

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: P236877

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2R-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236877
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-AF72-240-D-U-T2R-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27797 lumens
Efficiency: N/A
Efficacy: 114.9 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

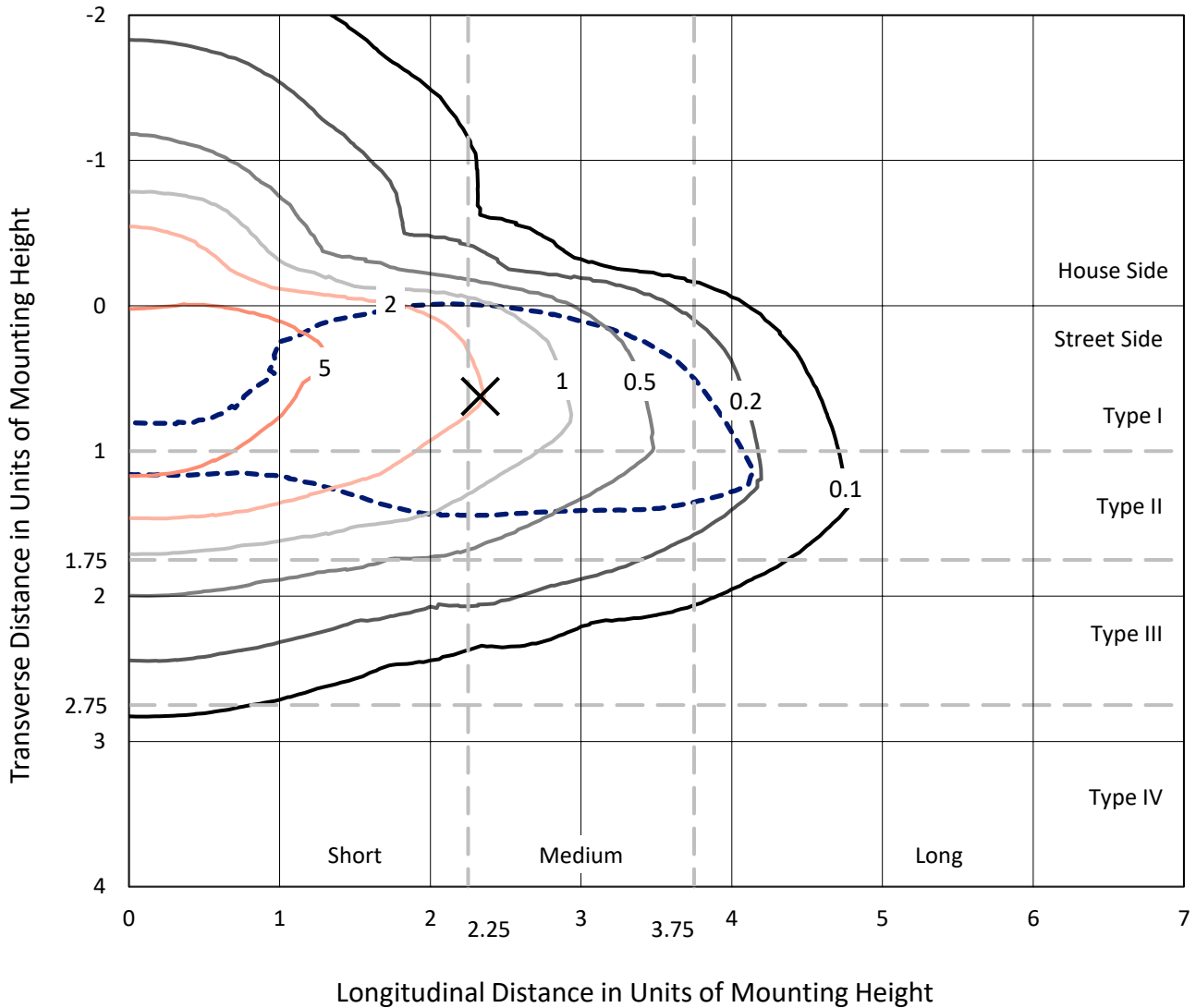
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

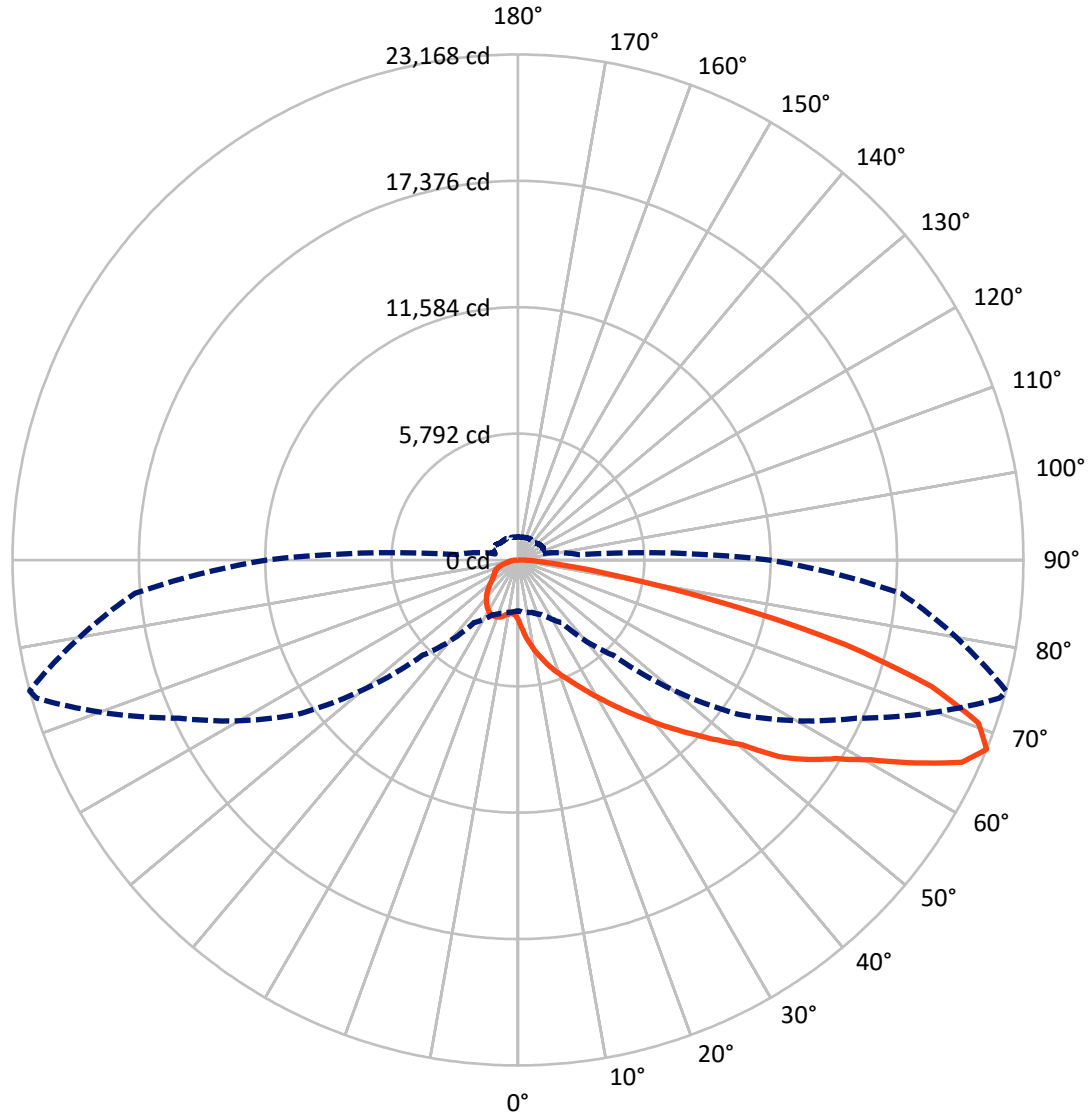
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 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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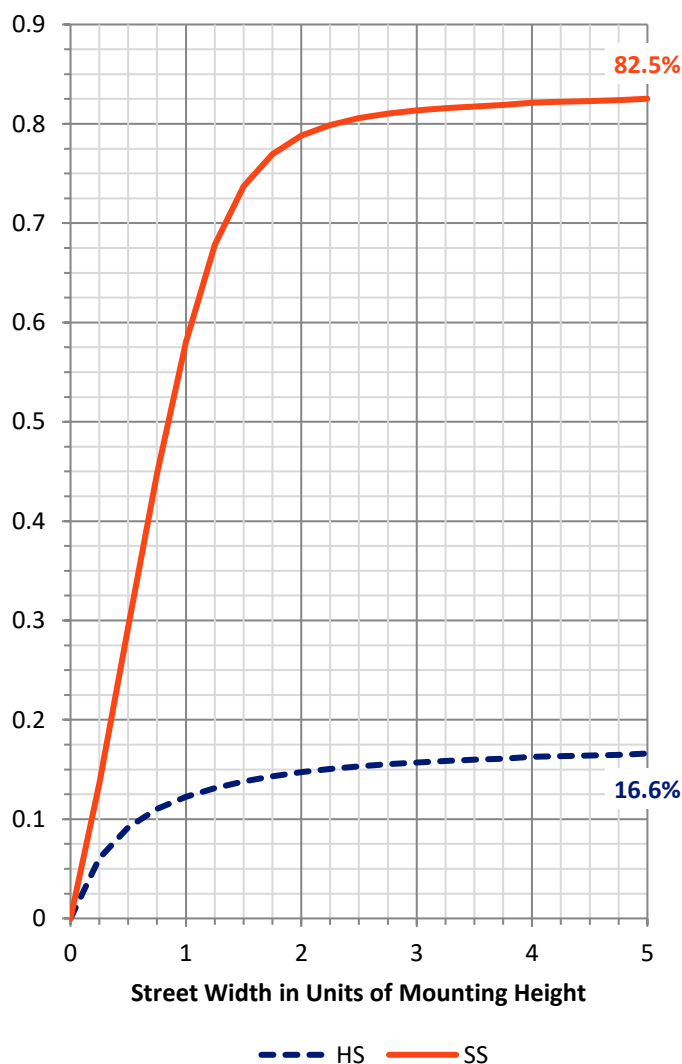
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4746.7	0.0	4746.7
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	23050.3	0.0	23050.3
	% Fixture	82.9	0.0	82.9
Total	Lumens	27797.0	0.0	27797.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.6	1.2
10°-20°	1169.4	4.2
20°-30°	2132.9	7.7
30°-40°	3500.9	12.6
40°-50°	5062.8	18.2
50°-60°	5966.6	21.5
60°-70°	5798.1	20.9
70°-80°	3222.9	11.6
80°-90°	619.7	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°	27797.0	100.0
0°-180°	27797.0	100.0

Coefficient of Utilization



