

IES LM-79-08

MEASUREMENT AND TEST REPORT

For

GREEN CREATIVE LTD

Room 3603, Level 36, Tower 1, Enterprise Square Five, 38 Wang Chiu Road, Kowloon Bay, KL, Hong Kong, China

Test Model:
11PAR30/930FL40/277V/SL+SL25D

Report Type:	Electrical and Photometric tests including: Luminous Flux, Chromaticity, Luminous Intensity Distribution, THD
Reviewed By:	Hill Liu 
Report Number:	KS2230727-43636E-EE-1
Test Date:	2023-08-22 to 2023-08-23
Report Date:	2023-08-25
Approved by:	Blake Zhang / EE Engineer
Prepared By:	Bay Area Compliance Laboratories Corp. (Shenzhen) 5/F(B-West) -7/F, the 3rd Phase of Wan Li Industrial Building D, Shihua Road, Futian Free Trade Zone Shenzhen, Guangdong, China. Tel: +86-755-33320018 Fax: +86-755-33320008
Test Facility:	Test facility was located at No.12, Pulong East 1 st Road, Tangxia Town, Dongguan, Guangdong, China.

Note: 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.(Shenzhen). This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, or any agency of the U.S. Government.

1. Product Description#

General Information:

Two test sample was in good condition and received on date 2023-07-27, and used for testing. One was tested in integrating sphere and the other was tested in goniophotometer

Model Tested: 11PAR30/930FL40/277V/SL+SL25D
Manufacturer: GREEN CREATIVE LTD
Brand Name: GREEN CREATIVE
Product Designation: Directional LED Lamp
Burning Time Before Test: 0hour(For New Products)

Rated Values:

Rated Voltage/Frequency: AC 120-277V 60Hz
Rated Power: 11W
Nominal CCT: 3000K
Nominal Lumen Output: 990 lm

Family Declaration

The Model	Multiple Models	Differences Items	Details
11PAR30/930FL40/277V/SL+SL25D	11PAR30/930NF25/277V/SL	Model Number	11PAR30/930FL40/277V/SL+SL25D & 11PAR30/930NF25/277V/SL are the same product except for the model number.

2. Standards Used

- IES LM-79-08: Approved Method: Electrical & Photometric Measurement of Solid-state Lighting Products
- ANSI C82.77-10-2014: Harmonic Emission Limits – Related Power Quality Requirements for Lighting
- *IES TM-30-18: IES Method for Evaluating Light Source Color Rendition (This method is not in NVLAP accreditation scope)

3. Description of Test Equipment

Device	Manufacture	Model No	Serial No	Calibration date	Calibration due date
1.5m temperature integrating sphere	SENSING	SPR-600	S09008	2022-11-10	2023-11-09
High-precision rapid spectral analysis system	EVERFINE	HAAS-2000	M112048CA1361125	2022-11-10	2023-11-09
Digital power meter	YOKOGAWA	WT310	13398	2022-11-10	2023-11-09
Programmable Precision DC Power Supply	EVERFINE	WY5015	11060010	2022-11-10	2023-11-09
thermometer	SENSING	NA	NA	2022-11-10	2023-11-09
Standard Light Source	EVERFINE	D204	N/A	2023-05-12	2025-05-11
Precision frequency power supply	ALL Power	APW-105N	970613	2022-11-10	2023-11-09

Device	Manufacture	Model No	Serial No	Calibration date	Calibration due date
AC POWER SUPPLY	EVERFINE	VPS1030 PWM	1012017	2022-11-16	2023-11-15
Digital CC&CV DC Power Supply	EVERFINE	WY12010	1009009	2022-11-10	2023-11-09
Digital power meter	YOKOGAWA	WT-210	91j926132	2022-11-10	2023-11-09
full-field speed goniophotometer	EVERFINE	GO-R5000	YG108492N10120001	2022-11-10	2023-11-09
wireless remote thermohygrometer	N/A	AOK-5017B	N/A	2022-11-10	2023-11-09
Standard Light Source	EVERFINE	D908	1012003	2023-05-12	2025-05-11

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Shenzhen) 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%.

Integrating Sphere System

The system includes AC power source, digital power meter, DC power supply, Spectroradiometer, and integrating sphere. The integrating sphere system is calibrated by standard spectrum light source before measurement.

4π geometry was used during measurement. The product was operated in its intended orientation in application and was recorded in this report.

The uncertainty of the light output (luminous flux) measurements is $U=2.1\%$ ($K=2$), at the 95% confidence level. The uncertainty of the correlated color temperature measurements is $U=22\text{K}$ ($K=2$), at the 95% confidence level. The uncertainty of the CRI is $U=2.1(K=2)$, at the 95% confidence level.

