

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: P398160

Luminaire Tested: **ARCH-S-PA1-90-827-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398160  
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-PA1-90-827-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8592 lumens  
Efficiency: N/A  
Efficacy: 91.4 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

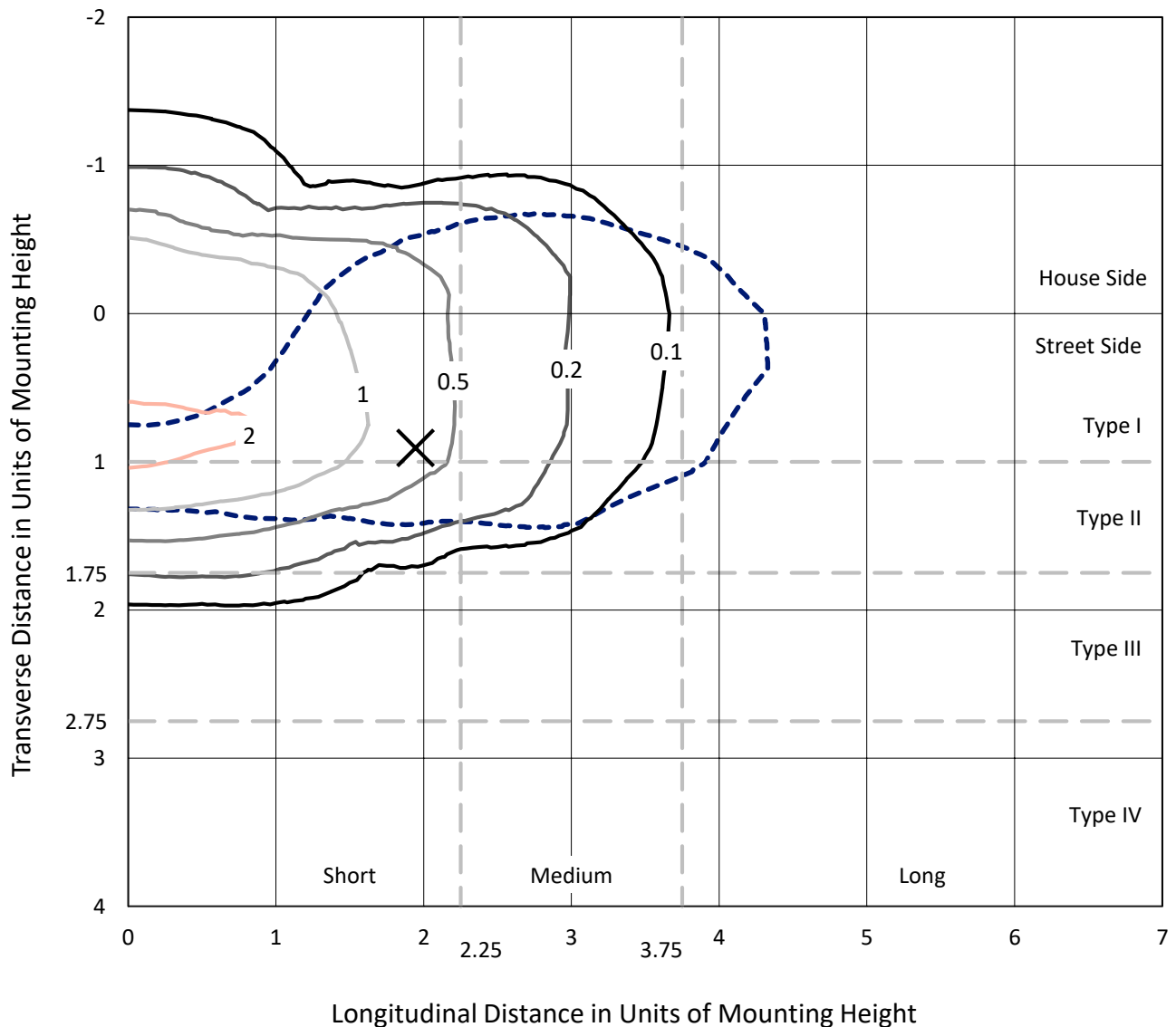
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

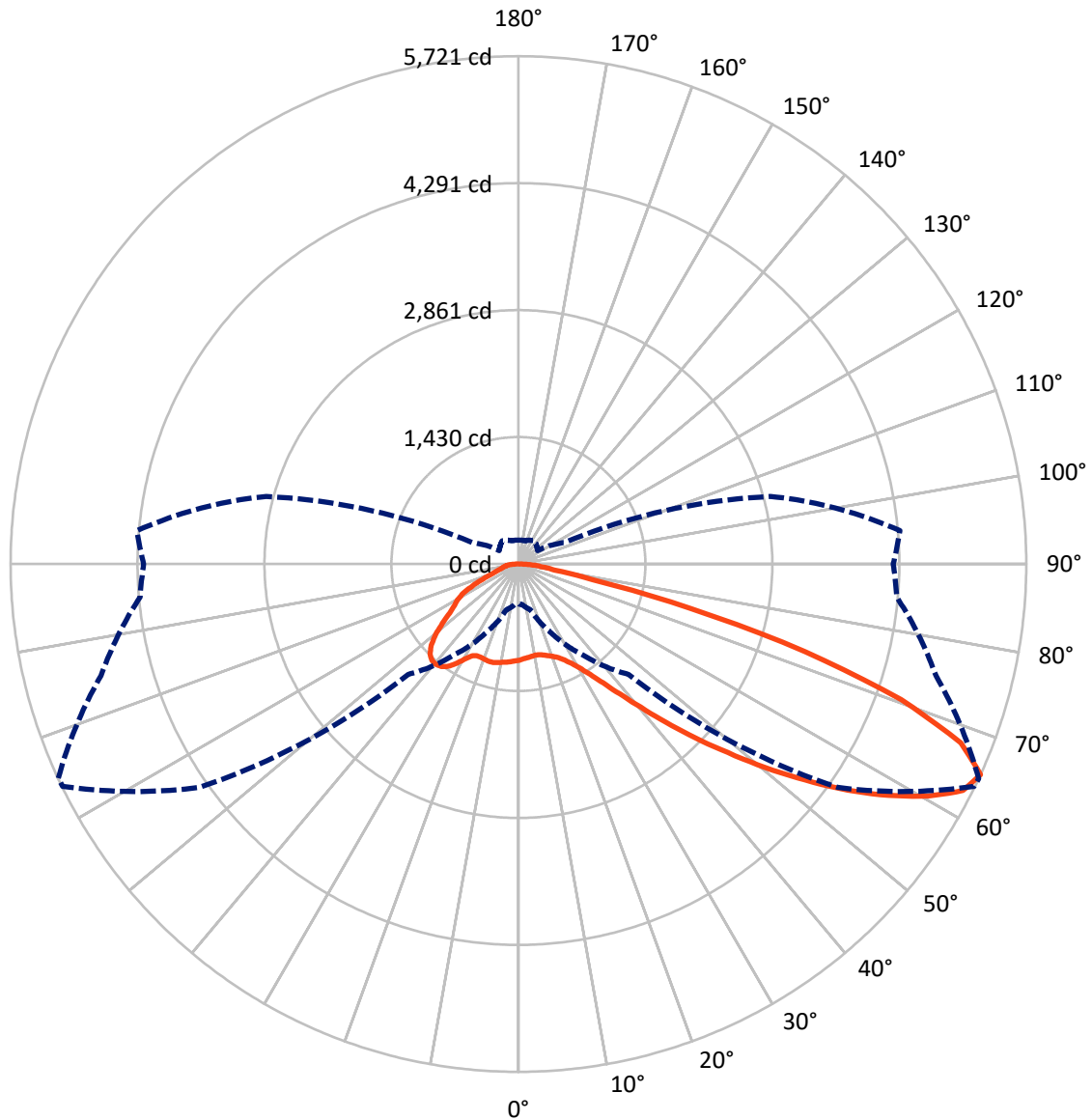
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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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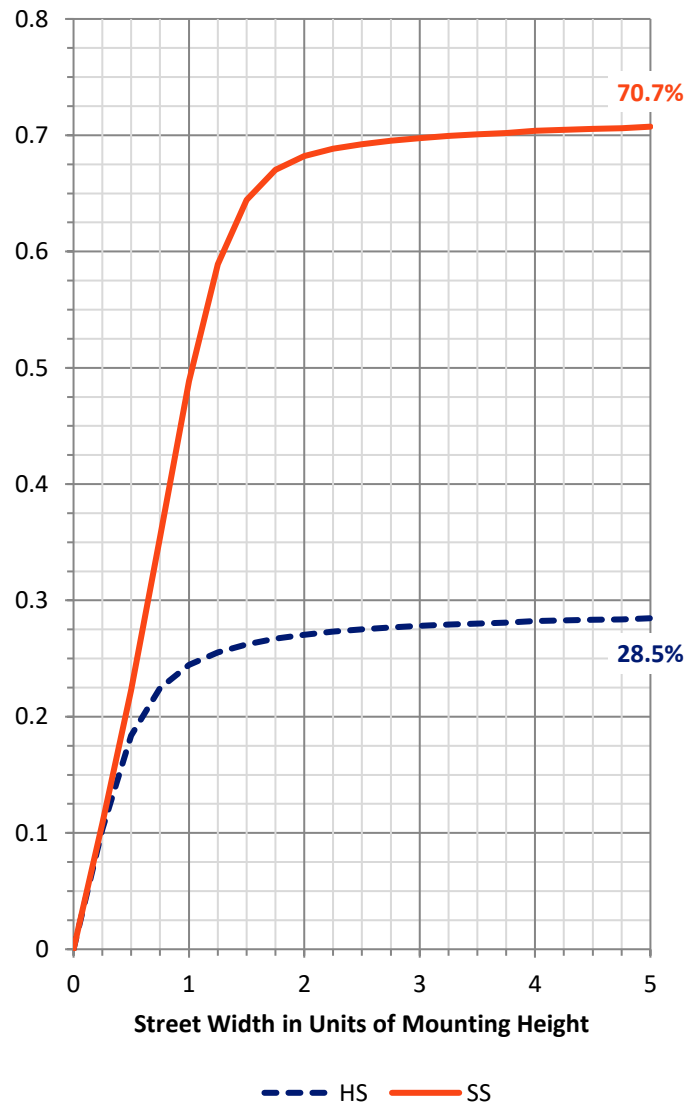
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2484.1	0.0	2484.1
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	6107.9	0.0	6107.9
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	8592.0	0.0	8592.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.4	1.2
10°-20°	308.8	3.6
20°-30°	548.5	6.4
30°-40°	928.0	10.8
40°-50°	1615.5	18.8
50°-60°	2087.7	24.3
60°-70°	1826.8	21.3
70°-80°	993.7	11.6
80°-90°	179.5	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°	8592.0	100.0
