

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: P573524

Luminaire Tested: **ARCH-S-PA2-80-830-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573524  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-80-830-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9370 lumens  
Efficiency: N/A  
Efficacy: 112.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

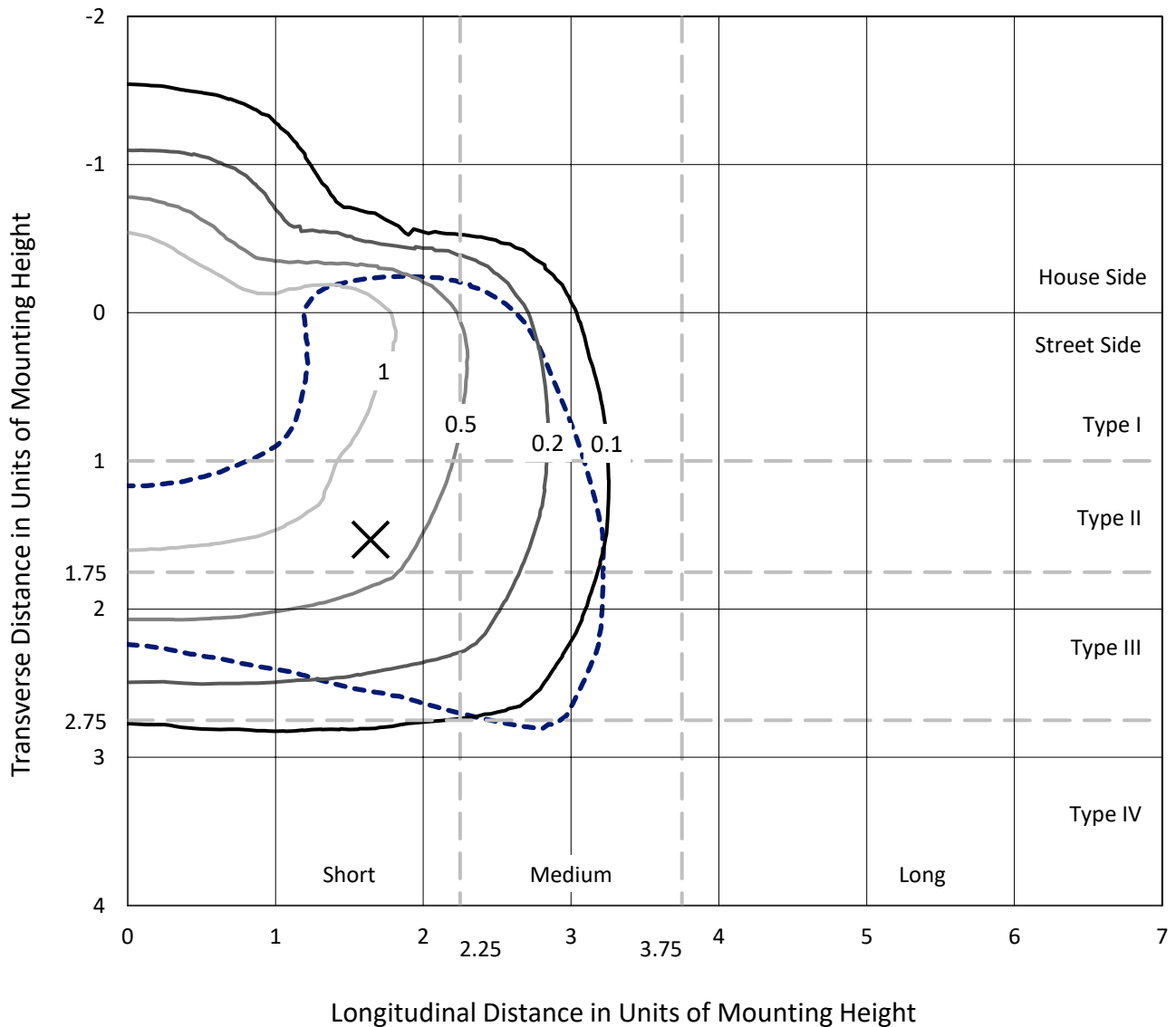
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

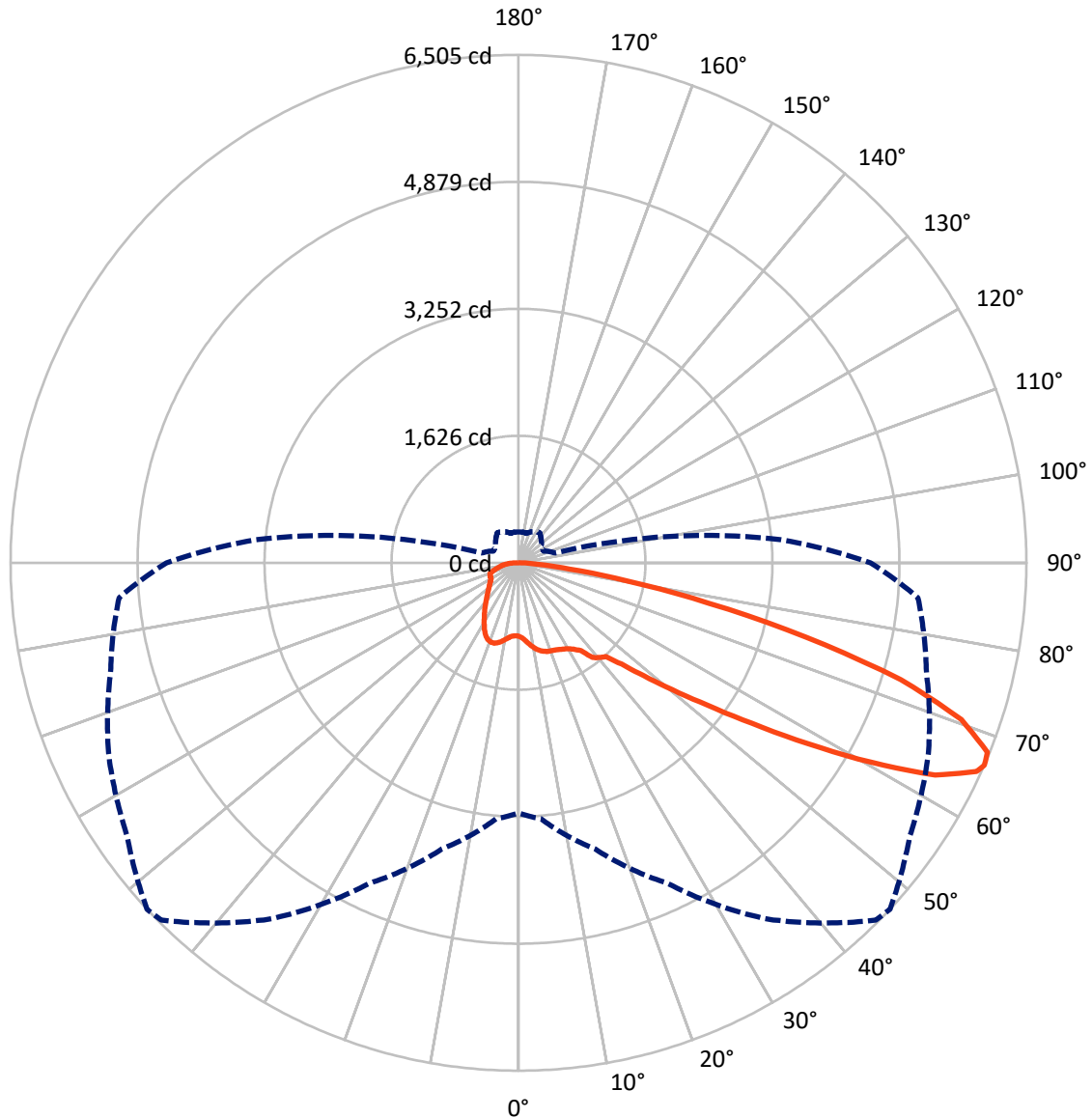
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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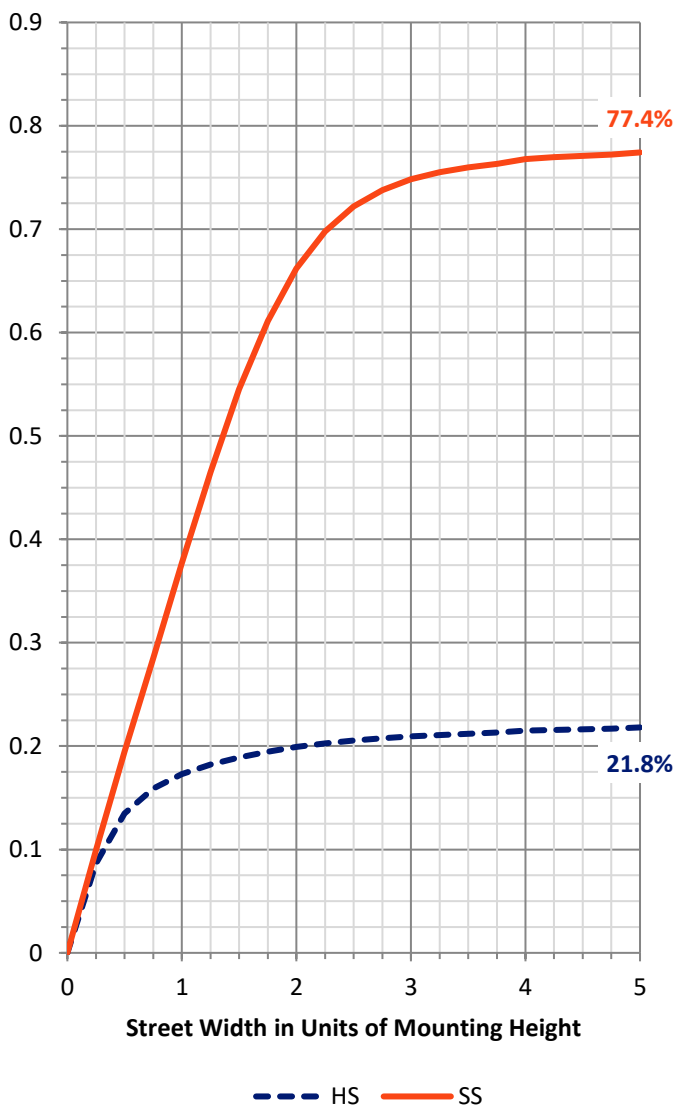
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2083.2	0.0	2083.2
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	7286.8	0.0	7286.8
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	9370.0	0.0	9370.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.8	1.0
10°-20°	314.5	3.4
20°-30°	524.5	5.6
30°-40°	761.7	8.1
40°-50°	1164.9	12.4
50°-60°	2202.0	23.5
60°-70°	2845.2	30.4
70°-80°	1278.9	13.6
80°-90°	182.4	1.9
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°	9370.0	100.0
0°-180°	9370.0	100.0