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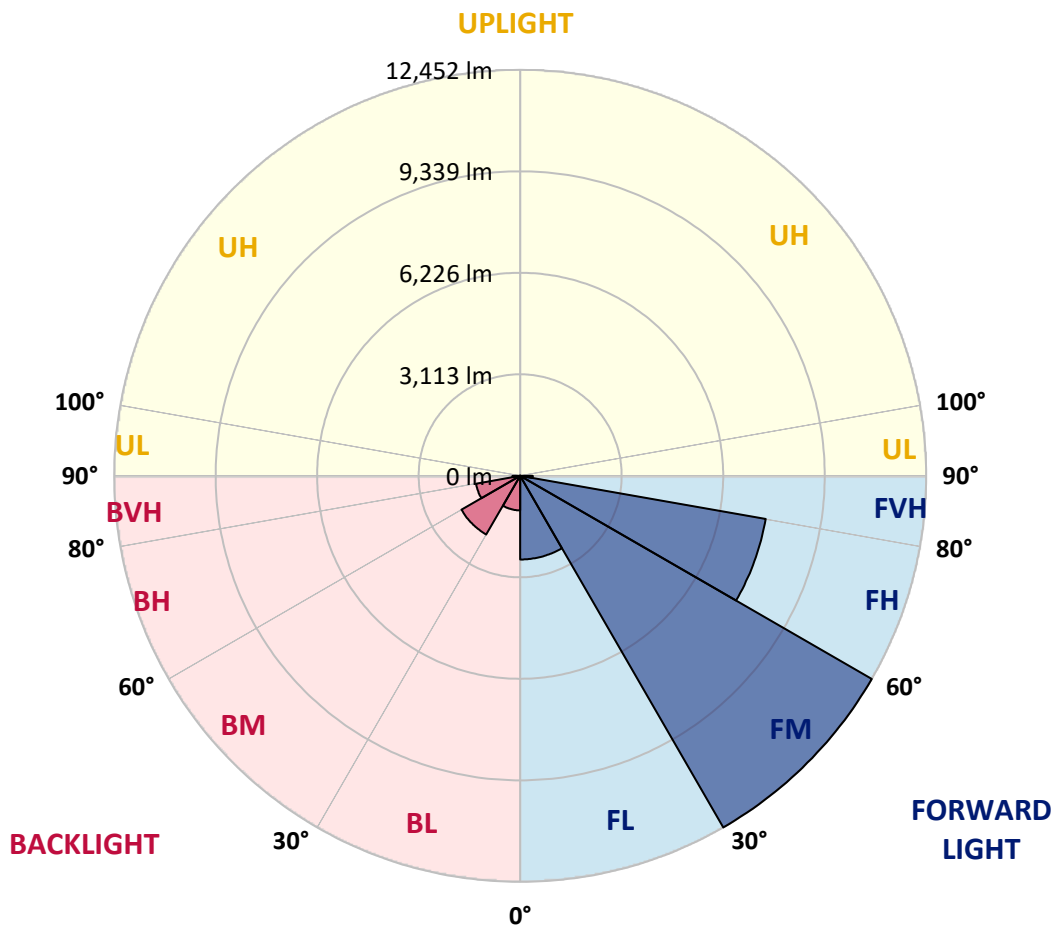
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2566.4	9.2			
FM (30°-60°)	12451.6	44.8			
FH (60°-80°)	7646.6	27.5			G4/12000
FVH (80°-90°)	385.7	1.4			G3/500
BL (0°-30°)	1059.5	3.8	B3/2500		
BM (30°-60°)	2078.8	7.5	B2/2500		
BH (60°-80°)	1374.4	4.9	B3/2500		G3/2500
BVH (80°-90°)	234.0	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°	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4
2.5°	3905.0	3916.6	3893.4	3841.1	3765.5	3626.1	3504.0	3289.0	3097.3	3074.0	2870.6
5°	4590.7	4602.3	4573.3	4509.3	4428.0	4276.9	4108.4	3829.4	3521.5	3463.4	3033.3
7.5°	5061.4	5067.2	5032.3	4968.4	4904.5	4753.4	4584.9	4271.1	3893.4	3846.9	3242.5
10°	5462.3	5474.0	5427.5	5386.8	5317.1	5166.0	4991.6	4660.4	4271.1	4207.2	3457.5
12.5°	5834.2	5845.9	5816.8	5781.9	5758.7	5619.2	5427.5	5032.3	4613.9	4544.2	3713.2
15°	6084.1	6095.7	6101.5	6148.0	6177.1	6078.3	5886.5	5456.5	4985.8	4921.9	4015.4
17.5°	6014.4	6043.4	6130.6	6299.1	6479.3	6485.1	6328.2	5874.9	5351.9	5282.2	4323.4
20°	5811.0	5834.2	5938.8	6194.5	6549.0	6752.4	6740.8	6299.1	5694.8	5619.2	4608.1
22.5°	5979.5	6008.6	6008.6	6165.5	6514.1	6891.8	7042.9	6717.5	6037.6	5967.9	4892.9
25°	6700.1	6717.5	6595.5	6531.6	6659.4	7008.1	7292.8	7170.8	6456.0	6374.7	5200.8
