

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: P397586

Luminaire Tested: **ARCH-S-PA1-100-827-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397586  
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-PA1-100-827-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8663 lumens  
Efficiency: N/A  
Efficacy: 90.2 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

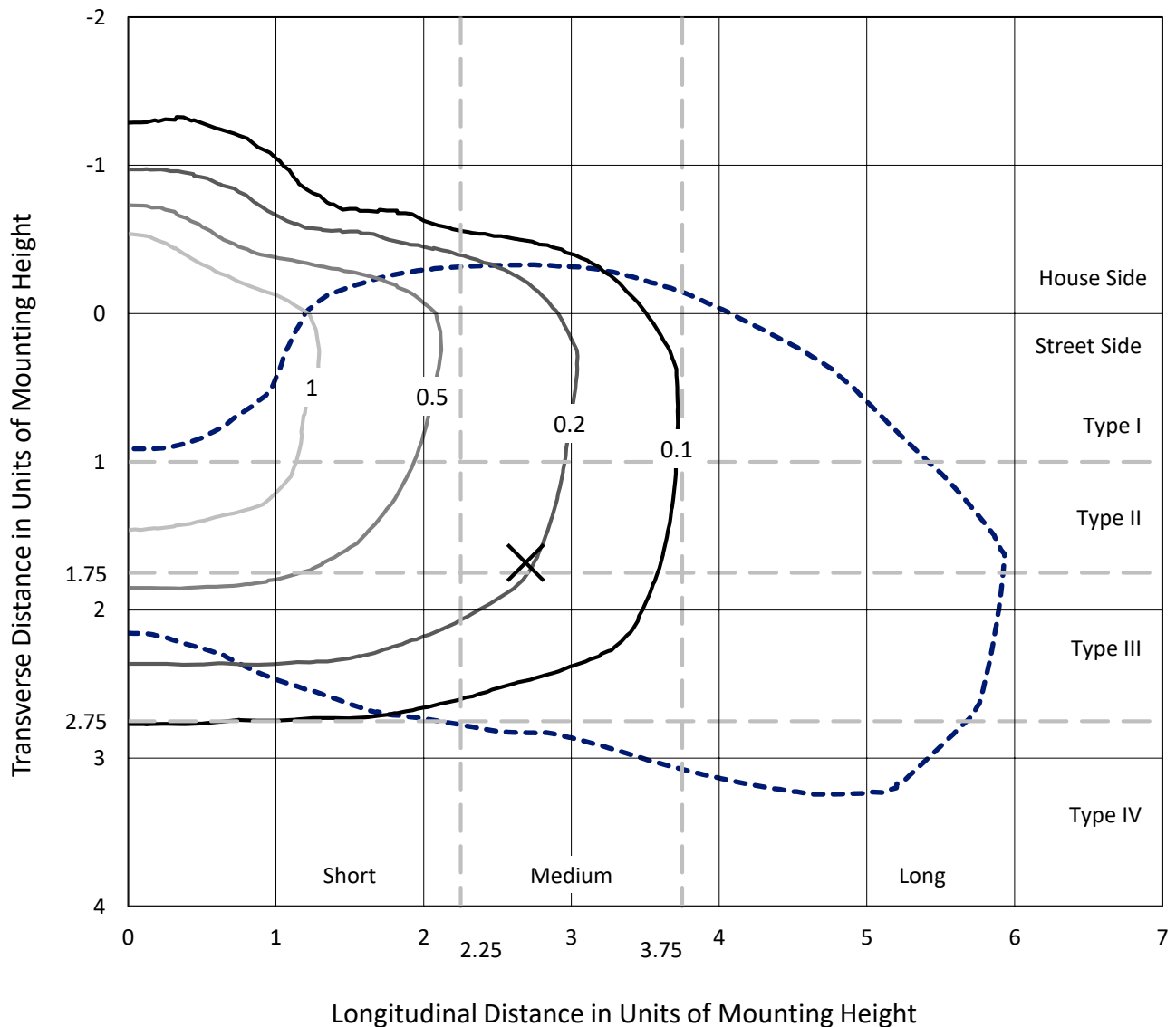
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397586  
 CATALOG NUMBER: ARCH-S-PA1-100-827-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