0°-180°	8592.0	100.0



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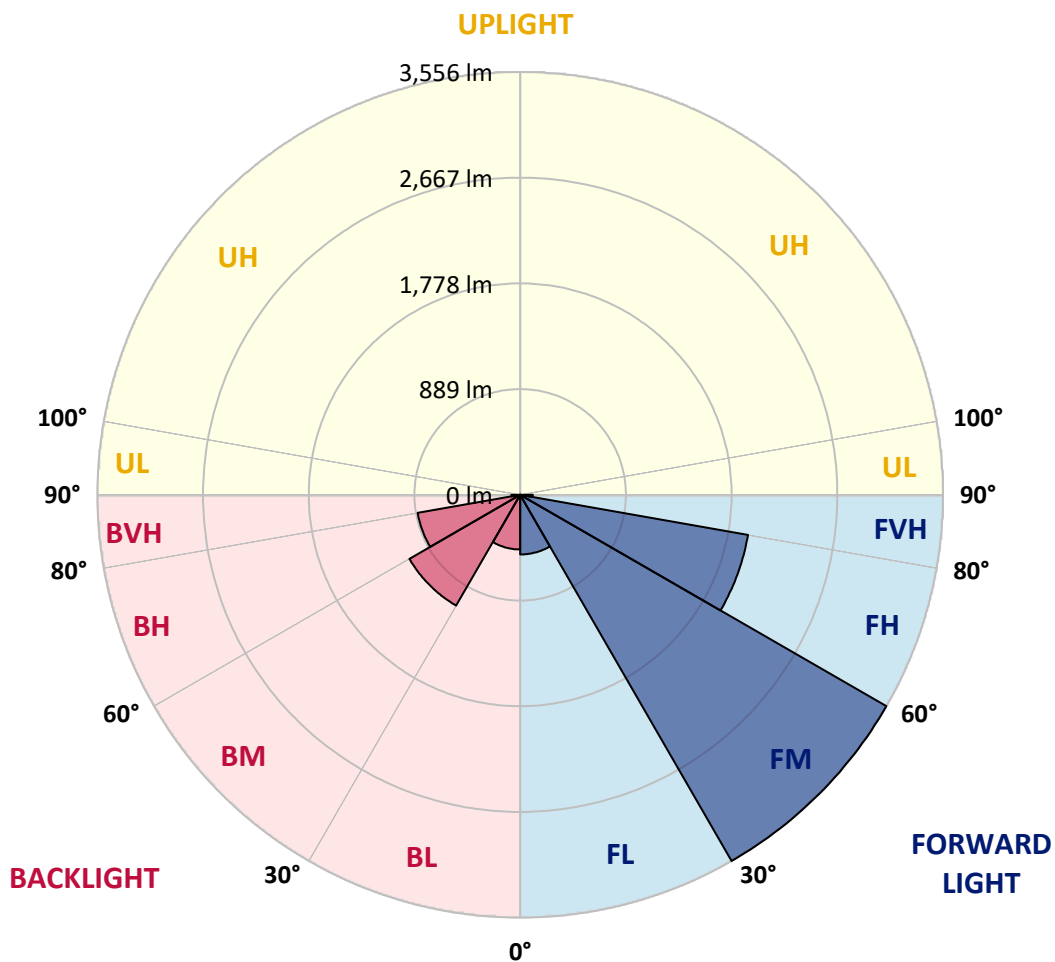
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	501.3	5.8			
FM	(30°-60°)	3555.6	41.4			
FH	(60°-80°)	1945.4	22.6			G2/5000
FVH	(80°-90°)	105.7	1.2			G2/225
BL	(0°-30°)	459.5	5.3	B1/500		
BM	(30°-60°)	1075.5	12.5	B2/2500		
BH	(60°-80°)	875.2	10.2	B2/1000		G2/1000
BVH	(80°-90°)	73.9	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°	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7
2.5°	1066.5	1065.3	1063.1	1065.3	1066.5	1068.7	1067.6	1069.8	1068.7	1072.1	1077.8
5°	1039.3	1037.1	1035.9	1041.6	1045.0	1050.6	1052.9	1060.8	1059.7	1065.3	1074.4
7.5°	1008.8	1008.8	1007.6	1014.4	1019.0	1029.1	1037.1	1050.6	1051.8	1061.9	1072.1
10°	985.0	986.2	985.0	990.7	997.5	1009.9	1023.5	1042.7	1043.8	1058.5	1068.7
12.5°	976.0	976.0	976.0	983.9	992.9	1009.9	1025.7	1046.1	1048.4	1064.2	1073.2
15°	988.4	989.6	987.3	995.2	1005.4	1025.7	1040.4	1061.9	1064.2	1078.9	1084.6
17.5°	1032.5	1037.1	1031.4	1035.9	1033.7	1049.5	1063.1	1084.6	1085.7	1098.1	1100.4
20°	1119.6	1124.1	1115.1	1109.4	1089.1	1087.9	1093.6	1110.6	1110.6	1118.5	1112.8
22.5°	1254.2	1258.7	1242.9	1221.4	1172.8	1149.0	1136.6	1144.5	1143.4	1146.8	1132.0