The uncertainty of power meter AC current $U=0.39\%$ of rdg, AC Voltage $U=0.25\%$ of rdg, Power $U=0.42\%$ ($K=2$), at the 95% confidence level. The uncertainty of power meter AC current $U=0.19\%$ of rdg, AC Voltage $U=0.18\%$ of rdg, Power $U=0.46\%$ ($K=2$), at the 95% confidence level.

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 intensity is $U=2.00\%$ ($K=2$), at the 95% confidence level.

Additional Test

The Additional Test item may not be covered by IESNA LM-79-2008. Additional test including power factor, off-state power and THD, was measured by Digital Power Meter after stabilized at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. Test voltage for THD and power factor test would be equal to rated voltage or, in case of a voltage range, maximum value of that range.

The uncertainty of the temperature is $U=0.8^{\circ}\text{C}$ ($K=2$), at the 95% confidence level.

Fidelity Index and Gamut Index Calculation

The R_i , R_g was calculated according to IES TM-30-18 by using calculation tools. The calculation was based on the measured SPD from 380nm to 780nm with 1nm intervals. All the colors in this report is for reference only.

5. Test Result

[Integrating Sphere System]

The Stabilization time: **30 minutes**

Total operating time for integrating sphere test: **1.0 hour**

Test orientation: **Base Up**

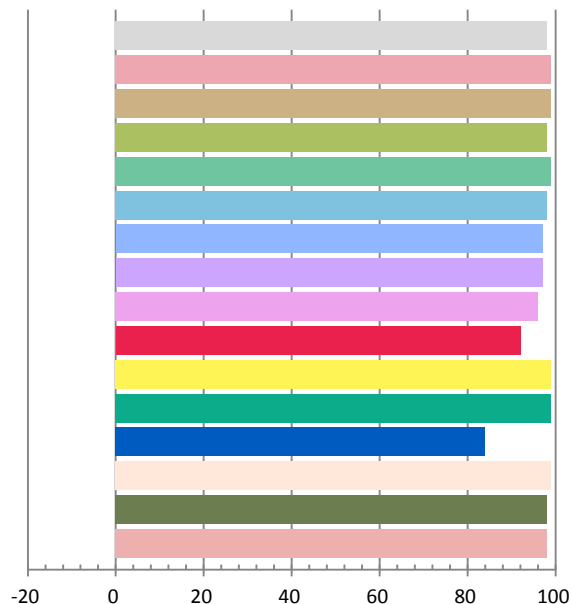
Photometric and Electrical Measurement Result

