

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: P398088

Luminaire Tested: **ARCH-S-PA1-80-827-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398088  
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-PA1-80-827-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8016 lumens  
Efficiency: N/A  
Efficacy: 96.6 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

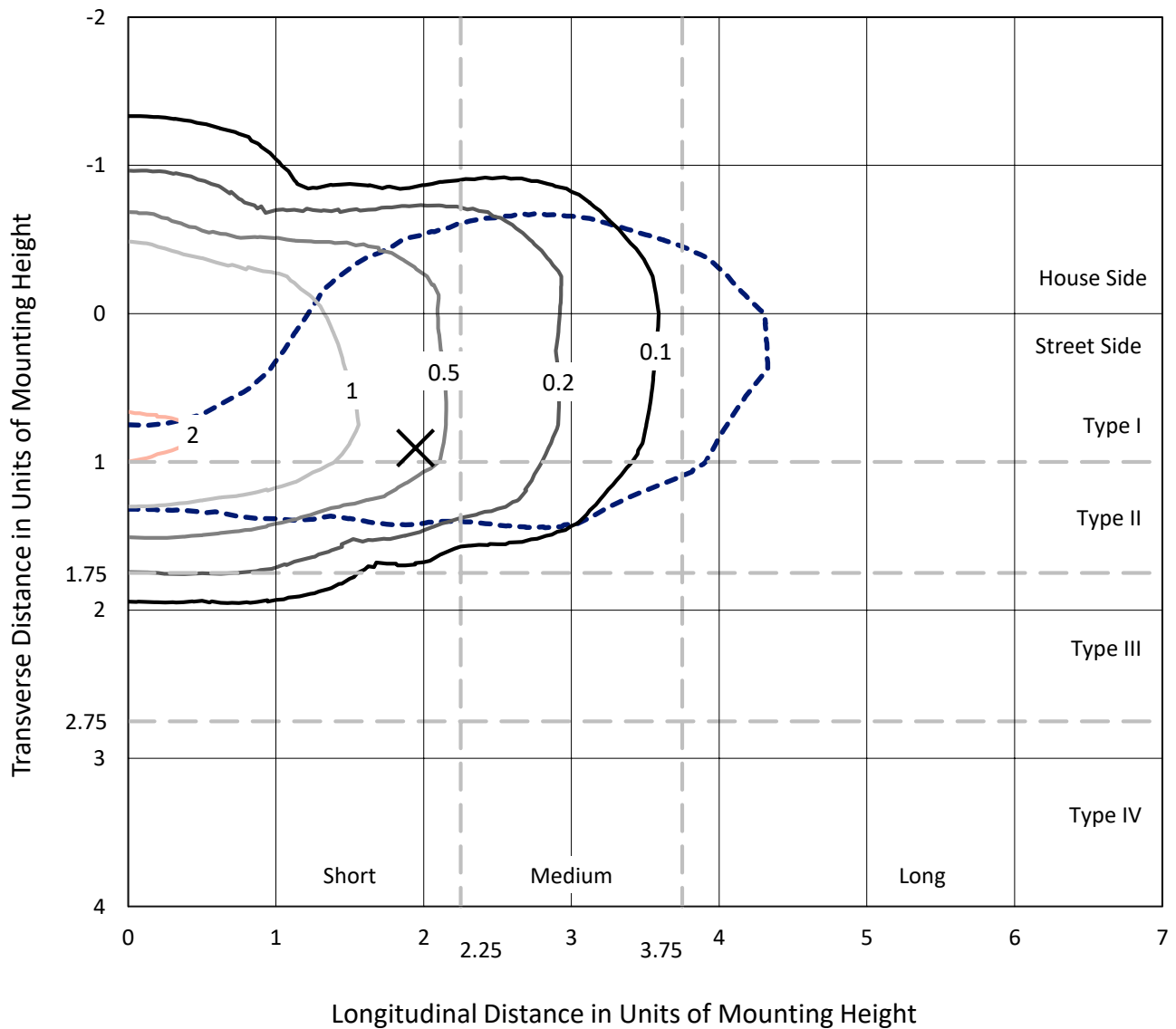
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

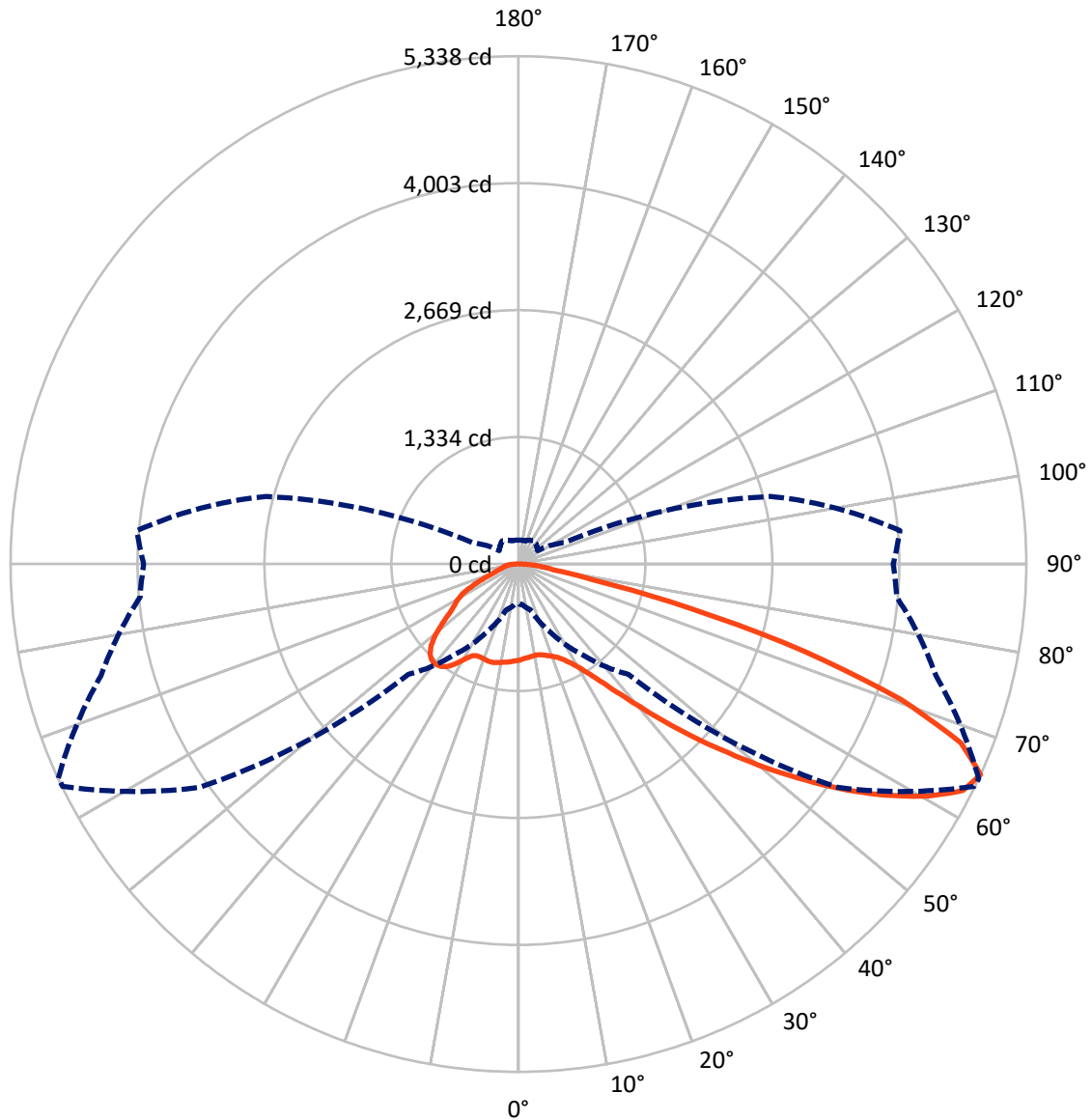


Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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



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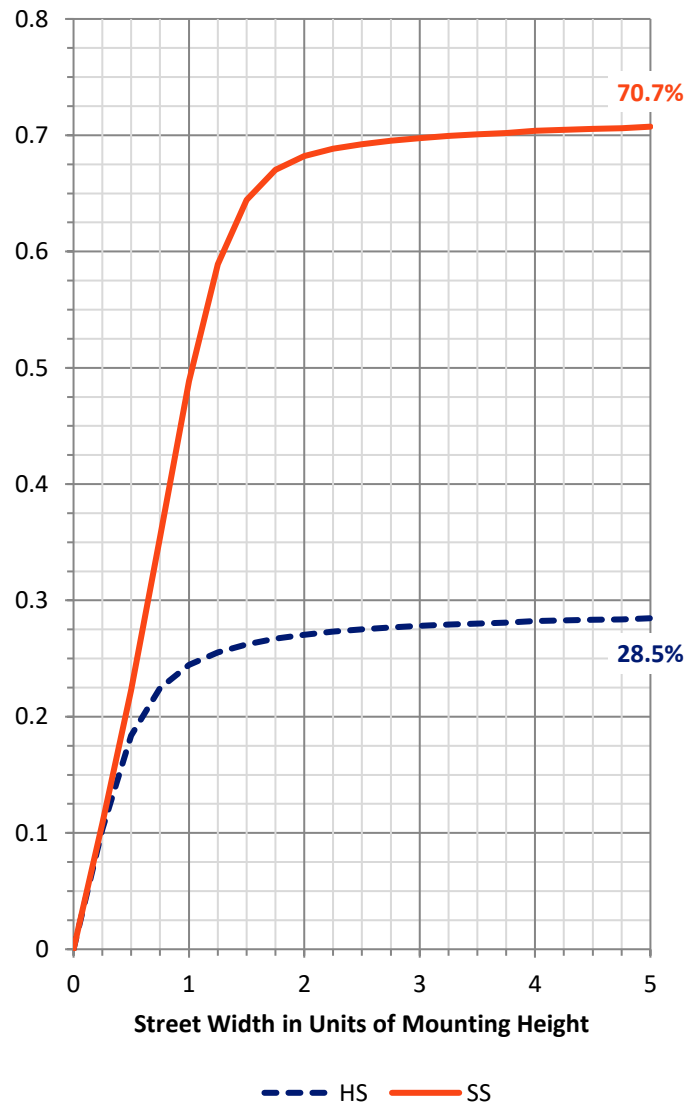
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2317.5	0.0	2317.5
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	5698.5	0.0	5698.5
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	8016.0	0.0	8016.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.5	1.2
10°-20°	288.1	3.6
20°-30°	511.8	6.4
30°-40°	865.8	10.8
40°-50°	1507.2	18.8
50°-60°	1947.7	24.3
60°-70°	1704.4	21.3
70°-80°	927.1	11.6
80°-90°	167.5	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°	8016.0	100.0
