

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: P231142

Luminaire Tested: **ARCH-M-AF48-60-D-U-T3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231142  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-M-AF48-60-D-U-T3-7030  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7723 lumens  
Efficiency: N/A  
Efficacy: 122.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 28.75 FT

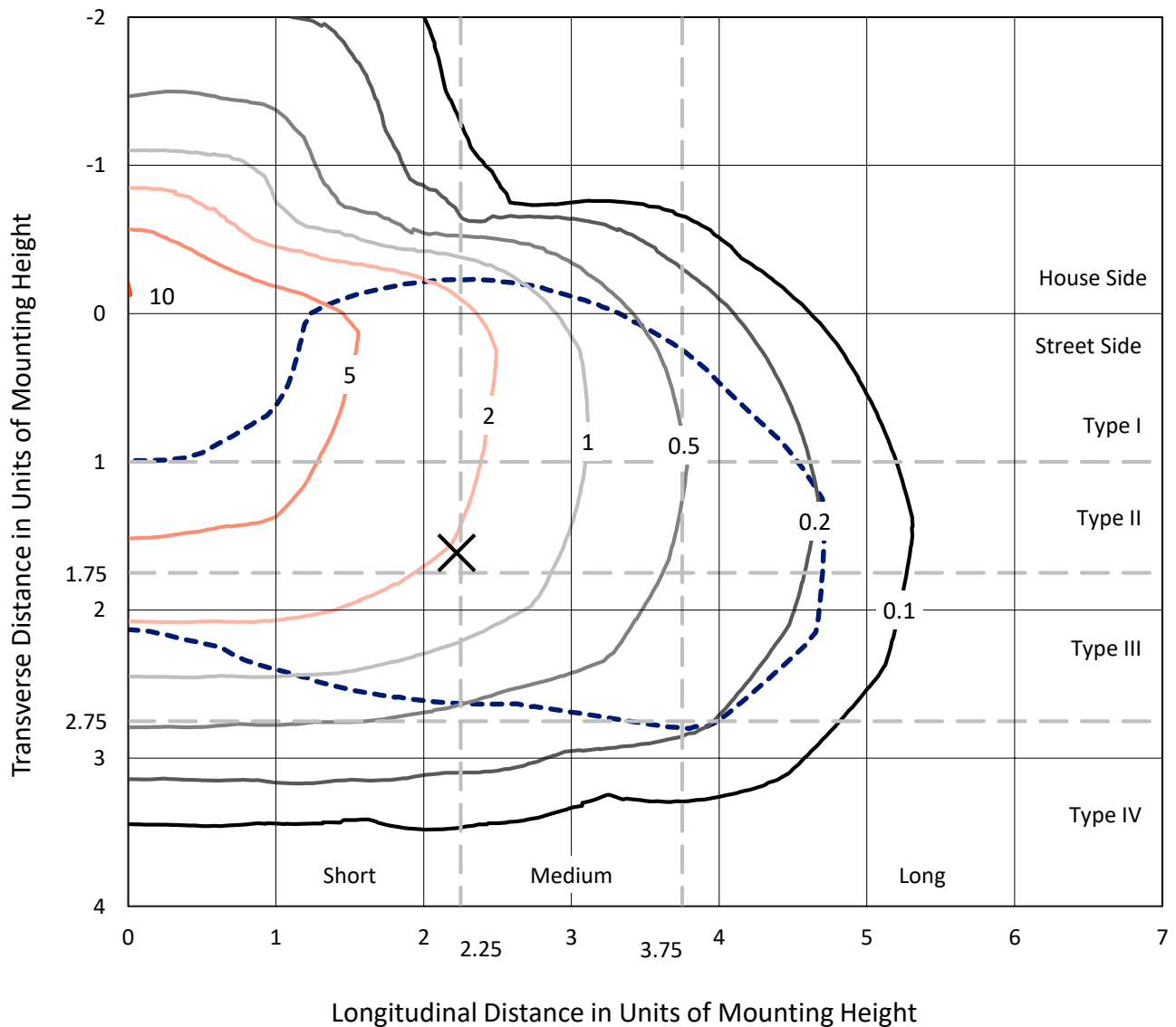


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### Iso-Footcandle Lines of Horizontal Illumination

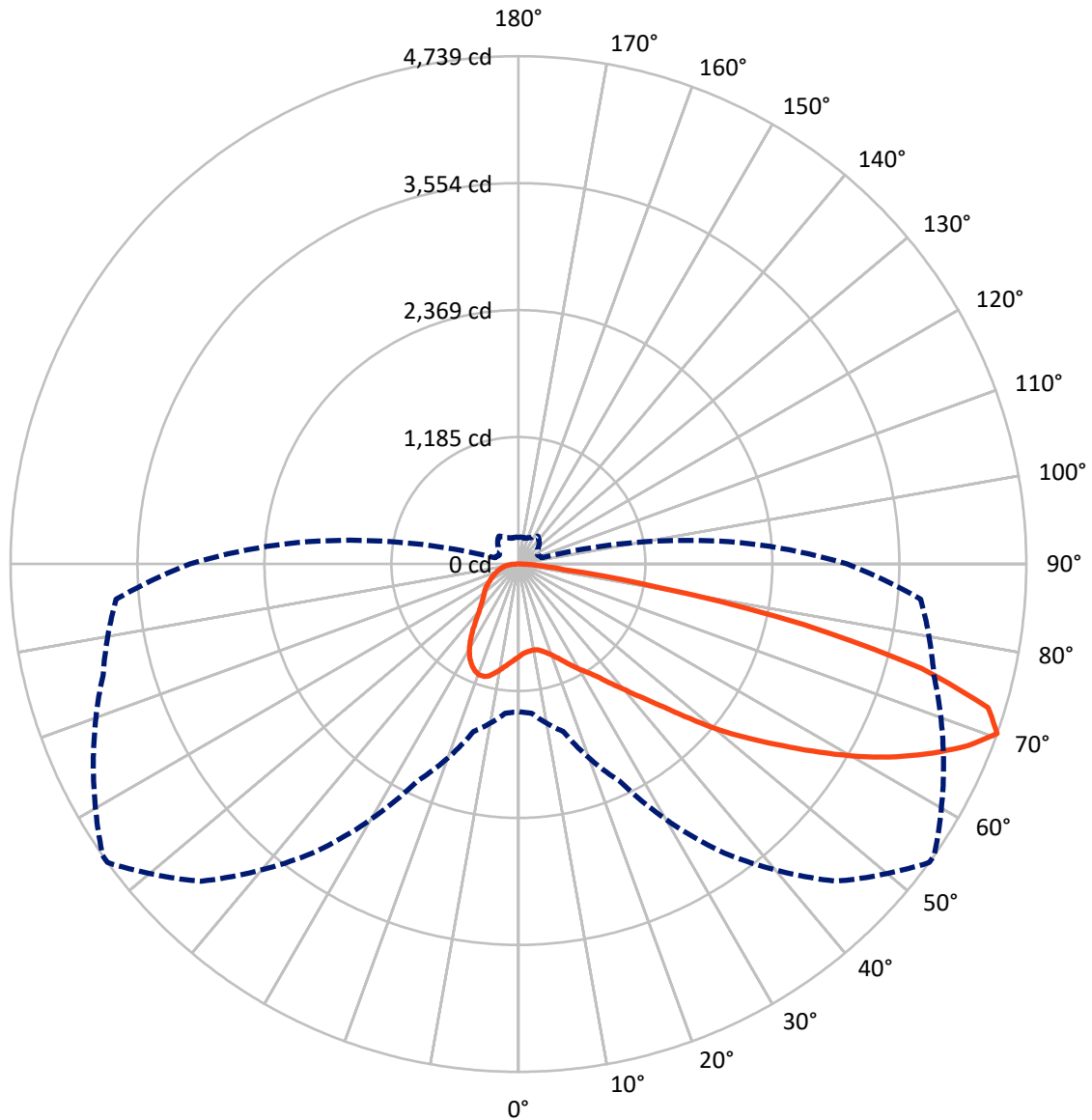
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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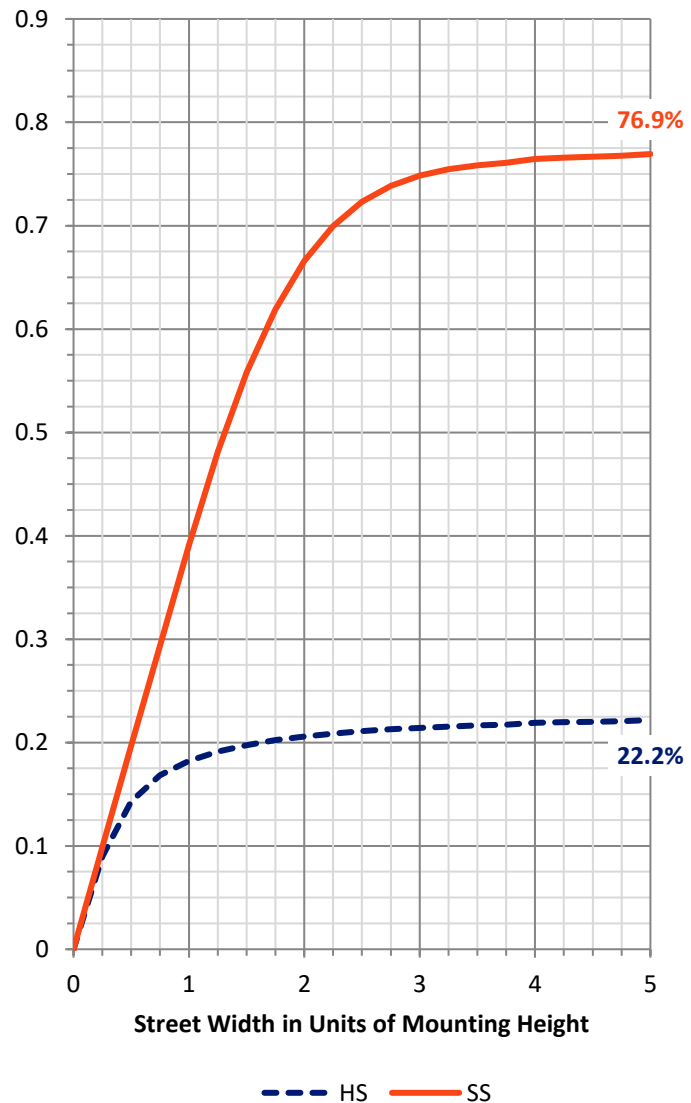
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1751.5	0.0	1751.5
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	5971.4	0.0	5971.4
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	7723.0	0.0	7723.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.8	1.1
10°-20°	270.9	3.5
20°-30°	470.7	6.1
30°-40°	687.9	8.9
40°-50°	1079.6	14.0
50°-60°	1660.2	21.5
60°-70°	2028.4	26.3
70°-80°	1257.6	16.3
80°-90°	182.7	2.4