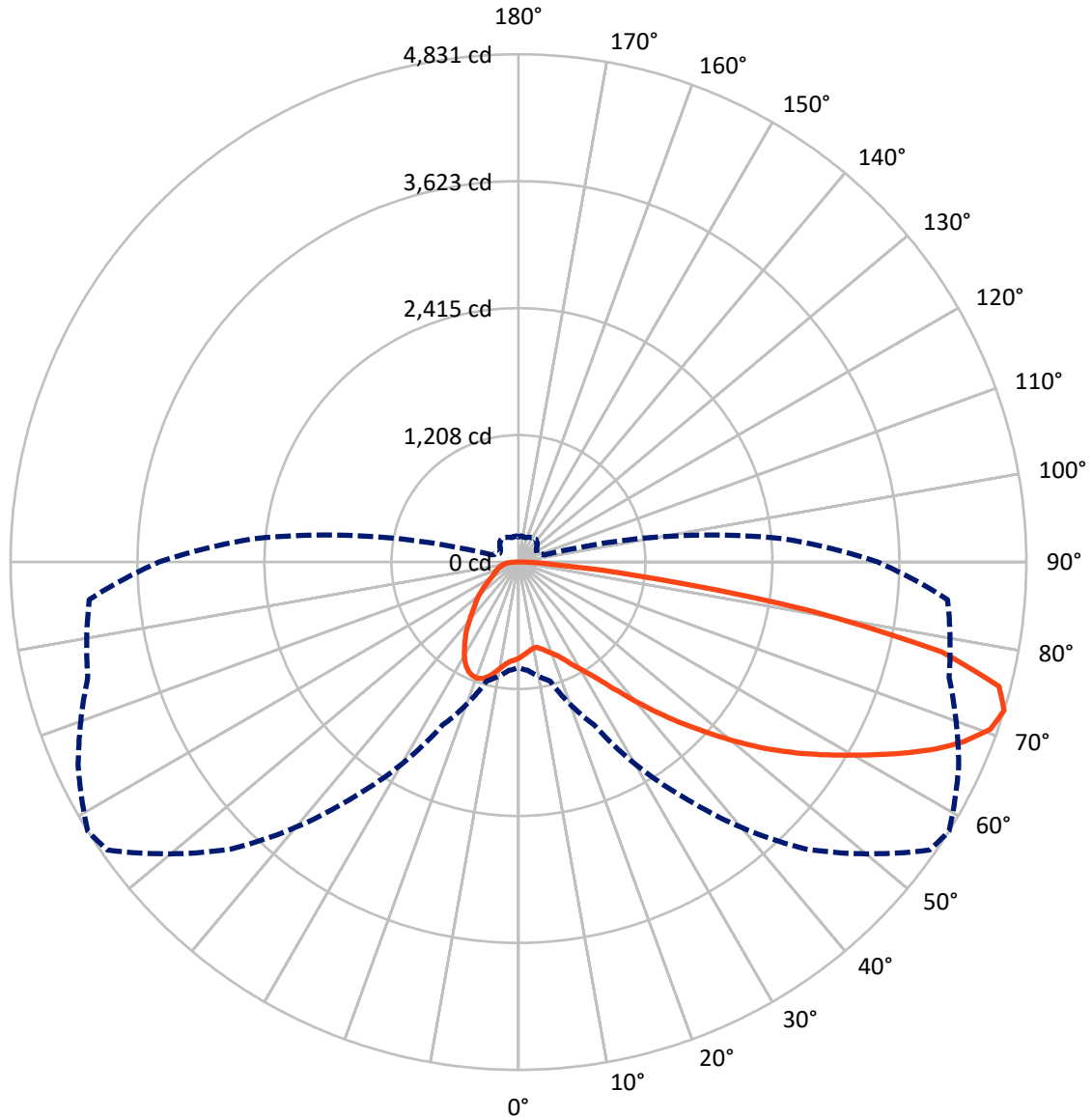


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397586

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397586

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T3

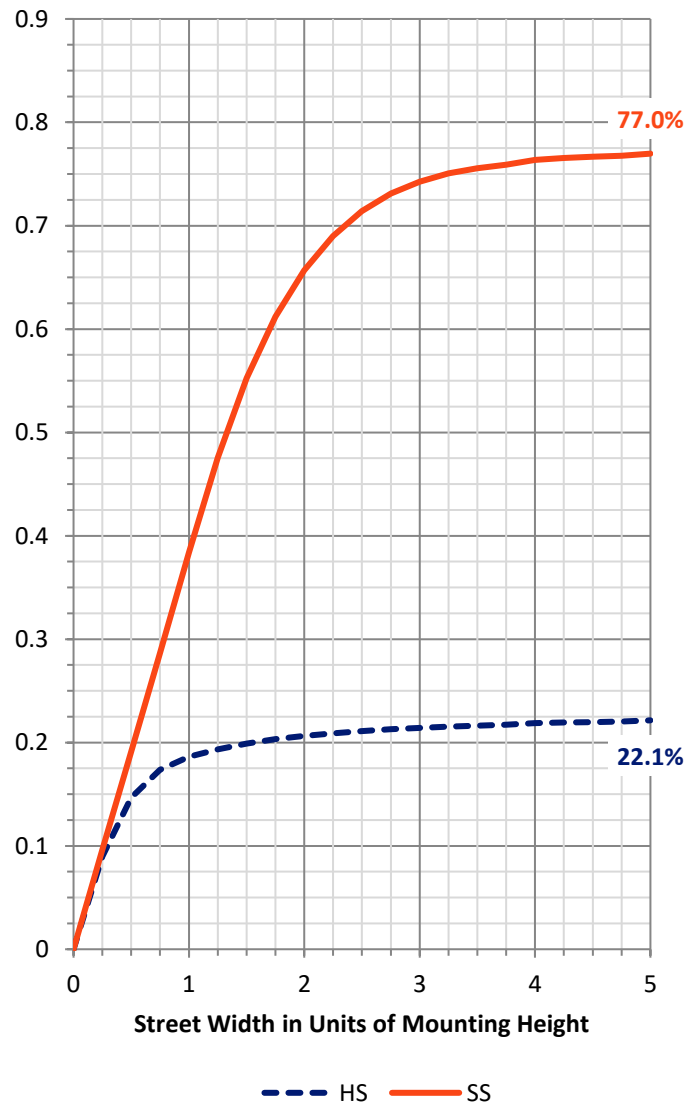
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1964.7	0.0	1964.7
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	6698.3	0.0	6698.3
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	8663.0	0.0	8663.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.0	1.0
10°-20°	279.5	3.2
20°-30°	500.8	5.8
30°-40°	753.3	8.7
40°-50°	1219.8	14.1
50°-60°	1836.2	21.2
60°-70°	2161.0	24.9
70°-80°	1532.4	17.7
80°-90°	292.0	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°	8663.0	100.0
0°-180°	8663.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P397586