**Coefficient of Utilization**

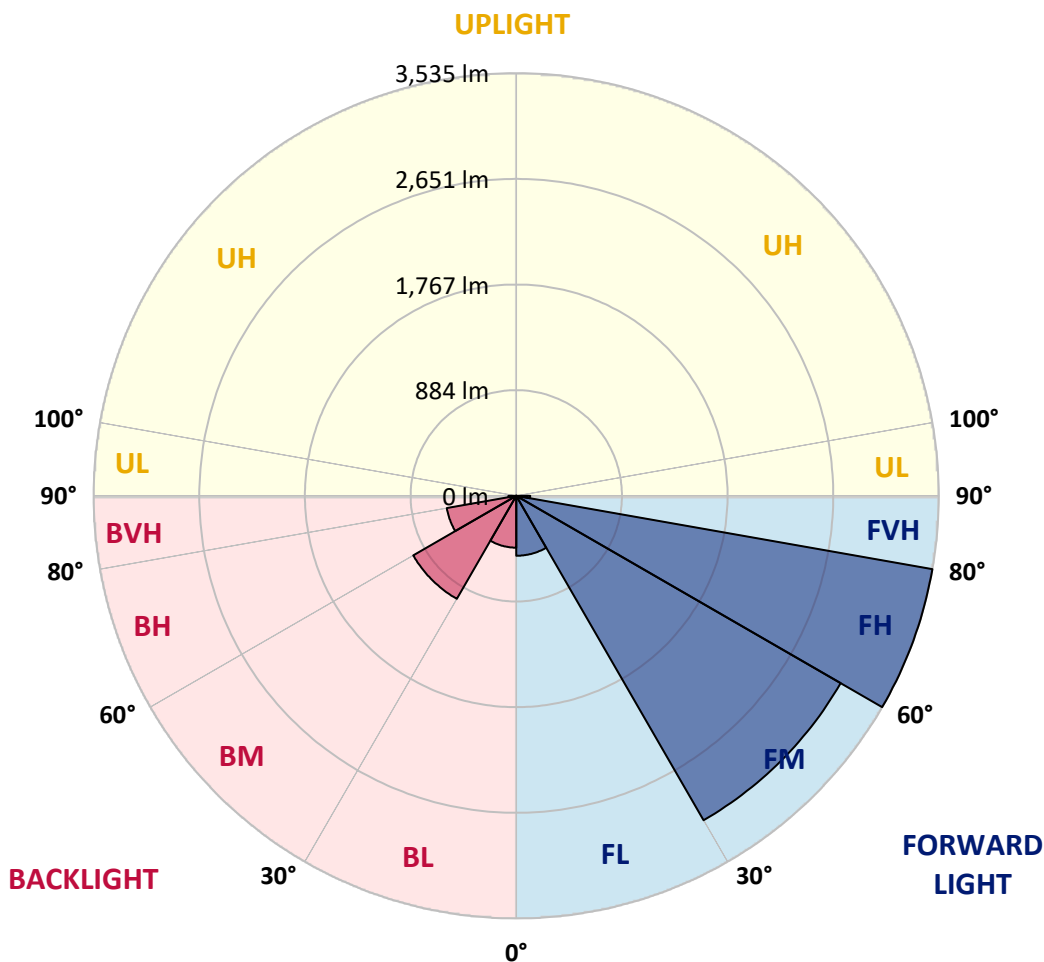


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	501.3	5.4			
FM (30°-60°)	3133.5	33.4			
FH (60°-80°)	3534.7	37.7			G2/5000
FVH (80°-90°)	117.2	1.3			G2/225
BL (0°-30°)	433.5	4.6	B1/500		
BM (30°-60°)	995.1	10.6	B1/1000		
BH (60°-80°)	589.4	6.3	B2/1000		G2/1000
BVH (80°-90°)	65.2	0.7			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0
2.5°	995.4	987.8	982.7	980.2	975.1	964.9	964.9	962.3	952.2	947.1	944.5
5°	1074.4	1069.3	1056.5	1046.4	1031.1	1010.7	1008.2	992.9	972.5	957.2	947.1
7.5°	1150.7	1145.6	1132.9	1117.6	1092.2	1066.7	1059.1	1038.7	1005.6	982.7	964.9
10°	1216.9	1209.3	1194.0	1173.6	1145.6	1117.6	1110.0	1087.1	1054.0	1020.9	990.3
12.5°	1260.2	1255.1	1237.3	1211.8	1181.3	1153.3	1148.2	1127.8	1094.7	1059.1	1020.9
15°	1280.6	1278.0	1257.7	1232.2	1201.6	1178.7	1176.2	1158.4	1130.4	1094.7	1051.4
17.5°	1275.5	1272.9	1255.1	1229.7	1206.7	1194.0	1194.0	1181.3	1158.4	1127.8	1082.0
20°	1250.0	1250.0	1234.7	1216.9	1204.2	1201.6	1201.6	1199.1	1183.8	1158.4	1112.5
22.5°	1224.6	1224.6	1214.4	1201.6	1199.1	1209.3	1211.8	1216.9	1211.8	1191.5	1150.7
25°	1229.7	1227.1	1214.4	1199.1	1201.6	1224.6	1229.7	1242.4	1239.8	1224.6	1188.9
