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, KL, Hong Kong

Test Model: SDSK6/9CCTS/DIM120V

Report Type:	Electrical and Photometric tests including: Luminous Flux, Power Factor, Chromaticity, Luminous Intensity Distribution.
Reviewed By:	Hill Liu Hill Liu
Report Number:	2402T37477E-EE-2
Test Date:	2024-05-30 to 2024-06-07
Report Date:	2024-07-01
Approved by:	Blake Zhang / EE Engineer Blake zhang
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 Location 1:	Test facility was located at No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.
Test Location 2:	Test facility was located at Room 301, No.113, Pingkang Road, Dalang, Dongguan, Guangdong, China.

1. Product Description#

General Information:

One test sample was in good condition and received on 2024-05-30, and used for testing.

Model Tested:	SDSK6/9CCTS/DIM120V
Manufacturer:	GREEN CREATIVE LTD
Brand Name:	GREEN CREATIVE
Product Designation:	LED Surface Mount Downlight
Burning Time Before Test:	0hour(For New Products)

Rated Values:

Rated Voltage/Frequency:	120V AC 60Hz
Rated Power:	12W
Nominal CCT:	2700K/3000K/3500K/4000K/5000K
Nominal Lumen Output:	900lm, 920lm, 1000lm, 1000lm, 1000lm

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	2023-09-02	2024-09-01
spectroradiometer	EVERFINE	HAAS-2000	G112048TS81331121	2023-09-02	2024-09-01
Digital Power Meter	EVERFINE	PF2010A	1011004	2023-09-02	2024-09-01
Digital CC&CV DC Power Supply	EVERFINE	WY305-V1	1101047	2023-09-02	2024-09-01
Standard Light Source	EVERFINE	D204	N/A	2023-05-12	2025-05-11
Special zero-voltage synchronous switching AC	EVERFINE	DPS1010-YF	1011001T	2023-09-02	2024-09-01
AC POWER SUPPLY	EVERFINE	VPS1030 PWM	1012017	2023-09-02	2024-09-01
Digital CC&CV DC Power Supply	EVERFINE	WY12010	1009009	2023-09-02	2024-09-01
Digital power meter	YOKOGAWA	WT-210	91j926132	2023-09-02	2024-09-01
full-field speed goniophotometer	EVERFINE	GO-R5000	YG108492N10120001	2023-09-02	2024-09-01
wireless remote thermohygrometer	N/A	AOK-5017B	N/A	2023-09-02	2024-09-01
Standard Light Source	EVERFINE	D908	N/A	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°C±1.2°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=22K (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. For luminous intensity distribution, The vertical angle (γ) test intervals were set no more than 2.5 degree ,The horizontal angle (C plane) test intervals were set no more than 22.5 degree. For color spatial uniformity, The vertical angle (γ) test intervals were set no more than 90 degree ,The horizontal angle (C plane) test intervals were set no more than 10 degree

The uncertainty of the luminous intensity is U=2.00% (K=2), at the 95% confidence level.

Fidelity Index and Gamut Index Calculation

The R_f, 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]

Test facility was located at Room 301, No.113, Pingkang Road, Dalang, Dongguan, Guangdong, China.

Control Setting: 3500K

The diameter of the sphere: 2M

The coating reflectance of sphere: 98%

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

Test orientation: **Downward**

Photometric and Electrical Measurement Result

Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
120.0	60	0.1028	11.36	0.9209	1010	88.91

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
3.381	3497	-0.00305	0.4023	0.3824	0.2372	0.5073

Color Rendering Index

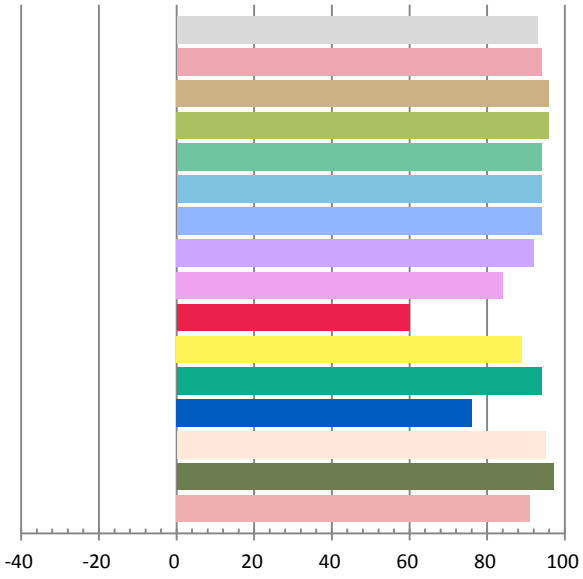
Ra
92.9

R1	R2	R3	R4
94	96	96	94

R5	R6	R7	R8
94	94	92	84

R9	R10	R11	R12
60	89	94	76

R13	R14	R15
95	97	91



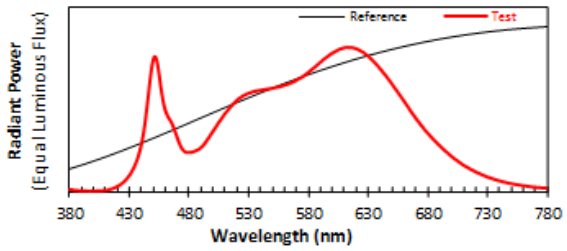
ANSI/IES TM-30-18 Color Rendition Report