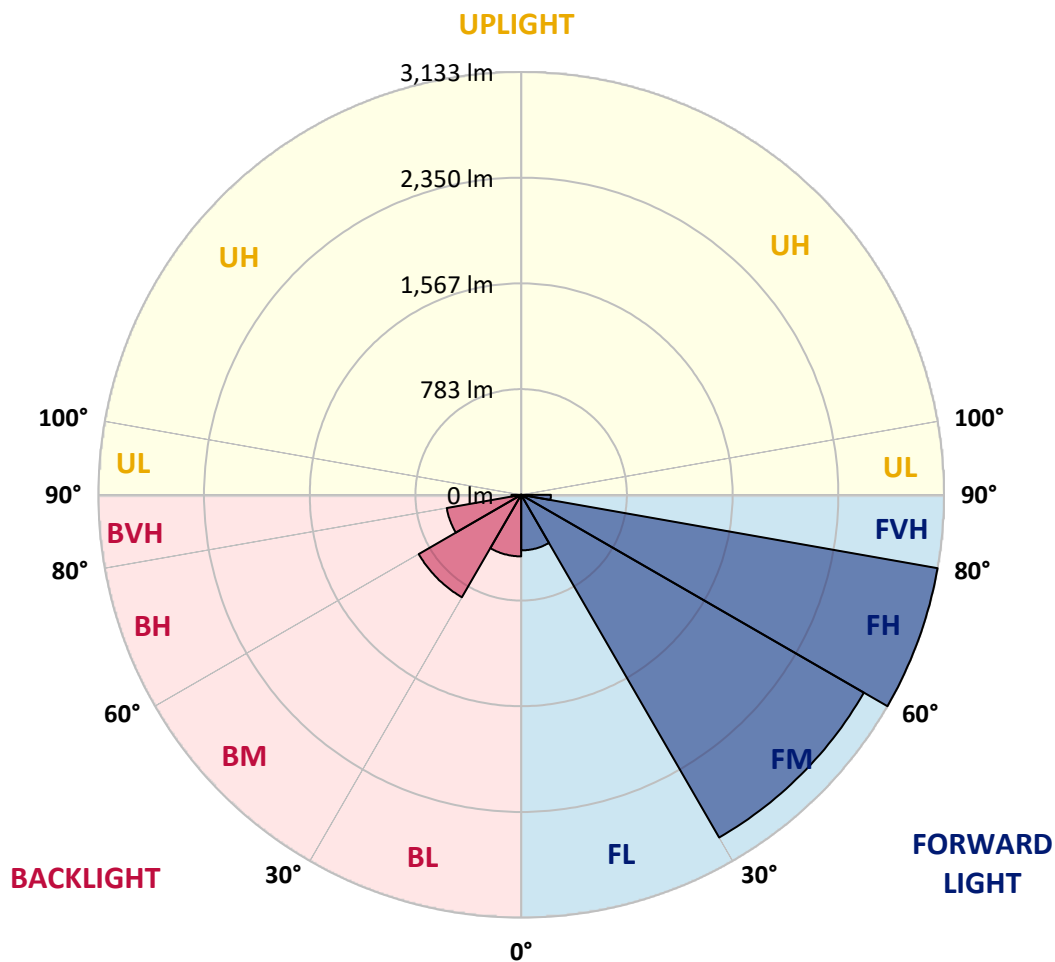
CATALOG NUMBER: ARCH-S-PA1-100-827-U-T3

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	412.0	4.8			
FM	(30°-60°)	2932.7	33.9			
FH	(60°-80°)	3133.4	36.2			G2/5000
FVH	(80°-90°)	220.2	2.5			G2/225
BL	(0°-30°)	456.4	5.3	B1/500		
BM	(30°-60°)	876.6	10.1	B1/1000		
BH	(60°-80°)	560.0	6.5	B2/1000		G2/1000
BVH	(80°-90°)	71.7	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