27.5°	1285.7	1283.1	1250.0	1219.5	1216.9	1244.9	1250.0	1267.8	1267.8	1255.1	1232.2
30°	1425.7	1430.8	1369.7	1293.3	1255.1	1272.9	1278.0	1298.4	1308.6	1313.7	1295.8
32.5°	1639.5	1631.9	1540.2	1415.5	1331.5	1313.7	1321.3	1339.1	1374.8	1385.0	1341.7
35°	1855.9	1861.0	1771.9	1614.1	1453.7	1387.5	1382.4	1407.9	1461.3	1415.5	1339.1
37.5°	2057.1	2049.4	1945.0	1774.5	1614.1	1537.7	1540.2	1530.1	1484.2	1392.6	1356.9
40°	2276.0	2255.6	2169.1	1950.1	1746.5	1619.2	1596.3	1509.7	1471.5	1433.3	1428.2
42.5°	2492.4	2494.9	2423.7	2207.3	1904.3	1677.7	1642.1	1553.0	1578.4	1570.8	1565.7
45°	2764.8	2764.8	2693.5	2492.4	2153.8	1896.7	1848.3	1741.4	1782.1	1812.7	1873.8
47.5°	3014.3	2999.0	2978.7	2808.1	2479.7	2181.8	2161.4	2039.2	2146.2	2240.4	2365.1
50°	3279.1	3258.7	3246.0	3141.6	2907.4	2614.6	2553.5	2426.2	2660.4	2836.1	3067.8
52.5°	3691.5	3655.9	3589.7	3531.1	3439.5	3100.9	3024.5	2930.3	3233.2	3454.7	3928.3
55°	4063.2	4032.6	3969.0	4012.3	3999.6	3691.5	3625.3	3536.2	3864.6	4134.5	4676.8
57.5°	4200.7	4203.2	4289.8	4521.5	4643.7	4465.4	4371.2	4282.1	4559.6	4684.4	5173.2
60°	4264.3	4256.7	4480.7	4857.5	5254.7	5308.1	5188.5	5005.2	5109.6	5117.2	5593.3
62.5°	4126.8	4147.2	4455.3	4997.5	5621.3	6005.7	5987.9	5667.1	5570.4	5463.4	5705.3