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°	7723.0	100.0
0°-180°	7723.0	100.0



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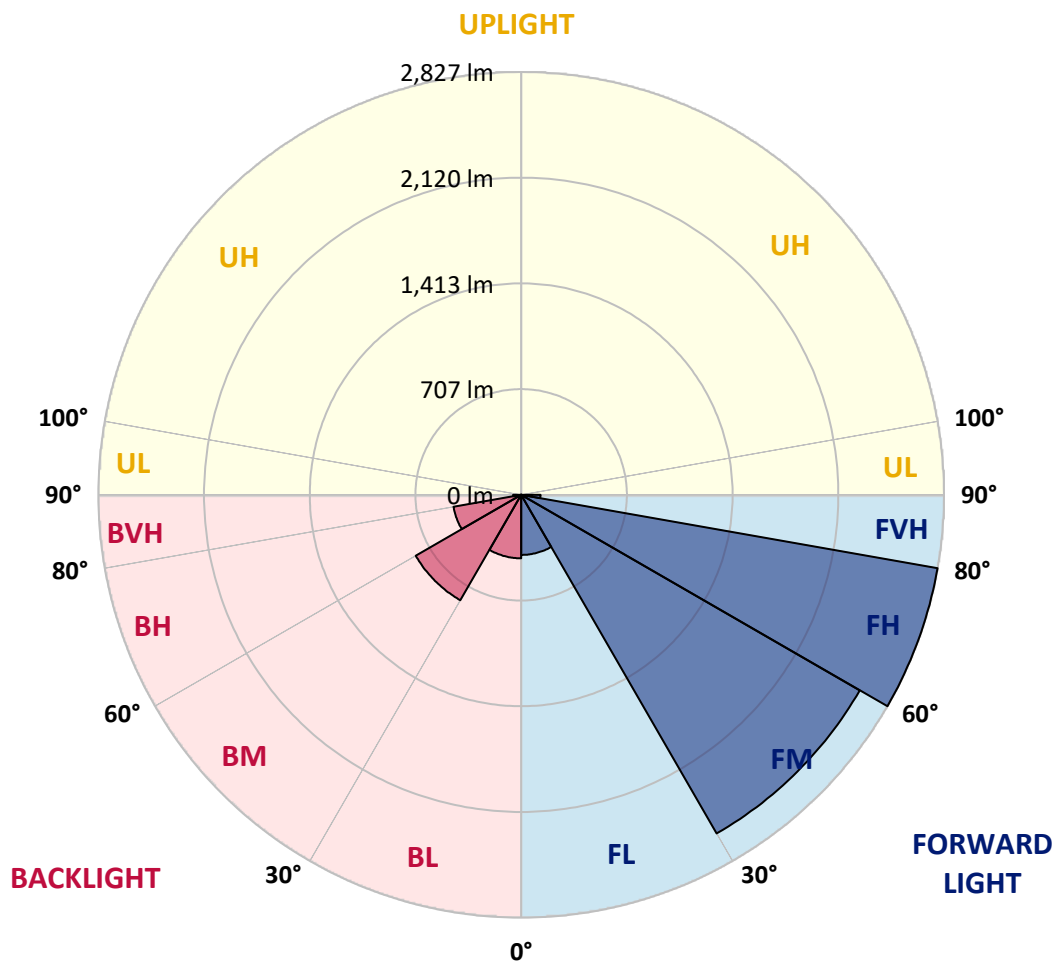
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	401.8	5.2			
FM	(30°-60°)	2613.9	33.8			
FH	(60°-80°)	2826.7	36.6			G2/5000
FVH	(80°-90°)	129.0	1.7			G2/225
BL	(0°-30°)	424.6	5.5	B1/500		
BM	(30°-60°)	813.9	10.5	B1/1000		
BH	(60°-80°)	459.3	5.9	B1/500		G1/500
BVH	(80°-90°)	53.7	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	864.0	864.0	864.0	864.0	864.0	864.0	864.0	864.0	864.0	864.0	864.0
2.5°	830.1	827.3	827.3	831.5	832.9	837.2	837.2	838.6	842.8	849.9	858.4
5°	804.7	803.2	804.7	810.3	813.1	821.6	824.5	825.9	834.4	845.7	858.4
7.5°	779.2	777.8	780.6	789.1	797.6	810.3	817.4	818.8	831.5	847.1	864.0
10°	770.7	769.3	773.5	780.6	789.1	803.2	814.6	816.0	834.4	852.7	876.8
12.5°	782.0	780.6	784.9	791.9	800.4	810.3	823.0	824.5	848.5	872.5	898.0
15°	810.3	810.3	811.7	816.0	824.5	832.9	844.2	845.7	871.1	899.4	924.9
17.5°	854.1	851.3	851.3	849.9	855.6	859.8	873.9	875.4	902.2	927.7	953.1
20°	907.9	906.5	900.8	893.7	892.3	895.2	909.3	910.7	937.6	958.8	982.8
22.5°	972.9	974.4	961.6	946.1	939.0	943.2	956.0	957.4	977.2	995.6	1016.8
