

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: P398162

Luminaire Tested: **ARCH-S-PA1-90-827-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398162  
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-PA1-90-827-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8574 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 94  
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

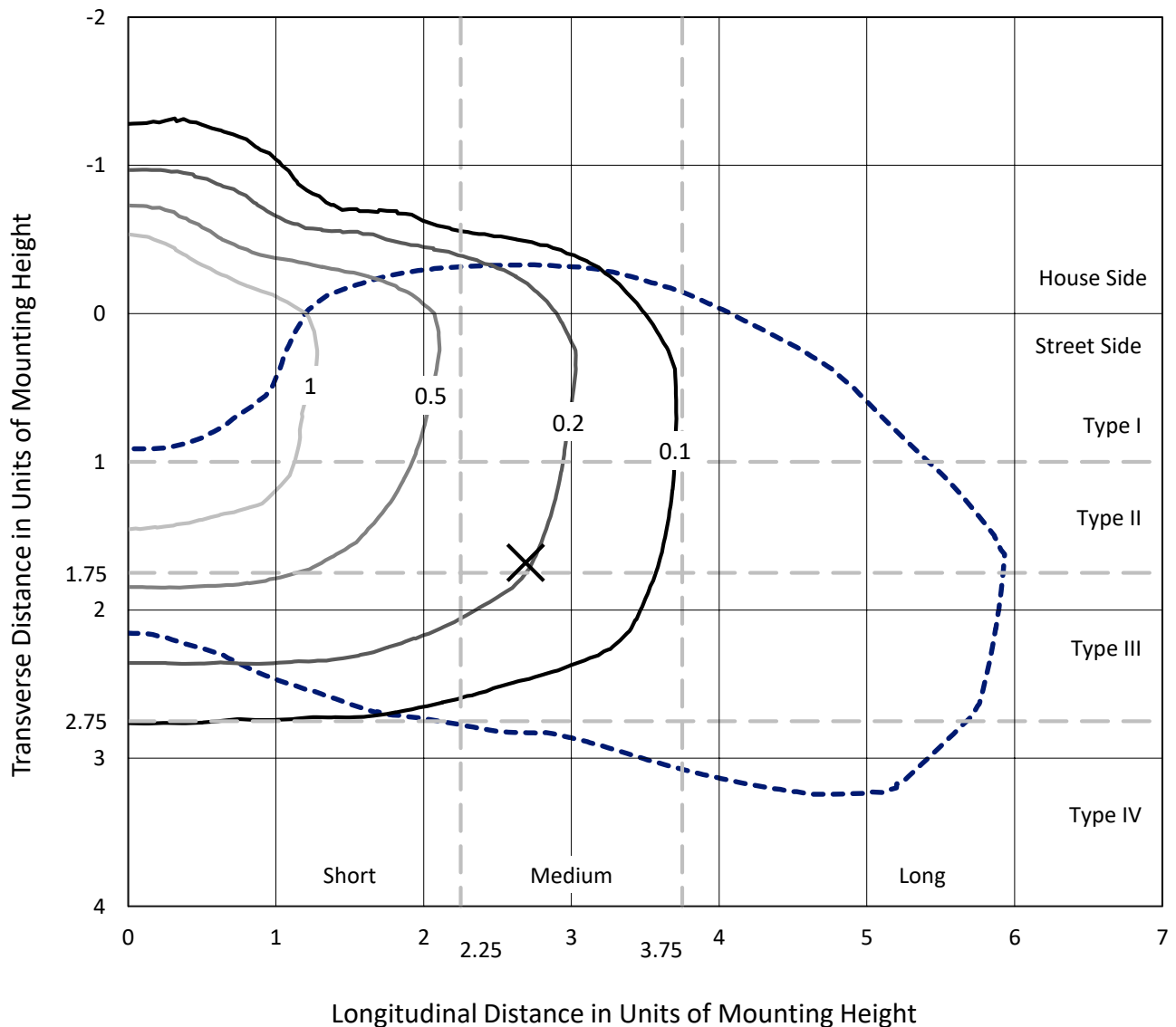


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

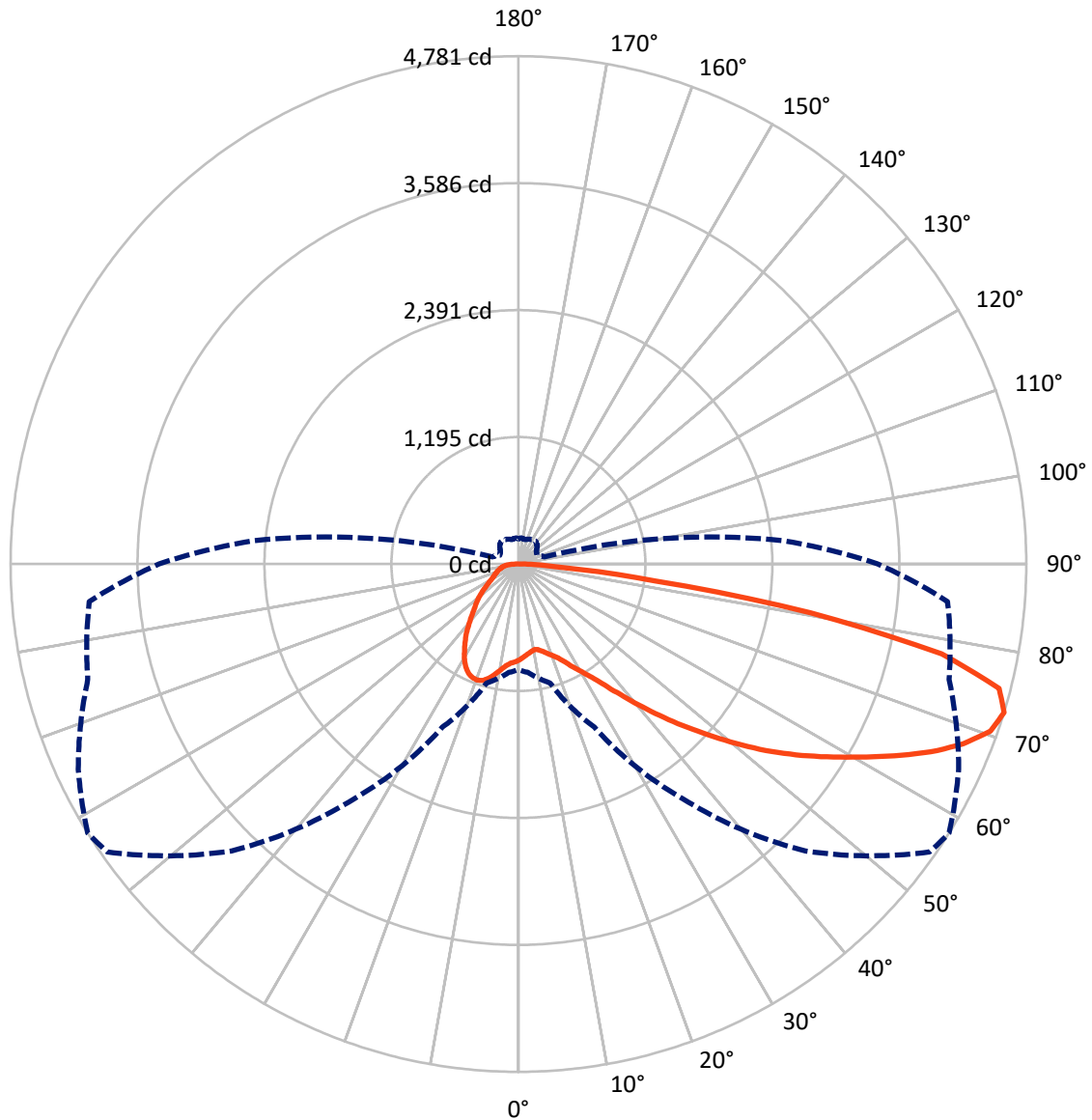


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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



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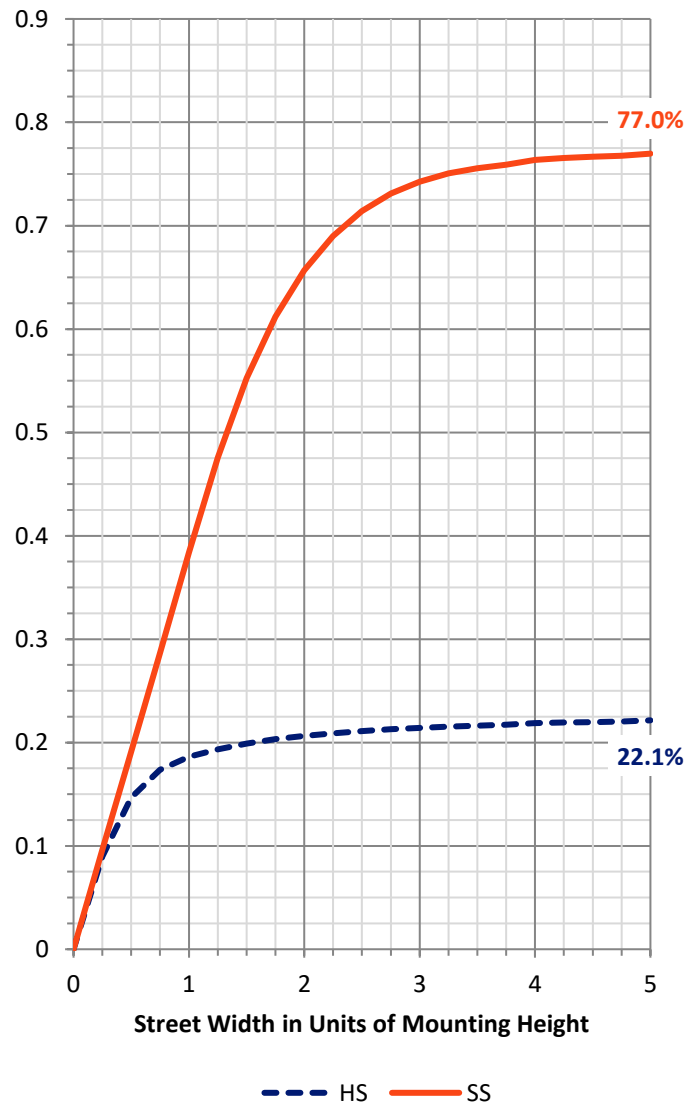
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1944.5	0.0	1944.5
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	6629.5	0.0	6629.5
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	8574.0	0.0	8574.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.1	1.0
10°-20°	276.7	3.2
20°-30°	495.6	5.8
30°-40°	745.5	8.7
40°-50°	1207.3	14.1
50°-60°	1817.3	21.2
60°-70°	2138.8	24.9
70°-80°	1516.6	17.7
80°-90°	289.0	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°	8574.0	100.0
