

ANSI/IES LM-79-19

MEASUREMENT AND TEST REPORT

For

GREEN CREATIVE LTD

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

Test Model: 11PAR30DIM/927FL40/SL

Report Type:	Electrical and Photometric tests including: Luminous Flux, Chromaticity, Luminous Intensity Distribution, THD
Reviewed By:	Hill Liu <i>Hill Liu</i>
Report Number:	KS2230727-43613E-EE-1-M1
Test Date:	2023-08-12 to 2023-08-16
Report Date:	2023-08-26
Approved by:	Blake Zhang / EE Engineer
Revised Note:	The previous report KS2230727-43613E-EE-1 is replaced by this report on 2023-08-26
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 samples were in good condition and received on 2023-07-27. One was tested in integrating sphere and the other was tested in goniophotometer

Model Tested: 11PAR30DIM/927FL40/SL
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: 120V AC 60Hz
Rated Power: 11W
Nominal CCT: 2700K
Nominal Lumen Output: 950lm

2. Standards Used

- ANSI/IES LM-79-19: Approved method: Optical and Electrical Measurements 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
2.0m integrating sphere	EVERFINE	R98	11010018	2022-11-10	2023-11-09
spectroradiometer	EVERFINE	HAAS-2000	G112048TS81331121	2022-11-10	2023-11-09
Digital Power Meter	EVERFINE	PF2010A	1011004	2022-11-10	2023-11-09
Digital CC&CV DC Power Supply	EVERFINE	WY305-V1	1101047	2022-11-10	2023-11-09
Standard Light Source	EVERFINE	D204	N/A	2023-05-12	2025-05-11
Special zero-voltage synchronous switching AC	EVERFINE	DPS1010-YF	1011001T	2022-11-10	2023-11-09
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 ANSI/IES LM-79-19. The product was operated at rated voltage or at voltage required by manufacturer. The ambient temperature of the sample was maintained at $25^{\circ}\text{C} \pm 1.2^{\circ}\text{C}$ during measurement. And relative humidity is maintained between 10% and 65%. The air flow around the SSL product is less than 0.2m/s.

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 $U=0.19\%$ 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 ANSI/IES LM-79-2019. Additional test including power factor, off-state power and THD, was measured by Digital Power Meter after stabilized at $25^{\circ}\text{C} \pm 1.2^{\circ}\text{C}$. 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 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.

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**

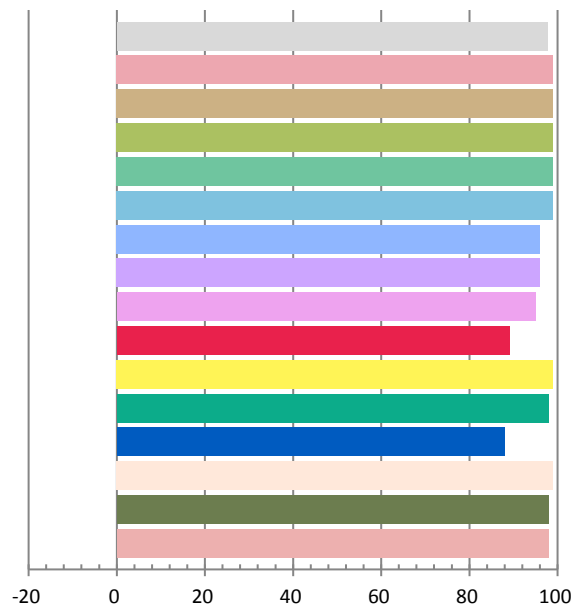
Photometric and Electrical Measurement Result

