

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: P236841

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2R-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236841
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-AF72-280-D-U-T2R-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29355.8 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

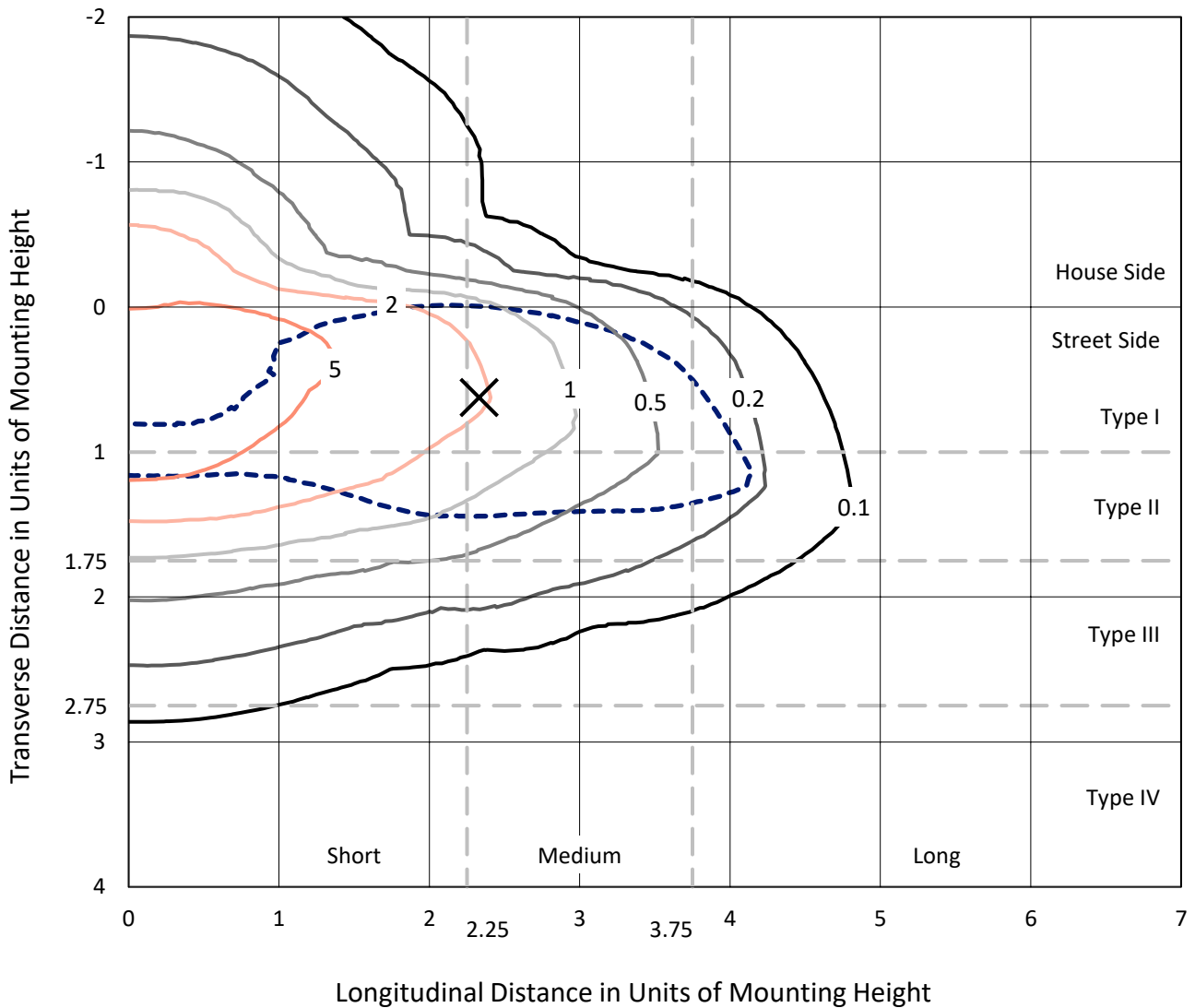
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

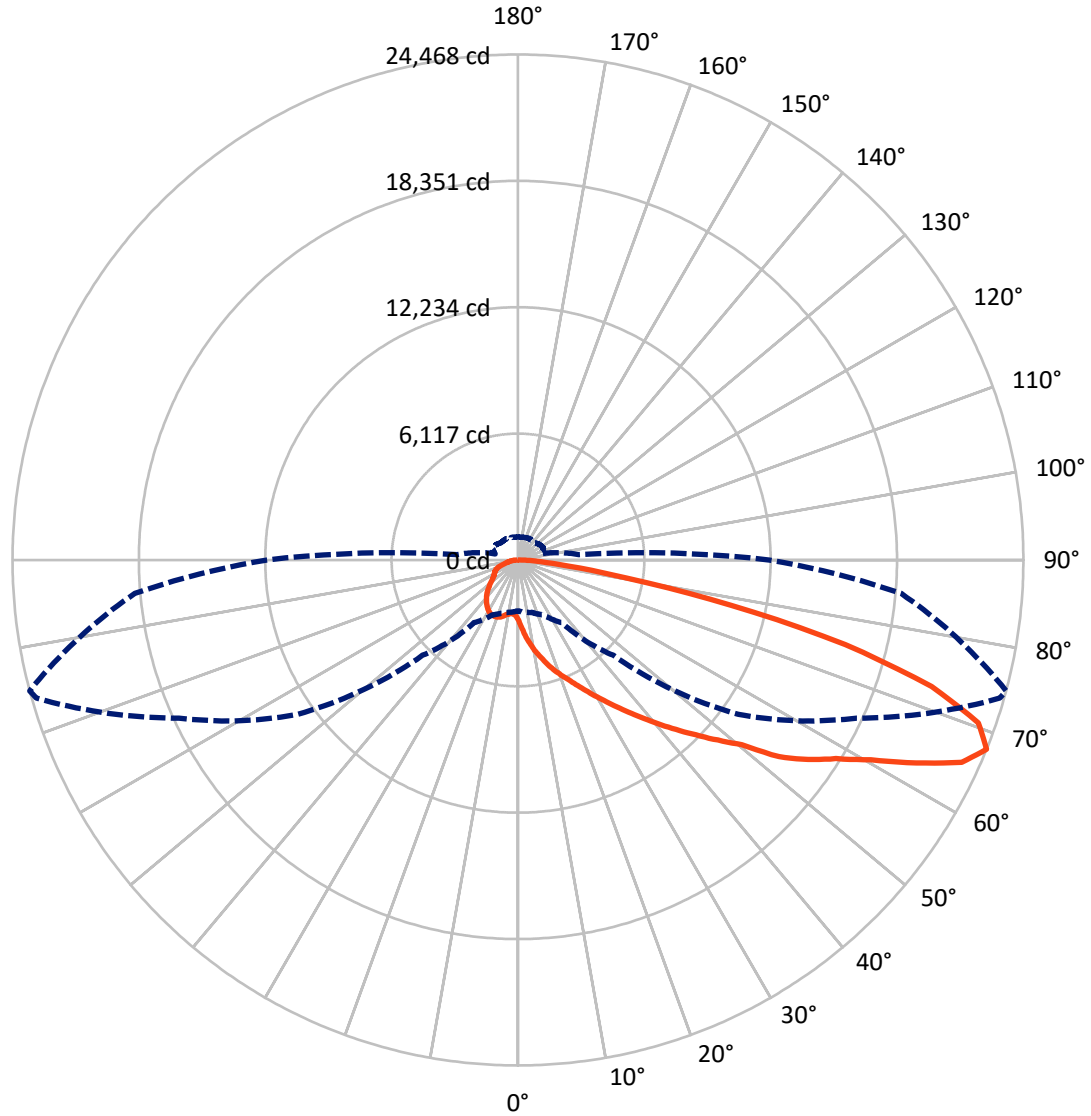
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 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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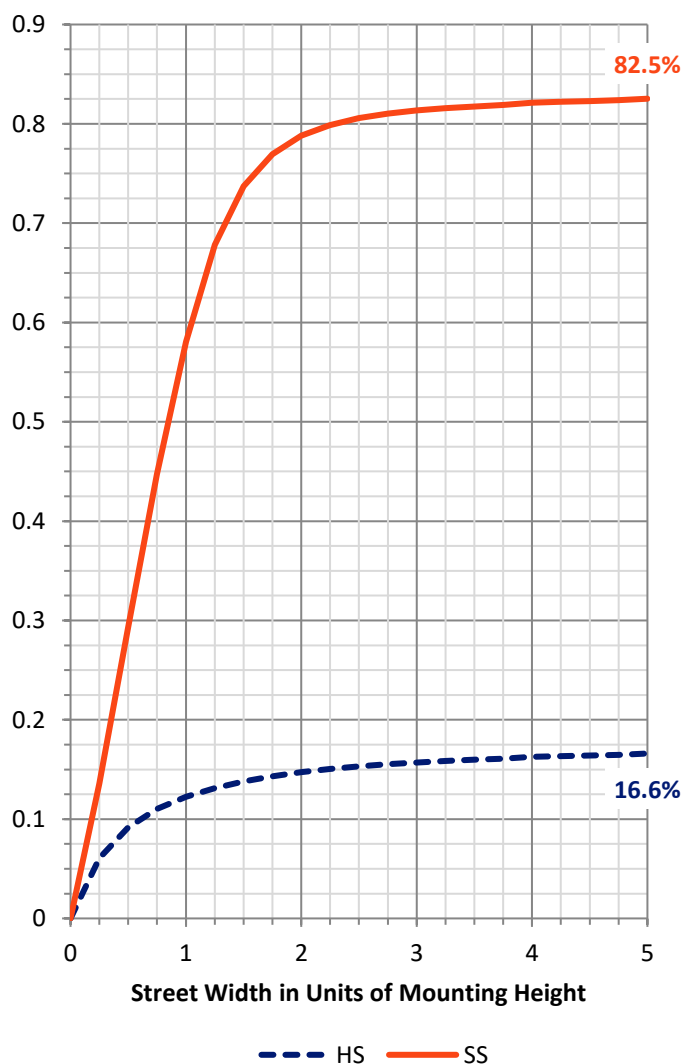
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5012.9	0.0	5012.9
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	24342.9	0.0	24342.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	29355.8	0.0	29355.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.7	1.2
10°-20°	1235.0	4.2
20°-30°	2252.5	7.7
30°-40°	3697.3	12.6
40°-50°	5346.8	18.2
50°-60°	6301.2	21.5
60°-70°	6123.2	20.9
70°-80°	3403.7	11.6
80°-90°	654.5	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°	29355.8	100.0
0°-180°	29355.8	100.0

Coefficient of Utilization