0°-180°	8016.0	100.0



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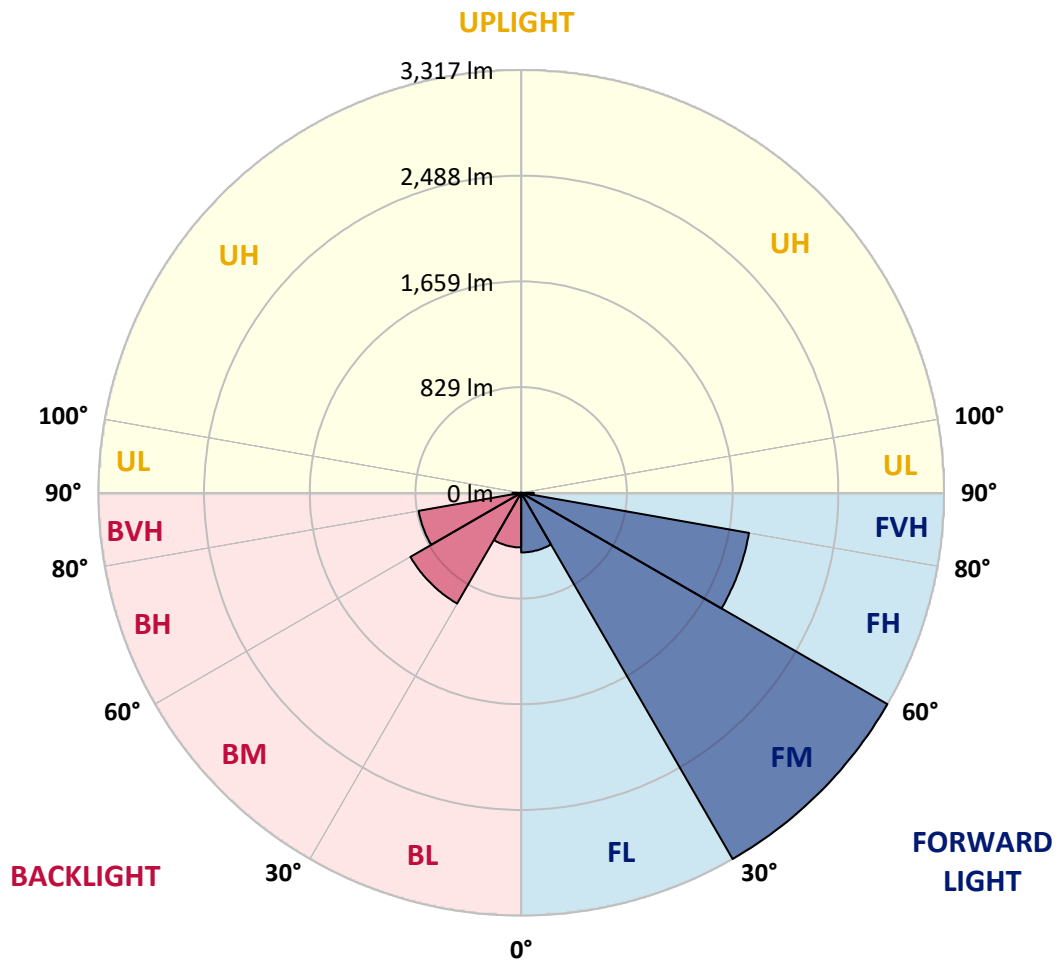
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	467.7	5.8			
FM	(30°-60°)	3317.2	41.4			
FH	(60°-80°)	1814.9	22.6			G2/5000
FVH	(80°-90°)	98.6	1.2			G1/100
BL	(0°-30°)	428.7	5.3	B1/500		
BM	(30°-60°)	1003.4	12.5	B2/2500		
BH	(60°-80°)	816.5	10.2	B2/1000		G2/1000
BVH	(80°-90°)	68.9	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°	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9
2.5°	995.0	993.9	991.8	993.9	995.0	997.1	996.0	998.1	997.1	1000.2	1005.5
5°	969.6	967.5	966.5	971.7	974.9	980.2	982.3	989.7	988.6	993.9	1002.3
7.5°	941.2	941.2	940.1	946.4	950.6	960.1	967.5	980.2	981.2	990.7	1000.2
10°	919.0	920.0	919.0	924.3	930.6	942.2	954.9	972.8	973.9	987.6	997.1
12.5°	910.6	910.6	910.6	917.9	926.4	942.2	957.0	976.0	978.1	992.9	1001.3
15°	922.2	923.2	921.1	928.5	938.0	957.0	970.7	990.7	992.9	1006.6	1011.8
17.5°	963.3	967.5	962.3	966.5	964.4	979.1	991.8	1011.8	1012.9	1024.5	1026.6
20°	1044.6	1048.8	1040.3	1035.1	1016.1	1015.0	1020.3	1036.1	1036.1	1043.5	1038.2
22.5°	1170.1	1174.3	1159.6	1139.5	1094.1	1072.0	1060.4	1067.8	1066.7	1069.9	1056.2
