

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: P236871

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2R-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T2R-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22663 lumens
Efficiency: N/A
Efficacy: 125.2 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

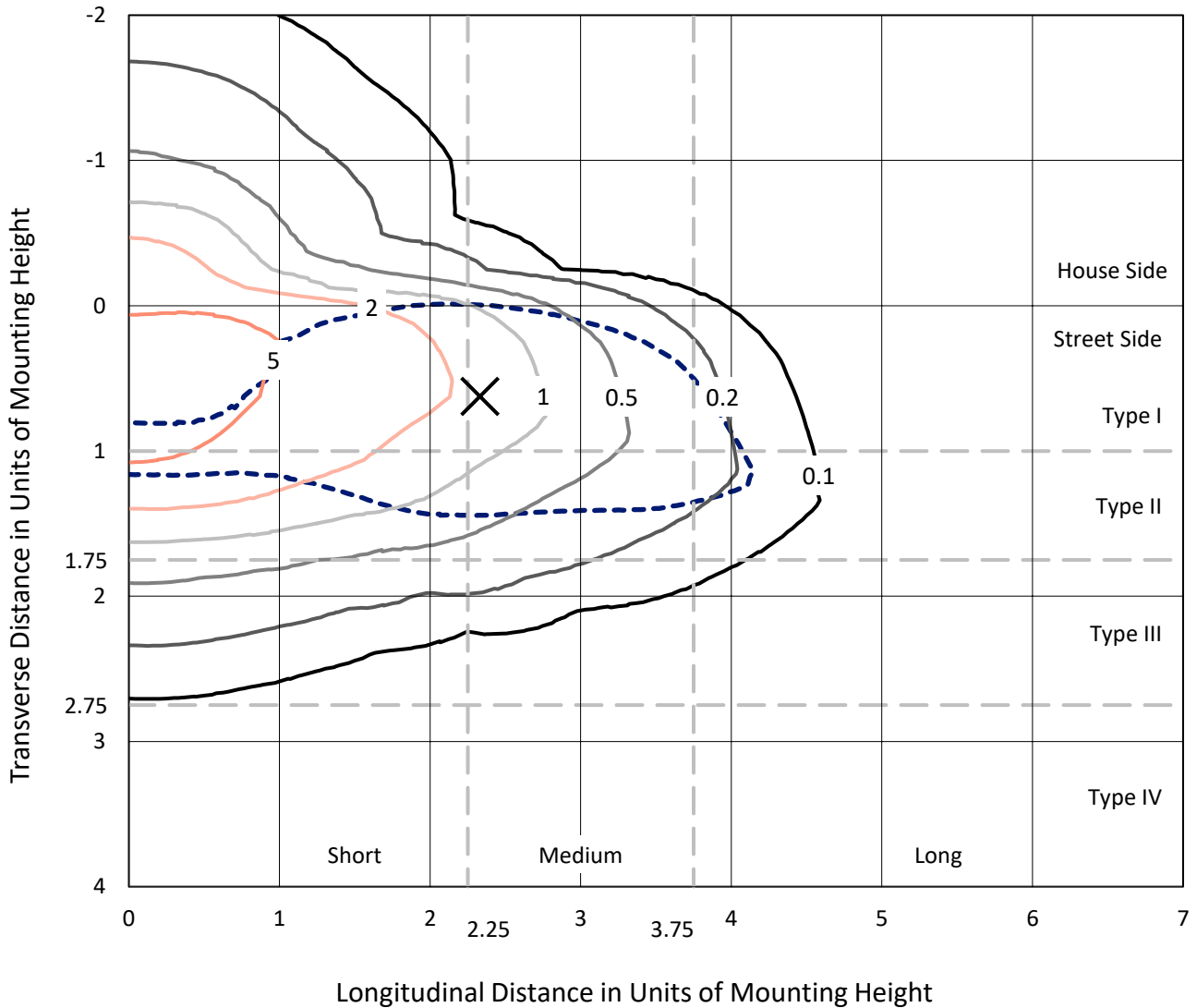
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

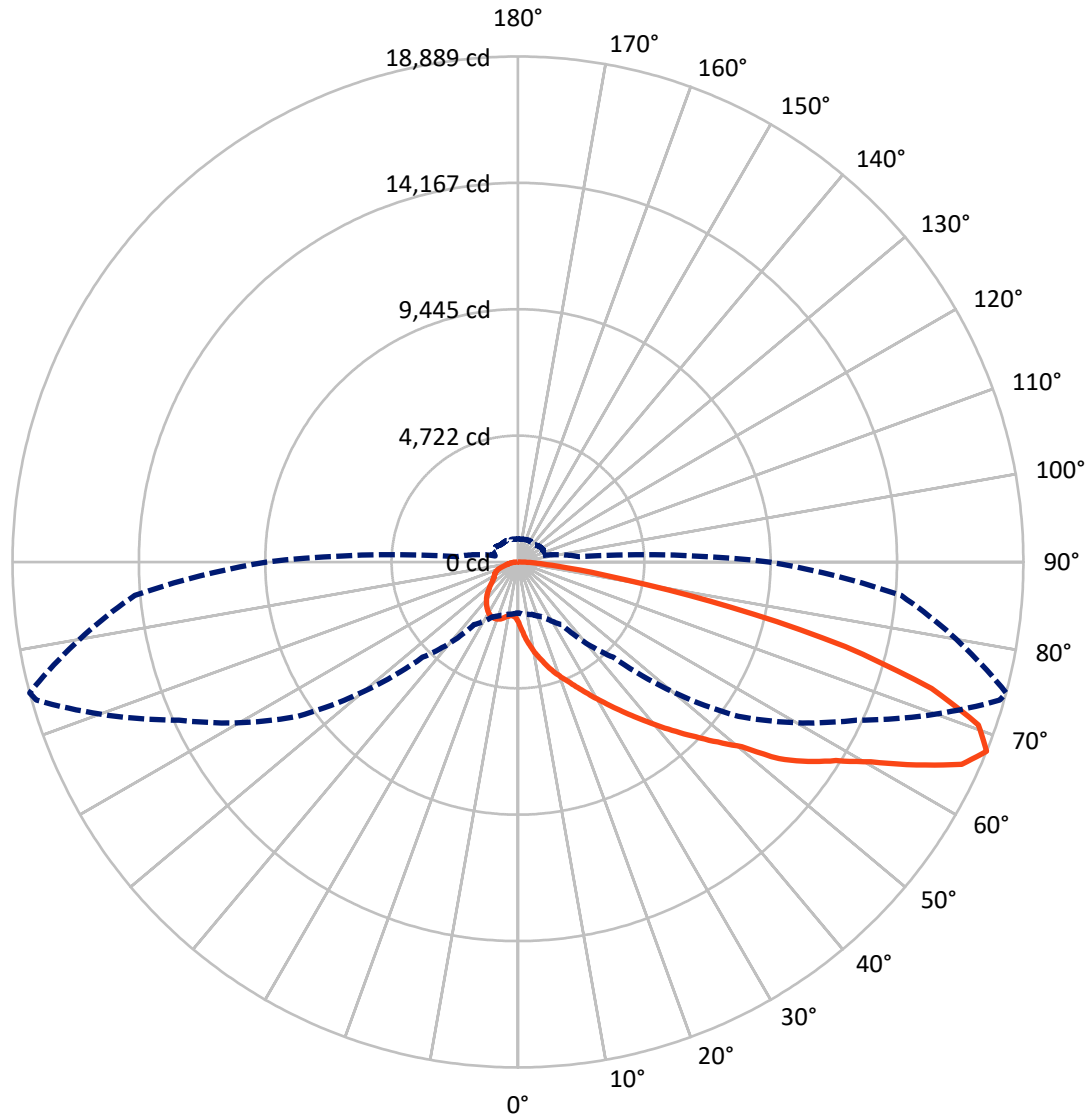
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 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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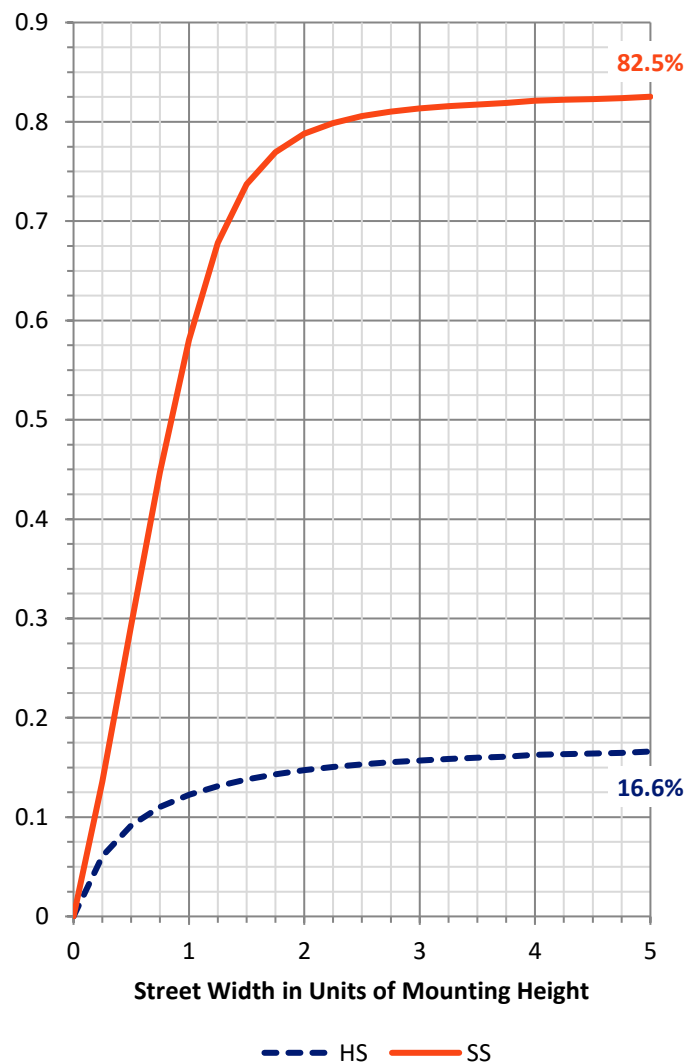
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3870.0	0.0	3870.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	18793.0	0.0	18793.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	22663.0	0.0	22663.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.8	1.2
10°-20°	953.4	4.2
20°-30°	1738.9	7.7
30°-40°	2854.3	12.6
40°-50°	4127.8	18.2
50°-60°	4864.6	21.5
60°-70°	4727.2	20.9
70°-80°	2627.7	11.6
80°-90°	505.3	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°	22663.0	100.0
0°-180°	22663.0	100.0

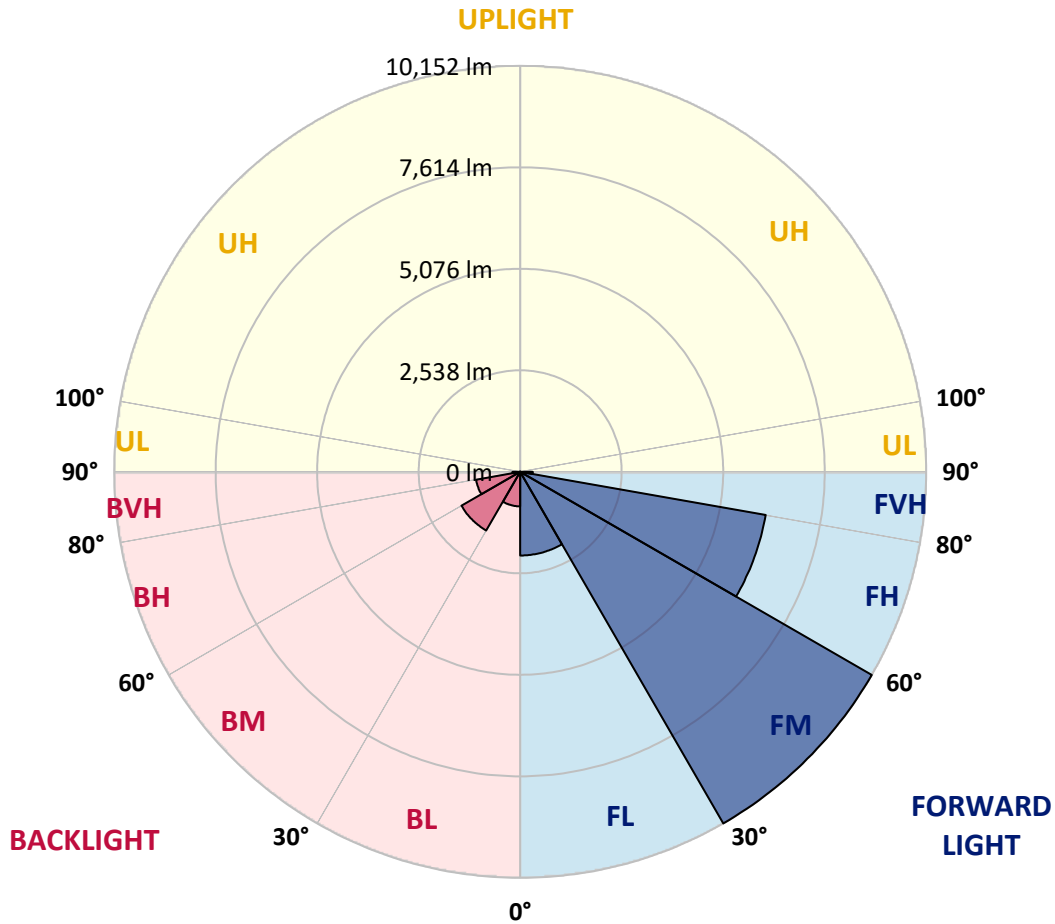