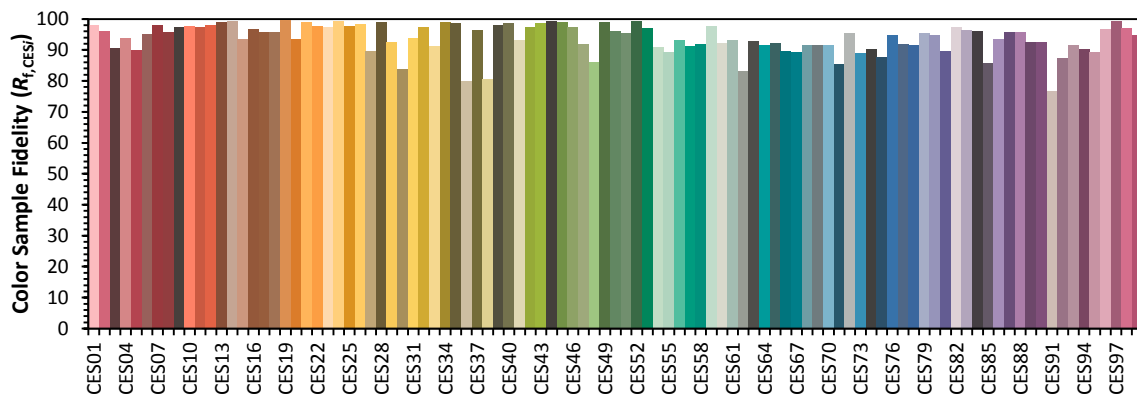
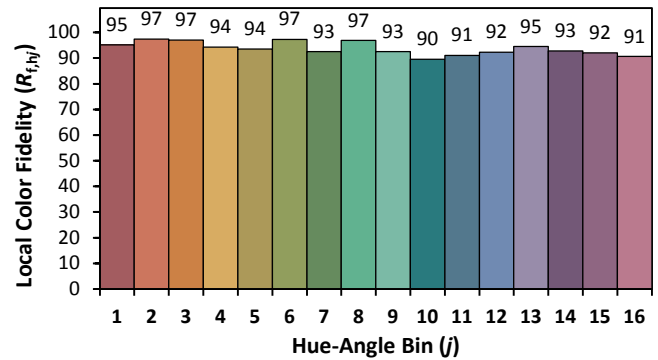
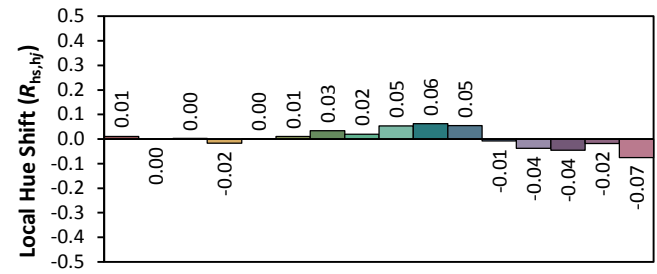
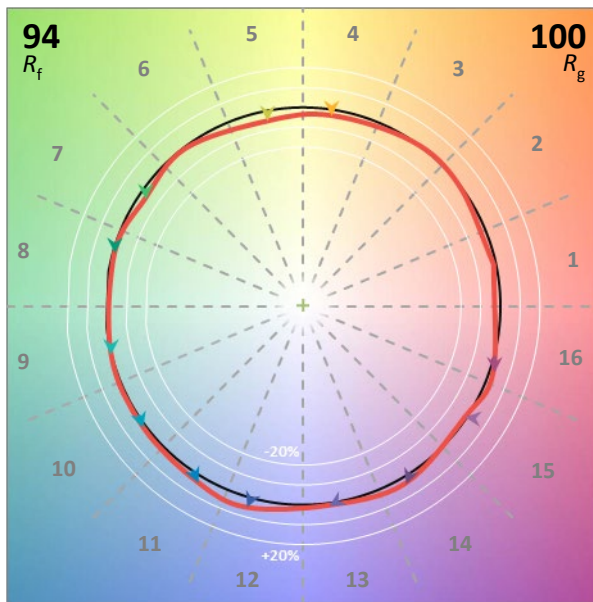
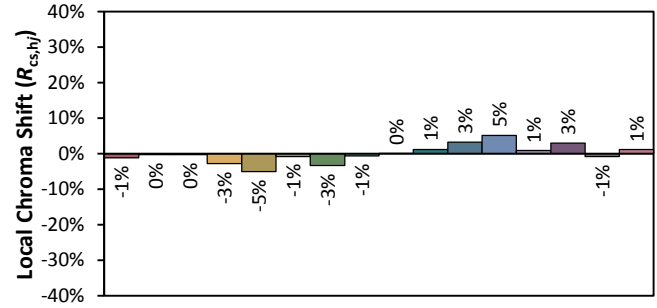
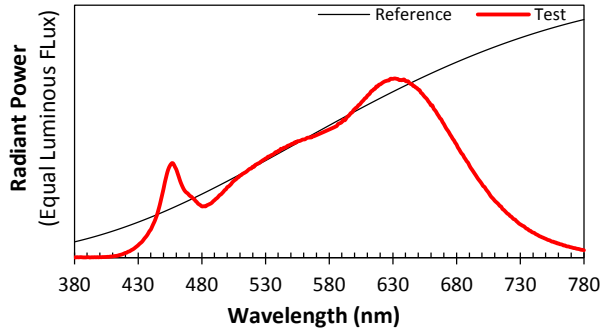
Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
120.1	60	0.08986	10.38	0.9619	993.28	95.66

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
3.708	3077	-0.000832	0.4304	0.3997	0.2482	0.5187