0°-180°	8574.0	100.0

**Coefficient of Utilization**



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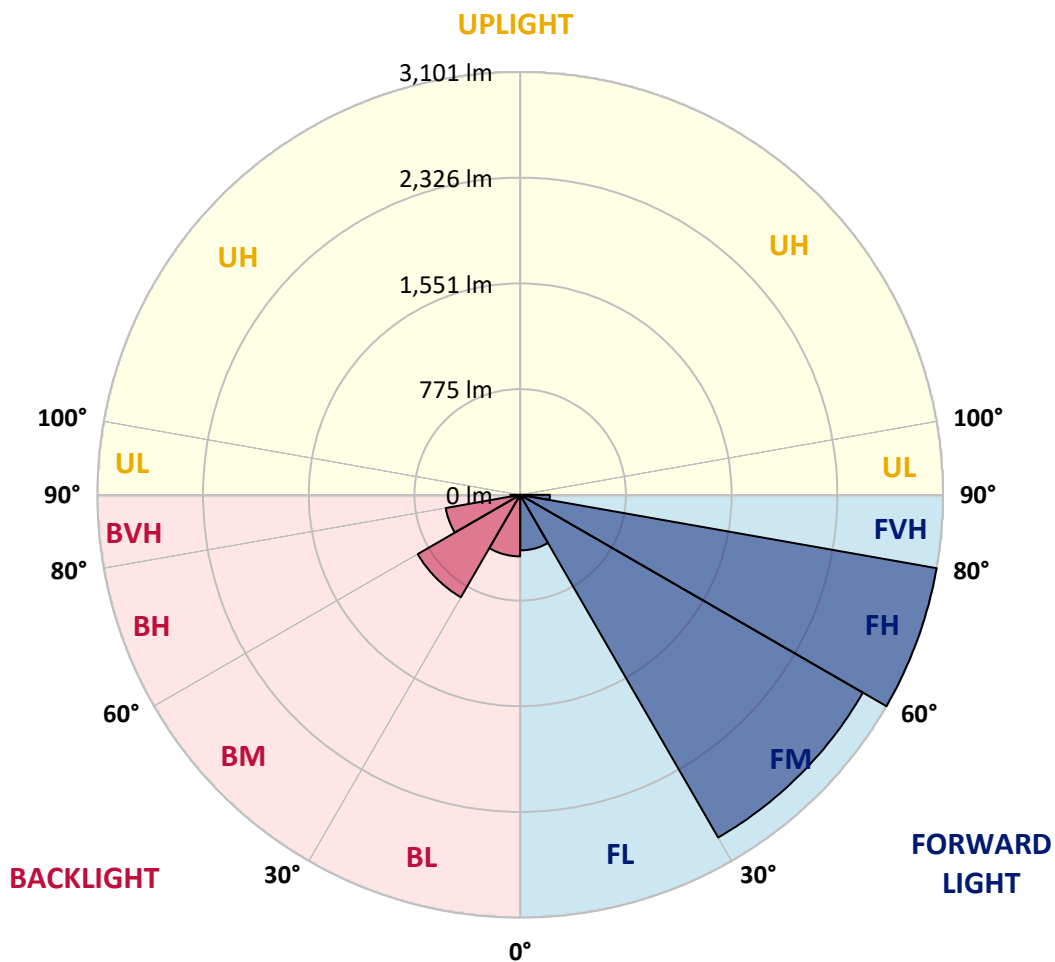
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	407.7	4.8			
FM	(30°-60°)	2902.5	33.9			
FH	(60°-80°)	3101.2	36.2			G2/5000
FVH	(80°-90°)	218.0	2.5			G2/225
BL	(0°-30°)	451.7	5.3	B1/500		
BM	(30°-60°)	867.6	10.1	B1/1000		
BH	(60°-80°)	554.2	6.5	B2/1000		G2/1000
BVH	(80°-90°)	71.0	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	904.4	904.4	904.4	904.4	904.4	904.4	904.4	904.4	904.4	904.4	904.4
2.5°	870.4	865.9	867.0	867.0	871.6	873.8	874.9	878.3	880.6	886.3	894.2
5°	829.7	826.3	827.4	828.5	836.5	844.4	851.2	855.7	862.5	871.6	882.9
7.5°	800.2	798.0	799.1	801.4	808.2	817.2	828.5	835.3	845.5	862.5	881.7
10°	778.7	778.7	779.9	784.4	791.2	802.5	811.6	819.5	839.9	870.4	899.8
12.5°	761.8	761.8	765.2	774.2	785.5	796.8	818.4	827.4	854.6	896.5	931.5
15°	760.6	761.8	762.9	770.8	783.3	808.2	839.9	853.4	886.3	936.1	976.8
17.5°	778.7	779.9	775.3	777.6	792.3	827.4	869.3	885.1	927.0	981.3	1023.2
20°	834.2	834.2	820.6	808.2	818.4	856.8	904.4	920.2	966.6	1026.6	1068.5
22.5°	947.4	953.0	921.4	894.2	878.3	899.8	942.9	959.8	1011.9	1076.4	1118.3
