

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: P236863

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2R-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236863  
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-AF72-100-D-U-T2R-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14177 lumens  
Efficiency: N/A  
Efficacy: 139.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

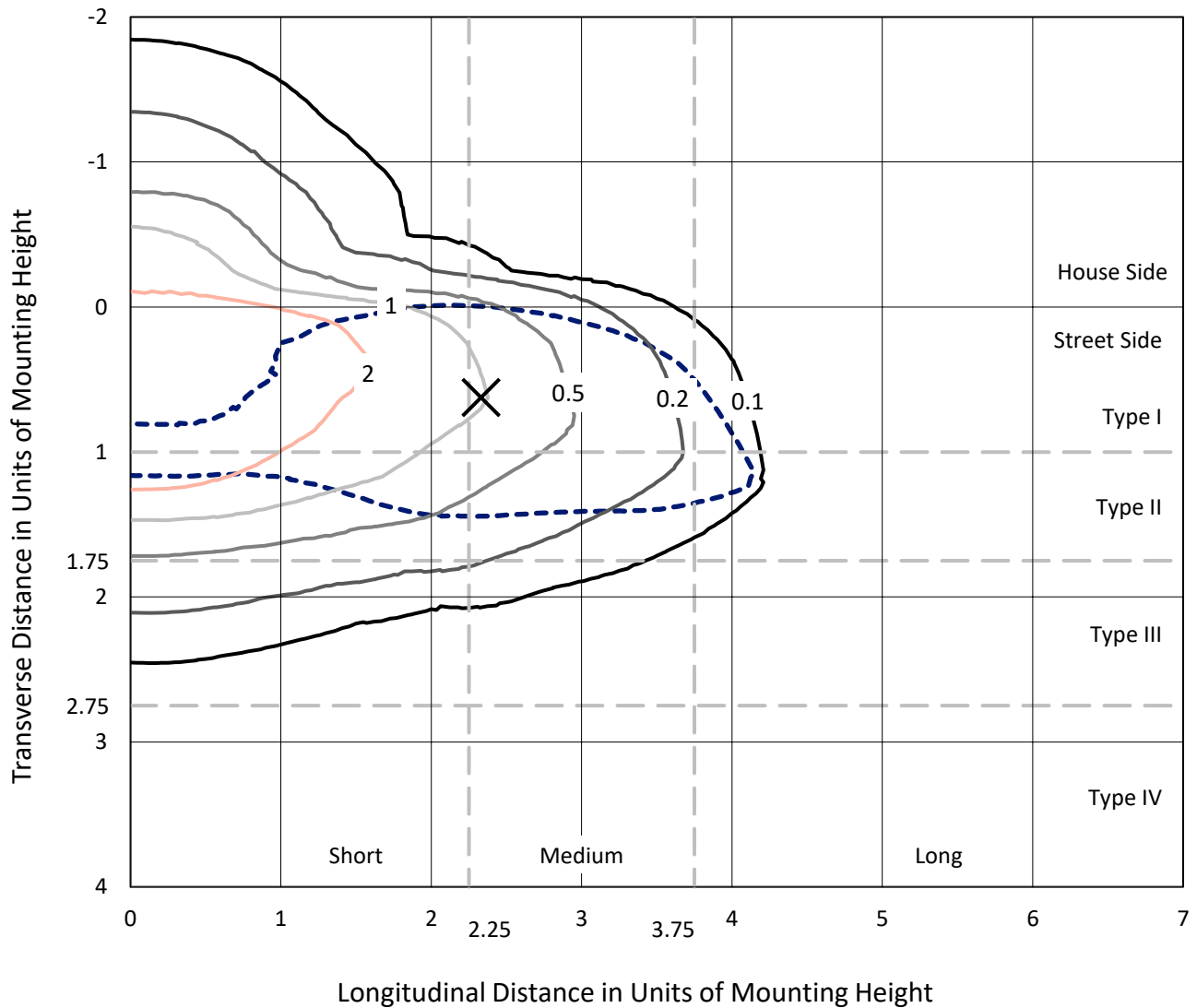
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P236863  
 CATALOG NUMBER: ARCH-L-AF72-100-D-U-T2R-7050

