

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: P189135

Luminaire Tested: A03-SI-A-1-LED-30K-D-120-S

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2019
Report Number: P189135
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-30K-D-120-S
Description: ARROWLINEAR LED LUMINAIRE, EXTRA SMALL HOUSING
3-FOOT LONG EXTRUDED HOUSING WITH WHITE REFLECTOR AND FROSTED LENS
Light Source: (84) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

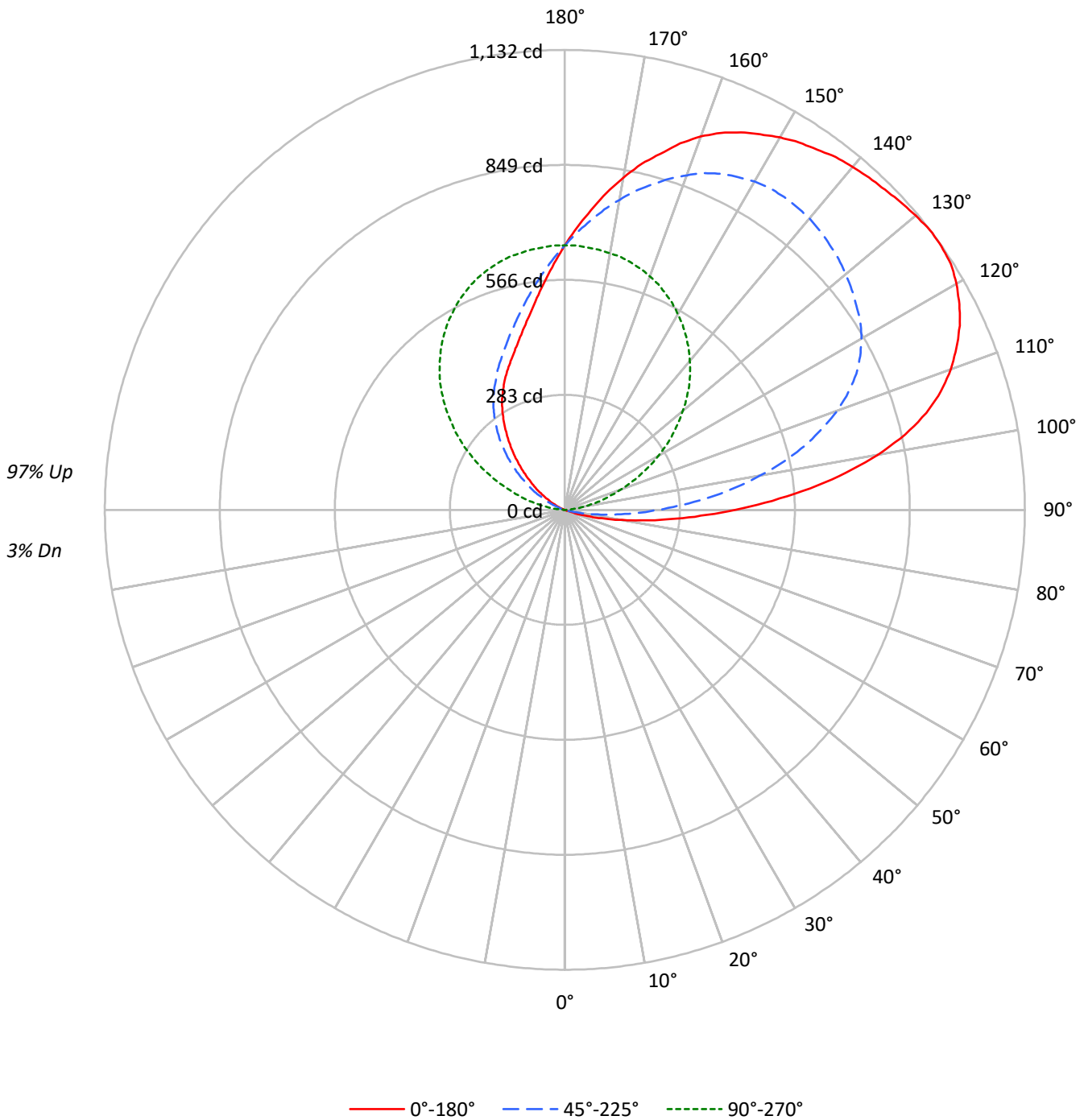
Lumens per Lamp: N/A
Luminaire Lumens: 2767.9 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular w/ Sides (W: 3.16' x L: 0.29' x H: 0.11')
CIE Type: Indirect