27.5°	7705.4	7676.3	7525.2	7269.6	7130.1	7223.1	7513.6	7600.8	6938.3	6839.5	5520.4
30°	8704.9	8687.4	8513.1	8170.3	7856.5	7658.9	7757.7	7984.3	7461.3	7345.1	5828.4
32.5°	9640.4	9611.4	9419.6	9018.7	8664.2	8298.1	8106.3	8333.0	8019.2	7885.5	6171.3
35°	10500.5	10424.9	10233.2	9814.8	9448.7	9100.0	8629.3	8664.2	8623.5	8484.0	6549.0
37.5°	11197.8	11139.7	10930.5	10541.1	10151.8	9820.6	9326.6	9041.9	9274.3	9140.7	6984.8
40°	11813.7	11749.8	11534.8	11145.5	10785.2	10471.4	10082.1	9501.0	10006.5	9855.4	7472.9
42.5°	12278.6	12232.1	12057.8	11674.3	11325.6	11040.9	10849.1	10082.1	10767.8	10622.5	8007.5
45°	12528.5	12482.0	12389.0	12081.1	11761.4	11540.6	11558.1	10773.6	11563.9	11441.8	8640.9
47.5°	12220.5	12255.4	12336.7	12278.6	12081.1	11976.5	12191.5	11488.3	12453.0	12336.7	9326.6
50°	11395.4	11430.2	11755.6	12156.6	12226.3	12354.2	12760.9	12313.5	13394.3	13301.4	10175.0
52.5°	9367.3	9559.1	10459.8	11418.6	12075.2	12604.0	13394.3	13539.6	14980.7	14980.7	11674.3
55°	7077.8	7246.3	8274.9	9948.4	11488.3	12627.3	13859.2	14370.6	16125.5	16148.7	12458.8
57.5°	5735.4	5840.0	6345.6	8059.8	10256.4	12336.7	14411.3	15085.3	17078.5	17183.1	13469.9
60°	4654.6	4712.7	5043.9	6235.2	8553.8	11552.3	14806.4	16108.1	18438.3	18583.6	14759.9