### Iso-Footcandle Lines of Horizontal Illumination

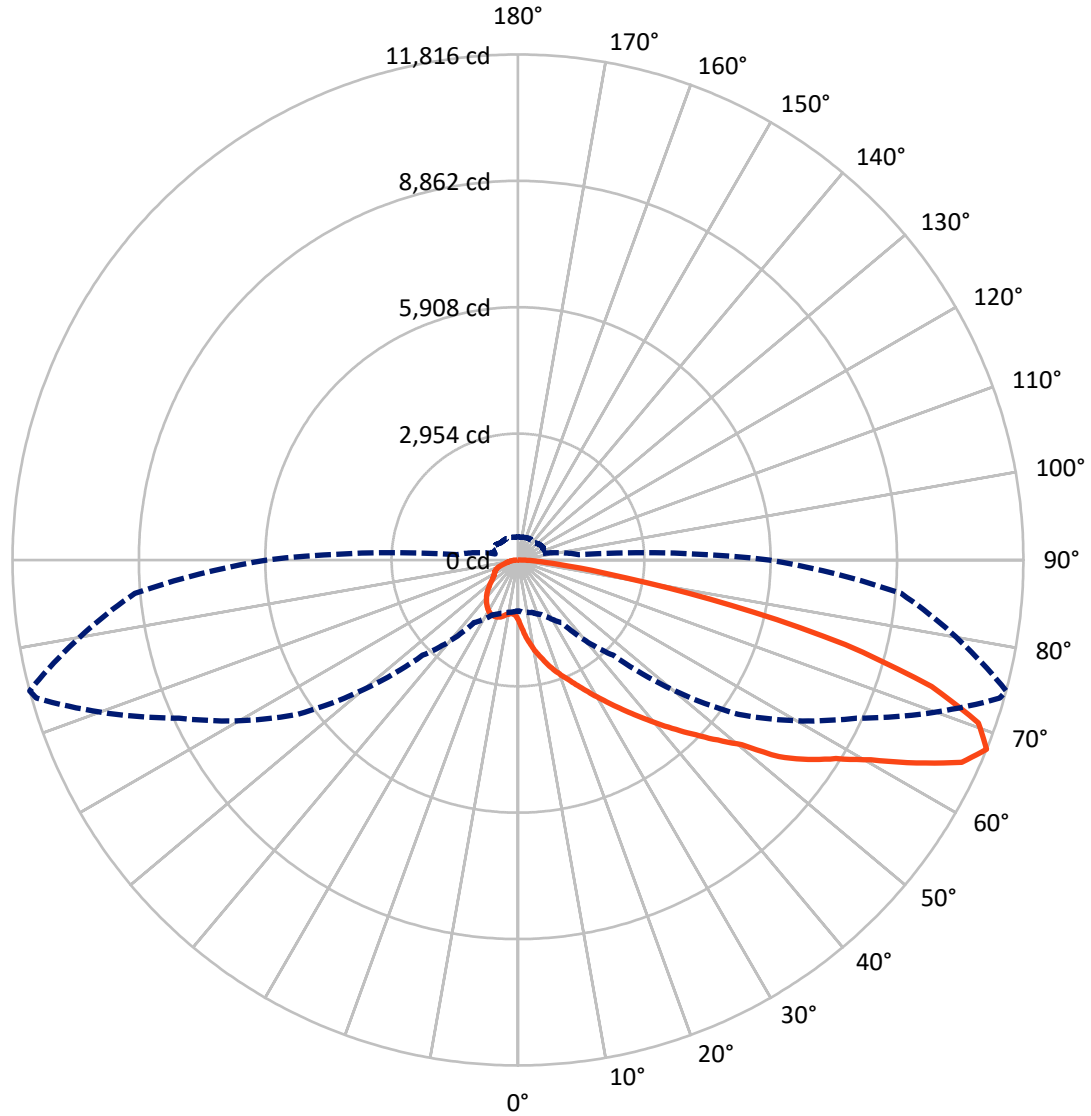
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type II - Medium - N/A

REPORT NUMBER: P236863  
CATALOG NUMBER: ARCH-L-AF72-100-D-U-T2R-7050

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P236863  
 CATALOG NUMBER: ARCH-L-AF72-100-D-U-T2R-7050