25°	1059.2	1055.0	1036.6	1013.9	999.8	999.8	1012.5	1012.5	1030.9	1042.2	1056.4
27.5°	1141.2	1132.7	1115.8	1083.2	1060.6	1064.9	1077.6	1077.6	1094.6	1098.8	1105.9
30°	1230.3	1221.8	1200.6	1159.6	1129.9	1127.1	1142.6	1141.2	1163.8	1162.4	1156.8
32.5°	1339.2	1335.0	1299.6	1247.3	1207.7	1197.8	1211.9	1213.3	1227.5	1223.2	1204.9
35°	1491.9	1490.5	1458.0	1366.1	1313.7	1295.4	1303.8	1303.8	1313.7	1302.4	1271.3
37.5°	1684.3	1687.1	1658.8	1523.0	1449.5	1418.4	1419.8	1418.4	1421.2	1408.5	1376.0
40°	1876.6	1883.7	1882.2	1718.2	1624.9	1571.1	1551.3	1548.5	1555.6	1549.9	1518.8
42.5°	2129.7	2146.7	2107.1	1958.6	1854.0	1763.4	1709.7	1702.6	1718.2	1725.3	1695.6
45°	2392.7	2387.1	2324.9	2217.4	2122.6	2006.7	1904.9	1893.6	1904.9	1926.1	1895.0
47.5°	2529.9	2525.7	2510.1	2456.4	2442.2	2309.3	2155.2	2145.3	2124.1	2153.8	2117.0
50°	2756.2	2760.4	2696.8	2691.1	2750.5	2677.0	2438.0	2415.4	2377.2	2401.2	2370.1
52.5°	2920.2	2901.8	2862.2	2911.7	3097.0	3057.4	2703.9	2694.0	2658.6	2653.0	2638.8
55°	2986.7	2986.7	2993.8	3108.3	3372.8	3320.4	2992.3	3002.2	2954.2	2914.6	2933.0
57.5°	3006.5	3015.0	3075.8	3265.3	3696.6	3525.5	3310.5	3324.7	3255.4	3176.2	3234.2
60°	2908.9	2934.4	3080.0	3354.4	3879.0	3743.3	3645.7	3649.9	3549.5	3433.6	3535.4