65°	3604.9	3632.9	4086.1	4748.0	5679.8	6428.3	6446.1	6071.9	5802.0	5504.2	5387.0
66°	3207.8	3291.8	3795.9	4531.6	5572.9	6471.6	6504.7	6115.2	5791.8	5407.4	5135.0
67.5°	2691.0	2685.9	3248.5	4055.6	5275.0	6433.4	6476.7	6054.1	5654.4	5122.3	4630.9
70°	1647.2	1698.1	2181.8	3027.0	4366.2	5957.3	6015.9	5623.8	5061.2	4338.2	3424.2
72.5°	845.2	929.2	1247.5	1968.0	3169.6	4923.7	5122.3	4722.6	4137.0	3139.1	2090.2
75°	448.1	443.0	588.1	1066.7	2024.0	3694.0	3798.4	3541.3	2859.0	1871.2	1064.2
77.5°	239.3	252.0	308.0	547.4	1112.5	2360.0	2492.4	2283.6	1629.4	957.2	509.2
80°	162.9	170.6	208.8	308.0	603.4	1280.6	1402.8	1216.9	852.9	453.2	239.3
82.5°	104.4	109.5	142.6	190.9	361.5	621.2	654.3	623.7	417.5	257.1	145.1
85°	63.6	66.2	86.6	122.2	226.6	252.0	262.2	264.8	234.2	168.0	78.9
87.5°	30.6	33.1	48.4	61.1	106.9	91.7	84.0	86.6	129.8	99.3	35.6
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°	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0	942.0
2.5°	942.0	939.4	934.3	931.8	934.3	934.3	934.3	936.9	942.0	942.0	944.5
5°	942.0	936.9	931.8	931.8	936.9	942.0	947.1	957.2	962.3	964.9	964.9
7.5°	954.7	949.6	944.5	944.5	952.2	962.3	972.5	985.2	998.0	1008.2	1008.2
10°	980.2	972.5	967.4	970.0	982.7	995.4	1008.2	1023.4	1036.2	1048.9	1048.9