REPORT NUMBER: P397586

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8
2.5°	879.5	874.9	876.0	876.0	880.6	882.9	884.0	887.5	889.7	895.5	903.5
5°	838.3	834.9	836.0	837.1	845.1	853.1	860.0	864.6	871.4	880.6	892.0
7.5°	808.5	806.3	807.4	809.7	816.6	825.7	837.1	844.0	854.3	871.4	890.9
10°	786.8	786.8	788.0	792.5	799.4	810.8	820.0	828.0	848.6	879.5	909.2
12.5°	769.7	769.7	773.1	782.2	793.7	805.1	826.8	836.0	863.4	905.8	941.2
15°	768.5	769.7	770.8	778.8	791.4	816.6	848.6	862.3	895.5	945.8	987.0
17.5°	786.8	788.0	783.4	785.7	800.5	836.0	878.3	894.3	936.6	991.5	1033.8
20°	842.9	842.9	829.1	816.6	826.8	865.7	913.8	929.8	976.7	1037.3	1079.6
22.5°	957.2	962.9	930.9	903.5	887.5	909.2	952.6	969.8	1022.4	1087.6	1129.9
25°	1095.6	1101.3	1057.9	1019.0	989.2	985.8	1014.4	1032.7	1076.2	1143.6	1179.1
27.5°	1229.4	1219.1	1179.1	1142.5	1104.7	1073.9	1095.6	1111.6	1161.9	1213.4	1235.1
30°	1334.6	1326.6	1287.7	1261.4	1226.0	1185.9	1173.4	1190.5	1231.7	1279.7	1291.2
32.5°	1451.3	1445.6	1406.7	1372.4	1342.6	1304.9	1277.4	1285.4	1308.3	1342.6	1349.5
35°	1599.9	1612.5	1571.4	1501.6	1468.4	1431.8	1412.4	1414.7	1431.8	1453.6	1442.1
37.5°	1756.6	1771.5	1773.8	1664.0	1619.4	1586.2	1565.6	1573.6	1594.2	1609.1	1573.6
40°	2047.1	2032.2	1972.8	1891.6	1823.0	1790.9	1762.3	1761.2	1776.1	1802.4	1738.3
42.5°	2432.5	2418.8	2298.7	2193.5	2084.8	2048.2	1992.2	1968.2	1975.1	2008.2	1919.0
45°	2801.9	2796.2	2700.1	2577.7	2447.4	2376.5	2248.4	2190.1	2184.3	2210.6	2104.3
47.5°	3130.1	3105.0	3035.2	2940.3	2926.6	2741.3	2505.7	2426.8	2399.3	2414.2	2295.3
50°	3481.2	3395.4	3299.4	3241.1	3340.6	3167.9	2765.3	2683.0	2615.5	2625.8	2502.3
52.5°	3667.6	3523.5	3460.6	3477.8	3611.6	3545.3	3047.8	2947.1	2838.5	2853.4	2708.1
55°	3507.5	3506.4	3533.8	3640.2	3826.6	3750.0	3316.5	3203.3	3084.4	3087.8	2944.9
57.5°	3287.9	3332.5	3474.4	3708.8	4093.1	3965.0	3580.7	3460.6	3352.0	3334.8	3213.6
60°	3087.8	3137.0	3342.8	3697.4	4185.7	4161.7	3832.3	3727.1	3639.0	3588.7	3496.1
62.5°	2783.6	2820.2	3111.8	3624.2	4107.9	4303.5	4087.3	4015.3	3949.0	3844.9	3800.3
65°	2425.6	2438.2	2745.9	3382.9	4010.7	4358.4	4341.2	4309.2	4245.2	4091.9	4101.1
67.5°	2038.0	2063.1	2333.0	2997.5	3798.0	4333.2	4537.9	4564.2	4488.8	4258.9	4293.2
70°	1625.1	1656.0	1860.7	2464.5	3436.6	4224.6	4719.8	4762.1	4616.8	4313.8	4328.6
72.5°	1005.3	1035.0	1172.2	1712.0	2724.1	3859.8	4775.8	4830.7	4620.3	4240.6	4097.6
75°	347.7	351.1	458.6	821.1	1617.1	2914.0	4592.8	4722.1	4475.0	3974.1	3565.8
77.5°	159.0	164.7	203.6	338.5	717.1	1572.5	3792.3	4115.9	4033.6	3557.8	2744.7
80°	109.8	112.1	140.7	202.4	414.0	553.5	2393.6	2815.6	2959.7	2755.0	1758.9
82.5°	82.3	84.6	108.6	137.2	298.5	268.8	911.5	1308.3	1626.2	1596.5	735.4
85°	78.9	77.8	84.6	91.5	199.0	160.1	295.1	404.8	634.7	543.2	185.3
87.5°	34.3	37.7	86.9	51.5	104.1	74.3	128.1	149.8	193.3	168.1	66.3
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: P397586

