

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: P214718

Luminaire Tested: **ARCH-AF24-70-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214718
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-AF24-70-D-U-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7502 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

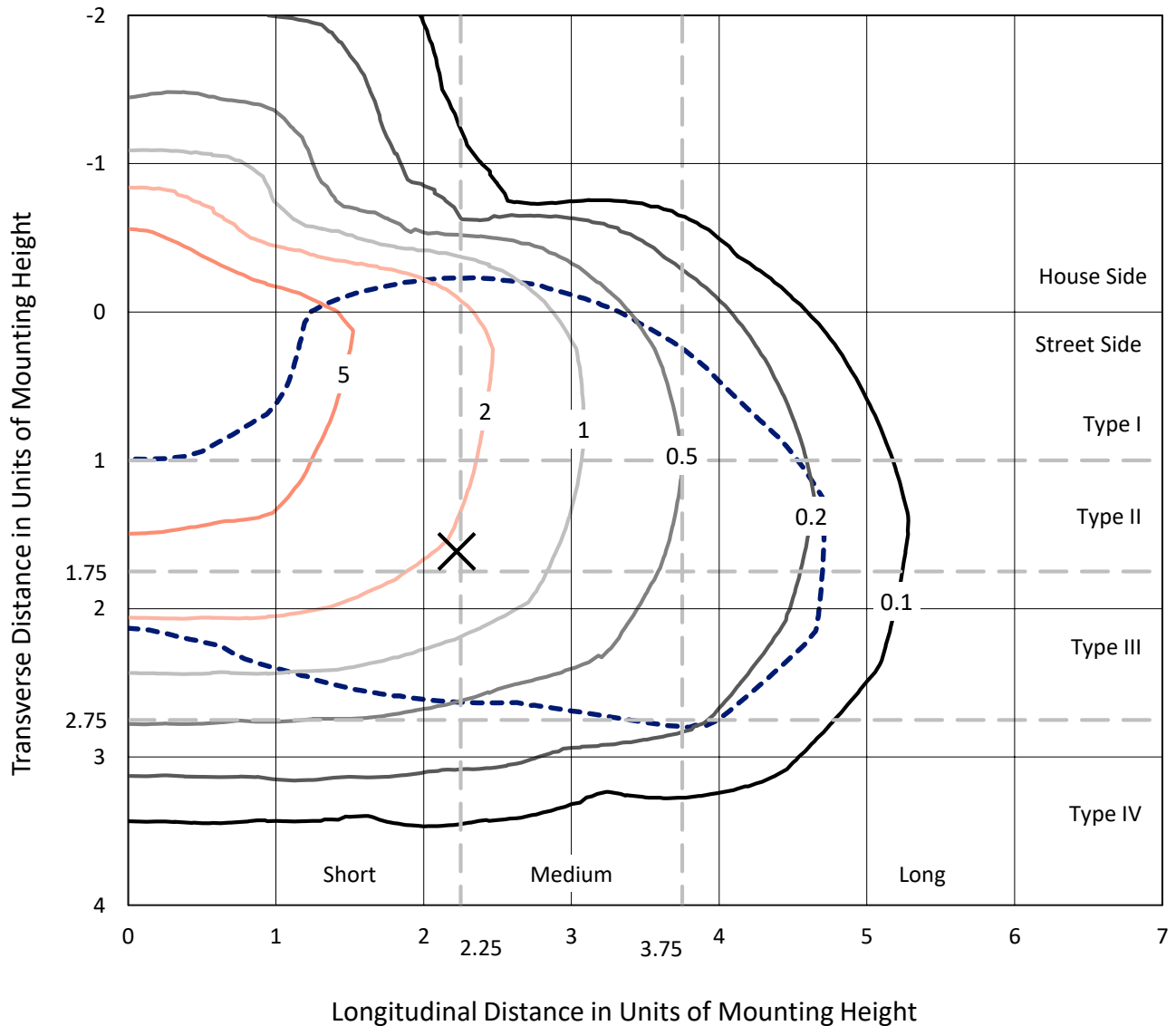
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

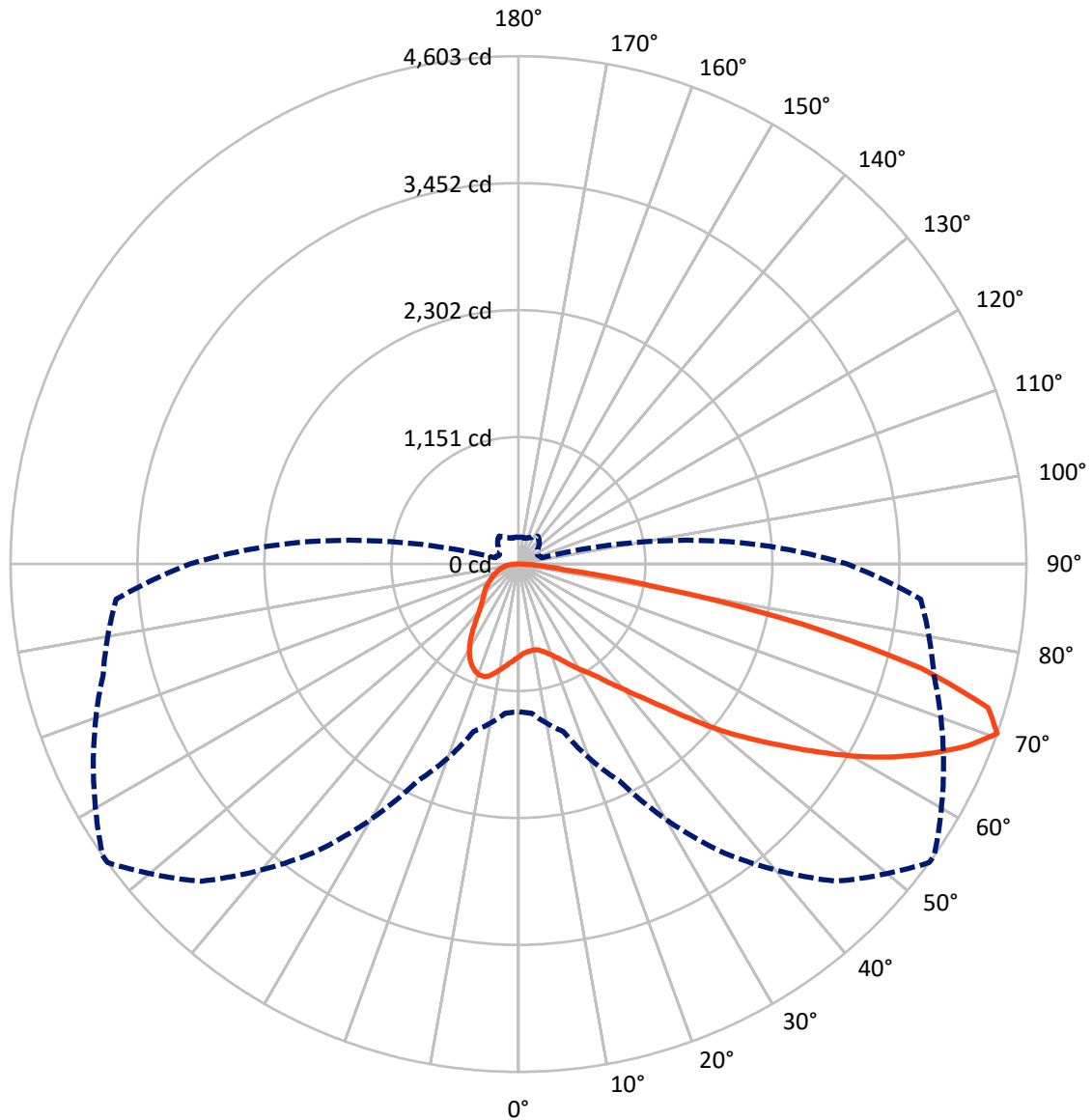
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.8 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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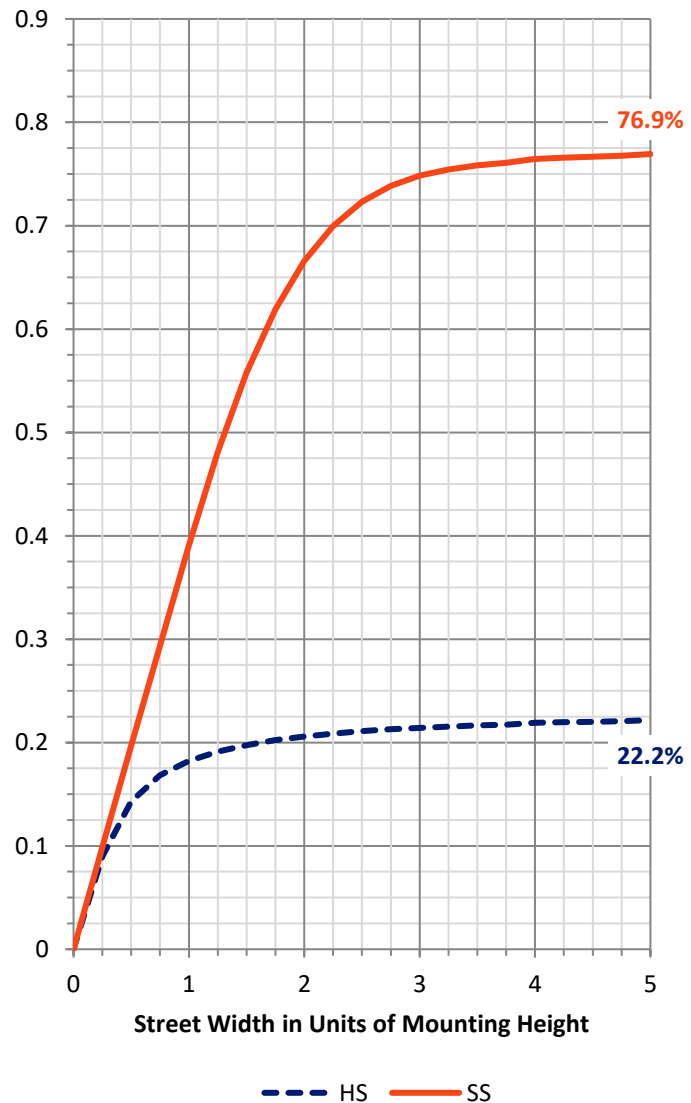
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1701.4	0.0	1701.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	5800.6	0.0	5800.6
	% Fixture	77.3	0.0	77.3
Total	Lumens	7502.0	0.0	7502.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	1.1
10°-20°	263.2	3.5
20°-30°	457.3	6.1
30°-40°	668.2	8.9
40°-50°	1048.8	14.0
50°-60°	1612.7	21.5
60°-70°	1970.4	26.3
70°-80°	1221.6	16.3
80°-90°	177.5	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°	7502.0	100.0
0°-180°	7502.0	100.0