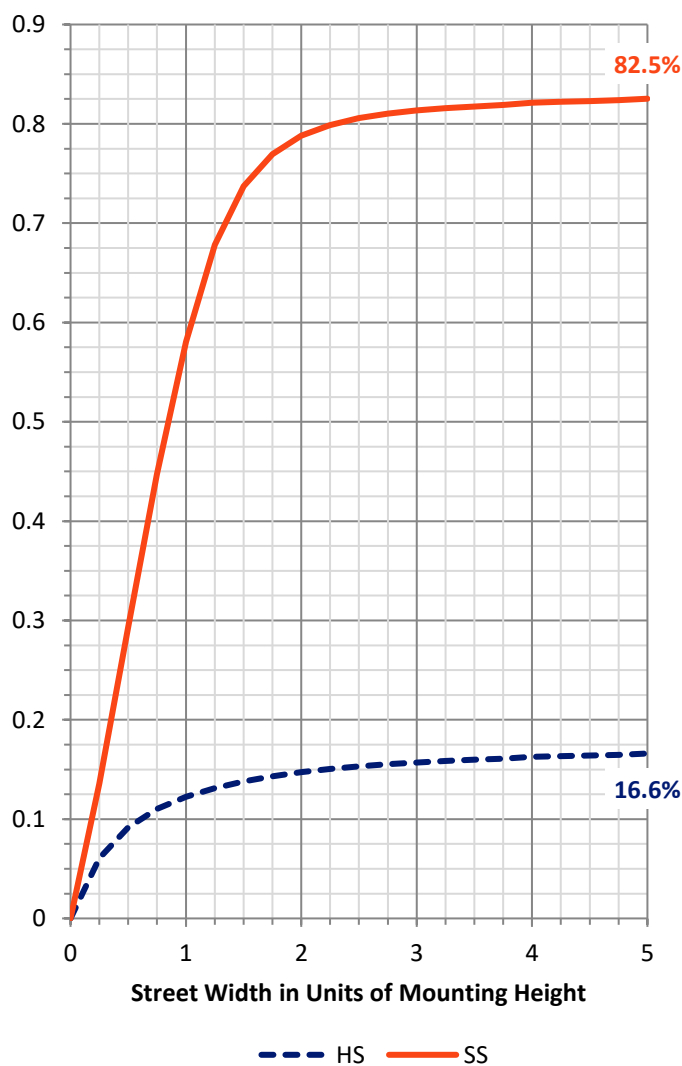
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2420.9	0.0	2420.9
	% Fixture	17.1	0.0	17.1
<b>Street Side</b>	Lumens	11756.1	0.0	11756.1
	% Fixture	82.9	0.0	82.9
<b>Total</b>	Lumens	14177.0	0.0	14177.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.0	1.2
10°-20°	596.4	4.2
20°-30°	1087.8	7.7
30°-40°	1785.6	12.6
40°-50°	2582.2	18.2
50°-60°	3043.1	21.5
60°-70°	2957.1	20.9
70°-80°	1643.8	11.6
80°-90°	316.1	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°	14177.0	100.0
0°-180°	14177.0	100.0