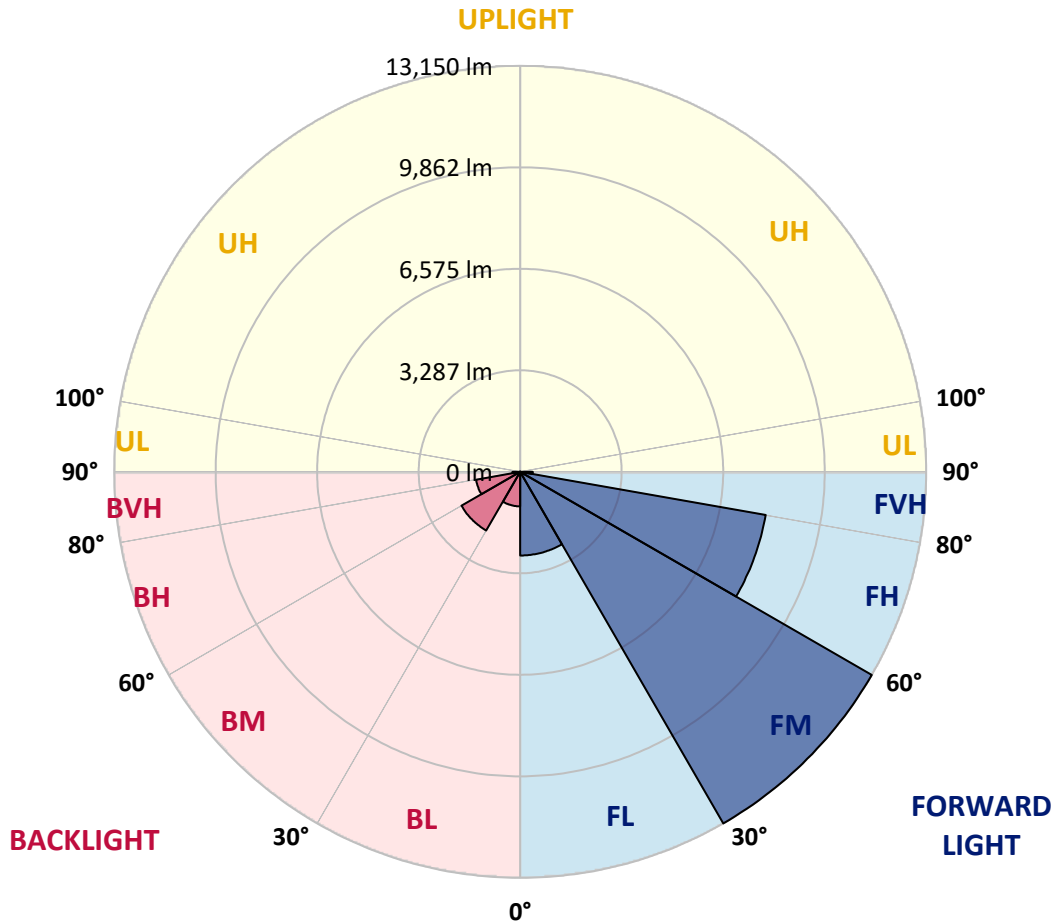
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2710.3	9.2			
FM (30°-60°)	13149.8	44.8			
FH (60°-80°)	8075.4	27.5			G4/12000
FVH (80°-90°)	407.3	1.4			G3/500
BL (0°-30°)	1118.9	3.8	B3/2500		
BM (30°-60°)	2195.4	7.5	B2/2500		
BH (60°-80°)	1451.5	4.9	B3/2500		G3/2500
BVH (80°-90°)	247.2	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9
2.5°	4124.0	4136.2	4111.7	4056.5	3976.7	3829.4	3700.5	3473.5	3270.9	3246.4	3031.6
5°	4848.2	4860.4	4829.7	4762.2	4676.3	4516.8	4338.8	4044.2	3718.9	3657.6	3203.5
7.5°	5345.2	5351.3	5314.5	5247.0	5179.6	5019.9	4842.0	4510.6	4111.7	4062.6	3424.4
10°	5768.7	5780.9	5731.8	5688.9	5615.3	5455.7	5271.5	4921.8	4510.6	4443.1	3651.5
12.5°	6161.4	6173.7	6143.0	6106.2	6081.6	5934.3	5731.8	5314.5	4872.6	4799.0	3921.5
15°	6425.3	6437.5	6443.7	6492.8	6523.5	6419.2	6216.7	5762.6	5265.4	5197.9	4240.6
17.5°	6351.7	6382.4	6474.3	6652.4	6842.6	6848.7	6683.1	6204.4	5652.1	5578.4	4565.8
20°	6136.9	6161.4	6271.9	6541.9	6916.2	7131.1	7118.8	6652.4	6014.0	5934.3	4866.5
22.5°	6314.8	6345.6	6345.6	6511.2	6879.4	7278.3	7437.9	7094.2	6376.2	6302.5	5167.2
25°	7075.8	7094.2	6965.3	6897.9	7032.8	7401.0	7701.8	7572.9	6818.0	6732.1	5492.5
27.5°	8137.5	8106.8	7947.2	7677.2	7529.9	7628.2	7935.0	8027.1	7327.4	7223.1	5830.0