25°	1084.3	1090.0	1047.0	1008.5	979.1	975.7	1004.0	1022.1	1065.1	1131.9	1167.0
27.5°	1216.8	1206.6	1167.0	1130.8	1093.4	1062.8	1084.3	1100.2	1150.0	1200.9	1222.4
30°	1320.9	1313.0	1274.5	1248.5	1213.4	1173.8	1161.3	1178.3	1219.0	1266.6	1277.9
32.5°	1436.4	1430.7	1392.2	1358.3	1328.8	1291.5	1264.3	1272.2	1294.9	1328.8	1335.6
35°	1583.5	1596.0	1555.2	1486.2	1453.3	1417.1	1397.9	1400.1	1417.1	1438.6	1427.3
37.5°	1738.6	1753.3	1755.6	1646.9	1602.7	1569.9	1549.5	1557.5	1577.8	1592.6	1557.5
40°	2026.1	2011.4	1952.5	1872.1	1804.2	1772.5	1744.2	1743.1	1757.8	1783.8	1720.5
42.5°	2407.5	2393.9	2275.1	2171.0	2063.4	2027.2	1971.7	1948.0	1954.8	1987.6	1899.3
45°	2773.1	2767.5	2672.4	2551.3	2422.2	2352.1	2225.3	2167.6	2161.9	2187.9	2082.7
47.5°	3098.0	3073.1	3004.0	2910.1	2896.5	2713.1	2480.0	2401.9	2374.7	2389.4	2271.7
50°	3445.5	3360.6	3265.5	3207.8	3306.2	3135.3	2736.9	2655.4	2588.6	2598.8	2476.6
52.5°	3629.9	3487.3	3425.1	3442.1	3574.5	3508.8	3016.5	2916.9	2809.3	2824.0	2680.3
55°	3471.5	3470.4	3497.5	3602.8	3787.3	3711.4	3282.5	3170.4	3052.7	3056.1	2914.6
57.5°	3254.2	3298.3	3438.7	3670.7	4051.0	3924.2	3543.9	3425.1	3317.5	3300.6	3180.6
60°	3056.1	3104.8	3308.5	3659.4	4142.7	4118.9	3792.9	3688.8	3601.7	3551.8	3460.2