12.5°	1008.2	1000.5	992.9	998.0	1015.8	1031.1	1043.8	1051.4	1064.2	1074.4	1074.4
15°	1036.2	1023.4	1020.9	1031.1	1048.9	1059.1	1064.2	1064.2	1069.3	1079.4	1079.4
17.5°	1066.7	1054.0	1051.4	1061.6	1076.9	1076.9	1066.7	1059.1	1056.5	1064.2	1066.7
20°	1097.3	1084.5	1084.5	1092.2	1089.6	1071.8	1054.0	1041.3	1031.1	1038.7	1041.3
22.5°	1135.5	1122.7	1117.6	1107.5	1084.5	1048.9	1020.9	1005.6	998.0	1003.1	1008.2
25°	1173.6	1163.5	1150.7	1115.1	1061.6	1005.6	970.0	957.2	959.8	970.0	975.1
27.5°	1222.0	1216.9	1186.4	1110.0	1020.9	944.5	908.9	906.3	916.5	931.8	939.4
30°	1280.6	1272.9	1219.5	1094.7	964.9	873.2	847.8	852.9	868.1	880.9	888.5
32.5°	1321.3	1316.2	1234.7	1059.1	896.1	809.6	789.2	789.2	796.9	814.7	822.3
35°	1334.0	1354.4	1244.9	1005.6	814.7	753.6	733.2	720.5	720.5	735.8	740.8
37.5°	1377.3	1423.1	1250.0	934.3	748.5	702.7	677.2	654.3	646.6	644.1	644.1
40°	1476.6	1530.1	1247.5	842.7	684.8	651.7	621.2	595.7	575.4	547.4	549.9
42.5°	1649.7	1690.5	1239.8	745.9	628.8	605.9	575.4	544.8	511.7	481.2	478.6
45°	1983.2	1922.1	1219.5	661.9	577.9	565.2	537.2	501.5	460.8	432.8	432.8
47.5°	2510.2	2342.2	1206.7	583.0	532.1	529.5	504.1	465.9	425.2	404.8	402.2
50°	3233.2	2922.7	1227.1	527.0	491.4	499.0	478.6	443.0	409.9	392.1	389.5