62.5°	3742.3	3800.4	4021.2	4736.0	6711.7	10082.1	14736.7	17171.5	20251.3	20489.6	16450.9
65°	2986.8	3050.8	3196.0	3637.7	4974.2	8257.4	14021.9	17717.7	22128.3	22360.7	17572.4
67.5°	2330.2	2388.3	2487.1	2777.7	3504.0	6177.1	12330.9	17142.4	22970.9	23168.4	17630.5
70°	1760.7	1789.8	1871.1	2057.1	2504.5	4102.6	9652.1	15213.2	22215.4	22395.6	16468.4
72.5°	1365.6	1359.8	1406.3	1499.2	1749.1	2824.1	6397.9	12371.6	19641.2	19827.1	14051.0
75°	1115.7	1109.9	1139.0	1168.0	1266.8	1894.4	3777.1	9315.0	15852.4	15497.9	10541.1
77.5°	941.4	935.6	964.6	970.4	1011.1	1307.5	2150.1	6130.6	10576.0	9965.9	5938.8
80°	796.1	790.3	825.2	836.8	865.8	958.8	1237.7	3318.1	5311.2	5032.3	2835.8
82.5°	598.5	621.8	685.7	714.8	749.6	708.9	767.1	1464.4	2463.9	2353.5	1231.9
85°	290.5	342.8	517.2	575.3	616.0	447.4	523.0	691.5	1109.9	1057.6	499.7
87.5°	98.8	87.2	308.0	366.1	401.0	203.4	290.5	383.5	459.1	418.4	156.9
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°	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4	2754.4
2.5°	2783.5	2696.3	2568.5	2469.7	2405.8	2353.5	2330.2	2324.4	2312.8	2307.0	2307.0
5°	2841.6	2684.7	2487.1	2382.5	2353.5	2330.2	2341.8	2347.6	2347.6	2347.6	2347.6
7.5°	2928.7	2707.9	2469.7	2399.9	2394.1	2394.1	2429.0	2446.4	2458.0	2458.0	2458.0
10°	3045.0	2748.6	2498.7	2440.6	2458.0	2469.7	2510.3	2533.6	2545.2	2551.0	2556.8