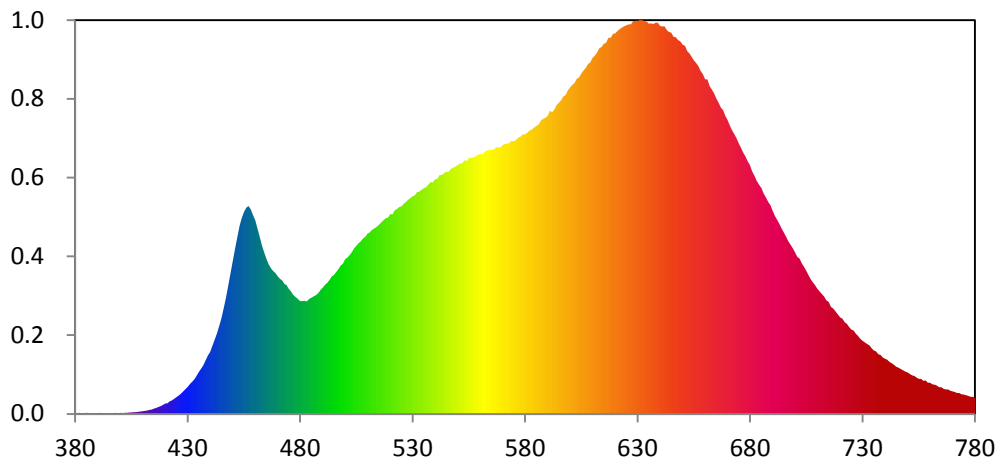
Color Rendering Index

Ra			
98.0			
R1	R2	R3	R4
99	99	98	99
R5	R6	R7	R8
98	97	97	96
R9	R10	R11	R12
92	99	99	84
R13	R14	R15	
99	98	98	





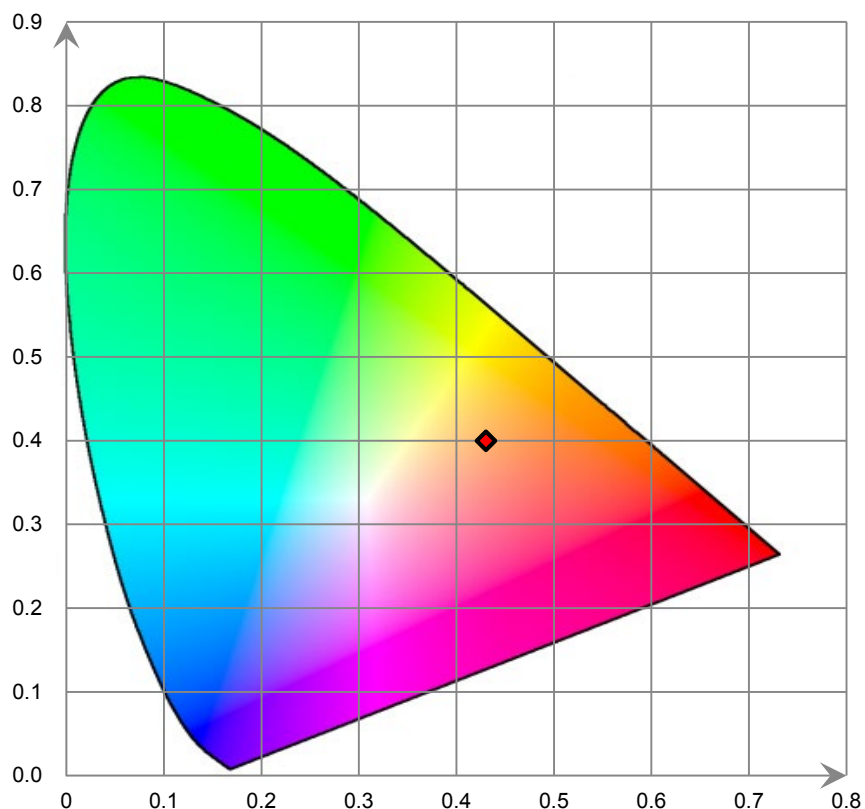
Relative Spectral Power Distribution



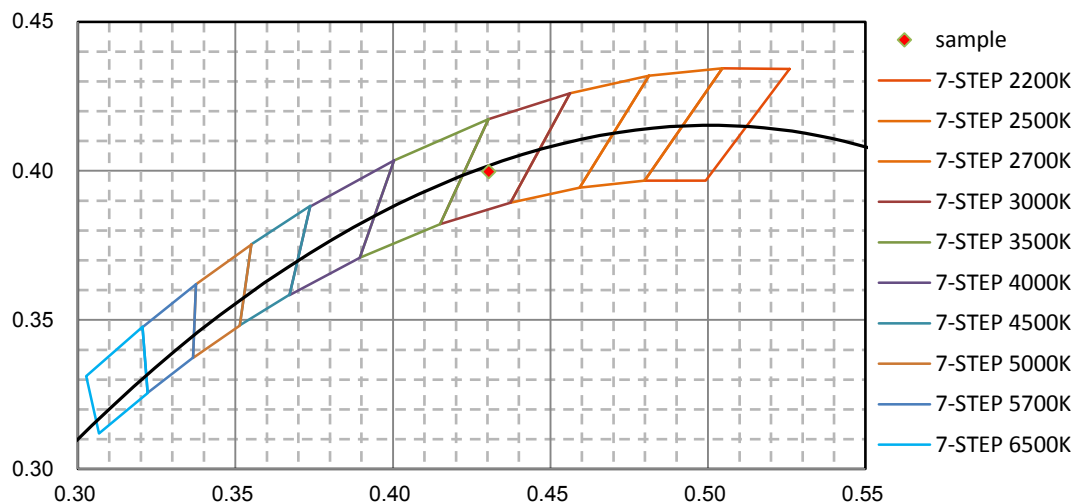
nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
380	3.229E-02	421	5.668E-01	462	9.288E+00	503	8.472E+00	544	1.262E+01
381	1.823E-02	422	6.710E-01	463	8.837E+00	504	8.673E+00	545	1.268E+01
382	5.276E-02	423	7.127E-01	464	8.462E+00	505	8.820E+00	546	1.269E+01
383	3.356E-02	424	7.936E-01	465	8.132E+00	506	8.938E+00	547	1.284E+01
384	4.293E-02	425	8.873E-01	466	7.843E+00	507	9.044E+00	548	1.291E+01
385	5.232E-02	426	9.619E-01	467	7.634E+00	508	9.200E+00	549	1.296E+01
386	3.922E-02	427	1.064E+00	468	7.492E+00	509	9.281E+00	550	1.304E+01
387	2.485E-02	428	1.184E+00	469	7.389E+00	510	9.442E+00	551	1.312E+01
388	2.446E-02	429	1.299E+00	470	7.215E+00	511	9.512E+00	552	1.313E+01
389	2.471E-02	430	1.419E+00	471	7.083E+00	512	9.644E+00	553	1.329E+01
390	4.336E-02	431	1.568E+00	472	6.998E+00	513	9.722E+00	554	1.325E+01
391	5.395E-02	432	1.691E+00	473	6.818E+00	514	9.808E+00	555	1.340E+01
392	1.673E-02	433	1.817E+00	474	6.748E+00	515	9.901E+00	556	1.342E+01
393	3.226E-02	434	2.001E+00	475	6.542E+00	516	1.003E+01	557	1.345E+01
394	3.944E-02	435	2.203E+00	476	6.415E+00	517	1.016E+01	558	1.351E+01
395	3.464E-02	436	2.373E+00	477	6.230E+00	518	1.025E+01	559	1.359E+01
396	4.856E-02	437	2.564E+00	478	6.126E+00	519	1.028E+01	560	1.361E+01
397	3.536E-02	438	2.802E+00	479	6.030E+00	520	1.048E+01	561	1.363E+01