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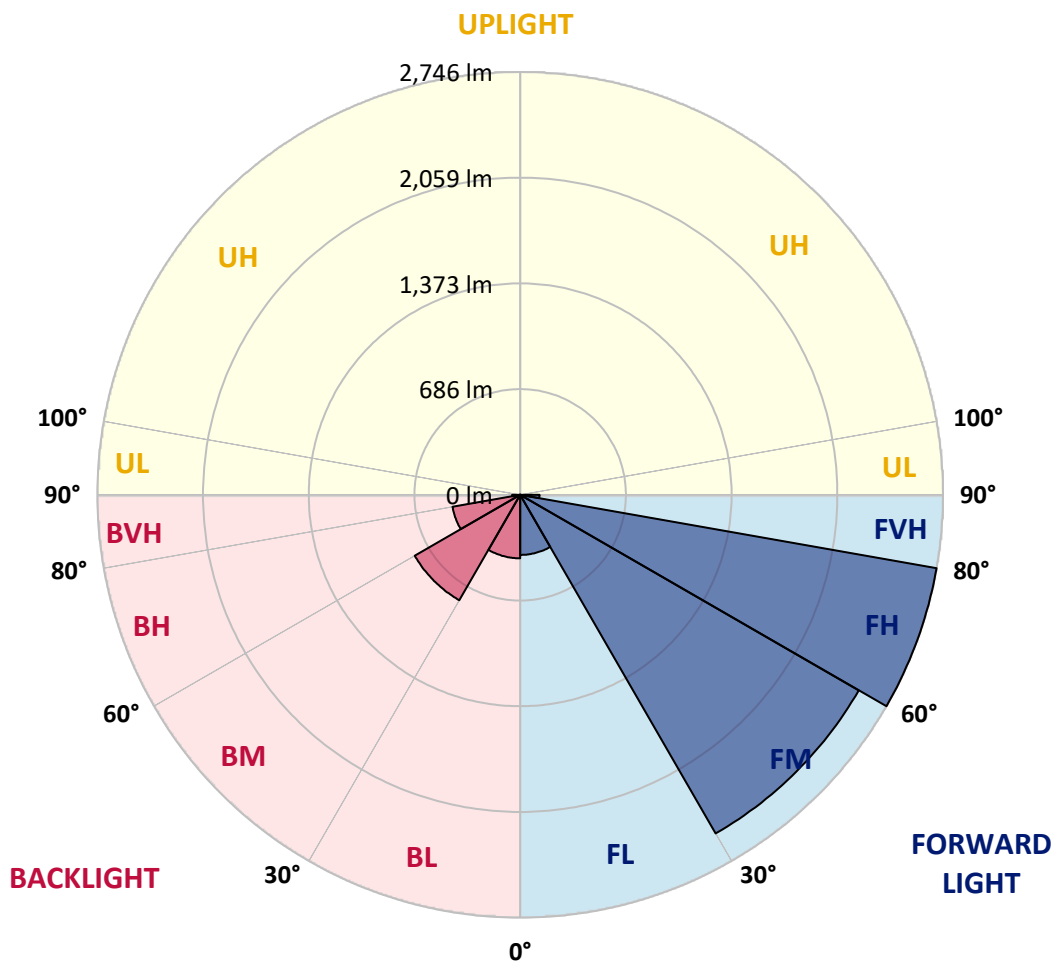
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	390.3	5.2			
FM	(30°-60°)	2539.1	33.8			
FH	(60°-80°)	2745.8	36.6			G2/5000
FVH	(80°-90°)	125.3	1.7			G2/225
BL	(0°-30°)	412.5	5.5	B1/500		
BM	(30°-60°)	790.6	10.5	B1/1000		
BH	(60°-80°)	446.2	5.9	B1/500		G1/500
BVH	(80°-90°)	52.2	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°	839.3	839.3	839.3	839.3	839.3	839.3	839.3	839.3	839.3	839.3	839.3
2.5°	806.4	803.6	803.6	807.7	809.1	813.2	813.2	814.6	818.7	825.6	833.8
5°	781.6	780.3	781.6	787.1	789.9	798.1	800.9	802.2	810.5	821.5	833.8
7.5°	756.9	755.5	758.3	766.5	774.8	787.1	794.0	795.4	807.7	822.8	839.3
10°	748.7	747.3	751.4	758.3	766.5	780.3	791.2	792.6	810.5	828.3	851.7
12.5°	759.6	758.3	762.4	769.3	777.5	787.1	799.5	800.9	824.2	847.6	872.3
15°	787.1	787.1	788.5	792.6	800.9	809.1	820.1	821.5	846.2	873.7	898.4
17.5°	829.7	827.0	827.0	825.6	831.1	835.2	848.9	850.3	876.4	901.1	925.9
20°	881.9	880.5	875.0	868.2	866.8	869.5	883.3	884.7	910.8	931.4	954.7
22.5°	945.1	946.5	934.1	919.0	912.1	916.2	928.6	930.0	949.2	967.1	987.7
25°	1028.9	1024.8	1006.9	984.9	971.2	971.2	983.6	983.6	1001.4	1012.4	1026.1
