



IES LM-79-08

MEASUREMENT AND TEST REPORT

For

ATG Electronics Corp

10700 7th Street Rancho Cucamonga, CA 91730, USA

Test Model: AA-300-40-T5

Report Type:	Electrical and Photometric tests including: Luminous Flux, Luminous Intensity Distribution
Test Engineer:	George Yang <i>George Yang</i>
Report Number:	RKSB181017003-10-16
Test Date:	2018-08-28
Report Date:	2018-10-18
Reviewed By:	Ray Gao/EE Engineer <i>Ray Gao</i>
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan). No.248 Chenghu Road, Kunshan, Jiangsu province, China. Tel: +86-0512-86175000 Fax: +86-0512-88934268
Accreditation:	The IAS Accreditation Number TL-749.

Note: The test data was only valid for the test sample(s). This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Kunshan). This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

1. Product Description

General Information:

One sample was received on 2018-08-27 and used for testing.

Model Tested: AA-300-40-T5
 Manufacturer: ATG Electronics Corp
 Brand Name: ATG
 Product Designation: Outdoor Pole/Arm-mounted Area and Roadway Luminaires
 Aging Time Before Test: 0hour(For New Products)

Rated Values:

Rated Voltage/Frequency: 120-277 VAC 60Hz
 Rated Power: 300W
 Nominal Lumen Output: 36000lm

Note:

1. The applicant *ATG Electronics Corp* declared that their product with model AA-300-40-T5 is the same to the product in report# RKS180502030-10-16 and is authorized by original applicant to use their test data.
2. All the data in previous report (RKS180502030-10-16) is shared in report.

2. Standards Used

- IES LM-79-08: Approved Method: Electrical & Photometric Measurement of Solid-state Lighting Products

3. Description of Test Equipment

Device	Manufacture	Model No	Serial No	Calibration date	Calibration due date
AC Power Supply	INVENTFINE	CHP-5KVA	900511765	2018-04-08	2019-04-08
DC Power Supply	INVENTFINE	WL3010	JWDMP030001	2018-04-08	2019-04-08
Power Meter	INVENTFINE	WT500	GSDSQ200007	2018-04-08	2019-04-08
Goniophotometer	INVENTFINE	GPM-1900	YWGCF120001	2018-01-24	2019-01-24
Wireless Weather Station	ZHONGXING	KG218	N/A	2017-11-14	2018-11-14
Standard Light Source	INVENTFINE	N/A	JWBYSR040007	2018-01-24	2019-01-24
AC Power Supply	INVENTFINE	CHP-5KVA	900511765	2018-04-08	2019-04-08

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Kunshan) attested that all calibration has been performed using suitable standards traceable to National Primary Standards and International System of Units (SI).

4. Test Method

Product was tested with no seasoning. All stabilization and measurements were made in compliance with IES LM-79-08. The product was operated at rated voltage or at voltage required by manufacturer. The ambient temperature of the sample was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ during measurement. And relative humidity is less than 65%.

Goniophotometer System

The goniophotometer system is calibrated by standard light source before measurement.

Type C goniophotometer was used for measuring total luminous flux, luminous intensity distribution, and color spatial uniformity. The product was operated in its intended orientation in application and was recorded in this report. The vertical angle (γ) test intervals were set no more than 1 degree while data for 5 degree intervals is reported. The horizontal angle (C plane) test intervals were set no more than 22.5 degree.

The uncertainty of the luminous flux is $U=2.6\%$ ($K=2$), at the 95% confidence level.

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5. Test Result

[Goniophotometer System]