52.5°	4063.2	3546.4	1250.0	491.4	460.8	476.1	465.9	432.8	399.7	384.4	381.9
55°	4704.8	4053.0	1216.9	458.3	430.3	453.2	453.2	422.6	394.6	379.3	379.3
57.5°	5155.4	4256.7	1102.4	427.7	404.8	432.8	440.4	417.5	392.1	387.0	387.0
60°	5348.9	4246.5	901.2	399.7	387.0	412.4	432.8	412.4	397.2	409.9	412.4
62.5°	5244.5	4025.0	700.1	379.3	374.2	407.3	440.4	432.8	415.0	425.2	430.3
65°	4773.5	3635.5	527.0	361.5	359.0	409.9	460.8	445.5	402.2	404.8	407.3
66°	4508.7	3373.3	483.7	356.4	353.9	412.4	471.0	440.4	392.1	397.2	394.6
67.5°	3943.5	2960.8	425.2	346.2	343.7	412.4	483.7	430.3	379.3	387.0	379.3
70°	2892.1	2095.2	364.1	333.5	328.4	404.8	481.2	409.9	351.3	346.2	333.5
72.5°	1677.7	1267.8	323.3	318.2	305.5	356.4	450.6	376.8	320.8	305.5	292.8
75°	824.9	644.1	287.7	300.4	267.3	313.1	407.3	348.8	295.3	275.0	267.3
77.5°	379.3	325.9	259.7	275.0	236.8	269.9	371.7	318.2	262.2	231.7	224.0
80°	206.2	203.7	218.9	229.1	198.6	236.8	328.4	277.5	221.5	188.4	178.2
82.5°	127.3	129.8	160.4	175.7	155.3	206.2	290.2	231.7	168.0	132.4	134.9
85°	66.2	73.8	106.9	117.1	101.8	152.8	218.9	155.3	94.2	68.7	68.7
87.5°	22.9	30.6	53.5	63.6	56.0	91.7	137.5	73.8	20.4	0.0	0.0
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)