30°	9193.0	9174.6	8990.5	8628.4	8297.0	8088.4	8192.7	8432.1	7879.8	7757.0	6155.2
32.5°	10181.0	10150.4	9947.8	9524.3	9150.0	8763.4	8560.9	8800.3	8468.9	8327.7	6517.4
35°	11089.3	11009.5	10807.1	10365.1	9978.5	9610.3	9113.2	9150.0	9107.1	8959.8	6916.2
37.5°	11825.6	11764.4	11543.5	11132.2	10721.1	10371.3	9849.6	9548.9	9794.4	9653.3	7376.5
40°	12476.2	12408.7	12181.7	11770.5	11390.1	11058.5	10647.5	10033.8	10567.7	10408.1	7892.1
42.5°	12967.2	12918.0	12733.9	12329.0	11960.7	11660.0	11457.5	10647.5	11371.6	11218.2	8456.5
45°	13231.1	13182.0	13083.8	12758.5	12421.0	12187.8	12206.2	11377.7	12212.4	12083.4	9125.6
47.5°	12905.8	12942.7	13028.5	12967.2	12758.5	12648.1	12875.1	12132.5	13151.3	13028.5	9849.6
50°	12034.4	12071.2	12414.9	12838.3	12911.9	13046.9	13476.6	13004.0	14145.5	14047.3	10745.6
52.5°	9892.7	10095.1	11046.3	12059.0	12752.4	13310.8	14145.5	14298.9	15820.8	15820.8	12329.0
55°	7474.7	7652.6	8738.9	10506.3	12132.5	13335.4	14636.4	15176.4	17029.8	17054.3	13157.4
57.5°	6057.2	6167.5	6701.4	8511.9	10831.5	13028.5	15219.4	15931.3	18036.2	18146.7	14225.2
60°	4915.6	4977.0	5326.8	6584.8	9033.4	12200.1	15636.7	17011.3	19472.3	19625.7	15587.6
62.5°	3952.1	4013.5	4246.7	5001.6	7088.0	10647.5	15563.1	18134.5	21387.0	21638.6	17373.5