Total operating time for luminous intensity distribution: **1.0 hours**

Test orientation: **Downward**

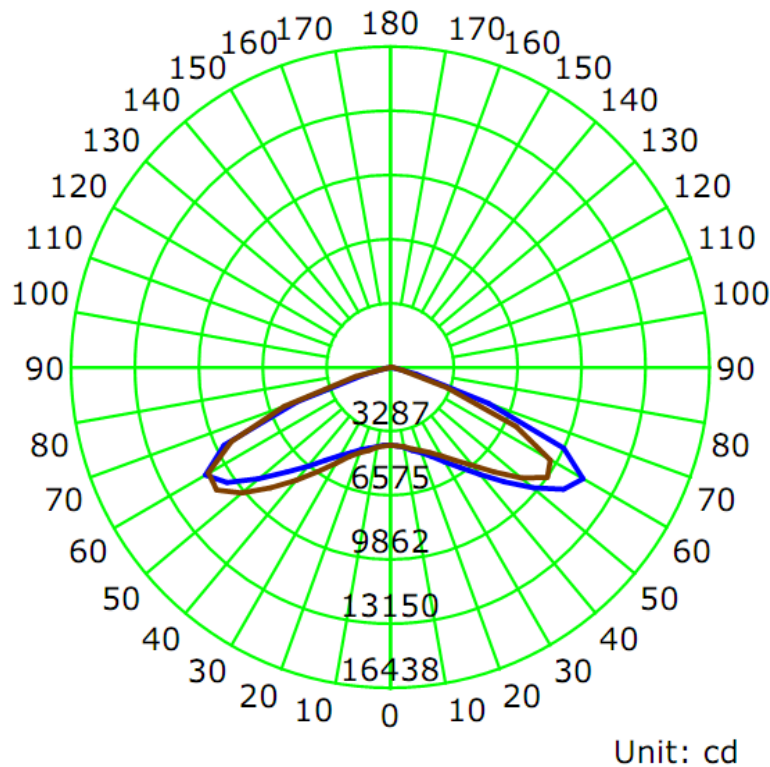
Electrical Measurement

Input Voltage (V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.0	60	2.3480	281.24	0.9980

Photometric Measurement

Luminous Flux (lm)	Efficacy (lm/W)	I_{max} (cd)	S/MH (C0/180)	S/MH (C90/270)
35732.4	127.10	13150.5	2.86	2.82

Luminous Intensity Distribution



	C0/180	C45/225	C90/270	C135/315	AVG.
Beam Angle (50% I_{max}):	138.9	140.0	137.5	139.4	139.0
Field Angle (10% I_{max}):	152.2	153.3	151.6	153.2	152.6

Luminous Intensity (cd) Distribution Data

C Y	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
0.0°	3993	3993	3993	3993	3993	3993	3993	3993
5.0°	4046	4048	4047	4041	4039	4032	4022	4017
10.0°	4185	4178	4171	4165	4150	4132	4122	4112
15.0°	4401	4369	4354	4333	4320	4300	4288	4280
20.0°	4651	4626	4581	4564	4534	4508	4485	4492
25.0°	5037	4984	4901	4867	4836	4789	4748	4757
30.0°	5571	5457	5345	5289	5235	5170	5128	5136
35.0°	6275	6124	5956	5837	5791	5720	5638	5646
40.0°	7181	7015	6883	6688	6560	6468	6392	6362
45.0°	8290	8271	8288	7915	7601	7623	7603	7441
50.0°	9615	9763	9985	9411	8855	9082	9313	8831
55.0°	10907	11252	11555	10685	9850	10425	11005	10437
60.0°	11457	11874	12091	10629	9524	10581	11790	11349
65.0°	9849	10041	9948	8628	7152	8657	9894	9817
70.0°	5373	5099	5076	4433	3115	4412	5047	5284
75.0°	1396	1255	1267	973	701	1011	1332	1360
80.0°	285	277	301	231	162	241	315	286
85.0°	0	8	12	0	0	0	0	8
90.0°	0	0	0	0	0	0	0	0
95.0°	0	0	0	0	0	0	0	0
100.0°	0	0	0	0	0	0	0	0
105.0°	0	0	0	0	0	0	0	0
110.0°	0	0	0	0	0	0	0	0
115.0°	0	0	0	0	0	0	0	0
120.0°	0	0	0	0	0	0	0	0
125.0°	0	0	0	0	0	0	0	0
130.0°	0	0	0	0	0	0	0	0
135.0°	0	0	0	0	0	0	0	0
140.0°	0	0	0	0	0	0	0	0
145.0°	0	0	0	0	0	0	0	0
150.0°	0	0	0	0	0	0	0	0
155.0°	0	0	0	0	0	0	0	0
160.0°	0	0	0	0	0	0	0	0
165.0°	0	0	0	0	0	0	0	0
170.0°	0	0	0	0	0	0	0	0
175.0°	0	0	0	0	0	0	0	0
180.0°	0	0	0	0	0	0	0	0

Luminous Intensity (cd) Distribution Data (cont.)