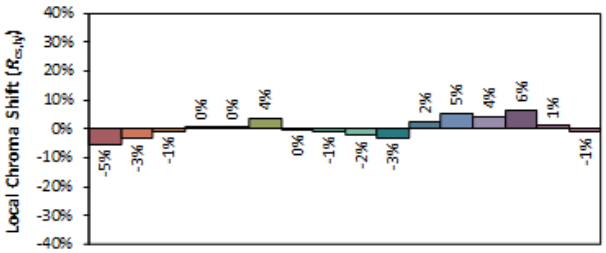
Source: User SPD

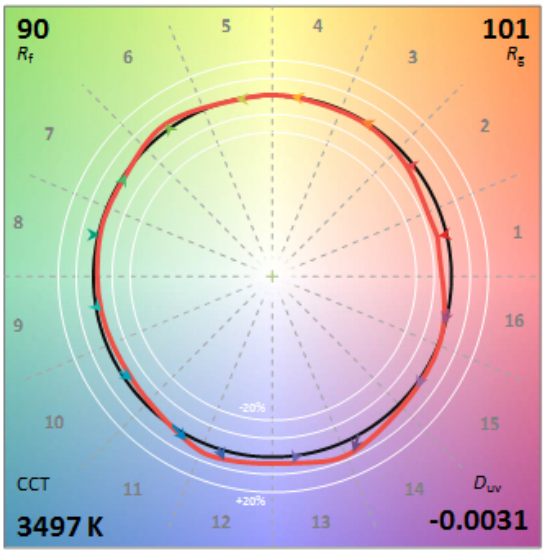
Manufacturer: GREEN CREATIVE LTD

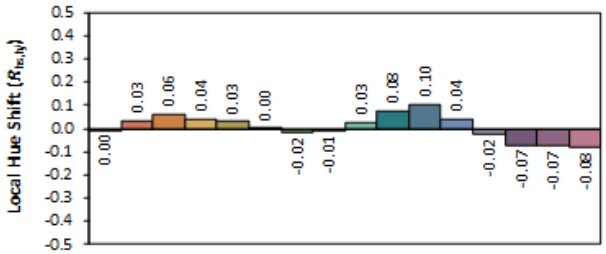
Date: 2024/5/30

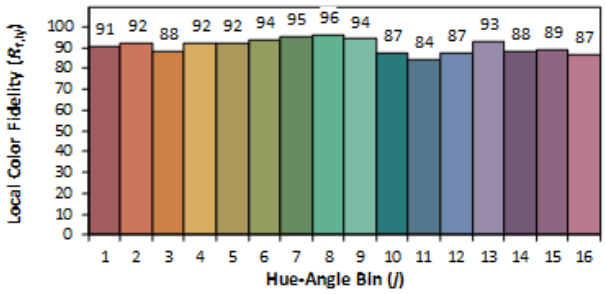
Model: SDSK6/9CCTS/DIM120V

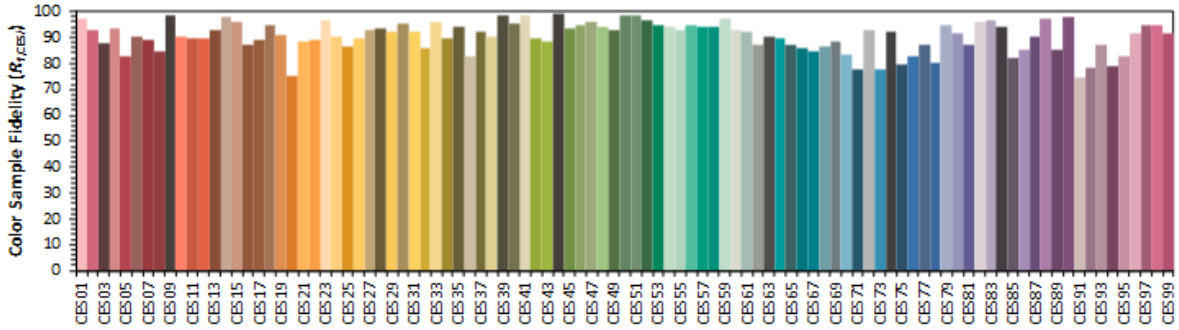












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

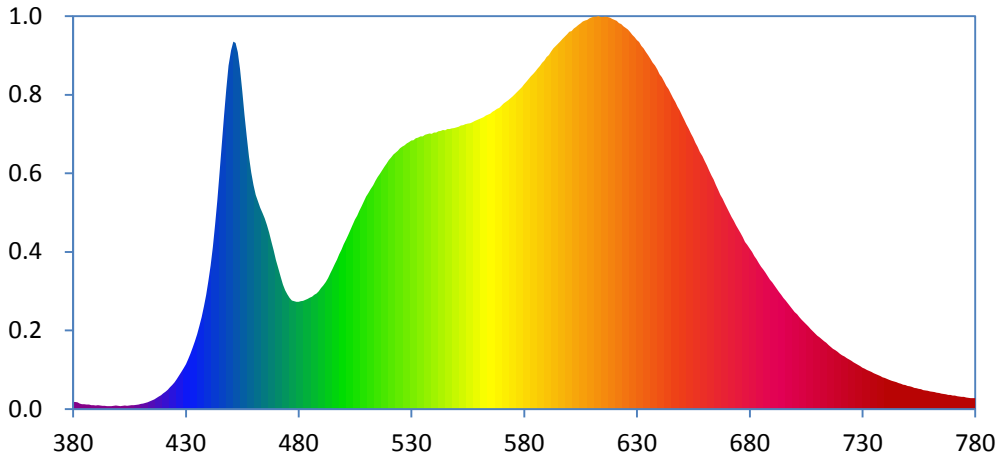
x	**0.4023**
y	**0.3822**
u'	**0.2373**
v'	**0.5072**

CIE 13.3-1995 (CRI)