65°	3154.4	3221.8	3375.2	3841.7	5253.1	8720.4	14808.2	18711.3	23369.1	23614.6	18557.9
67.5°	2460.8	2522.2	2626.6	2933.4	3700.5	6523.5	13022.4	18103.7	24259.0	24467.6	18619.2
70°	1859.5	1890.1	1976.1	2172.4	2644.9	4332.5	10193.4	16066.2	23461.2	23651.5	17391.9
72.5°	1442.1	1436.0	1485.2	1583.2	1847.2	2982.6	6756.7	13065.3	20742.6	20939.0	14838.9
75°	1178.3	1172.2	1202.8	1233.5	1337.9	2000.6	3988.9	9837.3	16741.4	16367.0	11132.2
77.5°	994.1	988.0	1018.8	1024.9	1067.8	1380.8	2270.6	6474.3	11169.0	10524.7	6271.9
80°	840.7	834.6	871.5	883.7	914.4	1012.7	1307.2	3504.2	5609.1	5314.5	2994.8
82.5°	632.1	656.6	724.2	754.9	791.7	748.7	810.0	1546.4	2602.0	2485.4	1301.1
85°	306.8	362.0	546.2	607.6	650.5	472.5	552.3	730.3	1172.2	1116.9	527.7
87.5°	104.4	92.1	325.3	386.7	423.5	214.8	306.8	405.1	484.8	441.9	165.7
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°	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9	2908.9
2.5°	2939.5	2847.6	2712.5	2608.1	2540.6	2485.4	2460.8	2454.7	2442.5	2436.4	2436.4
5°	3001.0	2835.3	2626.6	2516.1	2485.4	2460.8	2473.2	2479.3	2479.3	2479.3	2479.3
7.5°	3093.0	2859.8	2608.1	2534.5	2528.4	2528.4	2565.2	2583.7	2595.9	2595.9	2595.9
10°	3215.7	2902.7	2638.8	2577.4	2595.9	2608.1	2651.1	2675.6	2688.0	2694.2	2700.3
