

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: P398018

Luminaire Tested: **ARCH-S-PA1-70-827-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398018
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-827-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7403 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - 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

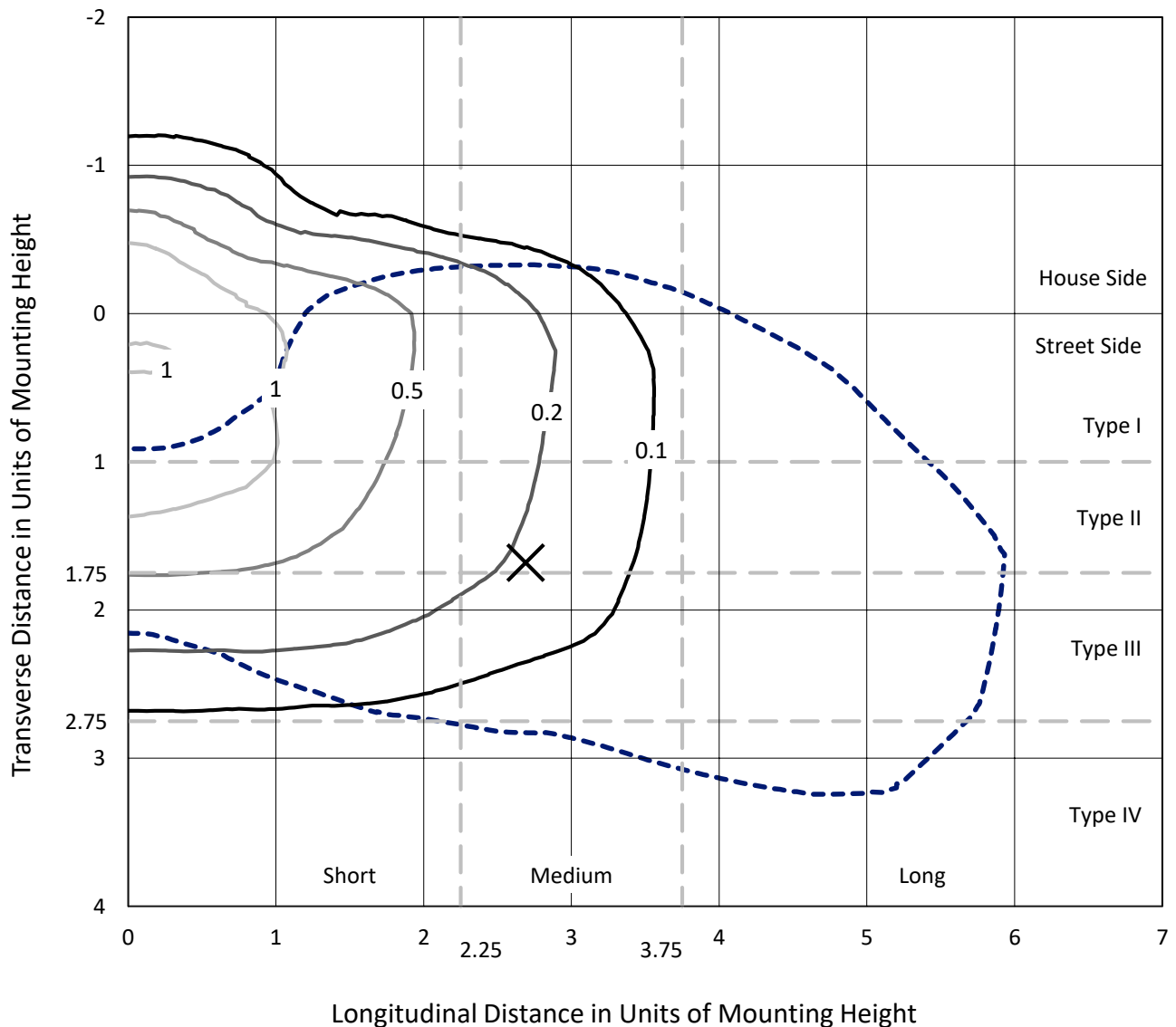


REPORT NUMBER: P398018

CATALOG NUMBER: ARCH-S-PA1-70-827-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