25°	1432.9	1431.7	1412.5	1372.9	1294.9	1237.2	1206.7	1194.3	1194.3	1187.5	1169.4
27.5°	1654.5	1637.6	1603.6	1556.1	1447.6	1367.3	1301.7	1270.0	1264.4	1244.0	1210.1
30°	1890.9	1878.5	1829.8	1760.8	1635.3	1532.4	1423.8	1360.5	1357.1	1313.0	1262.1
32.5°	2169.1	2148.7	2094.5	2011.9	1861.5	1716.7	1581.0	1484.9	1479.2	1409.1	1339.0
35°	2526.5	2509.5	2404.3	2321.8	2128.4	1938.4	1777.8	1650.0	1645.5	1559.5	1470.2
37.5°	2955.1	2911.0	2809.2	2654.3	2450.7	2225.6	2022.1	1861.5	1855.8	1760.8	1647.7
40°	3337.3	3297.8	3207.3	3064.8	2846.5	2596.6	2320.6	2126.1	2120.5	2005.1	1862.6
42.5°	3620.1	3592.9	3534.1	3451.6	3295.5	3144.0	2701.8	2446.2	2436.0	2286.7	2109.2
45°	3784.1	3762.6	3728.6	3749.0	3746.7	3718.5	3156.4	2827.3	2794.5	2601.1	2384.0
47.5°	3744.5	3725.2	3738.8	3897.1	4115.4	4279.4	3685.7	3217.5	3173.4	2921.2	2676.9
50°	3458.3	3466.3	3537.5	3840.6	4330.3	4694.4	4272.6	3661.9	3603.1	3243.5	2955.1
52.5°	2937.0	2956.2	3129.3	3553.3	4306.5	4963.6	4803.0	4121.1	4043.0	3557.9	3208.4
55°	2333.1	2381.7	2605.6	3051.2	3996.7	4982.8	5203.4	4582.5	4496.5	3853.0	3428.9
57.5°	1725.8	1798.2	2057.1	2466.5	3402.9	4678.6	5403.5	5023.5	4919.5	4145.9	3661.9
60°	1094.7	1138.8	1437.4	1920.3	2604.5	3934.5	5377.5	5399.0	5308.5	4437.7	3905.1