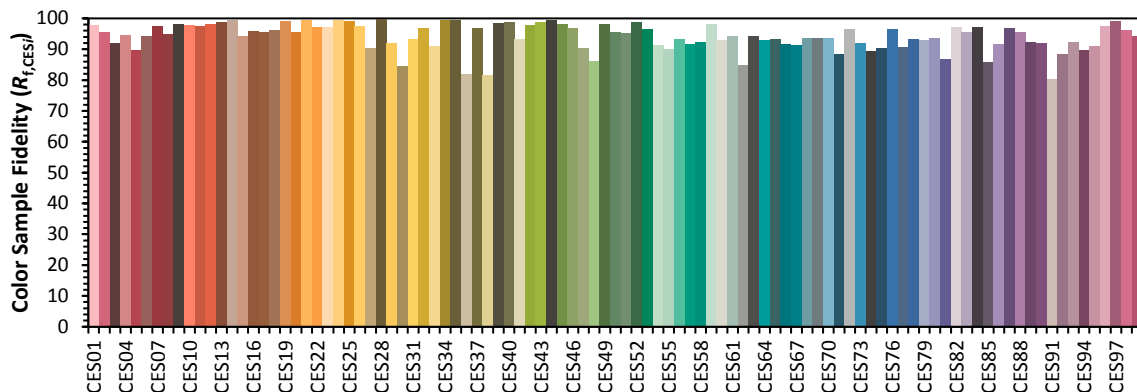
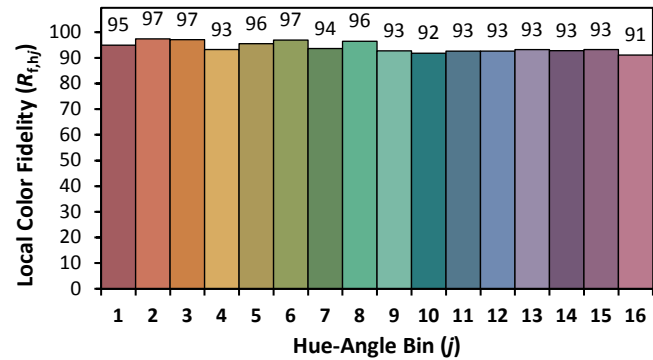
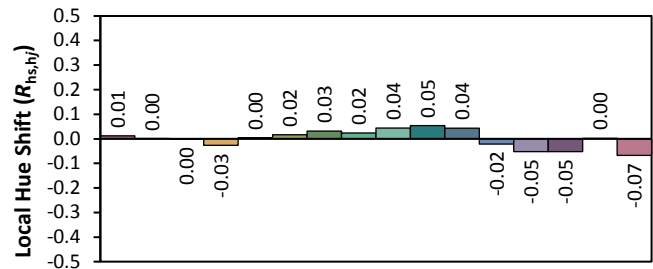
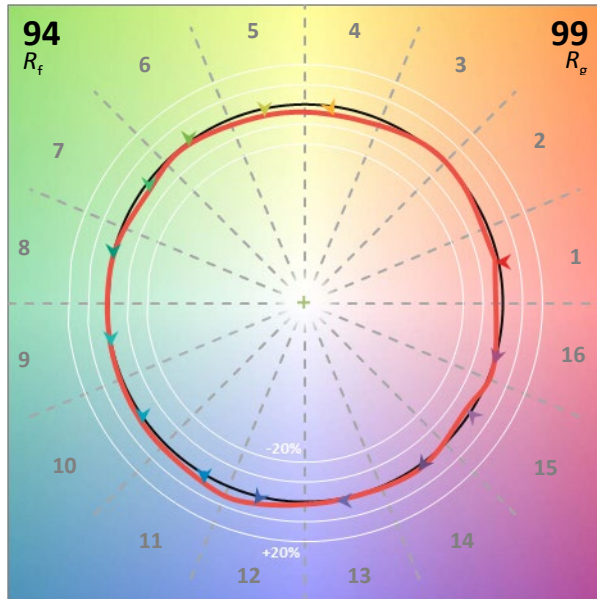
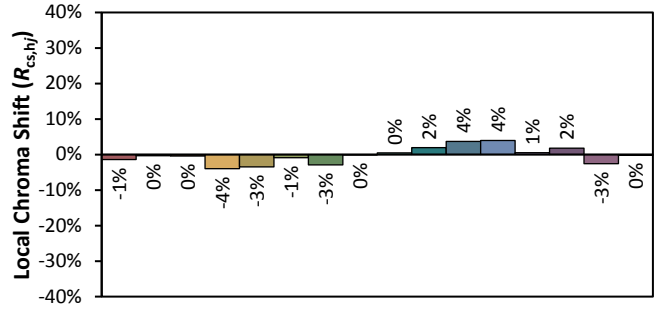
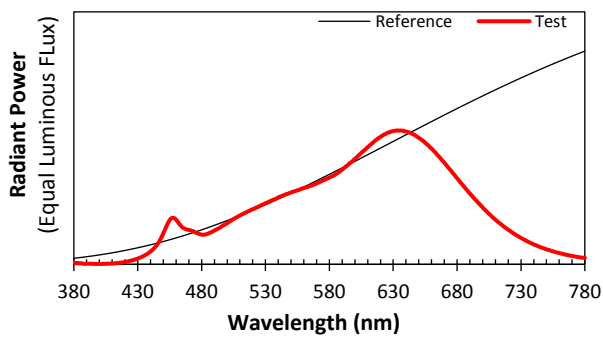
Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
120.1	60	0.09119	10.41	0.9513	954.65	91.67