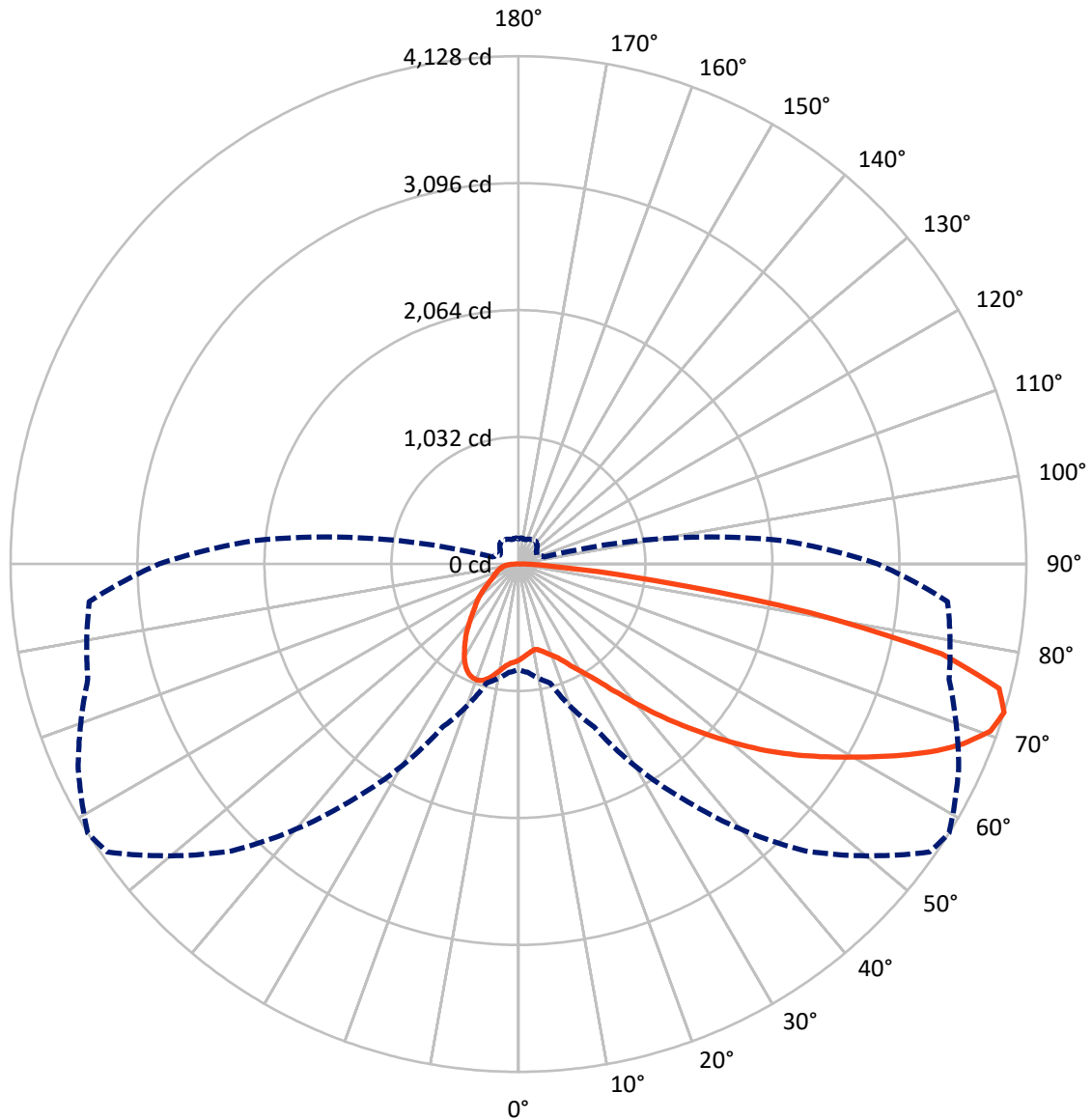


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P398018

CATALOG NUMBER: ARCH-S-PA1-70-827-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