398	5.260E-02	439	3.057E+00	480	5.908E+00	521	1.046E+01	562	1.373E+01
399	3.370E-02	440	3.241E+00	481	5.903E+00	522	1.068E+01	563	1.381E+01
400	5.944E-02	441	3.566E+00	482	5.927E+00	523	1.074E+01	564	1.382E+01
401	4.730E-02	442	3.888E+00	483	5.901E+00	524	1.084E+01	565	1.384E+01
402	6.299E-02	443	4.198E+00	484	6.028E+00	525	1.088E+01	566	1.385E+01
403	6.217E-02	444	4.586E+00	485	6.087E+00	526	1.101E+01	567	1.398E+01
404	6.997E-02	445	4.991E+00	486	6.161E+00	527	1.111E+01	568	1.398E+01
405	7.310E-02	446	5.509E+00	487	6.231E+00	528	1.122E+01	569	1.396E+01
406	9.143E-02	447	6.051E+00	488	6.336E+00	529	1.130E+01	570	1.409E+01
407	8.694E-02	448	6.673E+00	489	6.495E+00	530	1.141E+01	571	1.414E+01
408	1.158E-01	449	7.304E+00	490	6.615E+00	531	1.147E+01	572	1.417E+01
409	1.247E-01	450	7.945E+00	491	6.758E+00	532	1.163E+01	573	1.419E+01
410	1.386E-01	451	8.657E+00	492	6.865E+00	533	1.165E+01	574	1.432E+01
411	1.680E-01	452	9.264E+00	493	7.023E+00	534	1.175E+01	575	1.429E+01
412	1.839E-01	453	9.846E+00	494	7.196E+00	535	1.183E+01	576	1.437E+01
413	2.026E-01	454	1.028E+01	495	7.280E+00	536	1.189E+01	577	1.447E+01
414	2.280E-01	455	1.059E+01	496	7.430E+00	537	1.201E+01	578	1.453E+01
415	2.802E-01	456	1.080E+01	497	7.588E+00	538	1.215E+01	579	1.464E+01
416	3.161E-01	457	1.090E+01	498	7.777E+00	539	1.213E+01	580	1.464E+01
417	3.565E-01	458	1.073E+01	499	7.878E+00	540	1.230E+01	581	1.474E+01
418	4.065E-01	459	1.043E+01	500	8.113E+00	541	1.231E+01	582	1.485E+01
419	4.755E-01	460	1.015E+01	501	8.190E+00	542	1.253E+01	583	1.490E+01
420	5.395E-01	461	9.721E+00	502	8.325E+00	543	1.251E+01	584	1.502E+01

nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
585	1.510E+01	626	2.041E+01	667	1.606E+01	708	6.890E+00	749	2.223E+00
586	1.517E+01	627	2.042E+01	668	1.592E+01	709	6.735E+00	750	2.166E+00
587	1.539E+01	628	2.059E+01	669	1.562E+01	710	6.552E+00	751	2.092E+00
588	1.546E+01	629	2.060E+01	670	1.540E+01	711	6.414E+00	752	2.027E+00
589	1.552E+01	630	2.059E+01	671	1.512E+01	712	6.286E+00	753	1.995E+00
590	1.563E+01	631	2.063E+01	672	1.486E+01	713	6.140E+00	754	1.912E+00
591	1.588E+01	632	2.063E+01	673	1.466E+01	714	5.947E+00	755	1.838E+00
592	1.580E+01	633	2.059E+01	674	1.444E+01	715	5.879E+00	756	1.836E+00
593	1.595E+01	634	2.057E+01	675	1.417E+01	716	5.616E+00	757	1.741E+00
594	1.619E+01	635	2.045E+01	676	1.395E+01	717	5.509E+00	758	1.745E+00
595	1.630E+01	636	2.047E+01	677	1.369E+01	718	5.365E+00	759	1.630E+00
596	1.645E+01	637	2.043E+01	678	1.350E+01	719	5.209E+00	760	1.638E+00
597	1.665E+01	638	2.050E+01	679	1.323E+01	720	5.063E+00	761	1.551E+00
598	1.672E+01	639	2.051E+01	680	1.303E+01	721	4.982E+00	762	1.531E+00
599	1.696E+01	640	2.034E+01	681	1.270E+01	722	4.799E+00	763	1.489E+00
600	1.711E+01	641	2.031E+01	682	1.248E+01	723	4.715E+00	764	1.398E+00
601	1.725E+01	642	2.031E+01	683	1.222E+01	724	4.554E+00	765	1.408E+00
602	1.735E+01	643	2.011E+01	684	1.199E+01	725	4.424E+00	766	1.324E+00
603	1.756E+01	644	2.001E+01	685	1.184E+01	726	4.373E+00	767	1.288E+00
604	1.764E+01	645	1.998E+01	686	1.155E+01	727	4.203E+00	768	1.276E+00
605	1.783E+01	646	1.977E+01	687	1.134E+01	728	4.078E+00	769	1.218E+00
606	1.800E+01	647	1.974E+01	688	1.110E+01	729	3.931E+00	770	1.189E+00
607	1.814E+01	648	1.959E+01	689	1.094E+01	730	3.837E+00	771	1.145E+00
608	1.834E+01	649	1.952E+01	690	1.064E+01	731	3.748E+00	772	1.101E+00
609	1.842E+01	650	1.935E+01	691	1.037E+01	732	3.660E+00	773	1.091E+00
610	1.865E+01	651	1.929E+01	692	1.016E+01	733	3.593E+00	774	1.037E+00
611	1.877E+01	652	1.901E+01	693	9.947E+00	734	3.448E+00	775	1.010E+00
612	1.892E+01	653	1.889E+01	694	9.721E+00	735	3.335E+00	776	9.879E-01
613	1.916E+01	654	1.870E+01	695	9.505E+00	736	3.276E+00	777	9.412E-01
614	1.923E+01	655	1.852E+01	696	9.275E+00	737	3.124E+00	778	9.004E-01
615	1.940E+01	656	1.838E+01	697	9.052E+00	738	3.088E+00	779	8.897E-01
616	1.945E+01	657	1.821E+01	698	8.867E+00	739	2.959E+00	780	8.518E-01
617	1.971E+01	658	1.797E+01	699	8.673E+00	740	2.888E+00		
618	1.971E+01	659	1.780E+01	700	8.457E+00	741	2.843E+00		
619	1.991E+01	660	1.753E+01	701	8.226E+00	742	2.726E+00		
620	1.995E+01	661	1.753E+01	702	8.135E+00	743	2.652E+00		
621	2.005E+01	662	1.717E+01	703	7.889E+00	744	2.575E+00		
622	2.016E+01	663	1.699E+01	704	7.696E+00	745	2.478E+00		
623	2.025E+01	664	1.679E+01	705	7.512E+00	746	2.422E+00		
624	2.032E+01	665	1.652E+01	706	7.275E+00	747	2.349E+00		
625	2.036E+01	666	1.631E+01	707	7.049E+00	748	2.295E+00		

