

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: P189132

Luminaire Tested: A02-SI-A-1-LED-30K-D-120-S

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P189132  
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: A02-SI-A-1-LED-30K-D-120-S  
Description: ARROWLINEAR LED LUMINAIRE, EXTRA SMALL HOUSING  
2-FOOT LONG EXTRUDED HOUSING WITH WHITE REFLECTOR AND FROSTED LENS  
Light Source: (56) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

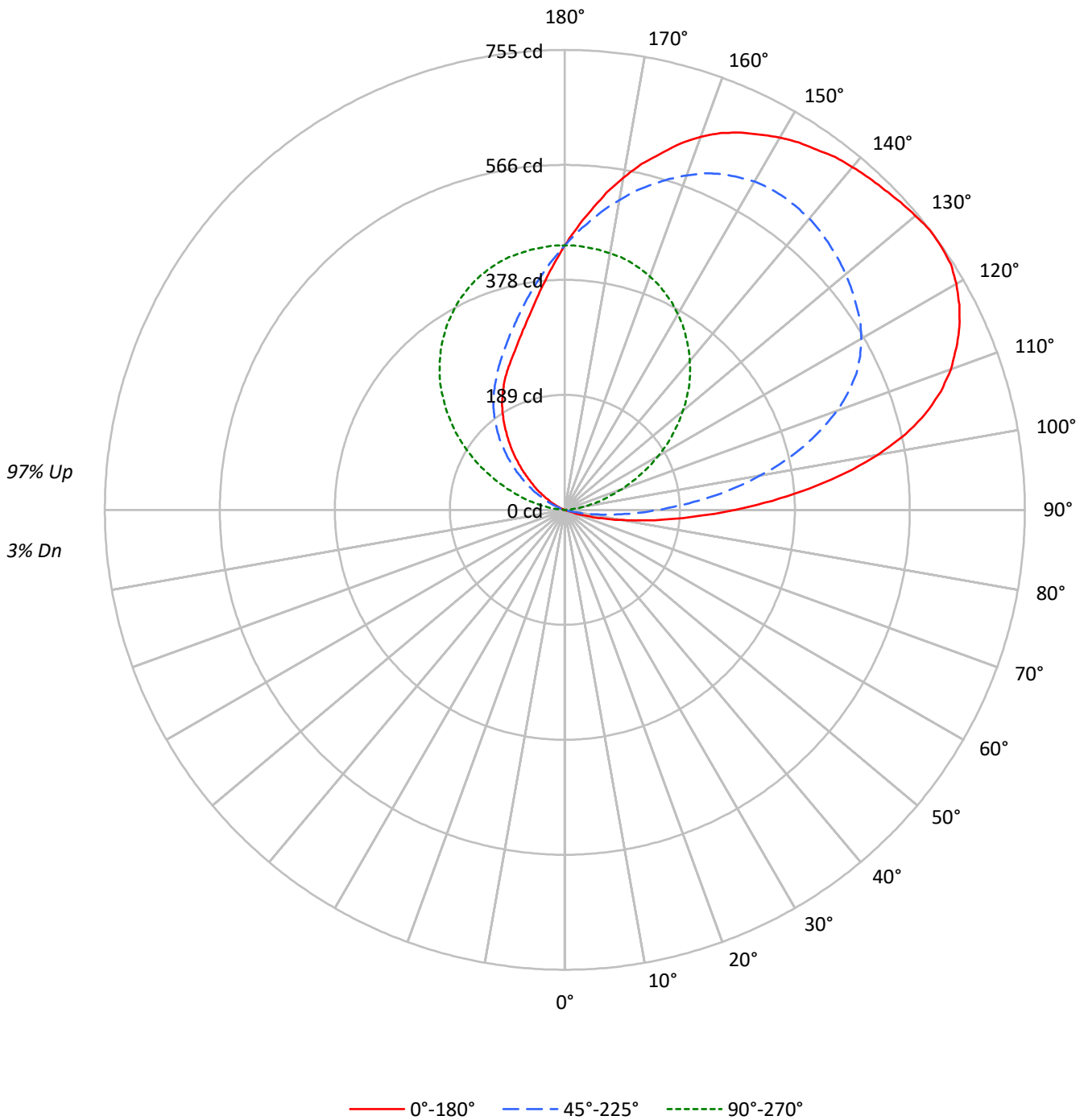
Lumens per Lamp: N/A  
Luminaire Lumens: 1845.2 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular w/ Sides (W: 2.18' x L: 0.29' x H: 0.11')  
CIE Type: Indirect