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2092.4	9.2			
FM (30°-60°)	10151.8	44.8			
FH (60°-80°)	6234.3	27.5			G3/7500
FVH (80°-90°)	314.4	1.4			G3/500
BL (0°-30°)	863.8	3.8	B2/1000		
BM (30°-60°)	1694.9	7.5	B2/2500		
BH (60°-80°)	1120.5	4.9	B3/2500		G3/2500
BVH (80°-90°)	190.8	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°	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7
2.5°	3183.8	3193.2	3174.3	3131.6	3070.0	2956.3	2856.8	2681.6	2525.2	2506.3	2340.4
5°	3742.8	3752.3	3728.6	3676.5	3610.1	3487.0	3349.6	3122.2	2871.1	2823.7	2473.1
7.5°	4126.6	4131.3	4102.9	4050.8	3998.6	3875.5	3738.1	3482.2	3174.3	3136.4	2643.6
10°	4453.5	4462.9	4425.0	4391.9	4335.0	4211.8	4069.7	3799.7	3482.2	3430.1	2818.9
12.5°	4756.7	4766.2	4742.5	4714.0	4695.1	4581.4	4425.0	4102.9	3761.8	3704.9	3027.4
15°	4960.4	4969.9	4974.6	5012.5	5036.2	4955.7	4799.3	4448.7	4065.0	4012.9	3273.8
17.5°	4903.5	4927.2	4998.3	5135.7	5282.6	5287.3	5159.4	4789.8	4363.4	4306.6	3524.9
20°	4737.7	4756.7	4842.0	5050.4	5339.4	5505.2	5495.8	5135.7	4643.0	4581.4	3757.0
22.5°	4875.1	4898.8	4898.8	5026.7	5311.0	5618.9	5742.1	5476.8	4922.5	4865.6	3989.2
25°	5462.6	5476.8	5377.3	5325.2	5429.4	5713.7	5945.8	5846.4	5263.6	5197.3	4240.3
