

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: AMETRIX

Report Number: P189136

Luminaire Tested: A03-SI-A-1-LED-35K-D-120-S

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2019
Report Number: P189136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL87330-GONIOPHOTOMETRY)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: AMETRIX
Catalog Number: A03-SI-A-1-LED-35K-D-120-S
Description: ARROWLINEAR LED LUMINAIRE, EXTRA SMALL HOUSING
3-FOOT LONG EXTRUDED HOUSING WITH WHITE REFLECTOR AND FROSTED LENS
Light Source: (84) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

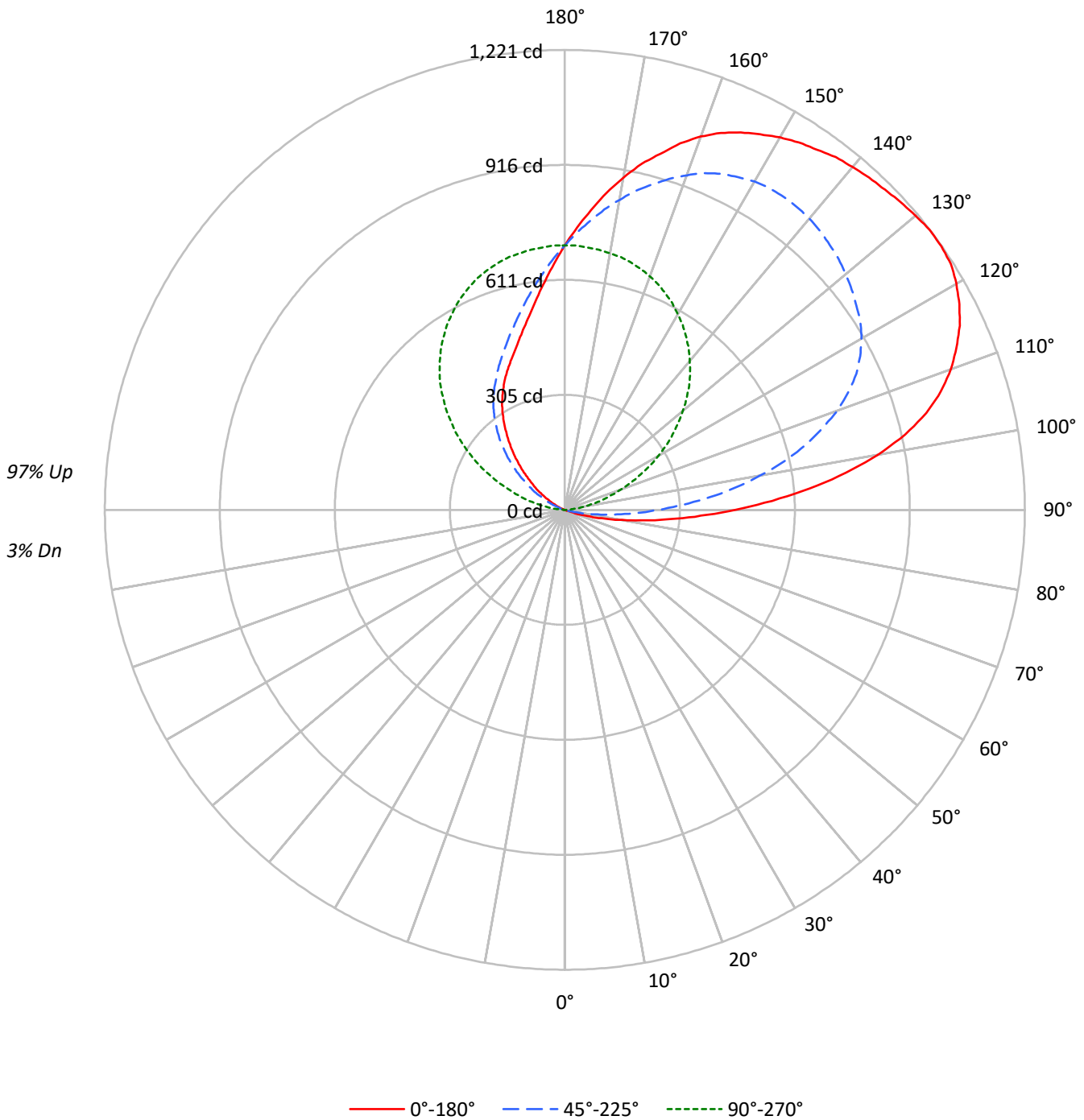
Lumens per Lamp: N/A
Luminaire Lumens: 2985.0 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular w/ Sides (W: 3.16' x L: 0.29' x H: 0.11')
CIE Type: Indirect