CIE 1931 x y Chromaticity Diagram



7-Step Chromaticity Quadrangles



[Goniophotometer System]

The Stabilization time: **30 minutes**

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

Test orientation: **Base Up**

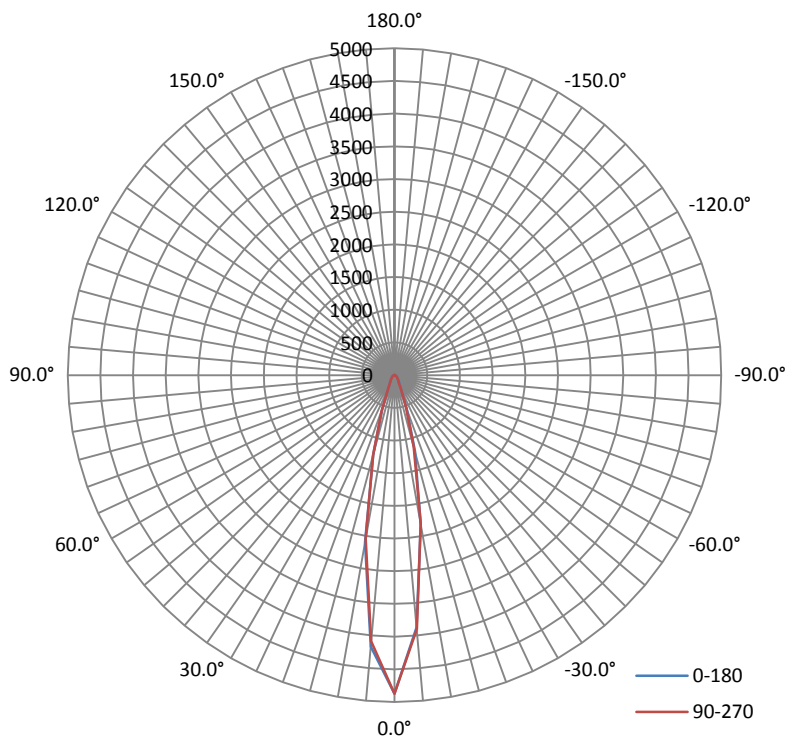
Electrical Measurement

Input Voltage (V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.01	60	0.0900	10.410	0.9638

Photometric Measurement

Luminous Flux (lm)	Efficacy (lm/W)	I _{max} (cd)	S/MH (C0/180)	S/MH (C90/270)
996.039	95.68	4900.0	0.33	0.33

Luminous Intensity Distribution



	C0/180	C45/225	C90/270	C135/315	AVG.
Beam Angle (50% I _{max}):	20.1	19.9	19.9	20.1	20.0
Field Angle (10% I _{max}):	41.4	41.1	41.1	41.4	41.3

Luminous Intensity (cd) Distribution Data

$\begin{matrix} C \\ \backslash \\ \gamma \end{matrix}$	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
0.0°	4874	4874	4874	4874	4874	4874	4874	4874
5.0°	4170	4212	4205	4156	4087	3995	3913	3819
10.0°	2600	2653	2651	2608	2541	2451	2368	2276
15.0°	1247	1284	1297	1293	1268	1228	1186	1137
20.0°	548	571	577	582	578	567	553	528
25.0°	234	243	246	247	249	247	242	236
30.0°	135	138	139	140	140	141	139	137
35.0°	102	104	103	104	106	105	102	100
40.0°	83	84	83	84	85	82	81	80
45.0°	66	67	67	67	66	66	66	65
50.0°	53	54	54	54	55	54	54	52
55.0°	44	44	44	45	45	45	44	43
60.0°	35	35	35	35	35	35	35	34
65.0°	27	27	27	27	27	27	27	26
70.0°	21	21	21	21	21	20	20	19
75.0°	15	15	15	15	15	14	14	13
80.0°	10	10	10	10	9	9	9	9
85.0°	5	5	5	5	5	5	4	4
90.0°	2	2	2	2	2	1	1	1
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°	1	1	1	1	1	1	1	1
145.0°	1	1	1	1	1	2	2	2
150.0°	2	2	2	2	2	2	2	2
155.0°	3	3	3	3	3	3	3	3
160.0°	3	3	3	3	3	3	3	3
165.0°	3	3	3	3	3	3	3	3
170.0°	3	3	3	3	3	3	2	2
175.0°	2	2	2	2	2	2	2	2
180.0°	1	1	1	1	1	1	1	1

Luminous Intensity (cd) Distribution Data (cont.)