27.5°	6282.2	6258.5	6135.4	5926.9	5813.2	5889.0	6125.9	6196.9	5656.8	5576.3	4500.8
30°	7097.1	7082.9	6940.8	6661.2	6405.4	6244.3	6324.9	6509.6	6083.2	5988.5	4751.9
32.5°	7859.9	7836.2	7679.9	7352.9	7063.9	6765.5	6609.1	6793.9	6538.1	6429.1	5031.5
35°	8561.1	8499.5	8343.1	8002.0	7703.5	7419.3	7035.5	7063.9	7030.8	6917.1	5339.4
37.5°	9129.6	9082.2	8911.7	8594.2	8276.8	8006.8	7604.0	7371.9	7561.4	7452.4	5694.7
40°	9631.8	9579.7	9404.4	9087.0	8793.2	8537.4	8220.0	7746.2	8158.4	8035.2	6092.7
42.5°	10010.8	9972.9	9830.8	9518.1	9233.8	9001.7	8845.3	8220.0	8779.0	8660.6	6528.6
45°	10214.5	10176.6	10100.8	9849.7	9589.2	9409.1	9423.3	8783.7	9428.1	9328.6	7045.0
47.5°	9963.4	9991.9	10058.2	10010.8	9849.7	9764.4	9939.7	9366.5	10152.9	10058.2	7604.0
50°	9290.7	9319.1	9584.4	9911.3	9968.2	10072.4	10404.0	10039.2	10920.5	10844.7	8295.8
52.5°	7637.2	7793.6	8527.9	9309.6	9845.0	10276.1	10920.5	11038.9	12213.9	12213.9	9518.1
55°	5770.5	5907.9	6746.5	8111.0	9366.5	10295.1	11299.5	11716.4	13147.2	13166.1	10157.7
57.5°	4676.1	4761.4	5173.6	6571.2	8362.1	10058.2	11749.6	12299.1	13924.2	14009.4	10982.0
60°	3794.9	3842.3	4112.3	5083.6	6973.9	9418.6	12071.7	13133.0	15032.8	15151.2	12033.8
62.5°	3051.1	3098.5	3278.5	3861.2	5472.1	8220.0	12014.9	14000.0	16511.0	16705.2	13412.5