REPORT NUMBER: P398018

CATALOG NUMBER: ARCH-S-PA1-70-827-U-T3

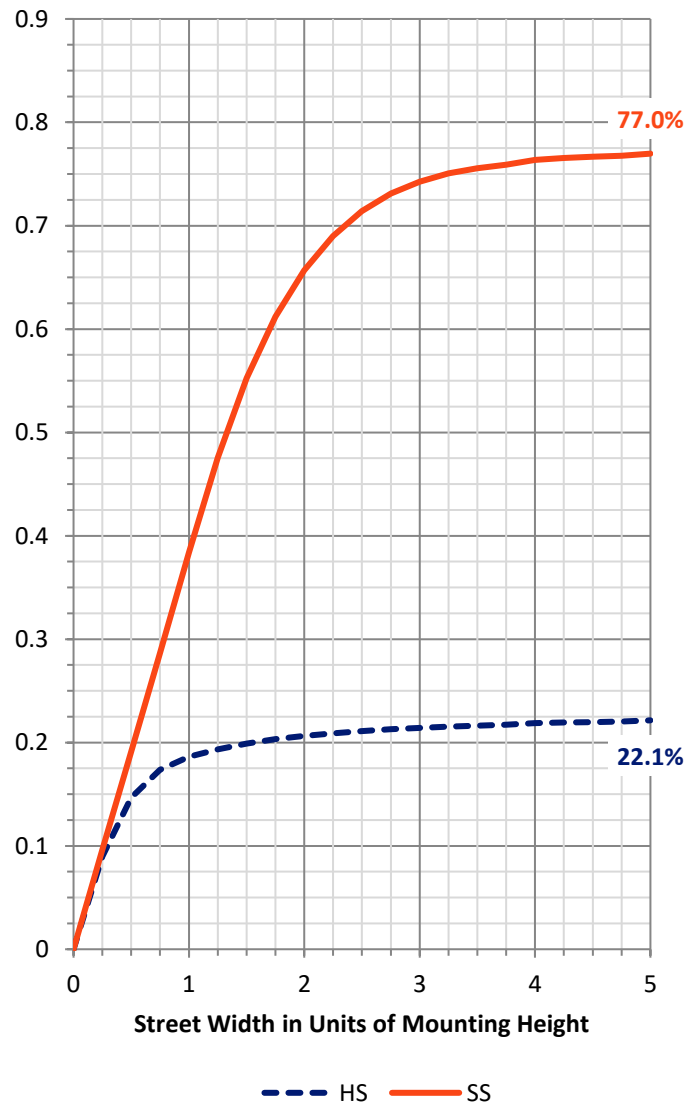
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1678.9	0.0	1678.9
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	5724.1	0.0	5724.1
	% Fixture	77.3	0.0	77.3
Total	Lumens	7403.0	0.0	7403.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.2	1.0
10°-20°	238.9	3.2
20°-30°	427.9	5.8
30°-40°	643.7	8.7
40°-50°	1042.4	14.1
50°-60°	1569.1	21.2
60°-70°	1846.7	24.9
70°-80°	1309.5	17.7
80°-90°	249.5	3.4
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°	7403.0	100.0
0°-180°	7403.0	100.0