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
3.6829	2715	-0.00049	0.4578	0.4088	0.2620	0.5264

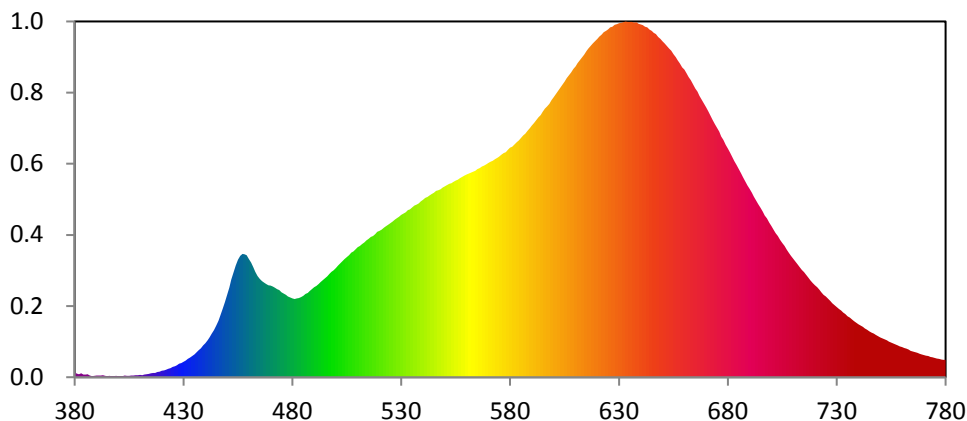
Color Rendering Index

Ra			
97.7			
R1	R2	R3	R4
99	99	99	99
R5	R6	R7	R8
99	96	96	95
R9	R10	R11	R12
89	99	98	88
R13	R14	R15	
99	98	98	





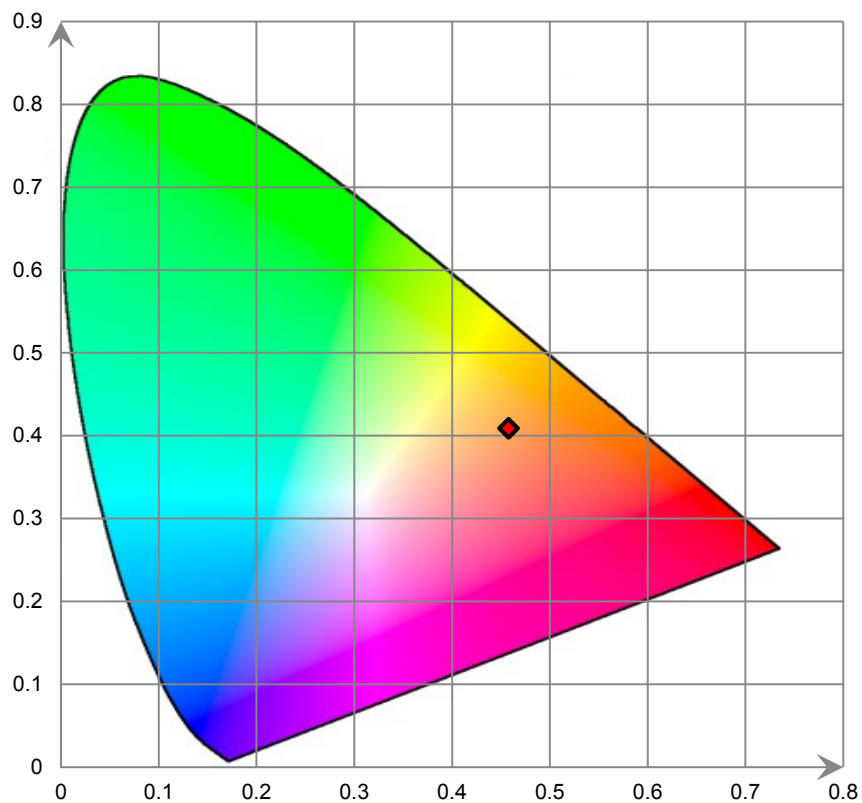
Relative Spectral Power Distribution



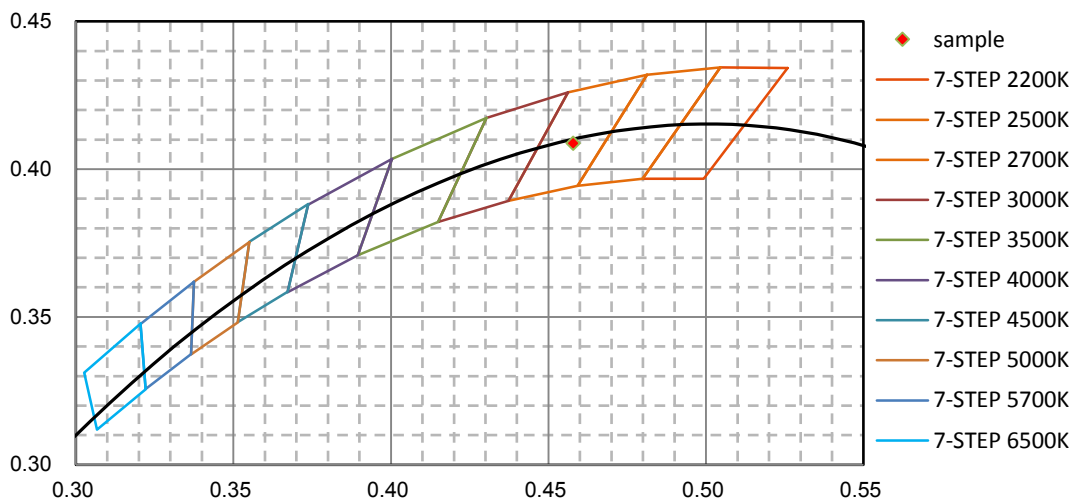
nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
380	3.331E-01	421	4.273E-01	462	6.871E+00	503	7.253E+00	544	1.145E+01
381	2.233E-01	422	4.750E-01	463	6.596E+00	504	7.393E+00	545	1.154E+01
382	1.778E-01	423	5.323E-01	464	6.334E+00	505	7.507E+00	546	1.165E+01
383	2.414E-01	424	5.707E-01	465	6.144E+00	506	7.638E+00	547	1.169E+01
384	1.712E-01	425	6.386E-01	466	6.016E+00	507	7.786E+00	548	1.176E+01
385	1.733E-01	426	6.924E-01	467	5.916E+00	508	7.872E+00	549	1.186E+01
386	1.842E-01	427	7.480E-01	468	5.820E+00	509	7.997E+00	550	1.193E+01
387	1.115E-01	428	8.357E-01	469	5.745E+00	510	8.132E+00	551	1.201E+01
388	7.007E-02	429	8.773E-01	470	5.730E+00	511	8.221E+00	552	1.210E+01