**Coefficient of Utilization**

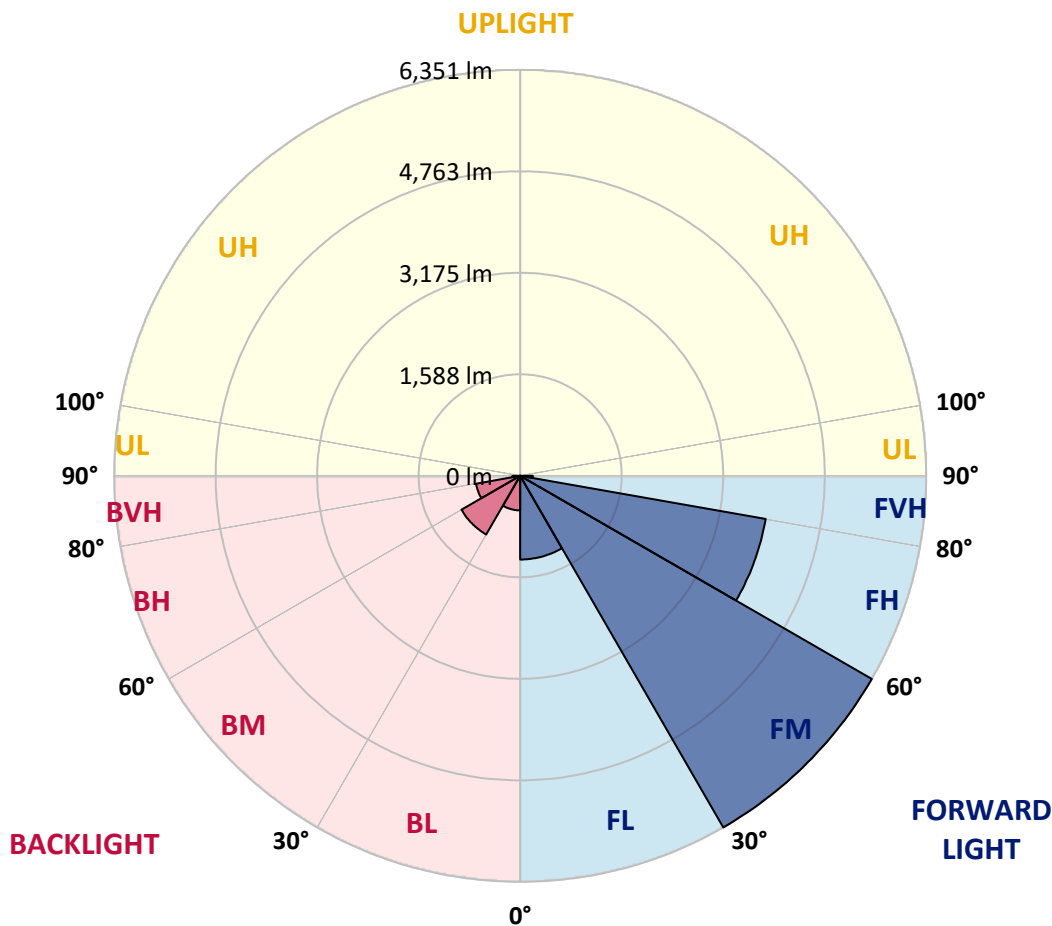


REPORT NUMBER: P236863  
 CATALOG NUMBER: ARCH-L-AF72-100-D-U-T2R-7050

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1308.9	9.2			
FM (30°-60°)	6350.5	44.8			
FH (60°-80°)	3899.9	27.5			G2/5000
FVH (80°-90°)	196.7	1.4			G2/225
BL (0°-30°)	540.3	3.8	B2/1000		
BM (30°-60°)	1060.2	7.5	B2/2500		
BH (60°-80°)	701.0	4.9	B2/1000		G2/1000
BVH (80°-90°)	119.4	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Medium