R_a	93
R_9	60

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

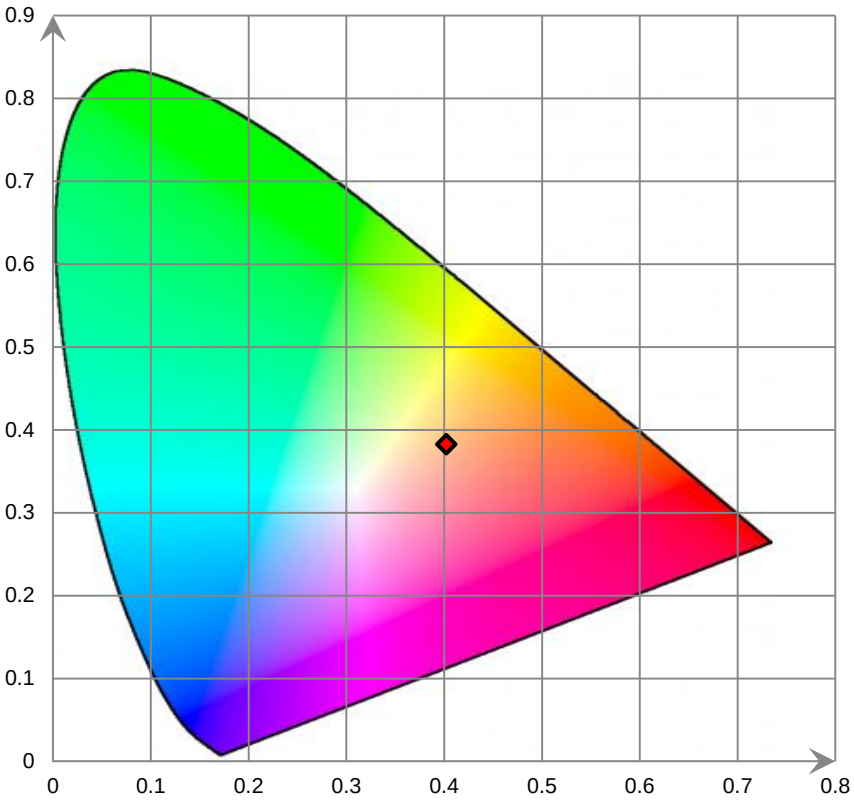
Relative Spectral Power Distribution



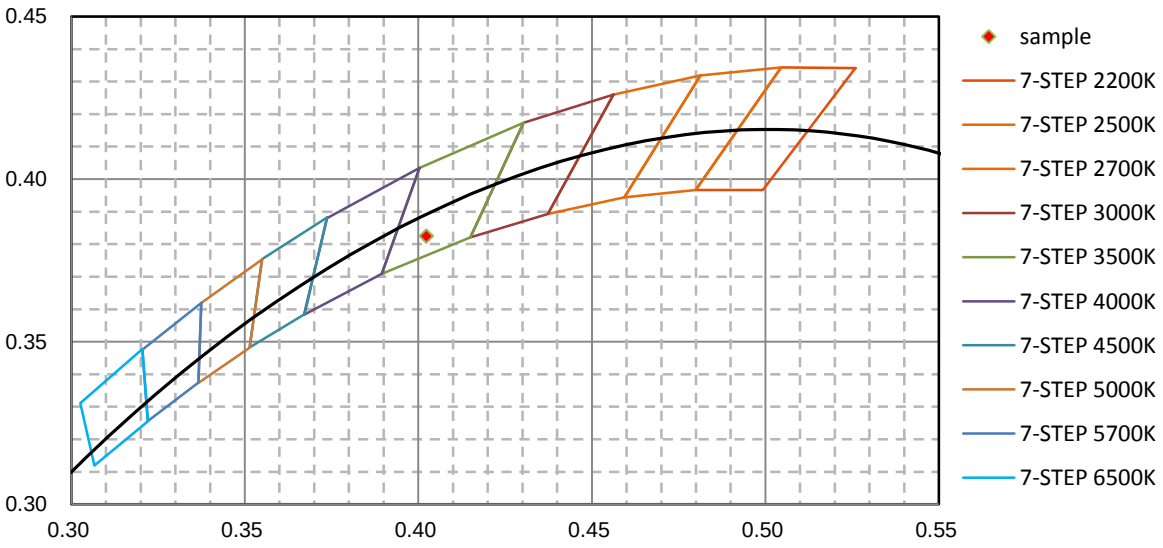
nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
380	3.262E-01	421	8.142E-01	462	9.846E+00	503	8.502E+00	544	1.323E+01
381	3.286E-01	422	9.040E-01	463	9.540E+00	504	8.738E+00	545	1.321E+01
382	3.139E-01	423	1.031E+00	464	9.304E+00	505	8.981E+00	546	1.327E+01
383	2.486E-01	424	1.134E+00	465	9.048E+00	506	9.164E+00	547	1.328E+01
384	2.184E-01	425	1.257E+00	466	8.726E+00	507	9.407E+00	548	1.331E+01
385	2.281E-01	426	1.403E+00	467	8.357E+00	508	9.618E+00	549	1.332E+01
386	2.064E-01	427	1.572E+00	468	7.938E+00	509	9.849E+00	550	1.335E+01
387	2.029E-01	428	1.740E+00	469	7.519E+00	510	1.008E+01	551	1.339E+01
388	1.816E-01	429	1.937E+00	470	7.076E+00	511	1.025E+01	552	1.344E+01
389	1.780E-01	430	2.125E+00	471	6.640E+00	512	1.042E+01	553	1.346E+01
390	1.582E-01	431	2.360E+00	472	6.267E+00	513	1.061E+01	554	1.350E+01
391	1.719E-01	432	2.621E+00	473	5.906E+00	514	1.081E+01	555	1.354E+01
392	1.689E-01	433	2.903E+00	474	5.627E+00	515	1.099E+01	556	1.354E+01
393	1.459E-01	434	3.212E+00	475	5.425E+00	516	1.116E+01	557	1.360E+01
394	1.492E-01	435	3.541E+00	476	5.269E+00	517	1.133E+01	558	1.365E+01
395	1.376E-01	436	3.945E+00	477	5.143E+00	518	1.149E+01	559	1.370E+01
396	1.376E-01	437	4.358E+00	478	5.110E+00	519	1.164E+01	560	1.375E+01
397	1.260E-01	438	4.852E+00	479	5.088E+00	520	1.180E+01	561	1.380E+01
398	1.500E-01	439	5.401E+00	480	5.089E+00	521	1.192E+01	562	1.384E+01
399	1.652E-01	440	6.066E+00	481	5.109E+00	522	1.206E+01	563	1.391E+01
400	1.461E-01	441	6.790E+00	482	5.130E+00	523	1.216E+01	564	1.396E+01
401	1.330E-01	442	7.684E+00	483	5.171E+00	524	1.224E+01	565	1.400E+01
402	1.458E-01	443	8.739E+00	484	5.213E+00	525	1.236E+01	566	1.410E+01
403	1.599E-01	444	9.890E+00	485	5.281E+00	526	1.244E+01	567	1.416E+01
404	1.499E-01	445	1.121E+01	486	5.322E+00	527	1.251E+01	568	1.423E+01
405	1.558E-01	446	1.257E+01	487	5.414E+00	528	1.259E+01	569	1.428E+01
406	1.747E-01	447	1.391E+01	488	5.475E+00	529	1.266E+01	570	1.438E+01
407	1.760E-01	448	1.518E+01	489	5.587E+00	530	1.273E+01	571	1.450E+01
408	1.949E-01	449	1.628E+01	490	5.733E+00	531	1.275E+01	572	1.457E+01
409	2.140E-01	450	1.702E+01	491	5.862E+00	532	1.283E+01	573	1.465E+01
410	2.383E-01	451	1.742E+01	492	6.027E+00	533	1.287E+01	574	1.474E+01
411	2.525E-01	452	1.736E+01	493	6.211E+00	534	1.293E+01	575	1.482E+01
412	2.858E-01	453	1.692E+01	494	6.432E+00	535	1.293E+01	576	1.494E+01
413	3.121E-01	454	1.613E+01	495	6.648E+00	536	1.301E+01	577	1.505E+01
414	3.591E-01	455	1.507E+01	496	6.874E+00	537	1.303E+01	578	1.517E+01
415	3.994E-01	456	1.393E+01	497	7.090E+00	538	1.307E+01	579	1.526E+01
416	4.534E-01	457	1.292E+01	498	7.342E+00	539	1.306E+01	580	1.540E+01
417	5.182E-01	458	1.196E+01	499	7.562E+00	540	1.311E+01	581	1.553E+01
418	5.827E-01	459	1.122E+01	500	7.815E+00	541	1.311E+01	582	1.566E+01
419	6.478E-01	460	1.062E+01	501	8.023E+00	542	1.318E+01	583	1.579E+01
420	7.356E-01	461	1.016E+01	502	8.256E+00	543	1.318E+01	584	1.590E+01

nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
585	1.602E+01	626	1.800E+01	667	1.015E+01	708	3.685E+00	749	1.128E+00
586	1.615E+01	627	1.788E+01	668	9.968E+00	709	3.574E+00	750	1.094E+00
587	1.628E+01	628	1.774E+01	669	9.744E+00	710	3.474E+00	751	1.070E+00
588	1.643E+01	629	1.763E+01	670	9.529E+00	711	3.393E+00	752	1.041E+00
589	1.654E+01	630	1.750E+01	671	9.308E+00	712	3.299E+00	753	1.004E+00
590	1.670E+01	631	1.741E+01	672	9.109E+00	713	3.215E+00	754	9.813E-01
591	1.679E+01	632	1.722E+01	673	8.922E+00	714	3.137E+00	755	9.463E-01
592	1.696E+01	633	1.710E+01	674	8.705E+00	715	3.034E+00	756	9.361E-01
593	1.710E+01	634	1.693E+01	675	8.523E+00	716	2.939E+00	757	8.967E-01
594	1.721E+01	635	1.679E+01	676	8.342E+00	717	2.855E+00	758	8.811E-01
595	1.732E+01	636	1.661E+01	677	8.143E+00	718	2.792E+00	759	8.643E-01
596	1.742E+01	637	1.644E+01	678	7.926E+00	719	2.710E+00	760	8.368E-01
597	1.756E+01	638	1.628E+01	679	7.789E+00	720	2.628E+00	761	8.155E-01
598	1.766E+01	639	1.611E+01	680	7.598E+00	721	2.542E+00	762	8.013E-01
599	1.777E+01	640	1.588E+01	681	7.443E+00	722	2.485E+00	763	7.655E-01
600	1.790E+01	641	1.574E+01	682	7.246E+00	723	2.408E+00	764	7.550E-01
601	1.792E+01	642	1.554E+01	683	7.098E+00	724	2.352E+00	765	7.309E-01
602	1.804E+01	643	1.532E+01	684	6.912E+00	725	2.288E+00	766	7.135E-01
603	1.812E+01	644	1.517E+01	685	6.757E+00	726	2.206E+00	767	6.943E-01
604	1.822E+01	645	1.497E+01	686	6.606E+00	727	2.151E+00	768	6.677E-01
605	1.828E+01	646	1.476E+01	687	6.460E+00	728	2.087E+00	769	6.556E-01
606	1.838E+01	647	1.457E+01	688	6.300E+00	729	2.024E+00	770	6.345E-01
607	1.843E+01	648	1.435E+01	689	6.125E+00	730	1.954E+00	771	6.269E-01
608	1.845E+01	649	1.416E+01	690	6.003E+00	731	1.902E+00	772	6.011E-01
609	1.853E+01	650	1.393E+01	691	5.850E+00	732	1.842E+00	773	5.945E-01
610	1.857E+01	651	1.372E+01	692	5.699E+00	733	1.806E+00	774	5.727E-01
611	1.860E+01	652	1.349E+01	693	5.547E+00	734	1.752E+00	775	5.689E-01
612	1.862E+01	653	1.329E+01	694	5.419E+00	735	1.701E+00	776	5.465E-01
613	1.864E+01	654	1.306E+01	695	5.260E+00	736	1.643E+00	777	5.275E-01
614	1.859E+01	655	1.287E+01	696	5.146E+00	737	1.598E+00	778	5.149E-01
615	1.859E+01	656	1.262E+01	697	5.012E+00	738	1.555E+00	779	5.156E-01
616	1.861E+01	657	1.243E+01	698	4.869E+00	739	1.505E+00	780	5.162E-01
617	1.859E+01	658	1.219E+01	699	4.736E+00	740	1.466E+00		
618	1.856E+01	659	1.198E+01	700	4.598E+00	741	1.419E+00		
619	1.851E+01	660	1.176E+01	701	4.483E+00	742	1.382E+00		
620	1.845E+01	661	1.154E+01	702	4.351E+00	743	1.337E+00		
621	1.841E+01	662	1.131E+01	703	4.233E+00	744	1.303E+00		
622	1.831E+01	663	1.108E+01	704	4.132E+00	745	1.266E+00		
623	1.825E+01	664	1.088E+01	705	4.014E+00	746	1.228E+00		
624	1.815E+01	665	1.062E+01	706	3.911E+00	747	1.195E+00		
625	1.807E+01	666	1.039E+01	707	3.797E+00	748	1.154E+00		

CIE 1931 x y Chromaticity Diagram



7-Step Chromaticity Quadrangles



Control Setting: 2700K

The diameter of the sphere: 2M

The coating reflectance of sphere: 98%

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

Test orientation: **Downward**

Photometric and Electrical Measurement Result

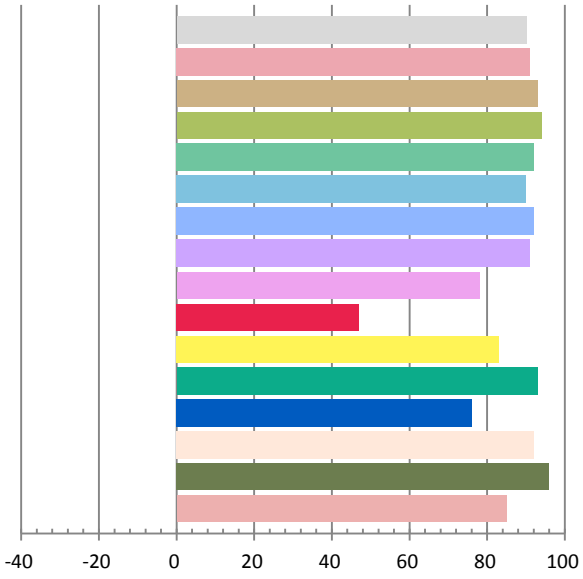
Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
120.0	60	0.1016	11.17	0.9162	928.28	83.1