389	9.037E-02	430	9.586E-01	471	5.665E+00	512	8.342E+00	553	1.214E+01
390	1.049E-01	431	1.052E+00	472	5.595E+00	513	8.432E+00	554	1.222E+01
391	1.000E-01	432	1.138E+00	473	5.508E+00	514	8.550E+00	555	1.230E+01
392	9.906E-02	433	1.223E+00	474	5.458E+00	515	8.649E+00	556	1.235E+01
393	1.206E-01	434	1.318E+00	475	5.318E+00	516	8.780E+00	557	1.245E+01
394	8.278E-02	435	1.435E+00	476	5.223E+00	517	8.839E+00	558	1.253E+01
395	7.520E-02	436	1.559E+00	477	5.157E+00	518	8.956E+00	559	1.261E+01
396	9.144E-02	437	1.680E+00	478	5.045E+00	519	9.089E+00	560	1.267E+01
397	5.802E-02	438	1.813E+00	479	4.994E+00	520	9.144E+00	561	1.274E+01
398	6.405E-02	439	1.979E+00	480	4.936E+00	521	9.235E+00	562	1.280E+01
399	7.679E-02	440	2.124E+00	481	4.895E+00	522	9.361E+00	563	1.285E+01
400	6.579E-02	441	2.305E+00	482	4.936E+00	523	9.460E+00	564	1.293E+01
401	6.554E-02	442	2.495E+00	483	4.958E+00	524	9.528E+00	565	1.302E+01
402	6.179E-02	443	2.727E+00	484	5.018E+00	525	9.632E+00	566	1.307E+01
403	9.772E-02	444	2.950E+00	485	5.097E+00	526	9.743E+00	567	1.317E+01
404	8.138E-02	445	3.225E+00	486	5.209E+00	527	9.851E+00	568	1.324E+01