62.5°	2658.6	2689.7	2949.9	3391.1	3849.3	3966.7	3962.5	3972.4	3835.2	3690.9	3818.2
65°	2351.7	2382.8	2660.0	3287.9	3826.7	4126.5	4252.4	4279.2	4102.5	3908.7	3995.0
67.5°	1900.6	1941.6	2204.7	2940.0	3716.4	4258.0	4523.9	4552.2	4308.9	4021.9	3979.4
70°	1377.4	1397.2	1617.8	2234.4	3266.7	4185.9	4738.8	4737.4	4376.8	4013.4	3767.3
72.5°	663.2	678.8	869.7	1387.3	2336.2	3552.4	4583.3	4610.1	4283.5	3890.3	3282.2
75°	272.9	288.5	352.1	585.5	1226.1	2347.5	3884.7	3948.3	3890.3	3491.5	2568.1
77.5°	169.7	175.4	206.5	302.6	560.0	1096.0	2719.4	2805.7	3082.9	2797.2	1695.6
80°	127.3	131.5	154.1	212.1	353.5	404.4	1350.5	1459.4	1868.1	1605.1	767.9
82.5°	106.1	107.5	123.0	154.1	240.4	231.9	432.7	482.2	871.1	612.3	264.4
85°	99.0	101.8	110.3	110.3	152.7	145.7	179.6	188.1	253.1	209.3	91.9
87.5°	50.9	48.1	97.6	86.3	79.2	70.7	76.4	82.0	94.7	100.4	41.0
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°	864.0	864.0	864.0	864.0	864.0	864.0	864.0	864.0	864.0	864.0	864.0
2.5°	861.2	865.5	872.5	879.6	888.1	898.0	903.6	910.7	916.4	913.5	912.1
5°	865.5	872.5	888.1	902.2	919.2	939.0	951.7	965.9	977.2	980.0	975.8
7.5°	872.5	885.3	906.5	931.9	954.6	980.0	999.8	1019.6	1033.7	1036.6	1036.6