27.5°	1108.6	1100.3	1083.8	1052.2	1030.3	1034.4	1046.7	1046.7	1063.2	1067.4	1074.2
30°	1195.1	1186.9	1166.3	1126.4	1097.6	1094.8	1109.9	1108.6	1130.5	1129.2	1123.7
32.5°	1300.9	1296.8	1262.4	1211.6	1173.1	1163.5	1177.2	1178.6	1192.4	1188.2	1170.4
35°	1449.2	1447.9	1416.3	1327.0	1276.2	1258.3	1266.5	1266.5	1276.2	1265.2	1234.9
37.5°	1636.1	1638.8	1611.3	1479.5	1408.0	1377.8	1379.2	1377.8	1380.6	1368.2	1336.6
40°	1822.9	1829.8	1828.4	1669.0	1578.4	1526.2	1506.9	1504.2	1511.1	1505.6	1475.3
42.5°	2068.8	2085.3	2046.8	1902.6	1800.9	1713.0	1660.8	1653.9	1669.0	1675.9	1647.0
45°	2324.3	2318.8	2258.3	2153.9	2061.9	1949.3	1850.4	1839.4	1850.4	1871.0	1840.7
47.5°	2457.5	2453.4	2438.3	2386.1	2372.4	2243.2	2093.5	2083.9	2063.3	2092.1	2056.4
50°	2677.3	2681.4	2619.6	2614.1	2671.8	2600.4	2368.2	2346.3	2309.2	2332.5	2302.3
52.5°	2836.7	2818.8	2780.3	2828.4	3008.4	2969.9	2626.5	2616.9	2582.5	2577.0	2563.3
55°	2901.2	2901.2	2908.1	3019.4	3276.2	3225.4	2906.7	2916.3	2869.6	2831.2	2849.0
57.5°	2920.5	2928.7	2987.8	3171.8	3590.8	3424.6	3215.8	3229.5	3162.2	3085.3	3141.6
60°	2825.7	2850.4	2991.9	3258.4	3768.0	3636.1	3541.4	3545.5	3448.0	3335.3	3434.2