62.5°	698.9	720.4	870.8	1369.5	1820.8	2913.2	5093.7	5682.9	5621.8	4703.5	4135.8
65°	449.0	458.0	534.9	842.5	1239.5	1758.6	4386.8	5713.4	5721.3	4869.7	4278.3
67.5°	365.3	369.8	398.1	520.2	876.5	971.5	3055.7	5279.1	5375.3	4826.8	4229.6
70°	332.5	338.1	367.5	415.0	678.6	670.6	1479.2	4417.4	4574.6	4579.1	4013.6
72.5°	280.5	288.4	328.0	392.4	524.7	529.3	626.5	3146.2	3378.1	4092.8	3689.1
75°	234.1	238.6	272.6	346.1	444.5	423.0	439.9	1668.1	2002.9	3281.9	3344.1
77.5°	190.0	194.5	219.4	275.9	394.7	329.1	346.1	691.0	853.8	2227.9	2733.4
80°	135.7	140.2	168.5	214.9	298.6	296.3	256.7	381.1	413.9	1204.4	1775.5
82.5°	97.3	100.7	127.8	153.8	207.0	297.4	193.4	259.0	271.4	533.8	715.9
85°	65.6	65.6	88.2	101.8	133.4	187.7	156.1	175.3	183.2	253.3	193.4
87.5°	28.3	28.3	47.5	52.0	70.1	87.1	116.5	88.2	90.5	136.8	79.2
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°	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7	1085.7
2.5°	1081.2	1082.3	1084.6	1091.3	1095.9	1102.6	1106.0	1110.6	1110.6	1108.3	1109.4
5°	1078.9	1082.3	1090.2	1102.6	1110.6	1123.0	1132.0	1138.8	1141.1	1138.8	1140.0
7.5°	1077.8	1083.4	1097.0	1115.1	1126.4	1142.2	1154.7	1162.6	1168.2	1166.0	1167.1