62.5°	2755.0	2791.2	3079.9	3586.9	4065.7	4259.3	4045.4	3974.0	3908.4	3805.4	3761.2
65°	2400.7	2413.2	2717.7	3348.1	3969.5	4313.6	4296.6	4264.9	4201.6	4049.9	4058.9
67.5°	2017.0	2041.9	2309.0	2966.7	3759.0	4288.7	4491.3	4517.3	4442.6	4215.1	4249.1
70°	1608.4	1639.0	1841.6	2439.2	3401.3	4181.2	4671.3	4713.2	4569.4	4269.5	4284.2
72.5°	994.9	1024.4	1160.2	1694.4	2696.1	3820.1	4726.7	4781.1	4572.8	4197.0	4055.5
75°	344.1	347.5	453.9	812.7	1600.5	2884.0	4545.6	4673.5	4429.1	3933.3	3529.2
77.5°	157.3	163.0	201.5	335.0	709.7	1556.3	3753.3	4073.6	3992.2	3521.3	2716.5
80°	108.7	110.9	139.2	200.3	409.7	547.8	2369.0	2786.7	2929.3	2726.7	1740.8
82.5°	81.5	83.8	107.5	135.8	295.4	266.0	902.1	1294.9	1609.5	1580.1	727.8
85°	78.1	77.0	83.8	90.6	196.9	158.5	292.0	400.7	628.2	537.6	183.4
87.5°	34.0	37.4	86.0	50.9	103.0	73.6	126.8	148.3	191.3	166.4	65.6
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°	904.4	904.4	904.4	904.4	904.4	904.4	904.4	904.4	904.4	904.4	904.4
2.5°	897.6	899.8	906.6	916.8	922.5	933.8	941.7	946.3	949.7	950.8	950.8
5°	889.7	894.2	908.9	925.9	941.7	965.5	987.0	999.5	1008.5	1011.9	1013.0
7.5°	891.9	903.2	924.7	949.7	970.0	1000.6	1026.6	1051.5	1071.9	1079.8	1079.8