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°	236	0	0	0	0
75°	1212	182	0	0	0
80°	3128	1389	0	0	0
85°	6646	4041	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 13030 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°	13.8	0.5
80°-90°	71.8	2.6
90°-100°	185.7	6.7
100°-110°	309.4	11.2
110°-120°	394.1	14.2
120°-130°	434.9	15.7
130°-140°	429.8	15.5
140°-150°	383.6	13.9
150°-160°	297.6	10.8
160°-170°	184.8	6.7
170°-180°	62.2	2.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	85.8	3.1
90°-120°	889.2	32.1
90°-150°	2137.5	77.2
90°-180°	2682.0	96.9
0°-180°	2767.9	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°	64	8	0	0	0	74
85°	262	129	0	0	0	191
90°	419	231	0	0	0	231
95°	605	359	17	1	1	531
105°	921	612	97	4	6	964
115°	1072	792	206	44	17	1060
125°	1131	876	324	120	75	1011
135°	1114	922	433	213	160	863
145°	1082	940	520	306	260	680
155°	1025	912	587	387	350	474
165°	907	829	630	474	434	259
175°	740	714	648	588	565	73
180°	651	651	651	651	651	



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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°	13.9	15.3	11.1	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	34.8	34.8	29.2	19.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	64.0	64.0	57.0	44.5	26.4	8.3	0.0	0.0	0.0	0.0	0.0
77.5°	100.1	98.8	90.4	75.1	52.9	27.8	4.2	0.0	0.0	0.0	0.0
80°	144.7	143.3	133.5	114.1	87.6	54.2	20.9	0.0	0.0	0.0	0.0
82.5°	197.5	196.1	183.6	161.4	129.4	89.0	44.5	9.7	0.0	0.0	0.0
85°	261.5	260.1	244.8	218.4	180.8	129.4	73.7	29.2	2.8	0.0	0.0
87.5°	335.2	329.7	315.8	283.8	235.1	176.7	109.9	52.9	12.5	0.0	0.0
90°	418.7	413.1	396.4	358.9	300.4	230.9	153.0	82.1	29.2	2.8	0.0
92.5°	510.5	509.1	484.1	439.5	371.4	290.7	203.1	116.8	51.5	13.9	5.6
95°	605.1	603.7	575.9	524.4	447.9	358.9	254.5	155.8	79.3	30.6	16.7
97.5°	698.3	696.9	662.1	609.2	524.4	425.6	310.2	198.9	109.9	51.5	33.4
100°	783.1	780.3	744.2	688.5	599.5	489.6	365.8	242.0	141.9	73.7	51.5
102.5°	858.2	852.7	817.9	759.5	669.1	553.6	420.1	286.5	178.0	100.1	73.7
105°	920.8	913.9	881.9	822.1	728.9	612.0	474.3	332.4	214.2	128.0	97.4
107.5°	970.9	965.3	931.9	874.9	783.1	663.5	525.8	377.0	251.8	157.2	121.0
110°	1011.2	1007.1	976.5	919.4	829.0	713.6	573.1	421.5	290.7	189.2	148.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	1043.2	1040.4	1011.2	954.2	869.4	755.3	614.8	463.2	328.3	221.2	176.7
115°	1072.4	1069.7	1041.8	987.6	902.7	791.5	653.8	503.5	367.2	253.2	205.9
117.5°	1094.7	1091.9	1064.1	1011.2	929.2	819.3	685.7	541.1	407.6	286.5	236.5
120°	1112.8	1108.6	1083.6	1032.1	951.4	842.9	713.6	577.3	445.1	319.9	265.7
122.5°	1126.7	1122.5	1098.9	1046.0	968.1	862.4	740.0	612.0	481.3	351.9	296.3
125°	1130.9	1128.1	1105.8	1053.0	976.5	876.3	763.6	642.6	513.3	383.9	324.1
127.5°	1132.2	1129.5	1107.2	1055.7	983.4	890.2	784.5	670.4	543.9	413.1	351.9
130°	1126.7	1126.7	1104.4	1055.7	987.6	902.7	804.0	696.9	570.3	440.9	379.7
132.5°	1121.1	1119.7	1100.3	1054.4	991.8	913.9	822.1	719.1	595.3	467.4	406.2
135°	1114.2	1114.2	1096.1	1054.4	995.9	922.2	837.4	738.6	616.2	491.0	432.6
137.5°	1108.6	1108.6	1091.9	1053.0	998.7	930.6	851.3	753.9	637.1	514.7	456.2
140°	1101.6	1101.6	1085.0	1050.2	1000.1	936.1	859.6	766.4	651.0	535.5	478.5
142.5°	1094.7	1094.7	1078.0	1046.0	1000.1	938.9	868.0	776.2	666.3	555.0	500.7
145°	1082.2	1083.6	1069.7	1039.1	995.9	940.3	870.7	781.7	677.4	573.1	520.2
147.5°	1072.4	1072.4	1059.9	1030.7	990.4	938.9	870.7	784.5	687.1	588.4	539.7
150°	1058.5	1058.5	1046.0	1022.4	984.8	933.3	869.4	785.9	694.1	602.3	556.4
152.5°	1041.8	1043.2	1030.7	1008.5	972.3	923.6	861.0	783.1	698.3	614.8	573.1
155°	1025.1	1026.5	1015.4	993.2	958.4	912.5	852.7	780.3	702.4	625.9	587.0
157.5°	1004.3	1005.7	994.5	972.3	940.3	897.2	838.8	774.8	705.2	634.3	600.9
160°	977.9	979.2	966.7	947.3	916.6	876.3	824.8	766.4	703.8	642.6	612.0
162.5°	945.9	945.9	936.1	918.0	888.8	854.1	808.2	756.7	702.4	648.2	621.8
165°	906.9	909.7	901.3	884.7	859.6	829.0	788.7	744.2	698.3	652.4	630.1
167.5°	872.1	870.7	863.8	851.3	829.0	804.0	769.2	731.7	694.1	656.5	637.1
170°	830.4	829.0	823.5	812.3	795.6	774.8	747.0	717.7	688.5	656.5	641.2
172.5°	787.3	784.5	780.3	773.4	760.9	745.6	724.7	702.4	680.2	656.5	645.4
175°	740.0	740.0	737.2	731.7	723.3	713.6	699.7	684.4	670.4	655.1	648.2
177.5°	695.5	695.5	694.1	691.3	687.1	683.0	676.0	669.1	662.1	653.8	651.0
180°	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0



