

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: P397593

Luminaire Tested: **ARCH-S-PA1-100-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397593  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-830-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9384 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

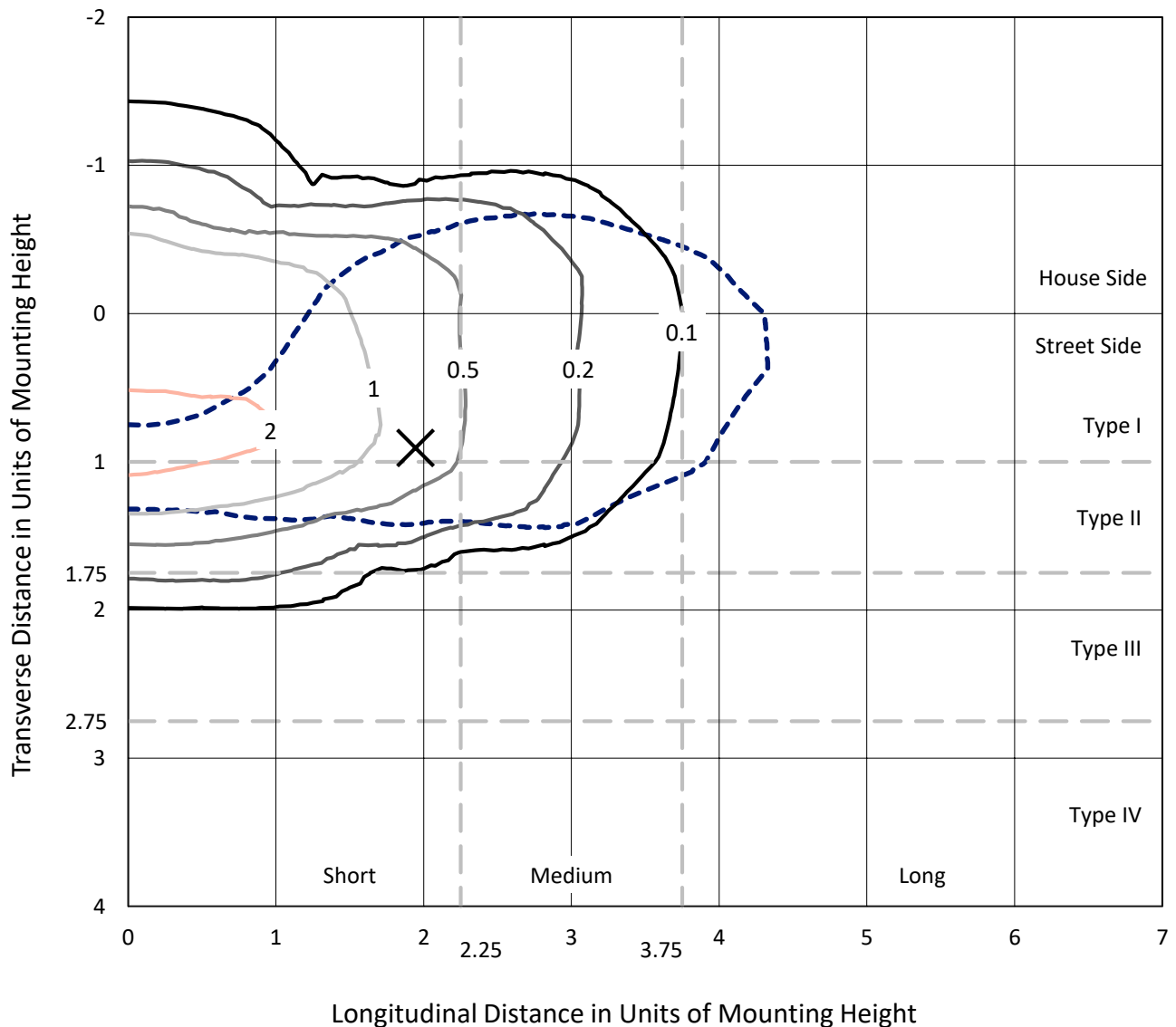
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

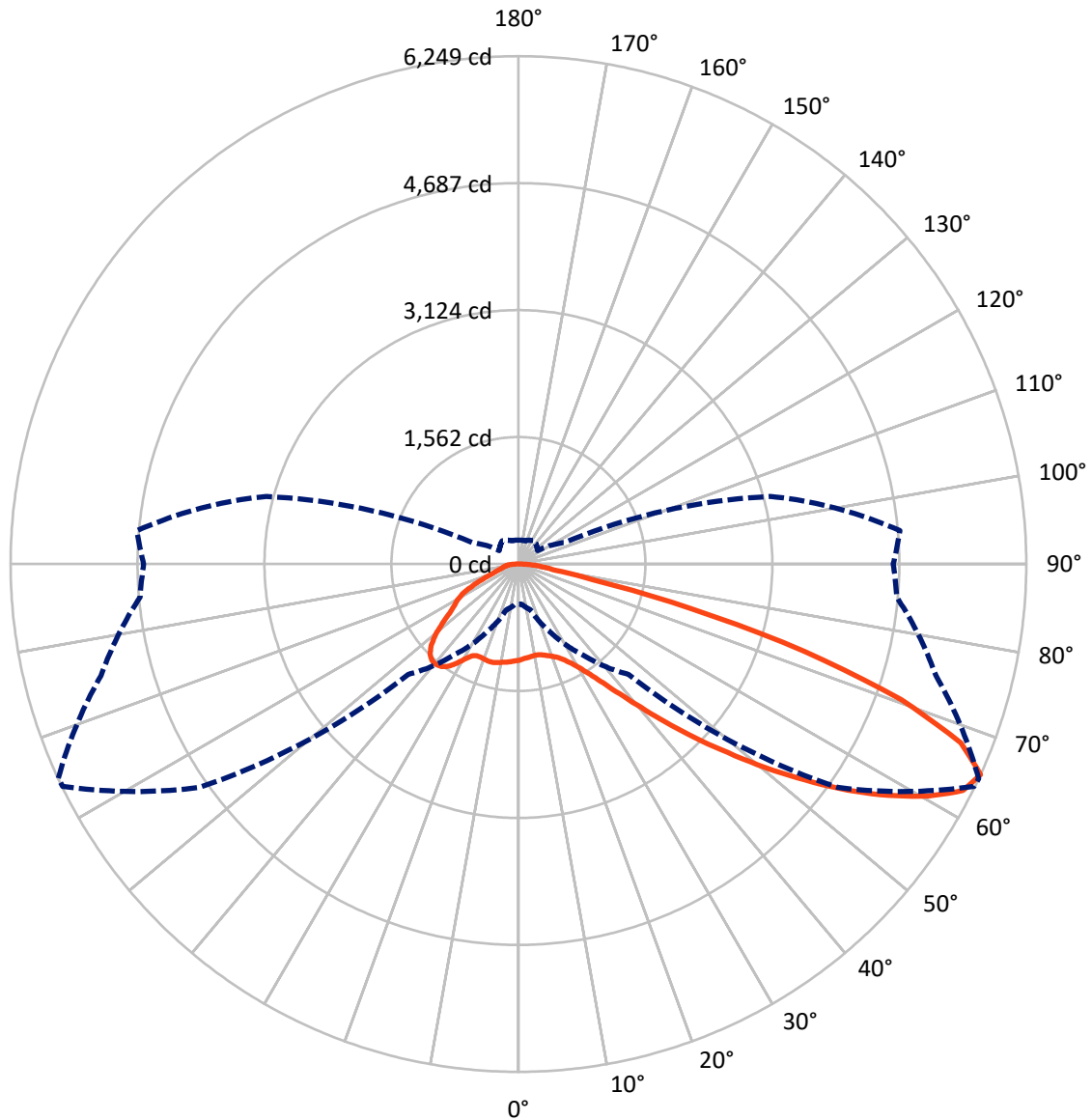
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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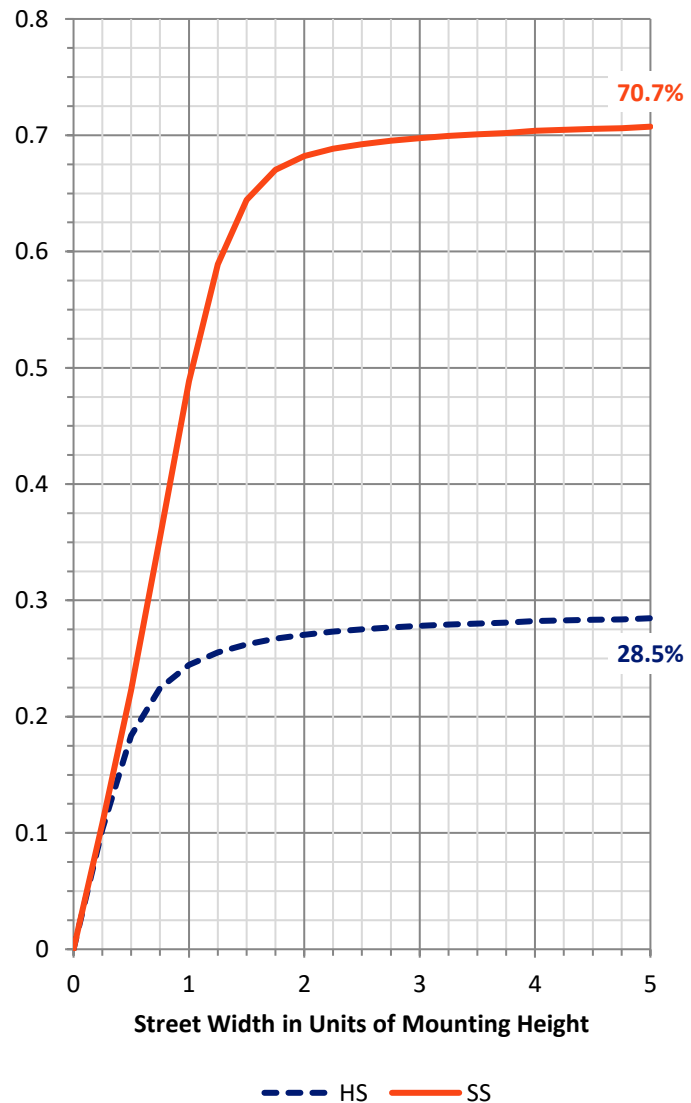
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2713.1	0.0	2713.1
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	6671.0	0.0	6671.0
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	9384.0	0.0	9384.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.0	1.2
10°-20°	337.3	3.6
20°-30°	599.1	6.4
30°-40°	1013.5	10.8
40°-50°	1764.4	18.8
50°-60°	2280.1	24.3
60°-70°	1995.2	21.3
70°-80°	1085.3	11.6
80°-90°	196.1	2.1
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°	9384.0	100.0
0°-180°	9384.0	100.0



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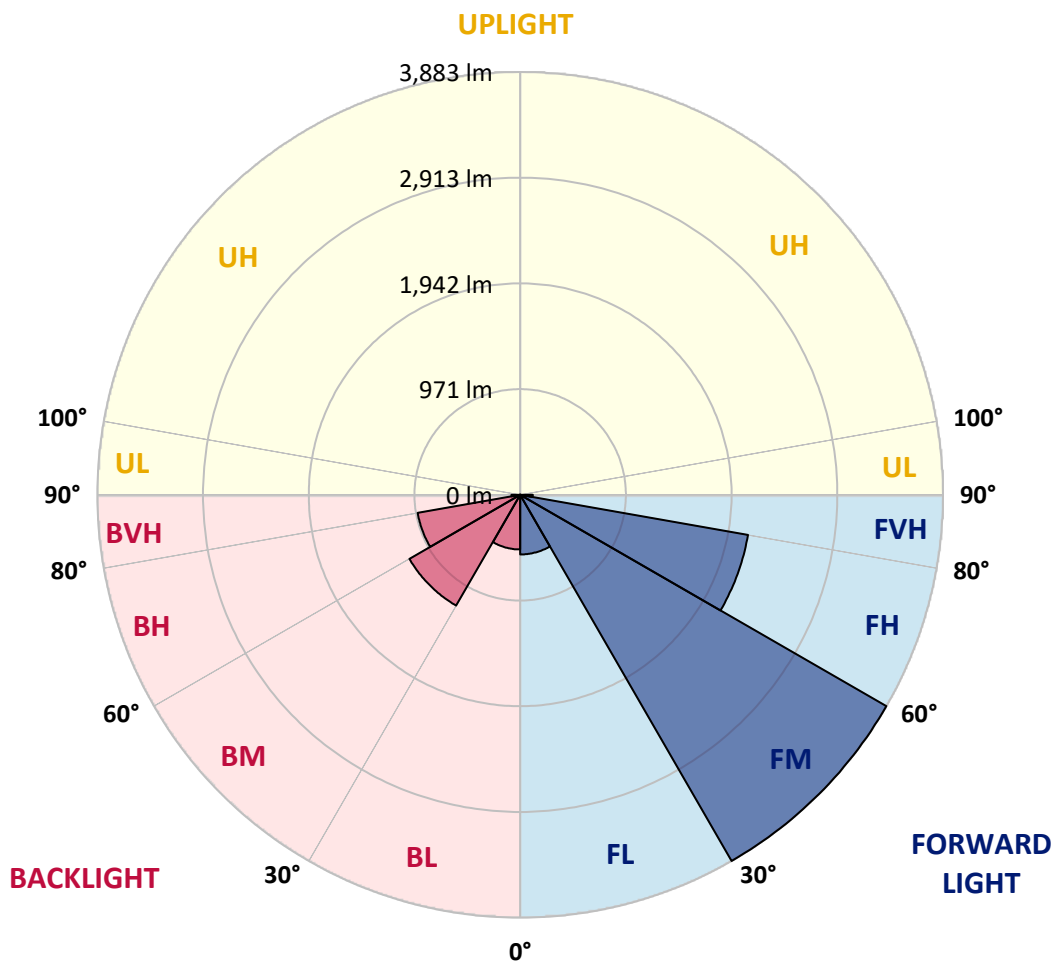