62.5°	2582.5	2612.8	2865.5	3294.1	3739.2	3853.2	3849.1	3858.7	3725.4	3585.3	3709.0
65°	2284.4	2314.7	2583.9	3193.8	3717.2	4008.4	4130.7	4156.8	3985.1	3796.9	3880.7
67.5°	1846.2	1886.1	2141.6	2855.9	3610.0	4136.2	4394.4	4421.9	4185.6	3906.8	3865.6
70°	1338.0	1357.2	1571.5	2170.4	3173.2	4066.1	4603.2	4601.8	4251.6	3898.5	3659.5
72.5°	644.3	659.4	844.8	1347.6	2269.3	3450.7	4452.1	4478.2	4160.9	3779.0	3188.3
75°	265.1	280.2	342.0	568.7	1191.0	2280.3	3773.5	3835.3	3779.0	3391.6	2494.6
77.5°	164.8	170.3	200.6	294.0	544.0	1064.6	2641.6	2725.4	2994.6	2717.2	1647.0
80°	123.6	127.8	149.7	206.1	343.4	392.9	1311.9	1417.6	1814.6	1559.1	745.9
82.5°	103.0	104.4	119.5	149.7	233.5	225.3	420.3	468.4	846.2	594.8	256.9
85°	96.2	98.9	107.1	107.1	148.4	141.5	174.5	182.7	245.9	203.3	89.3
87.5°	49.5	46.7	94.8	83.8	76.9	68.7	74.2	79.7	92.0	97.5	39.8
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°	839.3	839.3	839.3	839.3	839.3	839.3	839.3	839.3	839.3	839.3	839.3
2.5°	836.6	840.7	847.6	854.4	862.7	872.3	877.8	884.7	890.1	887.4	886.0
5°	840.7	847.6	862.7	876.4	892.9	912.1	924.5	938.2	949.2	952.0	947.8
7.5°	847.6	859.9	880.5	905.3	927.2	952.0	971.2	990.4	1004.2	1006.9	1006.9
10°	864.0	877.8	905.3	938.2	964.3	990.4	1012.4	1027.5	1039.9	1045.4	1045.4