C Y	180°	202.5°	225°	247.5°	270°	292.5°	315°	337.5°
0.0°	3993	3993	3993	3993	3993	3993	3993	3993
5.0°	4021	4024	4028	4035	4042	4044	4049	4055
10.0°	4128	4136	4140	4165	4187	4191	4191	4194
15.0°	4297	4316	4344	4364	4400	4412	4414	4407
20.0°	4513	4544	4577	4618	4648	4684	4695	4685
25.0°	4830	4865	4904	4979	5059	5090	5088	5087
30.0°	5249	5309	5371	5518	5653	5692	5648	5631
35.0°	5825	5910	6037	6287	6493	6529	6452	6396
40.0°	6593	6770	7033	7347	7562	7674	7646	7419
45.0°	7591	8033	8508	8708	8749	9079	9206	8786
50.0°	8893	9572	10200	10094	10016	10539	10888	10309
55.0°	10287	11146	11850	11315	10960	11725	12453	11799
60.0°	11016	12108	12750	11683	10836	11996	13151	12448
65.0°	9483	10960	11696	10098	9029	10251	11789	10903
70.0°	5146	6695	7626	6812	5822	6872	7520	6496
75.0°	1384	2221	2777	2572	1891	2591	2681	2013
80.0°	250	396	532	391	253	380	490	346
85.0°	0	0	39	0	0	0	33	0
90.0°	0	0	0	0	0	0	0	0
95.0°	0	0	0	0	0	0	0	0
100.0°	0	0	0	0	0	0	0	0
105.0°	0	0	0	0	0	0	0	0
110.0°	0	0	0	0	0	0	0	0
115.0°	0	0	0	0	0	0	0	0
120.0°	0	0	0	0	0	0	0	0
125.0°	0	0	0	0	0	0	0	0
130.0°	0	0	0	0	0	0	0	0
135.0°	0	0	0	0	0	0	0	0
140.0°	0	0	0	0	0	0	0	0
145.0°	0	0	0	0	0	0	0	0
150.0°	0	0	0	0	0	0	0	0
155.0°	0	0	0	0	0	0	0	0
160.0°	0	0	0	0	0	0	0	0
165.0°	0	0	0	0	0	0	0	0
170.0°	0	0	0	0	0	0	0	0
175.0°	0	0	0	0	0	0	0	0
180.0°	0	0	0	0	0	0	0	0

Zonal Lumen Density Measurement

Deg	Flux (lm)	%	Deg	Flux (lm)	%
0-5	96.0	0.27	0-5	96.0	0.27
5-10	293.2	0.82	0-10	389.2	1.09
10-15	504.8	1.41	0-15	893.9	2.50
15-20	736.6	2.06	0-20	1630.5	4.56
20-25	997.8	2.79	0-25	2628.4	7.36
25-30	1306.8	3.66	0-30	3935.2	11.01
30-35	1687.2	4.72	0-35	5622.3	15.73
35-40	2174.2	6.08	0-40	7796.6	21.82
40-45	2815.4	7.88	0-45	10611.9	29.70
45-50	3625.2	10.15	0-50	14237.2	39.84
50-55	4525.5	12.67	0-55	18762.7	52.51
55-60	5243.2	14.67	0-60	24005.9	67.18
60-65	5218.7	14.61	0-65	29224.6	81.79
65-70	3940.9	11.03	0-70	33165.5	92.82
70-75	1931.8	5.41	0-75	35097.3	98.22
75-80	544.5	1.52	0-80	35641.8	99.75
80-85	88.9	0.25	0-85	35730.7	100.00
85-90	1.7	0.00	0-90	35732.4	100.00
90-95	0.0	0.00	0-95	35732.4	100.00
95-100	0.0	0.00	0-100	35732.4	100.00
100-105	0.0	0.00	0-105	35732.4	100.00
105-110	0.0	0.00	0-110	35732.4	100.00
110-115	0.0	0.00	0-115	35732.4	100.00
115-120	0.0	0.00	0-120	35732.4	100.00
120-125	0.0	0.00	0-125	35732.4	100.00
125-130	0.0	0.00	0-130	35732.4	100.00
130-135	0.0	0.00	0-135	35732.4	100.00
135-140	0.0	0.00	0-140	35732.4	100.00
140-145	0.0	0.00	0-145	35732.4	100.00
145-150	0.0	0.00	0-150	35732.4	100.00
150-155	0.0	0.00	0-155	35732.4	100.00
155-160	0.0	0.00	0-160	35732.4	100.00
160-165	0.0	0.00	0-165	35732.4	100.00
165-170	0.0	0.00	0-170	35732.4	100.00
170-175	0.0	0.00	0-175	35732.4	100.00
175-180	0.0	0.00	0-180	35732.4	100.00

6. Product Photo



*****END OF REPORT*****