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
3.101	2777	0.000883	0.4552	0.4119	0.2589	0.5271

Color Rendering Index

Ra
90.1

R1	R2	R3	R4
91	93	94	92
R5	R6	R7	R8
90	92	91	78
R9	R10	R11	R12
47	83	93	76
R13	R14	R15	
92	96	85	



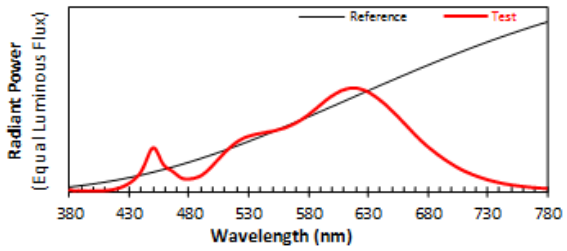
ANSI/IES TM-30-18 Color Rendition Report

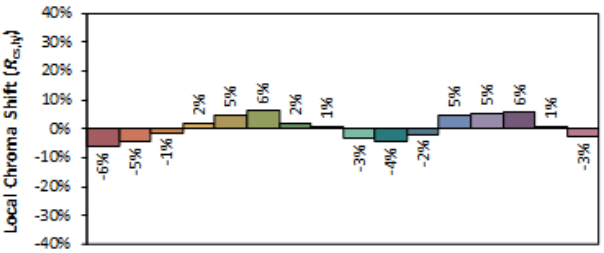
Source: User SPD

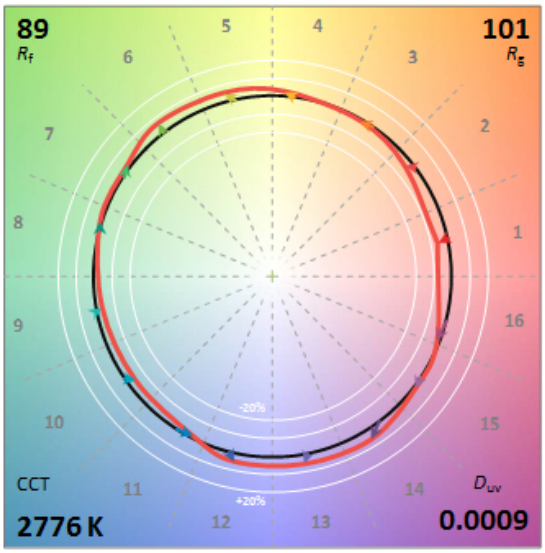
Manufacturer: GREEN CREATIVE LTD

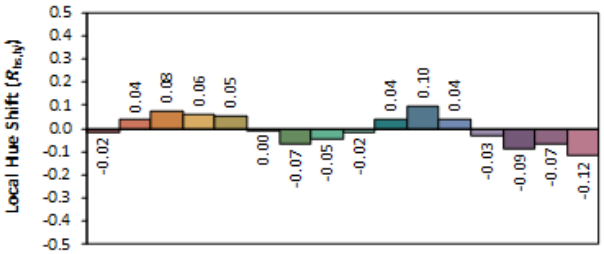
Date: 2024/5/30

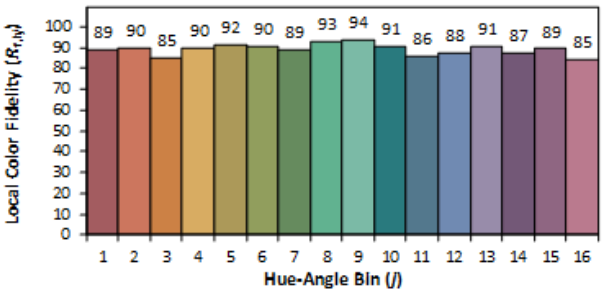
Model: SDSK6/9CCTS/DIM120V

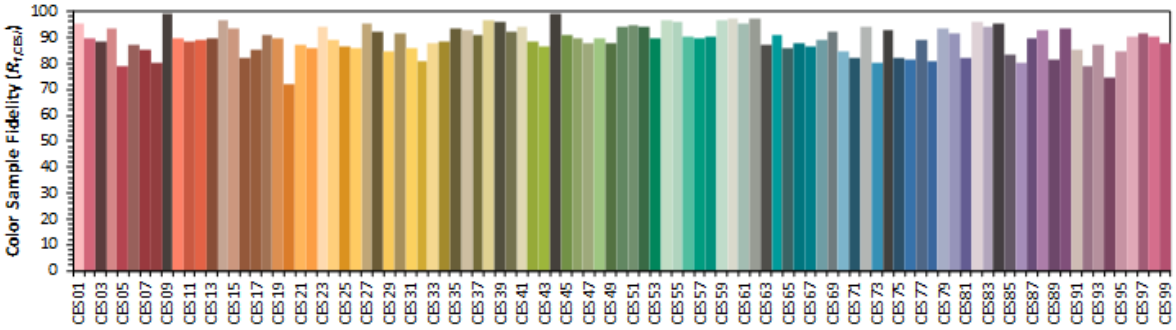












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

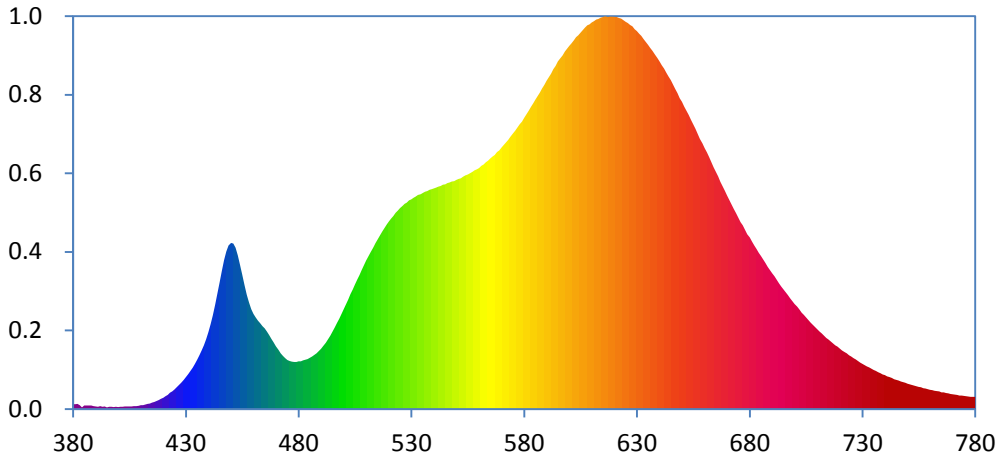
x	0.4552
y	0.4118
u'	0.2590
v'	0.5271

CIE 13.3-1995 (CRI)