Coefficient of Utilization



REPORT NUMBER: P398018

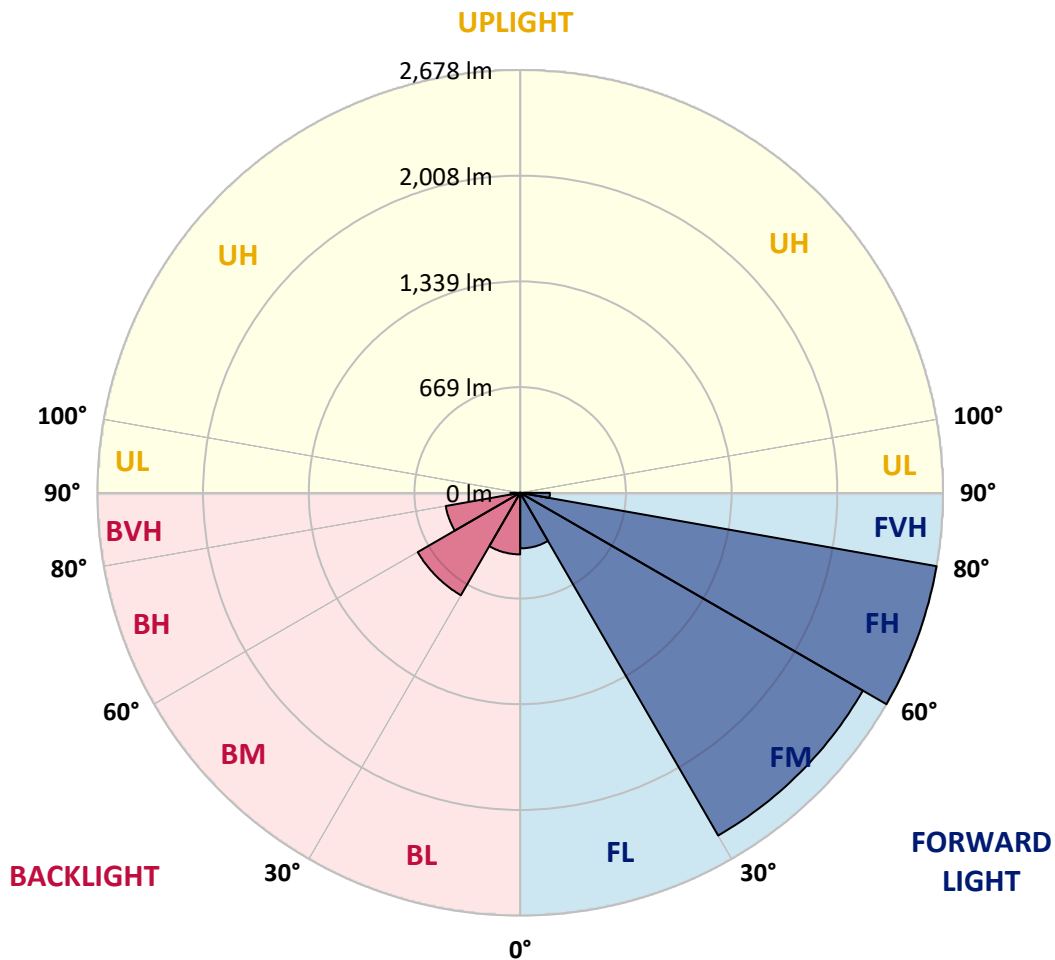
CATALOG NUMBER: ARCH-S-PA1-70-827-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	352.0	4.8			
FM	(30°-60°)	2506.1	33.9			
FH	(60°-80°)	2677.7	36.2			G2/5000
FVH	(80°-90°)	188.2	2.5			G2/225
BL	(0°-30°)	390.0	5.3	B1/500		
BM	(30°-60°)	749.1	10.1	B1/1000		
BH	(60°-80°)	478.5	6.5	B1/500		G1/500
BVH	(80°-90°)	61.3	0.8			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 IV Medium