12.5°	887.4	903.9	936.9	976.7	1005.5	1030.3	1042.6	1049.5	1055.0	1060.5	1061.9
15°	914.9	932.7	972.6	1015.2	1045.4	1057.7	1057.7	1056.4	1056.4	1059.1	1061.9
17.5°	942.3	961.6	1002.8	1048.1	1067.4	1060.5	1050.9	1046.7	1044.0	1042.6	1046.7
20°	971.2	990.4	1031.6	1074.2	1068.7	1039.9	1026.1	1016.5	1008.3	1004.2	1009.7
22.5°	1002.8	1020.6	1063.2	1092.1	1050.9	1006.9	980.8	965.7	952.0	943.7	949.2
25°	1039.9	1057.7	1098.9	1097.6	1019.3	957.5	916.2	891.5	876.4	868.2	868.2
27.5°	1083.8	1098.9	1138.8	1083.8	975.3	891.5	831.1	807.7	803.6	796.7	796.7
30°	1129.2	1141.5	1175.9	1052.2	914.9	805.0	739.0	728.1	729.4	722.6	723.9
32.5°	1175.9	1188.2	1197.9	1005.5	836.6	707.4	663.5	655.2	653.9	648.4	642.9
35°	1241.8	1259.7	1200.6	942.3	741.8	626.4	594.8	586.6	578.3	559.1	559.1
37.5°	1342.1	1361.3	1193.7	864.0	644.3	563.2	534.4	523.4	509.6	490.4	483.5
40°	1479.5	1479.5	1178.6	776.1	566.0	512.4	484.9	471.2	456.1	436.8	432.7
42.5°	1641.6	1603.1	1155.3	686.8	508.3	478.0	453.3	438.2	420.3	398.4	395.6
45°	1831.1	1726.7	1122.3	607.2	465.7	457.4	442.3	416.2	386.0	362.7	358.5
47.5°	2015.2	1838.0	1090.7	550.8	430.0	449.2	436.8	392.9	351.7	318.7	314.6