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	547.5	5.8			
FM	(30°-60°)	3883.4	41.4			
FH	(60°-80°)	2124.7	22.6			G2/5000
FVH	(80°-90°)	115.4	1.2			G2/225
BL	(0°-30°)	501.8	5.3	B2/1000		
BM	(30°-60°)	1174.7	12.5	B2/2500		
BH	(60°-80°)	955.8	10.2	B2/1000		G2/1000
BVH	(80°-90°)	80.7	0.9			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8
2.5°	1164.8	1163.5	1161.1	1163.5	1164.8	1167.2	1166.0	1168.5	1167.2	1170.9	1177.1
5°	1135.1	1132.6	1131.4	1137.6	1141.3	1147.5	1149.9	1158.6	1157.3	1163.5	1173.4
7.5°	1101.8	1101.8	1100.5	1107.9	1112.9	1124.0	1132.6	1147.5	1148.7	1159.8	1170.9
10°	1075.8	1077.1	1075.8	1082.0	1089.4	1103.0	1117.8	1138.8	1140.1	1156.1	1167.2
12.5°	1065.9	1065.9	1065.9	1074.6	1084.5	1103.0	1120.3	1142.5	1145.0	1162.3	1172.2
15°	1079.5	1080.8	1078.3	1086.9	1098.1	1120.3	1136.4	1159.8	1162.3	1178.3	1184.5
17.5°	1127.7	1132.6	1126.5	1131.4	1128.9	1146.2	1161.1	1184.5	1185.8	1199.3	1201.8
20°	1222.8	1227.8	1217.9	1211.7	1189.5	1188.2	1194.4	1212.9	1212.9	1221.6	1215.4
22.5°	1369.8	1374.7	1357.4	1334.0	1280.9	1254.9	1241.3	1250.0	1248.8	1252.5	1236.4
25°	1565.0	1563.7	1542.7	1499.5	1414.3	1351.3	1317.9	1304.3	1304.3	1296.9	1277.2