12.5°	3381.3	2994.8	2700.3	2651.1	2675.6	2681.8	2712.5	2724.8	2737.1	2743.2	2743.2
15°	3602.4	3129.8	2798.4	2737.1	2743.2	2737.1	2737.1	2724.8	2718.6	2718.6	2730.9
17.5°	3829.4	3258.6	2884.3	2798.4	2773.9	2724.8	2688.0	2657.3	2638.8	2626.6	2632.7
20°	4056.5	3375.2	2933.4	2810.7	2743.2	2663.4	2595.9	2553.0	2528.4	2503.7	2516.1
22.5°	4283.5	3485.7	2951.8	2773.9	2675.6	2559.1	2485.4	2417.9	2362.7	2325.9	2332.0
25°	4535.2	3608.5	2951.8	2730.9	2583.7	2460.8	2368.8	2258.4	2178.6	2147.9	2160.2
27.5°	4786.7	3712.8	2921.1	2651.1	2479.3	2356.5	2221.6	2092.7	2043.5	2025.1	2031.3
30°	5038.4	3792.6	2853.7	2553.0	2368.8	2233.8	2055.8	1970.0	1908.5	1859.5	1865.6
32.5°	5290.0	3847.8	2761.6	2430.2	2252.3	2080.4	1933.2	1834.9	1724.4	1663.0	1669.3
35°	5578.4	3890.7	2651.1	2307.4	2123.4	1945.4	1834.9	1675.4	1558.8	1509.6	1497.4
37.5°	5879.1	3921.5	2534.5	2172.4	1994.5	1847.2	1736.6	1540.3	1429.8	1362.4	1356.2
40°	6204.4	3933.8	2393.4	2031.3	1871.7	1785.9	1607.9	1460.6	1270.3	1227.4	1227.4
42.5°	6590.9	3927.6	2252.3	1890.1	1736.6	1644.7	1515.8	1448.3	1282.6	1239.6	1215.1
45°	7032.8	3927.6	2098.8	1724.4	1601.7	1466.7	1411.5	1368.5	1258.0	1276.4	1288.7
47.5°	7536.0	3915.3	1914.7	1589.4	1491.3	1374.7	1344.0	1251.9	1209.0	1221.2	1233.5
50°	8229.5	3933.8	1749.0	1479.0	1411.5	1313.3	1276.4	1227.4	1209.0	1215.1	1209.0