Input Watts (W): 30.7
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	96	96	96	96	82	82	82	82	57	57	57	34	34	34	13	13	13	3
1	86	82	78	74	74	70	67	64	48	46	45	28	27	26	10	9	9	1
2	78	71	65	60	67	61	56	52	42	39	36	25	23	21	8	8	7	0
3	71	62	55	50	61	54	48	43	37	33	30	22	20	18	7	7	6	0
4	65	55	47	42	55	47	41	36	33	29	26	19	17	15	7	6	5	0
5	59	49	41	35	51	42	36	31	29	25	22	17	15	13	6	5	4	0
6	55	43	36	30	46	37	31	26	26	22	19	15	13	11	5	4	4	0
7	50	39	31	26	43	33	27	23	23	19	16	14	11	10	5	4	3	0
8	46	35	28	23	40	30	24	20	21	17	14	12	10	8	4	3	3	0
9	43	32	25	20	37	27	21	17	19	15	12	11	9	7	4	3	2	0
10	40	29	22	17	34	25	19	15	17	13	11	10	8	7	4	3	2	0

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	0	0	0	0	0
5°	0	0	0	0	0
10°	0	0	0	0	0
15°	0	0	0	0	0
20°	0	0	0	0	0
25°	0	0	0	0	0
30°	0	0	0	0	0
35°	0	0	0	0	0
40°	0	0	0	0	0
45°	0	0	0	0	0
50°	0	0	0	0	0
55°	0	0	0	0	0
60°	0	0	0	0	0
65°	0	0	0	0	0
70°	254	0	0	0	0
75°	1306	197	0	0	0
80°	3372	1499	0	0	0
85°	7167	4357	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 14051 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.2	0.0
70°-80°	14.9	0.5
80°-90°	77.4	2.6
90°-100°	200.3	6.7
100°-110°	333.7	11.2
110°-120°	425.0	14.2
120°-130°	469.0	15.7
130°-140°	463.5	15.5
140°-150°	413.7	13.9
150°-160°	321.0	10.8
160°-170°	199.3	6.7
170°-180°	67.0	2.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	92.6	3.1
90°-120°	959.0	32.1
90°-150°	2305.2	77.2
90°-180°	2892.0	96.9
0°-180°	2985.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	2
75°	69	9	0	0	0	80
85°	282	140	0	0	0	205
90°	452	249	0	0	0	249
95°	652	387	18	2	2	572
105°	993	660	105	4	6	1039
115°	1157	854	222	48	18	1143
125°	1220	945	350	129	81	1091
135°	1202	995	466	230	172	931
145°	1167	1014	561	330	280	734
155°	1106	984	633	417	378	512
165°	978	894	680	512	468	280
175°	798	770	699	634	609	79
180°	702	702	702	702	702	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	15.0	16.5	12.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	37.5	37.5	31.5	21.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	69.0	69.0	61.5	48.0	28.5	9.0	0.0	0.0	0.0	0.0	0.0
77.5°	108.0	106.5	97.5	81.0	57.0	30.0	4.5	0.0	0.0	0.0	0.0
80°	156.0	154.5	144.0	123.0	94.5	58.5	22.5	0.0	0.0	0.0	0.0
82.5°	213.0	211.5	198.0	174.0	139.5	96.0	48.0	10.5	0.0	0.0	0.0
85°	282.0	280.5	264.0	235.5	195.0	139.5	79.5	31.5	3.0	0.0	0.0
87.5°	361.5	355.5	340.5	306.0	253.5	190.5	118.5	57.0	13.5	0.0	0.0
90°	451.5	445.5	427.5	387.0	324.0	249.0	165.0	88.5	31.5	3.0	0.0
92.5°	550.5	549.0	522.0	474.0	400.5	313.5	219.0	126.0	55.5	15.0	6.0
95°	652.5	651.0	621.0	565.5	483.0	387.0	274.5	168.0	85.5	33.0	18.0
97.5°	753.1	751.6	714.0	657.0	565.5	459.0	334.5	214.5	118.5	55.5	36.0
100°	844.6	841.6	802.6	742.6	646.5	528.0	394.5	261.0	153.0	79.5	55.5
102.5°	925.6	919.6	882.1	819.1	721.5	597.0	453.0	309.0	192.0	108.0	79.5
105°	993.1	985.6	951.1	886.6	786.1	660.0	511.5	358.5	231.0	138.0	105.0
107.5°	1047.1	1041.1	1005.1	943.6	844.6	715.5	567.0	406.5	271.5	169.5	130.5
110°	1090.6	1086.1	1053.1	991.6	894.1	769.6	618.0	454.5	313.5	204.0	160.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	1125.1	1122.1	1090.6	1029.1	937.6	814.6	663.0	499.5	354.0	238.5	190.5
115°	1156.6	1153.6	1123.6	1065.1	973.6	853.6	705.0	543.0	396.0	273.0	222.0
117.5°	1180.6	1177.6	1147.6	1090.6	1002.1	883.6	739.6	583.5	439.5	309.0	255.0
120°	1200.1	1195.6	1168.6	1113.1	1026.1	909.1	769.6	622.5	480.0	345.0	286.5
122.5°	1215.1	1210.6	1185.1	1128.1	1044.1	930.1	798.1	660.0	519.0	379.5	319.5
125°	1219.6	1216.6	1192.6	1135.6	1053.1	945.1	823.6	693.0	553.5	414.0	349.5
127.5°	1221.1	1218.1	1194.1	1138.6	1060.6	960.1	846.1	723.0	586.5	445.5	379.5
130°	1215.1	1215.1	1191.1	1138.6	1065.1	973.6	867.1	751.6	615.0	475.5	409.5
132.5°	1209.1	1207.6	1186.6	1137.1	1069.6	985.6	886.6	775.6	642.0	504.0	438.0
135°	1201.6	1201.6	1182.1	1137.1	1074.1	994.6	903.1	796.6	664.5	529.5	466.5
137.5°	1195.6	1195.6	1177.6	1135.6	1077.1	1003.6	918.1	813.1	687.0	555.0	492.0
140°	1188.1	1188.1	1170.1	1132.6	1078.6	1009.6	927.1	826.6	702.0	577.5	516.0
142.5°	1180.6	1180.6	1162.6	1128.1	1078.6	1012.6	936.1	837.1	718.5	598.5	540.0
145°	1167.1	1168.6	1153.6	1120.6	1074.1	1014.1	939.1	843.1	730.5	618.0	561.0
147.5°	1156.6	1156.6	1143.1	1111.6	1068.1	1012.6	939.1	846.1	741.1	634.5	582.0
150°	1141.6	1141.6	1128.1	1102.6	1062.1	1006.6	937.6	847.6	748.6	649.5	600.0
152.5°	1123.6	1125.1	1111.6	1087.6	1048.6	996.1	928.6	844.6	753.1	663.0	618.0
155°	1105.6	1107.1	1095.1	1071.1	1033.6	984.1	919.6	841.6	757.6	675.0	633.0
157.5°	1083.1	1084.6	1072.6	1048.6	1014.1	967.6	904.6	835.6	760.6	684.0	648.0
160°	1054.6	1056.1	1042.6	1021.6	988.6	945.1	889.6	826.6	759.1	693.0	660.0
162.5°	1020.1	1020.1	1009.6	990.1	958.6	921.1	871.6	816.1	757.6	699.0	670.5
165°	978.1	981.1	972.1	954.1	927.1	894.1	850.6	802.6	753.1	703.5	679.5
167.5°	940.6	939.1	931.6	918.1	894.1	867.1	829.6	789.1	748.6	708.0	687.0
170°	895.6	894.1	888.1	876.1	858.1	835.6	805.6	774.1	742.6	708.0	691.5
172.5°	849.1	846.1	841.6	834.1	820.6	804.1	781.6	757.6	733.5	708.0	696.0
175°	798.1	798.1	795.1	789.1	780.1	769.6	754.6	738.1	723.0	706.5	699.0
177.5°	750.1	750.1	748.6	745.6	741.1	736.6	729.0	721.5	714.0	705.0	702.0
180°	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	1.5	1.5
95°	0.0	1.5	1.5	1.5
97.5°	1.5	1.5	3.0	3.0
100°	4.5	3.0	3.0	3.0
102.5°	15.0	4.5	4.5	4.5
105°	27.0	4.5	6.0	6.0
107.5°	43.5	9.0	6.0	6.0
110°	61.5	18.0	7.5	7.5