405	8.174E-02	446	3.525E+00	487	5.275E+00	528	9.945E+00	569	1.332E+01
406	1.021E-01	447	3.870E+00	488	5.387E+00	529	1.003E+01	570	1.339E+01
407	1.157E-01	448	4.269E+00	489	5.502E+00	530	1.016E+01	571	1.347E+01
408	1.185E-01	449	4.683E+00	490	5.620E+00	531	1.023E+01	572	1.354E+01
409	1.313E-01	450	5.154E+00	491	5.711E+00	532	1.032E+01	573	1.363E+01
410	1.420E-01	451	5.615E+00	492	5.836E+00	533	1.045E+01	574	1.372E+01
411	1.349E-01	452	6.104E+00	493	5.941E+00	534	1.050E+01	575	1.381E+01
412	1.732E-01	453	6.556E+00	494	6.061E+00	535	1.062E+01	576	1.391E+01
413	1.864E-01	454	6.985E+00	495	6.186E+00	536	1.073E+01	577	1.402E+01
414	2.136E-01	455	7.349E+00	496	6.315E+00	537	1.079E+01	578	1.407E+01
415	2.406E-01	456	7.593E+00	497	6.467E+00	538	1.087E+01	579	1.424E+01
416	2.650E-01	457	7.704E+00	498	6.589E+00	539	1.100E+01	580	1.435E+01
417	2.710E-01	458	7.700E+00	499	6.687E+00	540	1.110E+01	581	1.442E+01
418	3.328E-01	459	7.627E+00	500	6.831E+00	541	1.122E+01	582	1.456E+01
419	3.473E-01	460	7.395E+00	501	6.983E+00	542	1.127E+01	583	1.470E+01
420	4.081E-01	461	7.179E+00	502	7.134E+00	543	1.137E+01	584	1.482E+01

nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
585	1.495E+01	626	2.189E+01	667	1.760E+01	708	7.792E+00	749	2.570E+00
586	1.511E+01	627	2.191E+01	668	1.736E+01	709	7.592E+00	750	2.497E+00
587	1.524E+01	628	2.204E+01	669	1.712E+01	710	7.420E+00	751	2.425E+00
588	1.541E+01	629	2.208E+01	670	1.688E+01	711	7.226E+00	752	2.373E+00
589	1.558E+01	630	2.214E+01	671	1.661E+01	712	7.052E+00	753	2.303E+00
590	1.574E+01	631	2.216E+01	672	1.637E+01	713	6.887E+00	754	2.225E+00
591	1.590E+01	632	2.221E+01	673	1.611E+01	714	6.719E+00	755	2.166E+00
592	1.608E+01	633	2.224E+01	674	1.585E+01	715	6.567E+00	756	2.104E+00
593	1.626E+01	634	2.222E+01	675	1.560E+01	716	6.382E+00	757	2.041E+00
594	1.640E+01	635	2.222E+01	676	1.535E+01	717	6.212E+00	758	1.978E+00
595	1.660E+01	636	2.223E+01	677	1.506E+01	718	6.054E+00	759	1.918E+00
596	1.680E+01	637	2.219E+01	678	1.483E+01	719	5.899E+00	760	1.882E+00
597	1.694E+01	638	2.220E+01	679	1.455E+01	720	5.751E+00	761	1.820E+00
598	1.710E+01	639	2.211E+01	680	1.431E+01	721	5.624E+00	762	1.777E+00
599	1.733E+01	640	2.206E+01	681	1.404E+01	722	5.473E+00	763	1.726E+00
600	1.750E+01	641	2.202E+01	682	1.380E+01	723	5.315E+00	764	1.656E+00
601	1.770E+01	642	2.193E+01	683	1.351E+01	724	5.151E+00	765	1.608E+00
602	1.791E+01	643	2.187E+01	684	1.327E+01	725	5.040E+00	766	1.566E+00
603	1.811E+01	644	2.175E+01	685	1.302E+01	726	4.900E+00	767	1.522E+00
604	1.831E+01	645	2.167E+01	686	1.276E+01	727	4.767E+00	768	1.474E+00
605	1.850E+01	646	2.155E+01	687	1.251E+01	728	4.634E+00	769	1.432E+00
606	1.870E+01	647	2.146E+01	688	1.226E+01	729	4.514E+00	770	1.395E+00
607	1.889E+01	648	2.129E+01	689	1.200E+01	730	4.385E+00	771	1.351E+00
608	1.905E+01	649	2.116E+01	690	1.177E+01	731	4.279E+00	772	1.321E+00
609	1.927E+01	650	2.101E+01	691	1.153E+01	732	4.160E+00	773	1.273E+00
610	1.944E+01	651	2.087E+01	692	1.130E+01	733	4.046E+00	774	1.241E+00
611	1.965E+01	652	2.072E+01	693	1.105E+01	734	3.942E+00	775	1.201E+00
612	1.983E+01	653	2.056E+01	694	1.081E+01	735	3.814E+00	776	1.166E+00
613	2.001E+01	654	2.041E+01	695	1.059E+01	736	3.720E+00	777	1.140E+00
614	2.019E+01	655	2.020E+01	696	1.036E+01	737	3.612E+00	778	1.106E+00
615	2.040E+01	656	2.002E+01	697	1.011E+01	738	3.513E+00	779	1.090E+00
616	2.056E+01	657	1.982E+01	698	9.927E+00	739	3.416E+00	780	1.092E+00
617	2.072E+01	658	1.963E+01	699	9.677E+00	740	3.310E+00		
618	2.089E+01	659	1.939E+01	700	9.455E+00	741	3.220E+00		
619	2.102E+01	660	1.924E+01	701	9.216E+00	742	3.154E+00		
620	2.116E+01	661	1.901E+01	702	9.011E+00	743	3.043E+00		
621	2.131E+01	662	1.878E+01	703	8.829E+00	744	2.969E+00		
622	2.142E+01	663	1.858E+01	704	8.595E+00	745	2.872E+00		
623	2.158E+01	664	1.831E+01	705	8.386E+00	746	2.790E+00		
624	2.165E+01	665	1.806E+01	706	8.207E+00	747	2.718E+00		
625	2.177E+01	666	1.786E+01	707	7.982E+00	748	2.646E+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: **1.0 hour**