REPORT NUMBER: P398018

CATALOG NUMBER: ARCH-S-PA1-70-827-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	780.9	780.9	780.9	780.9	780.9	780.9	780.9	780.9	780.9	780.9	780.9
2.5°	751.5	747.6	748.6	748.6	752.5	754.5	755.4	758.4	760.3	765.2	772.1
5°	716.4	713.4	714.4	715.4	722.2	729.1	734.9	738.8	744.7	752.5	762.3
7.5°	690.9	689.0	690.0	691.9	697.8	705.6	715.4	721.2	730.0	744.7	761.3
10°	672.4	672.4	673.4	677.3	683.1	692.9	700.7	707.6	725.2	751.5	776.9
12.5°	657.7	657.7	660.7	668.5	678.2	688.0	706.6	714.4	737.9	774.0	804.3
15°	656.7	657.7	658.7	665.5	676.3	697.8	725.2	736.9	765.2	808.2	843.4
17.5°	672.4	673.4	669.4	671.4	684.1	714.4	750.6	764.2	800.4	847.3	883.5
20°	720.3	720.3	708.5	697.8	706.6	739.8	780.9	794.5	834.6	886.4	922.6
22.5°	818.0	822.9	795.5	772.1	758.4	776.9	814.1	828.7	873.7	929.4	965.6
25°	936.2	941.1	904.0	870.8	845.4	842.4	866.9	882.5	919.6	977.3	1007.6
27.5°	1050.6	1041.8	1007.6	976.3	944.1	917.7	936.2	949.9	992.9	1036.9	1055.5
30°	1140.5	1133.7	1100.4	1078.0	1047.7	1013.5	1002.7	1017.4	1052.5	1093.6	1103.4
32.5°	1240.2	1235.3	1202.1	1172.8	1147.3	1115.1	1091.6	1098.5	1118.0	1147.3	1153.2
35°	1367.2	1378.0	1342.8	1283.2	1254.8	1223.6	1207.0	1208.9	1223.6	1242.1	1232.4
37.5°	1501.1	1513.8	1515.8	1422.0	1383.9	1355.5	1337.9	1344.8	1362.3	1375.1	1344.8
40°	1749.4	1736.7	1685.8	1616.4	1557.8	1530.4	1506.0	1505.0	1517.7	1540.2	1485.5
42.5°	2078.7	2067.0	1964.4	1874.5	1781.6	1750.3	1702.4	1681.9	1687.8	1716.1	1639.9
45°	2394.4	2389.5	2307.4	2202.8	2091.4	2030.8	1921.4	1871.5	1866.6	1889.1	1798.2
47.5°	2674.9	2653.4	2593.7	2512.6	2500.9	2342.6	2141.3	2073.8	2050.4	2063.1	1961.4
50°	2974.9	2901.6	2819.5	2769.7	2854.7	2707.1	2363.1	2292.7	2235.1	2243.9	2138.3
52.5°	3134.2	3011.0	2957.3	2972.0	3086.3	3029.6	2604.5	2518.5	2425.6	2438.4	2314.2
55°	2997.4	2996.4	3019.8	3110.7	3270.0	3204.6	2834.2	2737.4	2635.8	2638.7	2516.5
57.5°	2809.7	2847.8	2969.0	3169.4	3497.7	3388.3	3059.9	2957.3	2864.5	2849.8	2746.2
60°	2638.7	2680.7	2856.6	3159.6	3576.9	3556.4	3274.9	3185.0	3109.8	3066.8	2987.6
62.5°	2378.7	2410.0	2659.2	3097.0	3510.4	3677.6	3492.9	3431.3	3374.6	3285.7	3247.6
65°	2072.8	2083.6	2346.5	2890.8	3427.4	3724.5	3709.8	3682.4	3627.7	3496.8	3504.6
67.5°	1741.5	1763.0	1993.7	2561.5	3245.6	3703.0	3877.9	3900.4	3835.9	3639.4	3668.8
70°	1388.7	1415.1	1590.1	2106.1	2936.8	3610.1	4033.3	4069.5	3945.3	3686.4	3699.1
72.5°	859.0	884.5	1001.7	1463.0	2327.9	3298.4	4081.2	4128.1	3948.3	3623.8	3501.6
75°	297.1	300.0	391.9	701.7	1381.9	2490.1	3924.8	4035.3	3824.2	3396.1	3047.2
77.5°	135.8	140.7	174.0	289.3	612.8	1343.8	3240.7	3517.3	3446.9	3040.4	2345.5
80°	93.8	95.8	120.2	173.0	353.8	473.0	2045.5	2406.1	2529.2	2354.3	1503.1
82.5°	70.4	72.3	92.8	117.3	255.1	229.7	778.9	1118.0	1389.7	1364.3	628.4
85°	67.4	66.5	72.3	78.2	170.0	136.8	252.1	346.0	542.4	464.2	158.3
87.5°	29.3	32.3	74.3	44.0	88.9	63.5	109.5	128.0	165.2	143.7	56.7
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: P398018