25°	1336.8	1335.8	1317.8	1280.9	1208.1	1154.3	1125.8	1114.2	1114.2	1107.9	1091.0
27.5°	1543.6	1527.8	1496.1	1451.8	1350.5	1275.6	1214.4	1184.9	1179.6	1160.6	1129.0
30°	1764.1	1752.5	1707.2	1642.8	1525.7	1429.7	1328.4	1269.3	1266.1	1225.0	1177.5
32.5°	2023.7	2004.7	1954.1	1877.0	1736.7	1601.6	1475.0	1385.4	1380.1	1314.7	1249.2
35°	2357.1	2341.3	2243.1	2166.1	1985.7	1808.4	1658.6	1539.4	1535.2	1455.0	1371.6
37.5°	2757.0	2715.8	2620.9	2476.3	2286.4	2076.4	1886.5	1736.7	1731.4	1642.8	1537.3
40°	3113.6	3076.7	2992.3	2859.3	2655.7	2422.5	2165.1	1983.6	1978.3	1870.7	1737.8
42.5°	3377.4	3352.1	3297.2	3220.2	3074.6	2933.2	2520.6	2282.2	2272.7	2133.4	1967.8
45°	3530.4	3510.3	3478.7	3497.7	3495.6	3469.2	2944.8	2637.8	2607.2	2426.7	2224.2
47.5°	3493.4	3475.5	3488.2	3635.9	3839.5	3992.5	3438.6	3001.8	2960.6	2725.3	2497.4
50°	3226.5	3233.9	3300.4	3583.1	4040.0	4379.7	3986.2	3416.4	3361.6	3026.0	2757.0
52.5°	2740.1	2758.0	2919.5	3315.1	4017.8	4630.8	4481.0	3844.8	3772.0	3319.4	2993.3
55°	2176.7	2222.0	2431.0	2846.7	3728.7	4648.8	4854.5	4275.3	4195.1	3594.7	3199.1
57.5°	1610.1	1677.6	1919.2	2301.2	3174.8	4365.0	5041.3	4686.8	4589.7	3868.0	3416.4
60°	1021.3	1062.5	1341.0	1791.6	2429.9	3670.7	5017.0	5037.1	4952.7	4140.2	3643.3