Test orientation: **Base up**

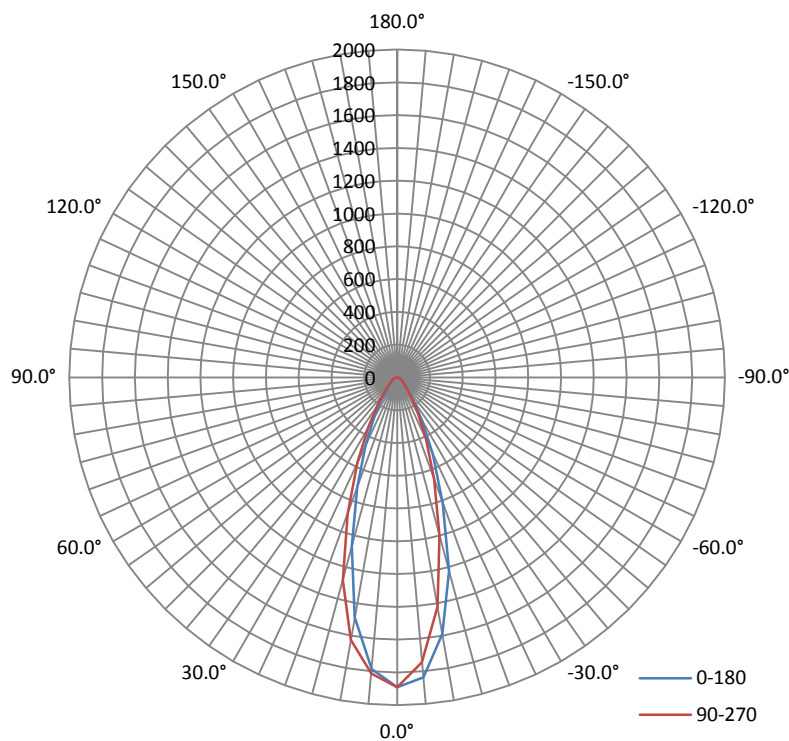
Electrical Measurement

Input Voltage (V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.08	60	0.0913	10.430	0.9514

Photometric Measurement

Luminous Flux (lm)	Efficacy (lm/W)	I _{max} (cd)	S/MH (C0/180)	S/MH (C90/270)
956.62	91.72	1893.0	0.60	0.52

Luminous Intensity Distribution



	C0/180	C45/225	C90/270	C135/315	AVG.
Beam Angle (50% I _{max}):	34.8	35.0	34.8	34.7	34.8
Field Angle (10% I _{max}):	68.3	68.6	69.0	68.5	68.6