52.5°	9193.0	3872.3	1589.4	1411.5	1350.1	1221.2	1221.2	1215.1	1221.2	1215.1	1215.1
55°	9720.8	3737.3	1472.9	1374.7	1307.2	1178.3	1202.8	1215.1	1227.4	1221.2	1221.2
57.5°	10469.4	3645.3	1380.8	1350.1	1282.6	1166.1	1190.6	1215.1	1221.2	1215.1	1215.1
60°	11353.1	3583.9	1319.5	1356.2	1264.2	1166.1	1196.7	1215.1	1209.0	1202.8	1202.8
62.5°	12378.1	3559.3	1276.4	1374.7	1245.8	1172.2	1196.7	1215.1	1190.6	1184.4	1184.4
65°	12764.6	3338.4	1221.2	1386.9	1258.0	1172.2	1190.6	1196.7	1166.1	1159.9	1153.8
67.5°	12169.4	2957.9	1141.4	1362.4	1294.8	1172.2	1172.2	1166.1	1129.2	1123.0	1110.7
70°	10837.7	2454.7	1018.8	1282.6	1319.5	1178.3	1147.5	1116.9	1080.1	1080.1	1055.6
72.5°	8873.9	1933.2	859.1	1141.4	1301.1	1196.7	1098.5	1055.6	1012.7	1012.7	988.0
75°	6394.6	1442.1	687.4	951.2	1221.2	1190.6	1037.1	981.9	932.8	926.6	896.0
77.5°	3645.3	1012.7	558.5	742.5	1086.2	1159.9	981.9	896.0	840.7	822.2	803.9
80°	1871.7	681.2	454.1	583.0	902.2	1073.9	939.0	797.8	736.4	705.7	675.0
82.5°	889.8	454.1	349.8	429.6	681.2	939.0	883.7	687.4	619.8	583.0	546.2
85°	398.9	270.0	233.2	276.2	484.8	730.3	779.3	564.6	484.8	607.6	448.0
87.5°	128.9	122.7	122.7	128.9	233.2	319.1	570.8	417.3	386.7	319.1	270.0
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)