10°	889.5	903.6	931.9	965.9	992.7	1019.6	1042.2	1057.8	1070.5	1076.2	1076.2
12.5°	913.5	930.5	964.5	1005.5	1035.2	1060.6	1073.3	1080.4	1086.1	1091.7	1093.1
15°	941.8	960.2	1001.2	1045.1	1076.2	1088.9	1088.9	1087.5	1087.5	1090.3	1093.1
17.5°	970.1	989.9	1032.3	1079.0	1098.8	1091.7	1081.8	1077.6	1074.8	1073.3	1077.6
20°	999.8	1019.6	1062.0	1105.9	1100.2	1070.5	1056.4	1046.5	1038.0	1033.7	1039.4
22.5°	1032.3	1050.7	1094.6	1124.3	1081.8	1036.6	1009.7	994.1	980.0	971.5	977.2
25°	1070.5	1088.9	1131.3	1129.9	1049.3	985.7	943.2	917.8	902.2	893.7	893.7
27.5°	1115.8	1131.3	1172.3	1115.8	1004.0	917.8	855.6	831.5	827.3	820.2	820.2
30°	1162.4	1175.2	1210.5	1083.2	941.8	828.7	760.8	749.5	750.9	743.8	745.3
32.5°	1210.5	1223.2	1233.1	1035.2	861.2	728.3	683.0	674.6	673.1	667.5	661.8
35°	1278.4	1296.8	1236.0	970.1	763.6	644.9	612.3	603.8	595.4	575.6	575.6
37.5°	1381.6	1401.4	1228.9	889.5	663.2	579.8	550.1	538.8	524.7	504.9	497.8
40°	1523.0	1523.0	1213.3	799.0	582.6	527.5	499.2	485.1	469.5	449.7	445.5
42.5°	1689.9	1650.3	1189.3	707.1	523.2	492.1	466.7	451.1	432.7	410.1	407.3
45°	1885.1	1777.6	1155.4	625.1	479.4	470.9	455.4	428.5	397.4	373.3	369.1
47.5°	2074.6	1892.1	1122.8	567.1	442.6	462.4	449.7	404.4	362.0	328.1	323.8