TEST NUMBER: P189136

CATALOG NUMBER: A03-SI-A-1-LED-35K-D-120-S

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
112.5°	81.0	31.5	13.5	10.5
115°	102.0	48.0	24.0	18.0
117.5°	124.5	64.5	39.0	30.0
120°	148.5	84.0	54.0	45.0
122.5°	174.0	106.5	73.5	61.5
125°	198.0	129.0	93.0	81.0
127.5°	223.5	153.0	114.0	102.0
130°	249.0	178.5	136.5	123.0
132.5°	274.5	204.0	162.0	147.0
135°	300.0	229.5	187.5	172.5
137.5°	324.0	256.5	214.5	199.5
140°	348.0	280.5	241.5	226.5
142.5°	373.5	306.0	268.5	253.5
145°	396.0	330.0	294.0	280.5
147.5°	420.0	352.5	321.0	307.5
150°	442.5	373.5	345.0	333.0
152.5°	465.0	394.5	366.0	355.5
155°	489.0	417.0	387.0	378.0
157.5°	511.5	438.0	408.0	399.0
160°	534.0	460.5	430.5	420.0
162.5°	556.5	486.0	453.0	442.5
165°	580.5	511.5	478.5	468.0
167.5°	601.5	540.0	507.0	496.5
170°	622.5	570.0	540.0	529.5
172.5°	642.0	601.5	577.5	567.0
175°	661.5	634.5	616.5	609.0
177.5°	682.5	669.0	657.0	654.0
180°	702.0	702.0	702.0	702.0

(END OF REPORT)