Input Watts (W): 20.5  
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°	228	0	0	0	0
75°	1171	174	0	0	0
80°	3020	1314	0	0	0
85°	6419	3792	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 12586 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°	0.1	0.0
70°-80°	9.2	0.5
80°-90°	47.9	2.6
90°-100°	123.8	6.7
100°-110°	206.3	11.2
110°-120°	262.7	14.2
120°-130°	289.9	15.7
130°-140°	286.5	15.5
140°-150°	255.7	13.9
150°-160°	198.4	10.8
160°-170°	123.2	6.7
170°-180°	41.4	2.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	57.2	3.1
90°-120°	592.8	32.1
90°-150°	1425.0	77.2
90°-180°	1788.0	96.9
0°-180°	1845.2	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	1
75°	43	6	0	0	0	49
85°	174	86	0	0	0	127
90°	279	154	0	0	0	154
95°	403	239	11	1	1	354
105°	614	408	65	3	4	643
115°	715	528	137	30	11	706
125°	754	584	216	80	50	674
135°	743	615	288	142	107	576
145°	721	627	347	204	173	454
155°	683	608	391	258	234	316
165°	605	553	420	316	289	173
175°	493	476	432	392	376	49
180°	434	434	434	434	434	



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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°	9.3	10.2	7.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	23.2	23.2	19.5	13.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	42.7	42.7	38.0	29.7	17.6	5.6	0.0	0.0	0.0	0.0	0.0
77.5°	66.8	65.8	60.3	50.1	35.2	18.5	2.8	0.0	0.0	0.0	0.0
80°	96.4	95.5	89.0	76.0	58.4	36.2	13.9	0.0	0.0	0.0	0.0
82.5°	131.7	130.8	122.4	107.6	86.2	59.3	29.7	6.5	0.0	0.0	0.0
85°	174.3	173.4	163.2	145.6	120.6	86.2	49.1	19.5	1.9	0.0	0.0
87.5°	223.5	219.8	210.5	189.2	156.7	117.8	73.3	35.2	8.3	0.0	0.0
90°	279.1	275.4	264.3	239.2	200.3	153.9	102.0	54.7	19.5	1.9	0.0
92.5°	340.3	339.4	322.7	293.0	247.6	193.8	135.4	77.9	34.3	9.3	3.7
95°	403.4	402.5	383.9	349.6	298.6	239.2	169.7	103.9	52.9	20.4	11.1
97.5°	465.5	464.6	441.4	406.2	349.6	283.8	206.8	132.6	73.3	34.3	22.3
100°	522.1	520.2	496.1	459.0	399.7	326.4	243.9	161.4	94.6	49.1	34.3
102.5°	572.2	568.4	545.3	506.3	446.0	369.1	280.0	191.0	118.7	66.8	49.1
105°	613.9	609.2	587.9	548.0	485.9	408.0	316.2	221.6	142.8	85.3	64.9
107.5°	647.3	643.6	621.3	583.3	522.1	442.3	350.5	251.3	167.8	104.8	80.7
110°	674.2	671.4	651.0	613.0	552.7	475.7	382.1	281.0	193.8	126.1	99.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	695.5	693.6	674.2	636.1	579.6	503.5	409.9	308.8	218.8	147.4	117.8
115°	715.0	713.1	694.6	658.4	601.8	527.6	435.8	335.7	244.8	168.8	137.2
117.5°	729.8	727.9	709.4	674.2	619.4	546.2	457.2	360.7	271.7	191.0	157.6
120°	741.9	739.1	722.4	688.1	634.3	562.0	475.7	384.8	296.7	213.3	177.1
122.5°	751.1	748.3	732.6	697.3	645.4	574.9	493.3	408.0	320.9	234.6	197.5
125°	753.9	752.1	737.2	702.0	651.0	584.2	509.1	428.4	342.2	255.9	216.1
127.5°	754.8	753.0	738.1	703.8	655.6	593.5	523.0	447.0	362.6	275.4	234.6
130°	751.1	751.1	736.3	703.8	658.4	601.8	536.0	464.6	380.2	294.0	253.2
132.5°	747.4	746.5	733.5	702.9	661.2	609.2	548.0	479.4	396.9	311.6	270.8
135°	742.8	742.8	730.7	702.9	664.0	614.8	558.2	492.4	410.8	327.3	288.4
137.5°	739.1	739.1	727.9	702.0	665.8	620.4	567.5	502.6	424.7	343.1	304.2
140°	734.4	734.4	723.3	700.1	666.7	624.1	573.1	510.9	434.0	357.0	319.0
142.5°	729.8	729.8	718.7	697.3	666.7	625.9	578.6	517.4	444.2	370.0	333.8
145°	721.4	722.4	713.1	692.7	664.0	626.9	580.5	521.2	451.6	382.1	346.8
147.5°	715.0	715.0	706.6	687.1	660.2	625.9	580.5	523.0	458.1	392.3	359.8
150°	705.7	705.7	697.3	681.6	656.5	622.2	579.6	523.9	462.7	401.5	370.9
152.5°	694.6	695.5	687.1	672.3	648.2	615.7	574.0	522.1	465.5	409.9	382.1
155°	683.4	684.4	676.9	662.1	638.9	608.3	568.4	520.2	468.3	417.3	391.3
157.5°	669.5	670.4	663.0	648.2	626.9	598.1	559.2	516.5	470.1	422.9	400.6
160°	651.9	652.8	644.5	631.5	611.1	584.2	549.9	510.9	469.2	428.4	408.0
162.5°	630.6	630.6	624.1	612.0	592.6	569.4	538.8	504.5	468.3	432.1	414.5
165°	604.6	606.5	600.9	589.8	573.1	552.7	525.8	496.1	465.5	434.9	420.1
167.5°	581.4	580.5	575.9	567.5	552.7	536.0	512.8	487.8	462.7	437.7	424.7
170°	553.6	552.7	549.0	541.6	530.4	516.5	498.0	478.5	459.0	437.7	427.5
172.5°	524.9	523.0	520.2	515.6	507.2	497.0	483.1	468.3	453.5	437.7	430.3
175°	493.3	493.3	491.5	487.8	482.2	475.7	466.4	456.2	447.0	436.8	432.1
177.5°	463.7	463.7	462.7	460.9	458.1	455.3	450.7	446.0	441.4	435.8	434.0
180°	434.0	434.0	434.0	434.0	434.0	434.0	434.0	434.0	434.0	434.0	434.0