27.5°	1807.0	1788.5	1751.5	1699.6	1581.0	1493.3	1421.7	1387.1	1380.9	1358.7	1321.6
30°	2065.2	2051.6	1998.5	1923.2	1786.0	1673.6	1555.1	1485.9	1482.2	1434.0	1378.4
32.5°	2369.0	2346.8	2287.5	2197.4	2033.1	1875.0	1726.8	1621.8	1615.6	1539.0	1462.4
35°	2759.4	2740.8	2626.0	2535.8	2324.6	2117.1	1941.7	1802.1	1797.2	1703.3	1605.7
37.5°	3227.5	3179.3	3068.2	2898.9	2676.6	2430.8	2208.5	2033.1	2026.9	1923.2	1799.6
40°	3645.0	3601.7	3502.9	3347.3	3108.9	2835.9	2534.6	2322.1	2315.9	2189.9	2034.3
42.5°	3953.8	3924.1	3859.9	3769.7	3599.3	3433.8	2950.8	2671.7	2660.5	2497.5	2303.6
45°	4132.9	4109.4	4072.3	4094.6	4092.1	4061.2	3447.3	3087.9	3052.1	2840.9	2603.7
47.5°	4089.6	4068.6	4083.5	4256.4	4494.8	4673.9	4025.4	3514.0	3465.9	3190.4	2923.6
50°	3777.1	3785.8	3863.6	4194.6	4729.4	5127.2	4666.5	3999.5	3935.2	3542.5	3227.5
52.5°	3207.7	3228.7	3417.7	3880.9	4703.5	5421.1	5245.7	4500.9	4415.7	3885.8	3504.2
55°	2548.1	2601.3	2845.8	3332.5	4365.1	5442.1	5683.0	5004.9	4911.0	4208.2	3745.0
57.5°	1884.9	1963.9	2246.8	2693.9	3716.6	5109.9	5901.6	5486.6	5373.0	4528.1	3999.5
60°	1195.6	1243.8	1569.9	2097.3	2844.6	4297.1	5873.2	5896.7	5797.9	4846.8	4265.0
62.5°	763.3	786.8	951.1	1495.8	1988.6	3181.8	5563.2	6206.7	6140.0	5137.1	4517.0