REPORT NUMBER: P236863

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T2R-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8
2.5°	1991.6	1997.5	1985.7	1959.0	1920.5	1849.4	1787.1	1677.5	1579.7	1567.8	1464.1
5°	2341.3	2347.3	2332.4	2299.8	2258.4	2181.3	2095.3	1953.1	1796.0	1766.4	1547.1
7.5°	2581.4	2584.4	2566.6	2534.0	2501.4	2424.3	2338.4	2178.3	1985.7	1962.0	1653.8
10°	2785.9	2791.8	2768.1	2747.4	2711.8	2634.7	2545.8	2376.9	2178.3	2145.7	1763.4
12.5°	2975.6	2981.5	2966.7	2948.9	2937.0	2865.9	2768.1	2566.6	2353.2	2317.6	1893.8
15°	3103.0	3108.9	3111.9	3135.6	3150.4	3100.0	3002.2	2782.9	2542.9	2510.3	2047.9
17.5°	3067.4	3082.3	3126.7	3212.7	3304.5	3307.5	3227.5	2996.3	2729.6	2694.0	2205.0
20°	2963.7	2975.6	3028.9	3159.3	3340.1	3443.8	3437.9	3212.7	2904.4	2865.9	2350.2
22.5°	3049.7	3064.5	3064.5	3144.5	3322.3	3515.0	3592.0	3426.1	3079.3	3043.7	2495.4
25°	3417.2	3426.1	3363.8	3331.2	3396.4	3574.2	3719.5	3657.2	3292.7	3251.2	2652.5
27.5°	3929.9	3915.1	3838.0	3707.6	3636.5	3683.9	3832.1	3876.5	3538.7	3488.3	2815.5
30°	4439.6	4430.8	4341.8	4167.0	4006.9	3906.2	3956.6	4072.1	3805.4	3746.1	2972.6
32.5°	4916.8	4902.0	4804.2	4599.7	4418.9	4232.2	4134.4	4250.0	4089.9	4021.8	3147.5
35°	5355.4	5316.9	5219.1	5005.7	4819.0	4641.2	4401.1	4418.9	4398.2	4327.0	3340.1
37.5°	5711.1	5681.4	5574.8	5376.2	5177.6	5008.7	4756.8	4611.5	4730.1	4661.9	3562.4
40°	6025.2	5992.6	5883.0	5684.4	5500.7	5340.6	5142.0	4845.7	5103.5	5026.5	3811.3
42.5°	6262.3	6238.6	6149.7	5954.1	5776.3	5631.1	5533.3	5142.0	5491.8	5417.7	4084.0
45°	6389.8	6366.1	6318.6	6161.6	5998.6	5885.9	5894.8	5494.7	5897.8	5835.6	4407.0
47.5°	6232.7	6250.5	6292.0	6262.3	6161.6	6108.2	6217.9	5859.3	6351.2	6292.0	4756.8
50°	5811.8	5829.6	5995.6	6200.1	6235.7	6300.9	6508.3	6280.1	6831.4	6783.9	5189.5
52.5°	4777.5	4875.3	5334.7	5823.7	6158.6	6428.3	6831.4	6905.5	7640.5	7640.5	5954.1
55°	3609.8	3695.8	4220.3	5073.9	5859.3	6440.2	7068.5	7329.3	8224.3	8236.2	6354.2
57.5°	2925.2	2978.5	3236.4	4110.7	5231.0	6292.0	7350.0	7693.8	8710.4	8763.7	6869.9
60°	2373.9	2403.6	2572.5	3180.1	4362.6	5891.9	7551.6	8215.4	9403.9	9478.0	7527.8
62.5°	1908.6	1938.3	2050.9	2415.4	3423.1	5142.0	7516.0	8757.8	10328.6	10450.1	8390.3
65°	1523.4	1556.0	1630.0	1855.3	2536.9	4211.4	7151.4	9036.4	11285.8	11404.4	8962.3
67.5°	1188.5	1218.1	1268.5	1416.7	1787.1	3150.4	6289.0	8743.0	11715.6	11816.3	8991.9
70°	898.0	912.8	954.3	1049.2	1277.4	2092.4	4922.7	7759.0	11330.3	11422.2	8399.2
72.5°	696.5	693.5	717.2	764.6	892.1	1440.4	3263.1	6309.8	10017.4	10112.2	7166.3
75°	569.0	566.1	580.9	595.7	646.1	966.2	1926.4	4750.8	8085.0	7904.2	5376.2
77.5°	480.1	477.2	492.0	494.9	515.7	666.8	1096.6	3126.7	5394.0	5082.8	3028.9
80°	406.0	403.1	420.8	426.8	441.6	489.0	631.3	1692.3	2708.8	2566.6	1446.3
82.5°	305.3	317.1	349.7	364.5	382.3	361.6	391.2	746.9	1256.6	1200.3	628.3
85°	148.2	174.9	263.8	293.4	314.2	228.2	266.7	352.7	566.1	539.4	254.9
87.5°	50.4	44.5	157.1	186.7	204.5	103.7	148.2	195.6	234.1	213.4	80.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P236863