62.5°	652.1	672.1	812.4	1277.7	1698.7	2717.9	4752.2	5301.9	5244.9	4388.2	3858.5
65°	418.9	427.3	499.1	786.1	1156.4	1640.7	4092.7	5330.4	5337.8	4543.3	3991.5
67.5°	340.8	345.0	371.4	485.3	817.7	906.3	2850.9	4925.2	5014.9	4503.2	3946.1
70°	310.2	315.5	342.9	387.2	633.1	625.7	1380.1	4121.2	4267.9	4272.1	3744.6
72.5°	261.7	269.1	306.0	366.1	489.6	493.8	584.5	2935.3	3151.6	3818.4	3441.7
75°	218.4	222.6	254.3	322.9	414.7	394.6	410.4	1556.3	1868.6	3061.9	3119.9
77.5°	177.3	181.5	204.7	257.4	368.2	307.0	322.9	644.7	796.6	2078.6	2550.2
80°	126.6	130.8	157.2	200.5	278.5	276.4	239.5	355.6	386.2	1123.7	1656.5
82.5°	90.7	93.9	119.2	143.5	193.1	277.5	180.4	241.6	253.2	498.0	667.9
85°	61.2	61.2	82.3	95.0	124.5	175.1	145.6	163.5	170.9	236.3	180.4
87.5°	26.4	26.4	44.3	48.5	65.4	81.2	108.7	82.3	84.4	127.7	73.9
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°	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9	1012.9
2.5°	1008.7	1009.7	1011.8	1018.2	1022.4	1028.7	1031.9	1036.1	1036.1	1034.0	1035.1
5°	1006.6	1009.7	1017.1	1028.7	1036.1	1047.7	1056.2	1062.5	1064.6	1062.5	1063.5
7.5°	1005.5	1010.8	1023.4	1040.3	1050.9	1065.7	1077.3	1084.6	1089.9	1087.8	1088.9