$\begin{matrix} C \\ \backslash \\ \gamma \end{matrix}$	180°	202.5°	225°	247.5°	270°	292.5°	315°	337.5°
0.0°	4874	4874	4874	4874	4874	4874	4874	4874
5.0°	3874	3825	3803	3827	3902	4009	4140	4247
10.0°	2323	2260	2222	2234	2299	2399	2537	2656
15.0°	1204	1166	1121	1115	1135	1197	1262	1324
20.0°	547	521	499	492	495	511	536	559
25.0°	246	232	220	215	214	221	230	244
30.0°	141	137	131	131	131	131	135	138
35.0°	100	99	98	98	100	100	100	102
40.0°	80	79	78	78	79	79	81	81
45.0°	63	63	63	63	64	65	66	66
50.0°	52	52	52	52	52	52	52	53
55.0°	43	43	42	42	43	43	43	44
60.0°	34	34	33	33	34	34	35	35
65.0°	26	26	25	26	26	26	27	28
70.0°	19	19	19	19	20	20	20	21
75.0°	14	13	13	14	14	14	15	15
80.0°	9	9	9	9	9	10	10	10
85.0°	4	4	4	4	4	5	5	5
90.0°	1	1	1	1	1	2	2	2
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°	1	1	1	1	1	1	1	1
155.0°	1	1	1	1	1	1	1	1
160.0°	1	1	1	1	1	1	1	1
165.0°	1	1	1	1	1	1	1	1
170.0°	1	1	1	1	1	1	1	1
175.0°	1	1	1	1	1	1	1	1
180.0°	1	1	1	1	1	1	1	1

Zonal Lumen Density Measurement

Deg	Flux (lm)	%	Deg	Flux (lm)	%
0-5	105.7	10.61	0-5	105.7	10.61
5-10	224.8	22.58	0-10	330.5	33.19
10-15	206.8	20.76	0-15	537.4	53.95
15-20	135.0	13.56	0-20	672.4	67.51
20-25	75.7	7.59	0-25	748.0	75.10
25-30	44.1	4.43	0-30	792.2	79.53
30-35	34.3	3.45	0-35	826.5	82.98
35-40	30.3	3.04	0-40	856.8	86.02
40-45	26.9	2.70	0-45	883.7	88.72
45-50	23.8	2.39	0-50	907.5	91.11
50-55	20.9	2.09	0-55	928.4	93.20
55-60	18.0	1.81	0-60	946.3	95.01
60-65	14.8	1.48	0-65	961.1	96.49
65-70	11.8	1.18	0-70	972.9	97.67
70-75	8.9	0.90	0-75	981.8	98.57
75-80	6.3	0.63	0-80	988.0	99.20
80-85	3.8	0.37	0-85	991.8	99.57
85-90	1.6	0.16	0-90	993.4	99.73
90-95	0.3	0.03	0-95	993.7	99.76
95-100	0.0	0.01	0-100	993.7	99.77
100-105	0.0	0.00	0-105	993.7	99.77
105-110	0.0	0.00	0-110	993.7	99.77
110-115	0.0	0.00	0-115	993.7	99.77
115-120	0.0	0.00	0-120	993.7	99.77
120-125	0.0	0.00	0-125	993.8	99.77
125-130	0.0	0.00	0-130	993.8	99.77
130-135	0.1	0.01	0-135	993.9	99.78
135-140	0.1	0.01	0-140	994.0	99.79
140-145	0.2	0.03	0-145	994.2	99.82
145-150	0.3	0.03	0-150	994.6	99.85
150-155	0.4	0.04	0-155	995.0	99.89
155-160	0.4	0.04	0-160	995.4	99.93
160-165	0.3	0.03	0-165	995.7	99.96
165-170	0.2	0.03	0-170	995.9	99.99
170-175	0.1	0.01	0-175	996.0	100.00
175-180	0.0	0.00	0-180	996.0	100.00

[Additional Test]

Test Item	Test Voltage (V)	Frequency (Hz)	Test Result
Total Harmonic Distortion:	120.0	60	13.24%

6. Product Photo



Directions

1. The information marked "superscript #" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
2. This report includes some test methods are not in NVLAP accreditation scope marked *.
3. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $K=2$ with the 95% confidence interval.
6. This report cannot be reproduced except in full, without prior written approval of the Company.
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*****END OF REPORT*****