10°	913.4	929.3	958.7	991.5	1017.6	1049.3	1076.4	1097.9	1121.7	1135.3	1137.5
12.5°	946.3	965.5	1004.0	1040.2	1069.6	1094.5	1119.4	1135.3	1146.6	1156.8	1159.0
15°	992.7	1016.4	1054.9	1092.3	1118.3	1134.1	1140.9	1140.9	1139.8	1140.9	1143.2
17.5°	1039.1	1061.7	1100.2	1137.5	1150.0	1140.9	1133.0	1130.8	1129.6	1127.4	1128.5
20°	1084.3	1105.8	1138.7	1167.0	1156.8	1125.1	1114.9	1113.8	1110.4	1108.1	1105.8
22.5°	1129.6	1145.5	1172.6	1182.8	1142.1	1096.8	1084.3	1077.6	1073.0	1067.4	1061.7
25°	1181.7	1186.2	1206.6	1190.7	1105.8	1044.7	1026.6	1016.4	1011.9	1006.2	1001.7
27.5°	1230.4	1230.4	1233.8	1178.3	1052.7	975.7	948.5	930.4	929.3	928.1	927.0
30°	1274.5	1268.8	1257.5	1140.9	983.6	890.8	850.0	831.9	838.7	844.4	845.5
32.5°	1326.6	1315.2	1283.6	1090.0	901.0	795.7	745.9	738.0	745.9	752.7	748.2
35°	1408.1	1387.7	1310.7	1031.1	821.7	708.6	661.0	649.7	647.4	646.3	637.3
37.5°	1524.6	1489.6	1332.2	967.8	743.6	631.6	596.5	572.7	551.2	528.6	525.2
40°	1667.3	1607.3	1346.9	895.3	661.0	567.1	529.7	499.2	462.9	423.3	418.8
42.5°	1823.5	1734.0	1353.7	815.0	588.6	513.9	467.5	429.0	388.2	357.7	352.0
45°	1992.1	1871.0	1348.1	738.0	529.7	468.6	416.5	374.7	341.8	320.3	315.8
47.5°	2156.2	2028.3	1332.2	676.9	484.4	430.1	376.9	338.4	313.5	289.8	284.1