R_a	90
R_9	47

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

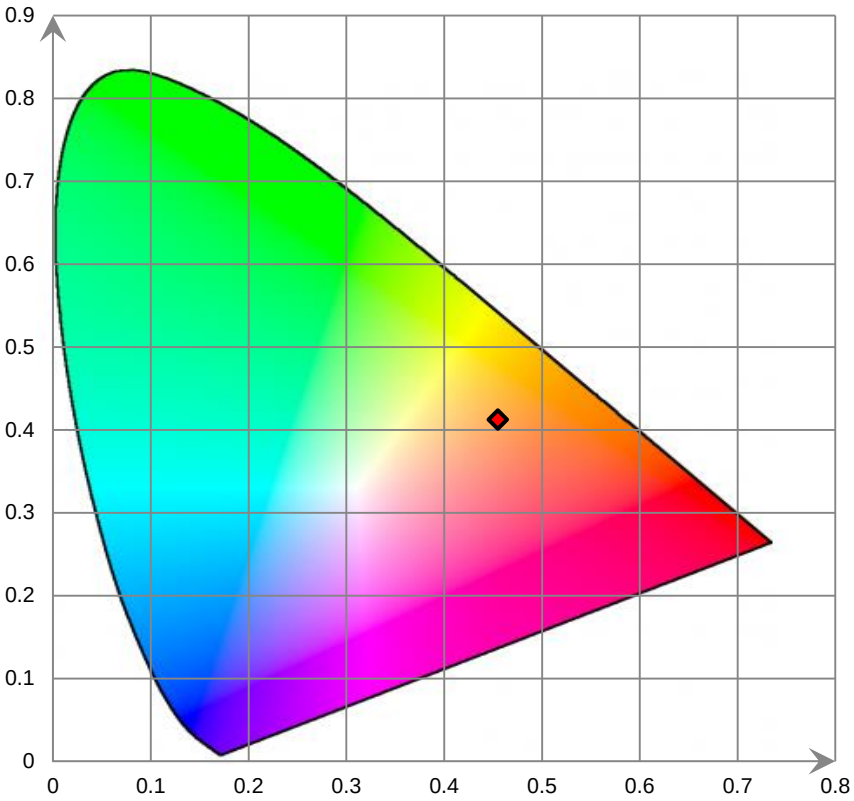
Relative Spectral Power Distribution



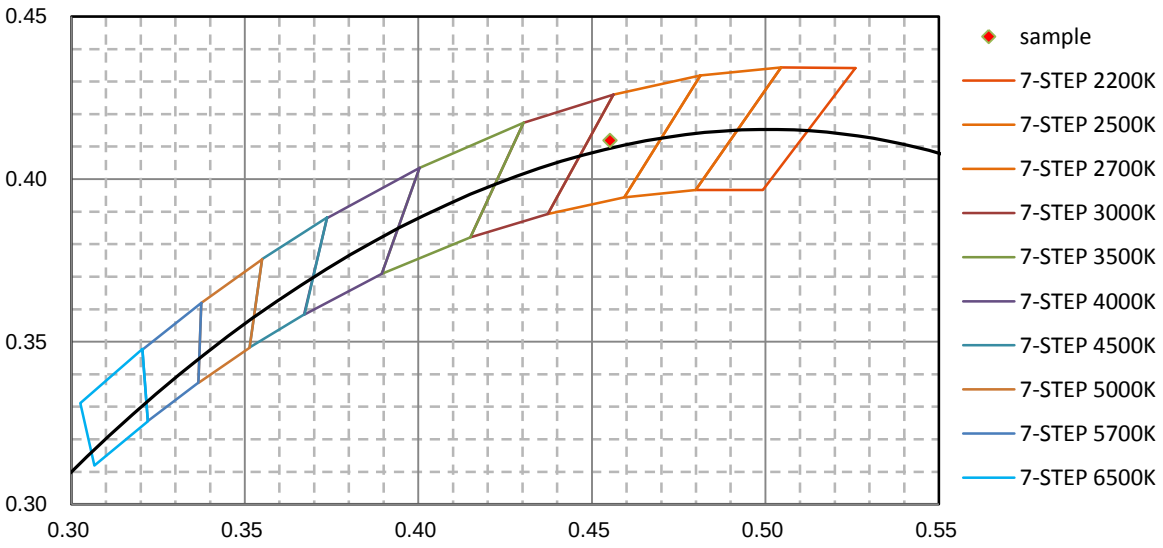
nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
380	2.377E-01	421	6.437E-01	462	4.463E+00	503	5.810E+00	544	1.135E+01
381	2.413E-01	422	7.043E-01	463	4.335E+00	504	6.040E+00	545	1.138E+01
382	2.538E-01	423	8.160E-01	464	4.194E+00	505	6.297E+00	546	1.145E+01
383	1.933E-01	424	8.870E-01	465	4.080E+00	506	6.546E+00	547	1.147E+01
384	7.313E-02	425	9.816E-01	466	3.911E+00	507	6.773E+00	548	1.152E+01
385	1.767E-01	426	1.090E+00	467	3.738E+00	508	7.031E+00	549	1.155E+01
386	1.691E-01	427	1.212E+00	468	3.550E+00	509	7.272E+00	550	1.160E+01
387	1.691E-01	428	1.319E+00	469	3.369E+00	510	7.512E+00	551	1.165E+01
388	1.643E-01	429	1.466E+00	470	3.176E+00	511	7.724E+00	552	1.169E+01
389	1.352E-01	430	1.610E+00	471	2.991E+00	512	7.940E+00	553	1.176E+01
390	1.253E-01	431	1.759E+00	472	2.823E+00	513	8.171E+00	554	1.183E+01
391	1.107E-01	432	1.917E+00	473	2.688E+00	514	8.398E+00	555	1.189E+01
392	1.450E-01	433	2.093E+00	474	2.570E+00	515	8.590E+00	556	1.194E+01
393	1.086E-01	434	2.275E+00	475	2.482E+00	516	8.789E+00	557	1.201E+01
394	1.276E-01	435	2.496E+00	476	2.428E+00	517	8.984E+00	558	1.209E+01
395	8.371E-02	436	2.710E+00	477	2.402E+00	518	9.160E+00	559	1.214E+01
396	1.033E-01	437	2.969E+00	478	2.383E+00	519	9.336E+00	560	1.221E+01
397	1.051E-01	438	3.217E+00	479	2.376E+00	520	9.491E+00	561	1.231E+01
398	9.942E-02	439	3.522E+00	480	2.405E+00	521	9.646E+00	562	1.239E+01
399	1.122E-01	440	3.888E+00	481	2.414E+00	522	9.778E+00	563	1.249E+01
400	8.953E-02	441	4.295E+00	482	2.465E+00	523	9.932E+00	564	1.258E+01
401	1.026E-01	442	4.745E+00	483	2.489E+00	524	1.004E+01	565	1.269E+01
402	1.076E-01	443	5.268E+00	484	2.532E+00	525	1.018E+01	566	1.279E+01
403	1.168E-01	444	5.827E+00	485	2.591E+00	526	1.028E+01	567	1.287E+01
404	1.204E-01	445	6.402E+00	486	2.657E+00	527	1.039E+01	568	1.302E+01
405	1.217E-01	446	6.979E+00	487	2.739E+00	528	1.046E+01	569	1.310E+01
406	1.298E-01	447	7.528E+00	488	2.813E+00	529	1.056E+01	570	1.324E+01
407	1.398E-01	448	7.969E+00	489	2.921E+00	530	1.062E+01	571	1.338E+01
408	1.401E-01	449	8.274E+00	490	3.044E+00	531	1.069E+01	572	1.349E+01
409	1.533E-01	450	8.412E+00	491	3.183E+00	532	1.076E+01	573	1.362E+01
410	1.881E-01	451	8.371E+00	492	3.348E+00	533	1.084E+01	574	1.379E+01
411	1.902E-01	452	8.167E+00	493	3.523E+00	534	1.087E+01	575	1.394E+01
412	2.202E-01	453	7.780E+00	494	3.705E+00	535	1.094E+01	576	1.410E+01
413	2.536E-01	454	7.296E+00	495	3.911E+00	536	1.100E+01	577	1.426E+01
414	2.749E-01	455	6.790E+00	496	4.128E+00	537	1.104E+01	578	1.442E+01
415	3.154E-01	456	6.263E+00	497	4.357E+00	538	1.110E+01	579	1.456E+01
416	3.556E-01	457	5.779E+00	498	4.570E+00	539	1.114E+01	580	1.475E+01
417	4.062E-01	458	5.389E+00	499	4.803E+00	540	1.118E+01	581	1.493E+01
418	4.563E-01	459	5.057E+00	500	5.053E+00	541	1.122E+01	582	1.511E+01
419	5.169E-01	460	4.817E+00	501	5.293E+00	542	1.126E+01	583	1.530E+01
420	5.692E-01	461	4.633E+00	502	5.548E+00	543	1.130E+01	584	1.548E+01

nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
585	1.567E+01	626	1.954E+01	667	1.151E+01	708	4.262E+00	749	1.320E+00
586	1.585E+01	627	1.945E+01	668	1.128E+01	709	4.140E+00	750	1.275E+00
587	1.603E+01	628	1.938E+01	669	1.105E+01	710	4.028E+00	751	1.236E+00
588	1.624E+01	629	1.925E+01	670	1.081E+01	711	3.912E+00	752	1.207E+00
589	1.643E+01	630	1.915E+01	671	1.058E+01	712	3.816E+00	753	1.173E+00
590	1.662E+01	631	1.901E+01	672	1.036E+01	713	3.713E+00	754	1.149E+00
591	1.681E+01	632	1.889E+01	673	1.013E+01	714	3.601E+00	755	1.120E+00
592	1.699E+01	633	1.874E+01	674	9.911E+00	715	3.522E+00	756	1.091E+00
593	1.721E+01	634	1.859E+01	675	9.683E+00	716	3.418E+00	757	1.052E+00
594	1.738E+01	635	1.845E+01	676	9.458E+00	717	3.324E+00	758	1.035E+00
595	1.759E+01	636	1.829E+01	677	9.297E+00	718	3.223E+00	759	1.001E+00
596	1.774E+01	637	1.813E+01	678	9.068E+00	719	3.150E+00	760	9.715E-01
597	1.791E+01	638	1.795E+01	679	8.851E+00	720	3.052E+00	761	9.568E-01
598	1.810E+01	639	1.778E+01	680	8.686E+00	721	2.957E+00	762	9.241E-01
599	1.825E+01	640	1.761E+01	681	8.472E+00	722	2.882E+00	763	9.012E-01
600	1.840E+01	641	1.741E+01	682	8.280E+00	723	2.811E+00	764	8.811E-01
601	1.852E+01	642	1.725E+01	683	8.107E+00	724	2.711E+00	765	8.469E-01
602	1.868E+01	643	1.704E+01	684	7.908E+00	725	2.657E+00	766	8.398E-01
603	1.883E+01	644	1.684E+01	685	7.737E+00	726	2.573E+00	767	8.053E-01
604	1.894E+01	645	1.666E+01	686	7.560E+00	727	2.504E+00	768	7.850E-01
605	1.906E+01	646	1.643E+01	687	7.389E+00	728	2.423E+00	769	7.552E-01
606	1.919E+01	647	1.621E+01	688	7.193E+00	729	2.354E+00	770	7.343E-01
607	1.932E+01	648	1.599E+01	689	7.031E+00	730	2.283E+00	771	7.279E-01
608	1.943E+01	649	1.574E+01	690	6.868E+00	731	2.213E+00	772	7.033E-01
609	1.949E+01	650	1.556E+01	691	6.722E+00	732	2.158E+00	773	6.817E-01
610	1.957E+01	651	1.532E+01	692	6.548E+00	733	2.095E+00	774	6.707E-01
611	1.965E+01	652	1.510E+01	693	6.372E+00	734	2.038E+00	775	6.626E-01
612	1.973E+01	653	1.489E+01	694	6.205E+00	735	1.967E+00	776	6.363E-01
613	1.977E+01	654	1.466E+01	695	6.063E+00	736	1.928E+00	777	6.190E-01
614	1.982E+01	655	1.442E+01	696	5.906E+00	737	1.859E+00	778	6.061E-01
615	1.986E+01	656	1.420E+01	697	5.760E+00	738	1.814E+00	779	6.068E-01
616	1.988E+01	657	1.393E+01	698	5.609E+00	739	1.749E+00	780	6.076E-01
617	1.985E+01	658	1.368E+01	699	5.461E+00	740	1.705E+00		
618	1.987E+01	659	1.346E+01	700	5.321E+00	741	1.655E+00		
619	1.987E+01	660	1.322E+01	701	5.184E+00	742	1.612E+00		
620	1.986E+01	661	1.300E+01	702	5.042E+00	743	1.567E+00		
621	1.986E+01	662	1.276E+01	703	4.881E+00	744	1.506E+00		
622	1.980E+01	663	1.249E+01	704	4.756E+00	745	1.468E+00		
623	1.977E+01	664	1.224E+01	705	4.628E+00	746	1.432E+00		
624	1.969E+01	665	1.201E+01	706	4.503E+00	747	1.393E+00		
625	1.962E+01	666	1.178E+01	707	4.377E+00	748	1.362E+00		