10°	1074.4	1083.4	1100.4	1123.0	1140.0	1155.8	1167.1	1170.5	1173.9	1171.6	1170.5
12.5°	1078.9	1089.1	1107.2	1134.3	1153.5	1166.0	1169.4	1163.7	1155.8	1151.3	1150.1
15°	1087.9	1098.1	1116.2	1144.5	1161.5	1166.0	1158.1	1140.0	1121.9	1111.7	1110.6
17.5°	1100.4	1107.2	1121.9	1146.8	1160.3	1154.7	1138.8	1117.3	1103.8	1095.9	1097.0
20°	1108.3	1108.3	1119.6	1138.8	1150.1	1145.6	1126.4	1102.6	1081.2	1071.0	1067.6
22.5°	1119.6	1114.0	1115.1	1132.0	1147.9	1141.1	1100.4	1058.5	1028.0	1016.7	1015.6
25°	1150.1	1134.3	1124.1	1134.3	1171.6	1116.2	1034.8	986.2	957.9	947.7	948.8
27.5°	1187.5	1166.0	1144.5	1161.5	1190.9	1059.7	951.1	895.7	878.7	870.8	874.2
30°	1224.8	1196.5	1168.2	1229.3	1177.3	971.5	843.7	789.4	774.7	769.0	773.5
32.5°	1293.8	1247.4	1213.5	1319.8	1135.4	870.8	727.2	677.4	663.8	657.1	654.8
35°	1409.1	1350.3	1316.4	1398.9	1076.6	758.8	620.9	585.8	571.1	556.4	554.2
37.5°	1575.4	1504.1	1473.6	1444.2	994.1	648.0	539.4	515.7	494.2	471.6	470.5
40°	1774.4	1681.7	1659.1	1464.5	879.9	544.0	482.9	460.3	433.1	411.7	412.8
42.5°	2004.0	1885.2	1836.6	1458.9	738.5	488.6	442.2	417.3	393.6	374.3	373.2
45°	2249.4	2114.8	2002.9	1419.3	598.3	450.1	417.3	387.9	364.2	342.7	340.4
47.5°	2520.8	2370.4	2156.7	1342.4	494.2	423.0	402.6	360.8	339.3	325.7	325.7