10°	1002.3	1010.8	1026.6	1047.7	1063.5	1078.3	1088.9	1092.0	1095.2	1093.1	1092.0
12.5°	1006.6	1016.1	1032.9	1058.3	1076.2	1087.8	1091.0	1085.7	1078.3	1074.1	1073.0
15°	1015.0	1024.5	1041.4	1067.8	1083.6	1087.8	1080.4	1063.5	1046.7	1037.2	1036.1
17.5°	1026.6	1032.9	1046.7	1069.9	1082.5	1077.3	1062.5	1042.4	1029.8	1022.4	1023.4
20°	1034.0	1034.0	1044.6	1062.5	1073.0	1068.8	1050.9	1028.7	1008.7	999.2	996.0
22.5°	1044.6	1039.3	1040.3	1056.2	1070.9	1064.6	1026.6	987.6	959.1	948.5	947.5
25°	1073.0	1058.3	1048.8	1058.3	1093.1	1041.4	965.4	920.0	893.7	884.2	885.2
27.5°	1107.9	1087.8	1067.8	1083.6	1111.0	988.6	887.3	835.6	819.8	812.4	815.6
30°	1142.7	1116.3	1089.9	1146.9	1098.4	906.3	787.1	736.5	722.7	717.5	721.7
32.5°	1207.0	1163.8	1132.1	1231.3	1059.3	812.4	678.4	632.0	619.3	613.0	610.9
35°	1314.7	1259.8	1228.1	1305.2	1004.5	708.0	579.3	546.5	532.8	519.1	517.0
37.5°	1469.8	1403.3	1374.8	1347.4	927.4	604.6	503.3	481.1	461.1	440.0	438.9
40°	1655.5	1568.9	1547.8	1366.4	820.9	507.5	450.5	429.4	404.1	384.1	385.1
42.5°	1869.6	1758.9	1713.5	1361.1	689.0	455.8	412.5	389.3	367.2	349.2	348.2
45°	2098.6	1973.0	1868.6	1324.2	558.1	419.9	389.3	361.9	339.7	319.7	317.6
47.5°	2351.8	2211.5	2012.1	1252.4	461.1	394.6	375.6	336.6	316.5	303.9	303.9