65°	490.4	500.2	584.2	920.2	1353.7	1920.7	4791.2	6240.1	6248.7	5318.6	4672.6
67.5°	399.0	403.9	434.8	568.2	957.3	1061.0	3337.4	5765.8	5870.7	5271.7	4619.5
70°	363.1	369.3	401.4	453.3	741.1	732.5	1615.6	4824.6	4996.2	5001.2	4383.6
72.5°	306.3	315.0	358.2	428.6	573.1	578.1	684.3	3436.2	3689.4	4470.1	4029.1
75°	255.7	260.6	297.7	378.0	485.4	462.0	480.5	1821.9	2187.5	3584.5	3652.4
77.5°	207.5	212.4	239.6	301.4	431.1	359.4	378.0	754.7	932.5	2433.3	2985.4
80°	148.2	153.2	184.0	234.7	326.1	323.6	280.4	416.3	452.1	1315.5	1939.2
82.5°	106.2	109.9	139.6	168.0	226.0	324.8	211.2	282.9	296.4	583.0	781.9
85°	71.6	71.6	96.3	111.2	145.7	205.0	170.5	191.5	200.1	276.7	211.2
87.5°	30.9	30.9	51.9	56.8	76.6	95.1	127.2	96.3	98.8	149.5	86.5
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°	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8	1185.8
2.5°	1180.8	1182.1	1184.5	1191.9	1196.9	1204.3	1208.0	1212.9	1212.9	1210.5	1211.7
5°	1178.3	1182.1	1190.7	1204.3	1212.9	1226.5	1236.4	1243.8	1246.3	1243.8	1245.0
7.5°	1177.1	1183.3	1198.1	1217.9	1230.2	1247.5	1261.1	1269.8	1275.9	1273.5	1274.7
10°	1173.4	1183.3	1201.8	1226.5	1245.0	1262.3	1274.7	1278.4	1282.1	1279.6	1278.4