50°	2217.1	1936.9	1053.6	504.1	402.5	443.7	430.0	358.5	313.2	289.8	287.1
52.5°	2419.1	2037.2	1013.8	454.7	379.1	432.7	413.5	333.8	311.8	280.2	276.1
55°	2632.0	2153.9	967.1	399.7	351.7	410.7	391.5	332.4	321.4	280.2	270.6
57.5°	2839.4	2283.1	891.5	346.2	321.4	377.8	383.3	324.2	300.8	277.5	266.5
60°	3068.8	2420.4	766.5	300.8	295.3	350.3	372.3	306.3	277.5	269.2	263.7
62.5°	3252.9	2544.1	598.9	269.2	273.4	328.3	358.5	295.3	267.9	261.0	259.6
65°	3332.6	2546.8	430.0	241.8	251.4	307.7	344.8	285.7	259.6	256.9	255.5
67.5°	3248.8	2406.7	302.2	215.7	228.0	288.5	326.9	276.1	251.4	252.8	250.0
70°	2978.2	2111.4	221.2	190.9	206.1	267.9	307.7	263.7	241.8	244.5	240.4
72.5°	2491.9	1645.7	177.2	170.3	188.2	245.9	288.5	250.0	226.7	228.0	219.8
75°	1840.7	1090.7	148.4	152.5	167.6	225.3	263.7	232.2	210.2	204.7	199.2
77.5°	1094.8	560.5	122.3	133.2	149.7	200.6	236.3	210.2	192.3	182.7	178.6
80°	451.9	226.7	100.3	112.6	130.5	178.6	208.8	184.1	171.7	162.1	156.6
82.5°	180.0	111.3	79.7	92.0	109.9	155.2	182.7	162.1	149.7	142.9	127.8
85°	68.7	54.9	53.6	64.6	82.4	119.5	151.1	136.0	126.4	108.5	104.4
87.5°	27.5	24.7	24.7	31.6	46.7	75.6	108.5	94.8	98.9	78.3	79.7
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)