50°	2282.4	1994.0	1084.7	519.0	414.3	456.8	442.6	369.1	322.4	298.4	295.6
52.5°	2490.3	2097.2	1043.6	468.1	390.3	445.5	425.7	343.6	321.0	288.5	284.2
55°	2709.5	2217.4	995.6	411.5	362.0	422.8	403.0	342.2	330.9	288.5	278.6
57.5°	2923.1	2350.3	917.8	356.4	330.9	388.9	394.5	333.7	309.7	285.7	274.3
60°	3159.2	2491.7	789.1	309.7	304.0	360.6	383.2	315.4	285.7	277.2	271.5
62.5°	3348.7	2619.0	616.6	277.2	281.4	338.0	369.1	304.0	275.8	268.7	267.3
65°	3430.7	2621.8	442.6	248.9	258.8	316.8	355.0	294.1	267.3	264.4	263.0
67.5°	3344.5	2477.6	311.1	222.0	234.7	297.0	336.6	284.2	258.8	260.2	257.4
70°	3065.9	2173.6	227.7	196.6	212.1	275.8	316.8	271.5	248.9	251.7	247.5
72.5°	2565.3	1694.2	182.4	175.4	193.7	253.1	297.0	257.4	233.3	234.7	226.3
75°	1895.0	1122.8	152.7	157.0	172.5	231.9	271.5	239.0	216.4	210.7	205.1
77.5°	1127.1	577.0	125.9	137.2	154.1	206.5	243.2	216.4	198.0	188.1	183.8
80°	465.3	233.3	103.2	116.0	134.3	183.8	215.0	189.5	176.8	166.9	161.2
82.5°	185.3	114.5	82.0	94.7	113.1	159.8	188.1	166.9	154.1	147.1	131.5
85°	70.7	56.6	55.2	66.5	84.8	123.0	155.6	140.0	130.1	111.7	107.5
87.5°	28.3	25.5	25.5	32.5	48.1	77.8	111.7	97.6	101.8	80.6	82.0
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)