65°	2435.2	2487.3	2605.7	2965.8	4055.5	6732.3	11432.1	14445.3	18041.3	18230.8	14326.9
67.5°	1899.8	1947.2	2027.7	2264.6	2856.8	5036.2	10053.5	13976.3	18728.2	18889.3	14374.3
70°	1435.5	1459.2	1525.5	1677.2	2042.0	3344.8	7869.4	12403.4	18112.3	18259.2	13426.7
72.5°	1113.4	1108.6	1146.5	1222.3	1426.1	2302.5	5216.2	10086.6	16013.5	16165.1	11455.8
75°	909.6	904.9	928.6	952.3	1032.8	1544.5	3079.5	7594.6	12924.5	12635.5	8594.2
77.5°	767.5	762.8	786.5	791.2	824.4	1066.0	1753.0	4998.3	8622.7	8125.2	4842.0
80°	649.1	644.3	672.8	682.2	705.9	781.7	1009.1	2705.2	4330.3	4102.9	2312.0
82.5°	488.0	506.9	559.1	582.7	611.2	578.0	625.4	1193.9	2008.8	1918.8	1004.4
85°	236.9	279.5	421.7	469.0	502.2	364.8	426.4	563.8	904.9	862.3	407.4
87.5°	80.5	71.1	251.1	298.5	326.9	165.8	236.9	312.7	374.3	341.1	127.9
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°	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7	2245.7
2.5°	2269.4	2198.3	2094.1	2013.5	1961.4	1918.8	1899.8	1895.1	1885.6	1880.9	1880.9
5°	2316.7	2188.8	2027.7	1942.5	1918.8	1899.8	1909.3	1914.0	1914.0	1914.0	1914.0
7.5°	2387.8	2207.8	2013.5	1956.7	1951.9	1951.9	1980.4	1994.6	2004.1	2004.1	2004.1
10°	2482.6	2240.9	2037.2	1989.8	2004.1	2013.5	2046.7	2065.6	2075.1	2079.9	2084.6
