8	11098.4	11617.6	13152.6	13233.2	10373.5
60°	3584.6	3629.4	3884.5	4801.8	6587.5	8896.7	11402.8	12405.2	14199.8	14311.7	11367.0
62.5°	2882.0	2926.7	3096.9	3647.3	5168.8	7764.5	11349.1	13224.2	15596.0	15779.6	12669.2
65°	2300.2	2349.5	2461.4	2801.5	3830.7	6359.2	10798.6	13644.9	17041.5	17220.6	13533.0
67.5°	1794.6	1839.3	1915.5	2139.2	2698.6	4757.1	9496.4	13201.8	17690.3	17842.6	13577.7
70°	1356.0	1378.3	1441.0	1584.3	1928.8	3159.4	7433.4	11716.1	17108.7	17247.3	12682.7
72.5°	1051.6	1047.1	1083.0	1154.7	1347.0	2175.0	4927.1	9527.7	15126.2	15269.3	10821.0
75°	859.3	854.7	877.2	899.5	975.5	1458.9	2908.9	7173.8	12208.3	11935.4	8118.0
77.5°	724.9	720.4	742.9	747.4	778.7	1007.0	1655.9	4721.3	8144.8	7674.9	4573.6
80°	613.1	608.6	635.5	644.4	666.8	738.4	953.2	2555.3	4090.3	3875.5	2183.9
82.5°	461.0	478.9	528.0	550.4	577.3	546.0	590.8	1127.8	1897.5	1812.5	948.7
85°	223.8	264.1	398.2	443.0	474.4	344.6	402.7	532.5	854.7	814.5	384.9
87.5°	76.1	67.0	237.2	281.9	308.7	156.7	223.8	295.3	353.6	322.2	120.8
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°	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3	2121.3
2.5°	2143.6	2076.5	1978.0	1901.9	1852.7	1812.5	1794.6	1790.1	1781.2	1776.7	1776.7
5°	2188.4	2067.5	1915.5	1834.8	1812.5	1794.6	1803.6	1808.0	1808.0	1808.0	1808.0
7.5°	2255.5	2085.4	1901.9	1848.2	1843.7	1843.7	1870.6	1884.0	1893.0	1893.0	1893.0
10°	2345.0	2116.8	1924.4	1879.6	1893.0	1901.9	1933.3	1951.2	1960.1	1964.6	1969.1
12.5°	2465.9	2183.9	1969.1	1933.3	1951.2	1955.6	1978.0	1987.0	1995.9	2000.4	2000.4
15°	2626.9	2282.3	2040.6	1995.9	2000.4	1995.9	1995.9	1987.0	1982.5	1982.5	1991.5
17.5°	2792.5	2376.3	2103.3	2040.6	2022.8	1987.0	1960.1	1937.7	1924.4	1915.5	1919.9
20°	2958.0	2461.4	2139.2	2049.6	2000.4	1942.2	1893.0	1861.7	1843.7	1825.8	1834.8
22.5°	3123.7	2541.9	2152.5	2022.8	1951.2	1866.1	1812.5	1763.2	1722.9	1696.1	1700.6
25°	3307.2	2631.4	2152.5	1991.5	1884.0	1794.6	1727.4	1646.9	1588.7	1566.3	1575.3
27.5°	3490.7	2707.5	2130.2	1933.3	1808.0	1718.4	1620.0	1526.1	1490.2	1476.8	1481.3
30°	3674.2	2765.7	2081.0	1861.7	1727.4	1628.9	1499.1	1436.5	1391.8	1356.0	1360.5
32.5°	3857.6	2806.0	2013.8	1772.1	1642.3	1517.1	1409.7	1338.1	1257.6	1212.8	1217.2
35°	4067.9	2837.3	1933.3	1682.7	1548.4	1418.6	1338.1	1221.7	1136.8	1100.9	1091.9
37.5°	4287.3	2859.7	1848.2	1584.3	1454.5	1347.0	1266.6	1123.3	1042.8	993.5	989.1
40°	4524.4	2868.6	1745.3	1481.3	1364.9	1302.3	1172.5	1065.1	926.4	895.1	895.1
42.5°	4806.4	2864.1	1642.3	1378.3	1266.6	1199.3	1105.3	1056.1	935.4	904.0	886.1
45°	5128.5	2864.1	1530.5	1257.6	1168.0	1069.5	1029.3	998.0	917.4	930.9	939.7
47.5°	5495.5	2855.2	1396.3	1159.0	1087.4	1002.5	980.0	913.0	881.6	890.6	899.5
50°	6001.3	2868.6	1275.4	1078.5	1029.3	957.6	930.9	895.1	881.6	886.1	881.6
52.5°	6703.8	2823.8	1159.0	1029.3	984.5	890.6	890.6	886.1	890.6	886.1	886.1
55°	7088.7	2725.4	1074.0	1002.5	953.2	859.3	877.2	886.1	895.1	890.6	890.6
57.5°	7634.7	2658.3	1007.0	984.5	935.4	850.2	868.2	886.1	890.6	886.1	886.1
60°	8279.1	2613.5	962.1	989.1	921.9	850.2	872.7	886.1	881.6	877.2	877.2
62.5°	9026.5	2595.6	930.9	1002.5	908.5	854.7	872.7	886.1	868.2	863.7	863.7
65°	9308.4	2434.6	890.6	1011.4	917.4	854.7	868.2	872.7	850.2	845.7	841.3
67.5°	8874.2	2157.0	832.3	993.5	944.2	854.7	854.7	850.2	823.5	819.0	810.0
70°	7903.2	1790.1	742.9	935.4	962.1	859.3	836.8	814.5	787.6	787.6	769.7
72.5°	6471.1	1409.7	626.5	832.3	948.7	872.7	801.1	769.7	738.4	738.4	720.4
75°	4663.1	1051.6	501.2	693.7	890.6	868.2	756.3	715.9	680.2	675.8	653.4
77.5°	2658.3	738.4	407.2	541.5	792.1	845.7	715.9	653.4	613.1	599.8	586.2
80°	1364.9	496.7	331.2	425.1	657.8	783.2	684.7	581.8	537.0	514.6	492.3
82.5°	648.9	331.2	255.1	313.2	496.7	684.7	644.4	501.2	452.0	425.1	398.2
85°	290.8	196.8	170.0	201.4	353.6	532.5	568.3	411.7	353.6	443.0	326.6
87.5°	94.0	89.5	89.5	94.0	170.0	232.7	416.2	304.3	281.9	232.7	196.8
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)