CATALOG NUMBER: ARCH-S-PA1-70-827-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	780.9	780.9	780.9	780.9	780.9	780.9	780.9	780.9	780.9	780.9	780.9
2.5°	775.0	776.9	782.8	791.6	796.5	806.3	813.1	817.0	820.0	820.9	820.9
5°	768.2	772.1	784.8	799.4	813.1	833.6	852.2	863.0	870.8	873.7	874.7
7.5°	770.1	779.9	798.5	820.0	837.5	863.9	886.4	907.9	925.5	932.3	932.3
10°	788.7	802.4	827.8	856.1	878.6	906.0	929.4	948.0	968.5	980.2	982.2
12.5°	817.0	833.6	866.9	898.1	923.5	945.0	966.5	980.2	990.0	998.8	1000.8
15°	857.1	877.6	910.8	943.1	965.6	979.3	985.1	985.1	984.1	985.1	987.1
17.5°	897.2	916.7	949.9	982.2	992.9	985.1	978.3	976.3	975.3	973.4	974.4
20°	936.2	954.8	983.2	1007.6	998.8	971.4	962.6	961.7	958.7	956.8	954.8
22.5°	975.3	989.0	1012.5	1021.3	986.1	947.0	936.2	930.4	926.5	921.6	916.7
25°	1020.3	1024.2	1041.8	1028.1	954.8	902.0	886.4	877.6	873.7	868.8	864.9
27.5°	1062.3	1062.3	1065.3	1017.4	908.9	842.4	819.0	803.3	802.4	801.4	800.4
30°	1100.4	1095.5	1085.8	985.1	849.3	769.1	733.9	718.3	724.2	729.1	730.0
32.5°	1145.4	1135.6	1108.3	941.1	777.9	687.0	644.0	637.2	644.0	649.9	646.0
35°	1215.8	1198.2	1131.7	890.3	709.5	611.8	570.7	561.0	559.0	558.0	550.2
37.5°	1316.4	1286.1	1150.3	835.6	642.1	545.3	515.0	494.5	475.9	456.4	453.5
40°	1439.6	1387.8	1163.0	773.0	570.7	489.6	457.4	431.0	399.7	365.5	361.6
42.5°	1574.4	1497.2	1168.8	703.7	508.2	443.7	403.6	370.4	335.2	308.8	303.9
45°	1720.0	1615.5	1164.0	637.2	457.4	404.6	359.6	323.5	295.1	276.6	272.7
47.5°	1861.7	1751.3	1150.3	584.4	418.3	371.4	325.4	292.2	270.7	250.2	245.3
50°	2043.5	1881.3	1133.7	543.4	375.3	338.1	303.9	268.8	244.3	234.6	232.6
52.5°	2244.8	2011.3	1114.1	491.6	333.3	311.8	290.3	259.0	251.2	232.6	229.7
55°	2462.8	2165.7	1110.2	426.1	296.1	293.2	276.6	267.8	269.7	232.6	227.7
57.5°	2692.4	2330.8	1119.0	360.6	265.8	276.6	282.4	275.6	272.7	237.5	227.7
60°	2931.9	2490.1	1092.6	300.0	242.4	262.9	289.3	271.7	250.2	235.5	228.7
62.5°	3164.5	2624.0	978.3	257.0	224.8	259.0	285.4	257.0	232.6	232.6	229.7
65°	3333.6	2683.7	765.2	225.8	213.1	254.1	278.5	247.3	227.7	234.6	230.6
67.5°	3353.1	2622.1	514.1	201.3	203.3	245.3	262.9	238.5	222.8	240.4	234.6
70°	3232.9	2461.8	314.7	182.8	190.6	229.7	249.2	229.7	216.0	235.5	226.7
72.5°	2921.1	2162.8	221.8	167.1	176.9	215.0	236.5	221.8	206.2	213.1	204.3
75°	2396.3	1676.1	175.9	152.5	163.2	201.3	225.8	210.1	194.5	191.5	185.7
77.5°	1697.6	1074.0	141.7	140.7	148.5	184.7	211.1	196.4	180.8	174.9	171.0
80°	976.3	526.8	122.2	127.0	134.9	168.1	193.5	180.8	166.1	157.3	151.5
82.5°	373.3	183.7	107.5	110.4	119.2	150.5	175.9	165.2	150.5	158.3	132.9
85°	121.2	100.7	88.0	90.9	99.7	125.1	155.4	146.6	130.0	115.3	106.5
87.5°	53.8	54.7	46.9	51.8	62.5	83.1	113.4	107.5	94.8	79.2	76.2
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)