12.5°	2610.5	2312.0	2084.6	2046.7	2065.6	2070.4	2094.1	2103.5	2113.0	2117.8	2117.8
15°	2781.0	2416.2	2160.4	2113.0	2117.8	2113.0	2113.0	2103.5	2098.8	2098.8	2108.3
17.5°	2956.3	2515.7	2226.7	2160.4	2141.5	2103.5	2075.1	2051.4	2037.2	2027.7	2032.5
20°	3131.6	2605.7	2264.6	2169.9	2117.8	2056.2	2004.1	1970.9	1951.9	1933.0	1942.5
22.5°	3306.9	2691.0	2278.8	2141.5	2065.6	1975.6	1918.8	1866.7	1824.0	1795.6	1800.3
25°	3501.2	2785.8	2278.8	2108.3	1994.6	1899.8	1828.8	1743.5	1681.9	1658.2	1667.7
27.5°	3695.4	2866.3	2255.2	2046.7	1914.0	1819.3	1715.1	1615.6	1577.7	1563.4	1568.2
30°	3889.7	2927.9	2203.0	1970.9	1828.8	1724.5	1587.1	1520.8	1473.4	1435.5	1440.3
32.5°	4083.9	2970.6	2132.0	1876.1	1738.7	1606.1	1492.4	1416.6	1331.3	1283.9	1288.7
35°	4306.6	3003.7	2046.7	1781.4	1639.3	1501.9	1416.6	1293.4	1203.4	1165.5	1156.0
37.5°	4538.7	3027.4	1956.7	1677.2	1539.8	1426.1	1340.8	1189.2	1103.9	1051.8	1047.0
40°	4789.8	3036.9	1847.7	1568.2	1445.0	1378.7	1241.3	1127.6	980.7	947.5	947.5
42.5°	5088.3	3032.1	1738.7	1459.2	1340.8	1269.7	1170.2	1118.1	990.2	957.0	938.1
45°	5429.4	3032.1	1620.3	1331.3	1236.5	1132.3	1089.7	1056.5	971.2	985.4	994.9
47.5°	5817.9	3022.7	1478.2	1227.1	1151.3	1061.3	1037.6	966.5	933.3	942.8	952.3