12.5°	3201.9	2835.8	2556.8	2510.3	2533.6	2539.4	2568.5	2580.1	2591.7	2597.5	2597.5
15°	3411.1	2963.6	2649.8	2591.7	2597.5	2591.7	2591.7	2580.1	2574.3	2574.3	2585.9
17.5°	3626.1	3085.6	2731.2	2649.8	2626.6	2580.1	2545.2	2516.2	2498.7	2487.1	2492.9
20°	3841.1	3196.0	2777.7	2661.4	2597.5	2522.0	2458.0	2417.4	2394.1	2370.9	2382.5
22.5°	4056.1	3300.6	2795.1	2626.6	2533.6	2423.2	2353.5	2289.5	2237.2	2202.4	2208.2
25°	4294.3	3416.9	2795.1	2585.9	2446.4	2330.2	2243.0	2138.4	2062.9	2033.8	2045.5
27.5°	4532.6	3515.7	2766.0	2510.3	2347.6	2231.4	2103.6	1981.5	1935.1	1917.6	1923.4
30°	4770.8	3591.2	2702.1	2417.4	2243.0	2115.2	1946.7	1865.3	1807.2	1760.7	1766.5
32.5°	5009.1	3643.5	2614.9	2301.2	2132.6	1969.9	1830.5	1737.5	1632.9	1574.8	1580.6
35°	5282.2	3684.2	2510.3	2184.9	2010.6	1842.1	1737.5	1586.4	1476.0	1429.5	1417.9
37.5°	5566.9	3713.2	2399.9	2057.1	1888.6	1749.1	1644.5	1458.6	1354.0	1290.0	1284.2
40°	5874.9	3724.8	2266.3	1923.4	1772.4	1691.0	1522.5	1383.0	1202.9	1162.2	1162.2
42.5°	6241.0	3719.0	2132.6	1789.8	1644.5	1557.3	1435.3	1371.4	1214.5	1173.8	1150.6
45°	6659.4	3719.0	1987.4	1632.9	1516.7	1388.8	1336.5	1295.9	1191.3	1208.7	1220.3
47.5°	7135.9	3707.4	1813.0	1505.0	1412.1	1301.7	1272.6	1185.4	1144.8	1156.4	1168.0