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T2R-7050

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8	1404.8
2.5°	1419.6	1375.2	1310.0	1259.6	1227.0	1200.3	1188.5	1185.5	1179.6	1176.6	1176.6
5°	1449.3	1369.2	1268.5	1215.1	1200.3	1188.5	1194.4	1197.3	1197.3	1197.3	1197.3
7.5°	1493.7	1381.1	1259.6	1224.0	1221.1	1221.1	1238.8	1247.7	1253.7	1253.7	1253.7
10°	1553.0	1401.8	1274.4	1244.8	1253.7	1259.6	1280.3	1292.2	1298.1	1301.1	1304.0
12.5°	1633.0	1446.3	1304.0	1280.3	1292.2	1295.1	1310.0	1315.9	1321.8	1324.8	1324.8
15°	1739.7	1511.5	1351.5	1321.8	1324.8	1321.8	1321.8	1315.9	1312.9	1312.9	1318.9
17.5°	1849.4	1573.7	1392.9	1351.5	1339.6	1315.9	1298.1	1283.3	1274.4	1268.5	1271.4
20°	1959.0	1630.0	1416.7	1357.4	1324.8	1286.3	1253.7	1232.9	1221.1	1209.2	1215.1
22.5°	2068.7	1683.4	1425.5	1339.6	1292.2	1235.9	1200.3	1167.7	1141.0	1123.2	1126.2
25°	2190.2	1742.7	1425.5	1318.9	1247.7	1188.5	1144.0	1090.6	1052.1	1037.3	1043.2
27.5°	2311.7	1793.0	1410.7	1280.3	1197.3	1138.1	1072.9	1010.6	986.9	978.0	981.0
30°	2433.2	1831.6	1378.1	1232.9	1144.0	1078.8	992.8	951.4	921.7	898.0	901.0
32.5°	2554.7	1858.3	1333.7	1173.6	1087.7	1004.7	933.6	886.2	832.8	803.2	806.1
35°	2694.0	1879.0	1280.3	1114.4	1025.4	939.5	886.2	809.1	752.8	729.1	723.1
37.5°	2839.2	1893.8	1224.0	1049.2	963.2	892.1	838.7	743.9	690.5	657.9	655.0
40°	2996.3	1899.7	1155.8	981.0	903.9	862.4	776.5	705.4	613.5	592.7	592.7
42.5°	3183.0	1896.8	1087.7	912.8	838.7	794.3	732.0	699.4	619.4	598.7	586.8
45°	3396.4	1896.8	1013.6	832.8	773.5	708.3	681.7	660.9	607.6	616.5	622.4
47.5°	3639.4	1890.9	924.7	767.6	720.2	663.9	649.1	604.6	583.9	589.8	595.7
50°	3974.3	1899.7	844.7	714.3	681.7	634.2	616.5	592.7	583.9	586.8	583.9
52.5°	4439.6	1870.1	767.6	681.7	652.0	589.8	589.8	586.8	589.8	586.8	586.8
55°	4694.5	1804.9	711.3	663.9	631.3	569.0	580.9	586.8	592.7	589.8	589.8
57.5°	5056.1	1760.4	666.8	652.0	619.4	563.1	575.0	586.8	589.8	586.8	586.8
60°	5482.9	1730.8	637.2	655.0	610.5	563.1	577.9	586.8	583.9	580.9	580.9
62.5°	5977.8	1719.0	616.5	663.9	601.6	566.1	577.9	586.8	575.0	572.0	572.0
65°	6164.5	1612.3	589.8	669.8	607.6	566.1	575.0	577.9	563.1	560.1	557.2
67.5°	5877.1	1428.5	551.3	657.9	625.3	566.1	566.1	563.1	545.3	542.4	536.4
70°	5233.9	1185.5	492.0	619.4	637.2	569.0	554.2	539.4	521.6	521.6	509.8
72.5°	4285.5	933.6	414.9	551.3	628.3	577.9	530.5	509.8	489.0	489.0	477.2
75°	3088.2	696.5	331.9	459.4	589.8	575.0	500.9	474.2	450.5	447.5	432.7
77.5°	1760.4	489.0	269.7	358.6	524.6	560.1	474.2	432.7	406.0	397.1	388.2
80°	903.9	329.0	219.3	281.6	435.7	518.7	453.4	385.3	355.6	340.8	326.0
82.5°	429.7	219.3	168.9	207.5	329.0	453.4	426.8	331.9	299.3	281.6	263.8
85°	192.6	130.4	112.6	133.4	234.1	352.7	376.4	272.7	234.1	293.4	216.4
87.5°	62.2	59.3	59.3	62.2	112.6	154.1	275.6	201.5	186.7	154.1	130.4
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)