12.5°	1178.3	1189.5	1209.2	1238.9	1259.9	1273.5	1277.2	1271.0	1262.3	1257.4	1256.2
15°	1188.2	1199.3	1219.1	1250.0	1268.5	1273.5	1264.8	1245.0	1225.3	1214.2	1212.9
17.5°	1201.8	1209.2	1225.3	1252.5	1267.3	1261.1	1243.8	1220.3	1205.5	1196.9	1198.1
20°	1210.5	1210.5	1222.8	1243.8	1256.2	1251.2	1230.2	1204.3	1180.8	1169.7	1166.0
22.5°	1222.8	1216.6	1217.9	1236.4	1253.7	1246.3	1201.8	1156.1	1122.8	1110.4	1109.2
25°	1256.2	1238.9	1227.8	1238.9	1279.6	1219.1	1130.2	1077.1	1046.2	1035.1	1036.3
27.5°	1296.9	1273.5	1250.0	1268.5	1300.6	1157.3	1038.8	978.3	959.7	951.1	954.8
30°	1337.7	1306.8	1275.9	1342.6	1285.8	1061.0	921.4	862.1	846.1	839.9	844.9
32.5°	1413.0	1362.4	1325.3	1441.4	1240.1	951.1	794.2	739.9	725.0	717.6	715.2
35°	1539.0	1474.8	1437.7	1527.9	1175.9	828.8	678.1	639.8	623.8	607.7	605.2
37.5°	1720.6	1642.8	1609.4	1577.3	1085.7	707.7	589.2	563.2	539.8	515.1	513.8
40°	1938.0	1836.7	1812.0	1599.5	961.0	594.1	527.4	502.7	473.1	449.6	450.8
42.5°	2188.7	2059.0	2005.9	1593.4	806.6	533.6	482.9	455.8	429.8	408.8	407.6
45°	2456.7	2309.8	2187.5	1550.1	653.4	491.6	455.8	423.7	397.7	374.3	371.8
47.5°	2753.2	2588.9	2355.5	1466.1	539.8	462.0	439.7	394.0	370.5	355.7	355.7