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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	0.9	0.9
95°	0.0	0.9	0.9	0.9
97.5°	0.9	0.9	1.9	1.9
100°	2.8	1.9	1.9	1.9
102.5°	9.3	2.8	2.8	2.8
105°	16.7	2.8	3.7	3.7
107.5°	26.9	5.6	3.7	3.7
110°	38.0	11.1	4.6	4.6



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CATALOG NUMBER: A02-SI-A-1-LED-30K-D-120-S

**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
112.5°	50.1	19.5	8.3	6.5
115°	63.1	29.7	14.8	11.1
117.5°	77.0	39.9	24.1	18.5
120°	91.8	51.9	33.4	27.8
122.5°	107.6	65.8	45.4	38.0
125°	122.4	79.7	57.5	50.1
127.5°	138.2	94.6	70.5	63.1
130°	153.9	110.4	84.4	76.0
132.5°	169.7	126.1	100.1	90.9
135°	185.5	141.9	115.9	106.6
137.5°	200.3	158.6	132.6	123.3
140°	215.1	173.4	149.3	140.0
142.5°	230.9	189.2	166.0	156.7
145°	244.8	204.0	181.8	173.4
147.5°	259.6	217.9	198.4	190.1
150°	273.6	230.9	213.3	205.9
152.5°	287.5	243.9	226.3	219.8
155°	302.3	257.8	239.2	233.7
157.5°	316.2	270.8	252.2	246.7
160°	330.1	284.7	266.1	259.6
162.5°	344.0	300.4	280.0	273.6
165°	358.9	316.2	295.8	289.3
167.5°	371.9	333.8	313.4	306.9
170°	384.8	352.4	333.8	327.3
172.5°	396.9	371.9	357.0	350.5
175°	408.9	392.3	381.1	376.5
177.5°	421.9	413.6	406.2	404.3
180°	434.0	434.0	434.0	434.0

(END OF REPORT)