CATALOG NUMBER: ARCH-S-PA1-100-827-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8	913.8
2.5°	906.9	909.2	916.0	926.3	932.1	943.5	951.5	956.1	959.5	960.7	960.7
5°	898.9	903.5	918.3	935.5	951.5	975.5	997.2	1009.8	1019.0	1022.4	1023.6
7.5°	901.2	912.6	934.3	959.5	980.1	1011.0	1037.3	1062.4	1083.0	1091.0	1091.0
10°	922.9	938.9	968.7	1001.8	1028.1	1060.1	1087.6	1109.3	1133.3	1147.1	1149.4
12.5°	956.1	975.5	1014.4	1051.0	1080.7	1105.9	1131.1	1147.1	1158.5	1168.8	1171.1
15°	1003.0	1027.0	1065.9	1103.6	1129.9	1145.9	1152.8	1152.8	1151.6	1152.8	1155.1
17.5°	1049.9	1072.7	1111.6	1149.4	1161.9	1152.8	1144.8	1142.5	1141.3	1139.1	1140.2
20°	1095.6	1117.3	1150.5	1179.1	1168.8	1136.8	1126.5	1125.3	1121.9	1119.6	1117.3
22.5°	1141.3	1157.4	1184.8	1195.1	1153.9	1108.2	1095.6	1088.7	1084.2	1078.4	1072.7
25°	1194.0	1198.5	1219.1	1203.1	1117.3	1055.6	1037.3	1027.0	1022.4	1016.7	1012.1
27.5°	1243.1	1243.1	1246.6	1190.5	1063.6	985.8	958.4	940.1	938.9	937.8	936.6
30°	1287.7	1282.0	1270.6	1152.8	993.8	900.0	858.9	840.6	847.4	853.1	854.3
32.5°	1340.3	1328.9	1296.9	1101.3	910.3	804.0	753.7	745.6	753.7	760.5	755.9
35°	1422.7	1402.1	1324.3	1041.8	830.3	715.9	667.9	656.4	654.2	653.0	643.9
37.5°	1540.5	1505.0	1346.1	977.8	751.4	638.1	602.7	578.7	556.9	534.1	530.6
40°	1684.6	1624.0	1360.9	904.6	667.9	573.0	535.2	504.3	467.7	427.7	423.1
42.5°	1842.4	1752.0	1367.8	823.4	594.7	519.2	472.3	433.4	392.3	361.4	355.7
45°	2012.8	1890.4	1362.1	745.6	535.2	473.5	420.9	378.5	345.4	323.6	319.1
47.5°	2178.6	2049.4	1346.1	683.9	489.5	434.6	380.8	341.9	316.8	292.8	287.1
50°	2391.3	2201.5	1326.6	635.9	439.2	395.7	355.7	314.5	285.9	274.5	272.2
52.5°	2626.9	2353.6	1303.7	575.2	390.0	364.8	339.7	303.1	293.9	272.2	268.8
55°	2882.0	2534.3	1299.2	498.6	346.5	343.1	323.6	313.4	315.6	272.2	266.5
57.5°	3150.7	2727.6	1309.5	422.0	311.1	323.6	330.5	322.5	319.1	277.9	266.5
60°	3430.9	2914.0	1278.6	351.1	283.6	307.6	338.5	317.9	292.8	275.6	267.6
62.5°	3703.1	3070.7	1144.8	300.8	263.0	303.1	333.9	300.8	272.2	272.2	268.8
65°	3900.9	3140.4	895.5	264.2	249.3	297.3	325.9	289.3	266.5	274.5	269.9
67.5°	3923.8	3068.4	601.6	235.6	237.9	287.1	307.6	279.0	260.7	281.3	274.5
70°	3783.1	2880.8	368.2	213.9	223.0	268.8	291.6	268.8	252.7	275.6	265.3
72.5°	3418.3	2530.9	259.6	195.6	207.0	251.6	276.8	259.6	241.3	249.3	239.0
75°	2804.2	1961.3	205.9	178.4	191.0	235.6	264.2	245.9	227.6	224.2	217.3
77.5°	1986.5	1256.9	165.8	164.7	173.8	216.1	247.0	229.9	211.6	204.7	200.1
80°	1142.5	616.4	143.0	148.7	157.8	196.7	226.4	211.6	194.4	184.1	177.3
82.5°	436.9	215.0	125.8	129.2	139.5	176.1	205.9	193.3	176.1	185.3	155.5
85°	141.8	117.8	102.9	106.4	116.7	146.4	181.8	171.5	152.1	134.9	124.7
87.5°	62.9	64.0	54.9	60.6	73.2	97.2	132.7	125.8	110.9	92.6	89.2
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)