50°	7792.5	3724.8	1656.1	1400.4	1336.5	1243.6	1208.7	1162.2	1144.8	1150.6	1144.8
52.5°	8704.9	3666.7	1505.0	1336.5	1278.4	1156.4	1156.4	1150.6	1156.4	1150.6	1150.6
55°	9204.6	3538.9	1394.6	1301.7	1237.7	1115.7	1139.0	1150.6	1162.2	1156.4	1156.4
57.5°	9913.6	3451.7	1307.5	1278.4	1214.5	1104.1	1127.3	1150.6	1156.4	1150.6	1150.6
60°	10750.3	3393.6	1249.4	1284.2	1197.1	1104.1	1133.1	1150.6	1144.8	1139.0	1139.0
62.5°	11720.8	3370.4	1208.7	1301.7	1179.6	1109.9	1133.1	1150.6	1127.3	1121.5	1121.5
65°	12086.9	3161.2	1156.4	1313.3	1191.3	1109.9	1127.3	1133.1	1104.1	1098.3	1092.5
67.5°	11523.2	2800.9	1080.8	1290.0	1226.1	1109.9	1109.9	1104.1	1069.2	1063.4	1051.8
70°	10262.2	2324.4	964.6	1214.5	1249.4	1115.7	1086.7	1057.6	1022.7	1022.7	999.5
72.5°	8402.7	1830.5	813.5	1080.8	1231.9	1133.1	1040.2	999.5	958.8	958.8	935.6
75°	6055.1	1365.6	650.8	900.7	1156.4	1127.3	982.1	929.8	883.3	877.5	848.4
77.5°	3451.7	958.8	528.8	703.1	1028.5	1098.3	929.8	848.4	796.1	778.7	761.2
80°	1772.4	645.0	430.0	552.0	854.2	1016.9	889.1	755.4	697.3	668.3	639.2
82.5°	842.6	430.0	331.2	406.8	645.0	889.1	836.8	650.8	586.9	552.0	517.2
85°	377.7	255.7	220.8	261.5	459.1	691.5	738.0	534.6	459.1	575.3	424.2
87.5°	122.0	116.2	116.2	122.0	220.8	302.2	540.4	395.1	366.1	302.2	255.7
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)