TEST NUMBER: P189135

CATALOG NUMBER: A03-SI-A-1-LED-30K-D-120-S

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	1.4	1.4
95°	0.0	1.4	1.4	1.4
97.5°	1.4	1.4	2.8	2.8
100°	4.2	2.8	2.8	2.8
102.5°	13.9	4.2	4.2	4.2
105°	25.0	4.2	5.6	5.6
107.5°	40.3	8.3	5.6	5.6
110°	57.0	16.7	7.0	7.0



TEST NUMBER: P189135

CATALOG NUMBER: A03-SI-A-1-LED-30K-D-120-S

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
112.5°	75.1	29.2	12.5	9.7
115°	94.6	44.5	22.3	16.7
117.5°	115.5	59.8	36.2	27.8
120°	137.7	77.9	50.1	41.7
122.5°	161.4	98.8	68.2	57.0
125°	183.6	119.6	86.2	75.1
127.5°	207.3	141.9	105.7	94.6
130°	230.9	165.5	126.6	114.1
132.5°	254.5	189.2	150.2	136.3
135°	278.2	212.8	173.9	160.0
137.5°	300.4	237.9	198.9	185.0
140°	322.7	260.1	223.9	210.0
142.5°	346.4	283.8	249.0	235.1
145°	367.2	306.0	272.6	260.1
147.5°	389.5	326.9	297.7	285.1
150°	410.3	346.4	319.9	308.8
152.5°	431.2	365.8	339.4	329.7
155°	453.5	386.7	358.9	350.5
157.5°	474.3	406.2	378.3	370.0
160°	495.2	427.0	399.2	389.5
162.5°	516.0	450.7	420.1	410.3
165°	538.3	474.3	443.7	434.0
167.5°	557.8	500.7	470.1	460.4
170°	577.3	528.6	500.7	491.0
172.5°	595.3	557.8	535.5	525.8
175°	613.4	588.4	571.7	564.7
177.5°	632.9	620.4	609.2	606.5
180°	651.0	651.0	651.0	651.0

(END OF REPORT)