50°	6353.3	3036.9	1350.3	1141.8	1089.7	1013.9	985.4	947.5	933.3	938.1	933.3
52.5°	7097.1	2989.5	1227.1	1089.7	1042.3	942.8	942.8	938.1	942.8	938.1	938.1
55°	7504.6	2885.3	1137.1	1061.3	1009.1	909.6	928.6	938.1	947.5	942.8	942.8
57.5°	8082.6	2814.2	1066.0	1042.3	990.2	900.2	919.1	938.1	942.8	938.1	938.1
60°	8764.8	2766.8	1018.6	1047.0	976.0	900.2	923.9	938.1	933.3	928.6	928.6
62.5°	9556.0	2747.9	985.4	1061.3	961.8	904.9	923.9	938.1	919.1	914.4	914.4
65°	9854.5	2577.3	942.8	1070.7	971.2	904.9	919.1	923.9	900.2	895.4	890.7
67.5°	9394.9	2283.6	881.2	1051.8	999.7	904.9	904.9	900.2	871.7	867.0	857.5
70°	8366.8	1895.1	786.5	990.2	1018.6	909.6	886.0	862.3	833.8	833.8	814.9
72.5°	6850.7	1492.4	663.3	881.2	1004.4	923.9	848.1	814.9	781.7	781.7	762.8
75°	4936.7	1113.4	530.6	734.3	942.8	919.1	800.7	758.0	720.1	715.4	691.7
77.5°	2814.2	781.7	431.1	573.3	838.6	895.4	758.0	691.7	649.1	634.9	620.6
80°	1445.0	525.9	350.6	450.1	696.4	829.1	724.9	615.9	568.5	544.8	521.1
82.5°	687.0	350.6	270.1	331.6	525.9	724.9	682.2	530.6	478.5	450.1	421.7
85°	308.0	208.5	180.0	213.2	374.3	563.8	601.7	435.9	374.3	469.0	345.9
87.5°	99.5	94.8	94.8	99.5	180.0	246.4	440.6	322.2	298.5	246.4	208.5
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)