50°	2607.2	2439.4	2144.0	1143.7	404.1	375.6	355.6	322.9	307.0	296.5	296.5
52.5°	2825.6	2676.8	2252.6	1014.0	368.2	359.8	341.9	316.5	299.6	290.2	289.1
55°	3037.6	2897.3	2349.7	885.2	338.7	338.7	338.7	311.3	292.3	283.8	282.8
57.5°	3248.7	3129.4	2451.0	800.8	312.3	320.8	332.4	304.9	285.9	278.5	277.5
60°	3487.1	3408.0	2568.1	741.7	289.1	301.8	323.9	297.5	275.4	269.1	268.0
62.5°	3740.3	3740.3	2674.7	658.4	268.0	285.9	311.3	288.0	265.9	260.6	259.6
65°	3938.7	4024.2	2743.3	533.9	246.9	270.1	296.5	275.4	253.2	252.2	250.1
67.5°	3961.9	4095.9	2700.0	403.0	227.9	253.2	281.7	261.7	240.6	240.6	237.4
70°	3795.2	3931.3	2565.0	301.8	214.2	236.3	262.7	244.8	224.7	226.8	221.6
72.5°	3516.7	3550.4	2229.4	238.5	198.4	218.4	239.5	225.8	207.9	207.9	200.5
75°	3149.5	2961.7	1619.6	199.4	179.4	197.3	216.3	204.7	188.9	183.6	179.4
77.5°	2506.9	2146.1	941.2	172.0	163.5	177.3	189.9	181.5	167.8	156.2	156.2
80°	1527.8	1257.7	415.7	148.8	144.5	155.1	163.5	154.0	142.4	130.8	127.7
82.5°	581.4	485.3	201.5	127.7	126.6	132.9	139.3	129.8	121.3	116.1	100.2
85°	159.3	146.7	138.2	106.6	104.5	103.4	110.8	106.6	95.0	78.1	69.6
87.5°	60.1	68.6	74.9	65.4	69.6	64.4	73.9	67.5	60.1	39.0	34.8
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)