50°	2366.8	2178.9	1313.0	629.3	434.6	391.6	352.0	311.3	283.0	271.7	269.4
52.5°	2599.9	2329.4	1290.3	569.3	386.0	361.1	336.2	299.9	290.9	269.4	266.0
55°	2852.3	2508.3	1285.8	493.5	343.0	339.6	320.3	310.1	312.4	269.4	263.7
57.5°	3118.3	2699.5	1296.0	417.7	307.9	320.3	327.1	319.2	315.8	275.0	263.7
60°	3395.6	2884.0	1265.4	347.5	280.7	304.5	335.0	314.7	289.8	272.8	264.9
62.5°	3665.0	3039.1	1133.0	297.7	260.3	299.9	330.5	297.7	269.4	269.4	266.0
65°	3860.9	3108.2	886.3	261.5	246.8	294.3	322.6	286.4	263.7	271.7	267.1
67.5°	3883.5	3036.8	595.4	233.2	235.4	284.1	304.5	276.2	258.1	278.4	271.7
70°	3744.3	2851.2	364.5	211.7	220.7	266.0	288.6	266.0	250.1	272.8	262.6
72.5°	3383.2	2504.9	256.9	193.6	204.9	249.0	273.9	256.9	238.8	246.8	236.6
75°	2775.4	1941.2	203.7	176.6	189.0	233.2	261.5	243.4	225.2	221.8	215.1
77.5°	1966.1	1243.9	164.1	163.0	172.0	213.9	244.5	227.5	209.4	202.6	198.1
80°	1130.8	610.1	141.5	147.1	156.2	194.7	224.1	209.4	192.4	182.2	175.4
82.5°	432.4	212.8	124.5	127.9	138.1	174.3	203.7	191.3	174.3	183.4	153.9
85°	140.4	116.6	101.9	105.3	115.5	144.9	180.0	169.8	150.5	133.6	123.4
87.5°	62.3	63.4	54.3	60.0	72.4	96.2	131.3	124.5	109.8	91.7	88.3
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)