50°	2794.5	2614.7	2298.0	1225.9	433.1	402.6	381.1	346.1	329.1	317.8	317.8
52.5°	3028.6	2869.1	2414.5	1086.8	394.7	385.6	366.4	339.3	321.2	311.0	309.9
55°	3255.9	3105.5	2518.6	948.8	363.0	363.0	363.0	333.6	313.3	304.2	303.1
57.5°	3482.1	3354.3	2627.1	858.4	334.8	343.8	356.2	326.8	306.5	298.6	297.4
60°	3737.7	3652.9	2752.7	795.0	309.9	323.4	347.2	318.9	295.2	288.4	287.3
62.5°	4009.1	4009.1	2866.9	705.7	287.3	306.5	333.6	308.7	285.0	279.3	278.2
65°	4221.7	4313.3	2940.4	572.2	264.6	289.5	317.8	295.2	271.4	270.3	268.0
67.5°	4246.6	4390.2	2894.0	432.0	244.3	271.4	302.0	280.5	257.8	257.8	254.5
70°	4067.9	4213.8	2749.3	323.4	229.6	253.3	281.6	262.4	240.9	243.1	237.5
72.5°	3769.4	3805.5	2389.6	255.6	212.6	234.1	256.7	242.0	222.8	222.8	214.9
75°	3375.8	3174.5	1736.0	213.7	192.3	211.5	231.8	219.4	202.4	196.8	192.3
77.5°	2687.1	2300.3	1008.8	184.3	175.3	190.0	203.6	194.5	179.8	167.4	167.4
80°	1637.6	1348.1	445.6	159.5	154.9	166.2	175.3	165.1	152.7	140.2	136.8
82.5°	623.1	520.2	216.0	136.8	135.7	142.5	149.3	139.1	130.1	124.4	107.4
85°	170.8	157.2	148.2	114.2	112.0	110.8	118.7	114.2	101.8	83.7	74.6
87.5°	64.5	73.5	80.3	70.1	74.6	69.0	79.2	72.4	64.5	41.8	37.3
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)