50°	3052.1	2855.7	2509.9	1338.9	473.1	439.7	416.3	378.0	359.4	347.1	347.1
52.5°	3307.8	3133.6	2637.1	1187.0	431.1	421.2	400.2	370.5	350.8	339.7	338.4
55°	3556.0	3391.8	2750.7	1036.3	396.5	396.5	396.5	364.4	342.1	332.3	331.0
57.5°	3803.1	3663.5	2869.3	937.5	365.6	375.5	389.1	357.0	334.7	326.1	324.8
60°	4082.2	3989.6	3006.4	868.3	338.4	353.3	379.2	348.3	322.4	315.0	313.7
62.5°	4378.7	4378.7	3131.1	770.7	313.7	334.7	364.4	337.2	311.3	305.1	303.9
65°	4610.9	4710.9	3211.4	625.0	289.0	316.2	347.1	322.4	296.4	295.2	292.7
67.5°	4638.0	4794.9	3160.8	471.8	266.8	296.4	329.8	306.3	281.6	281.6	277.9
70°	4442.9	4602.2	3002.7	353.3	250.7	276.7	307.6	286.6	263.1	265.6	259.4
72.5°	4116.8	4156.3	2609.9	279.1	232.2	255.7	280.4	264.3	243.3	243.3	234.7
75°	3687.0	3467.1	1896.0	233.4	210.0	231.0	253.2	239.6	221.1	214.9	210.0
77.5°	2934.8	2512.3	1101.8	201.3	191.5	207.5	222.3	212.4	196.4	182.8	182.8
80°	1788.5	1472.3	486.7	174.2	169.2	181.6	191.5	180.3	166.7	153.2	149.5
82.5°	680.6	568.2	235.9	149.5	148.2	155.6	163.0	151.9	142.0	135.9	117.3
85°	186.5	171.7	161.8	124.8	122.3	121.0	129.7	124.8	111.2	91.4	81.5
87.5°	70.4	80.3	87.7	76.6	81.5	75.3	86.5	79.1	70.4	45.7	40.8
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)