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°	1891	1891	1891	1891	1891	1891	1891	1891
5.0°	1786	1813	1834	1824	1814	1803	1820	1833
10.0°	1486	1548	1598	1630	1626	1616	1627	1609
15.0°	1067	1135	1207	1258	1282	1285	1268	1235
20.0°	713	756	809	856	885	886	867	829
25.0°	457	486	518	554	570	573	562	533
30.0°	280	297	315	335	348	348	335	315
35.0°	165	176	189	201	208	206	198	186
40.0°	104	109	116	124	130	126	122	113
45.0°	69	73	77	81	84	83	80	76
50.0°	49	51	55	57	59	58	57	55
55.0°	40	41	43	44	45	45	45	43
60.0°	31	33	35	36	38	38	38	36
65.0°	23	24	26	26	27	28	27	26
70.0°	17	18	19	19	20	20	20	19
75.0°	12	12	13	14	14	14	14	14
80.0°	7	8	9	9	9	10	9	9
85.0°	3	4	4	5	5	5	5	5
90.0°	1	1	1	2	2	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°	1	1	1	1	1	1	1	1
145.0°	1	1	1	1	1	1	1	1
150.0°	2	2	2	2	2	2	2	2
155.0°	2	2	2	2	2	2	2	2
160.0°	2	2	2	2	2	2	2	2
165.0°	2	2	2	2	2	2	2	2
170.0°	2	2	2	2	2	2	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°	1891	1891	1891	1891	1891	1891	1891	1891
5.0°	1836	1813	1786	1761	1744	1736	1742	1768
10.0°	1589	1543	1494	1444	1419	1410	1425	1457
15.0°	1221	1156	1093	1036	999	989	1003	1045
20.0°	816	772	726	680	658	651	661	691
25.0°	514	485	456	428	417	414	424	443
30.0°	307	290	276	263	256	253	259	271
35.0°	182	173	166	161	157	154	158	163
40.0°	112	107	102	100	98	97	99	103
45.0°	74	71	68	67	66	66	66	67
50.0°	54	51	49	48	48	47	47	48
55.0°	42	40	39	39	39	38	39	40
60.0°	35	33	31	30	30	30	30	30
65.0°	25	24	23	22	22	22	22	23
70.0°	19	18	17	16	16	16	16	16
75.0°	13	13	12	11	11	11	11	11
80.0°	9	8	8	7	7	6	7	7
85.0°	4	4	3	3	3	3	3	3
90.0°	2	1	1	1	1	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°	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°	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)	%
0-5	44.0	4.60
5-10	119.0	12.44
10-15	157.9	16.51
15-20	154.8	16.18
20-25	129.1	13.49
25-30	97.3	10.17
30-35	67.9	7.10
35-40	46.7	4.88
40-45	33.1	3.46
45-50	24.8	2.59
50-55	20.1	2.10
55-60	17.4	1.81
60-65	13.9	1.45
65-70	10.7	1.12
70-75	7.9	0.83
75-80	5.4	0.56
80-85	3.2	0.34
85-90	1.3	0.14
90-95	0.3	0.03
95-100	0.0	0.00
100-105	0.0	0.00
105-110	0.0	0.00
110-115	0.0	0.00
115-120	0.0	0.00
120-125	0.0	0.00
125-130	0.0	0.01
130-135	0.1	0.01
135-140	0.1	0.01
140-145	0.2	0.02
145-150	0.3	0.03
150-155	0.3	0.03
155-160	0.3	0.03
160-165	0.3	0.03
165-170	0.2	0.02
170-175	0.1	0.01
175-180	0.0	0.00

Deg	Flux (lm)	%
0-5	44.0	4.60
0-10	163.0	17.04
0-15	320.9	33.55
0-20	475.7	49.73
0-25	604.8	63.22
0-30	702.1	73.39
0-35	770.0	80.49
0-40	816.7	85.37
0-45	849.8	88.83
0-50	874.6	91.42
0-55	894.6	93.52
0-60	912.0	95.33
0-65	925.9	96.78
0-70	936.5	97.90
0-75	944.4	98.73
0-80	949.9	99.29
0-85	953.1	99.63
0-90	954.4	99.77
0-95	954.7	99.80
0-100	954.7	99.80
0-105	954.7	99.80
0-110	954.7	99.80
0-115	954.7	99.80
0-120	954.7	99.80
0-125	954.7	99.80
0-130	954.8	99.81
0-135	954.9	99.82
0-140	955.0	99.83
0-145	955.2	99.85
0-150	955.5	99.88
0-155	955.7	99.91
0-160	956.0	99.94
0-165	956.3	99.97
0-170	956.5	99.99
0-175	956.6	100.00
0-180	956.6	100.00

[Additional Test]

Test Item	Test Voltage (V)	Frequency (Hz)	Test Result
Total Harmonic Distortion:	120.0	60	16.85%

6. Product Photo



7. Report Revision

Report Number	Report Date	Contents
KS2230727-43613E-EE-1	2023-08-25	Original report
KS2230727-43613E-EE-1-M1	2023-08-26	Update the Nominal Lumen Output on page 2

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*****