CIE 1931 x y Chromaticity Diagram



7-Step Chromaticity Quadrangles



Control Setting: 3000K

The diameter of the sphere: 2M

The coating reflectance of sphere: 98%

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

Test orientation: **Downward**

Photometric and Electrical Measurement Result

Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
120.0	60	0.1018	11.19	0.916	952.7	85.14

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
3.187	3000	-0.00121	0.4352	0.4005	0.2510	0.5197

Color Rendering Index

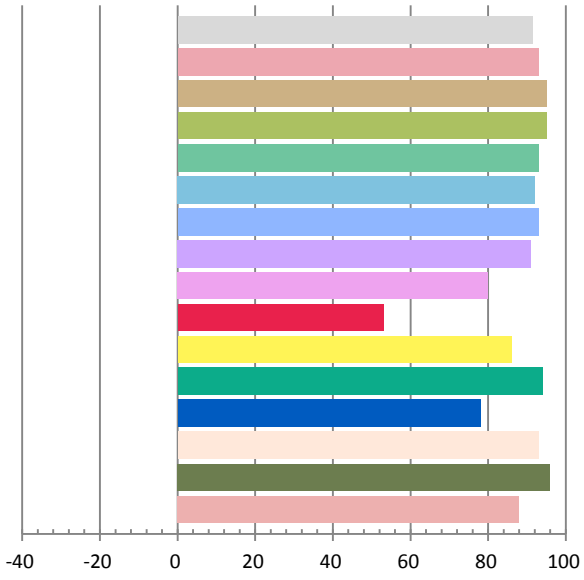
Ra
91.4

R1	R2	R3	R4
93	95	95	93

R5	R6	R7	R8
92	93	91	80

R9	R10	R11	R12
53	86	94	78

R13	R14	R15
93	96	88



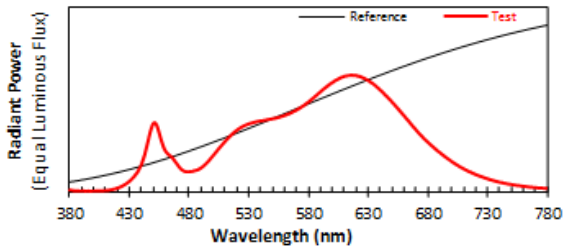
ANSI/IES TM-30-18 Color Rendition Report

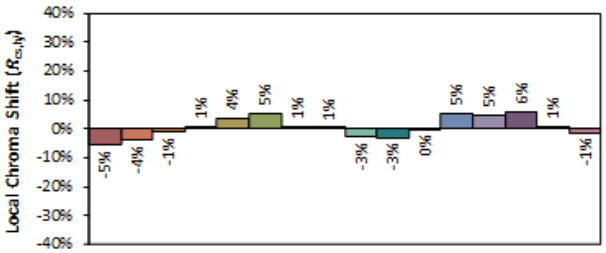
Source: User SPD

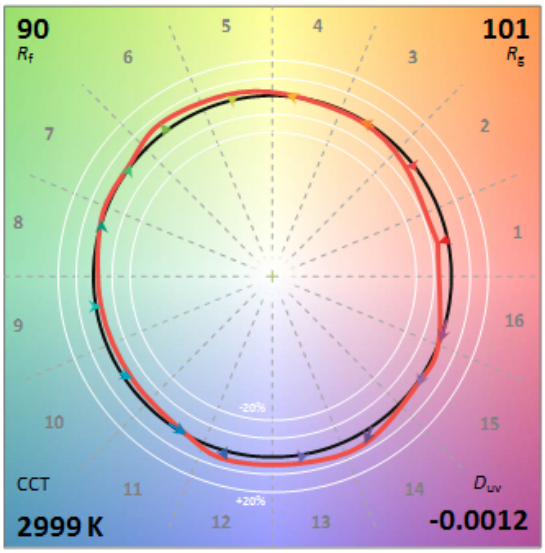
Manufacturer: GREEN CREATIVE LTD

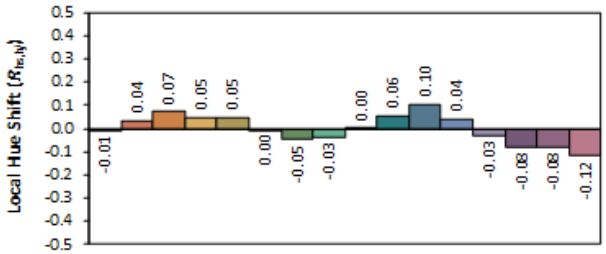
Date: 2024/5/30

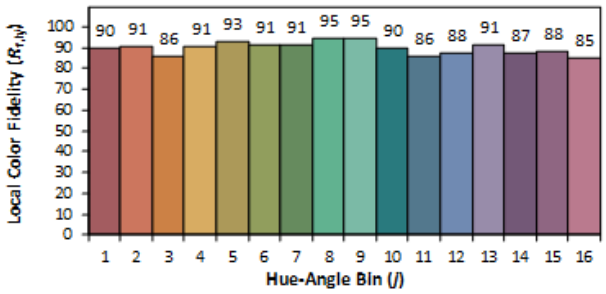
Model: SDSK6/9CCTS/DIM120V

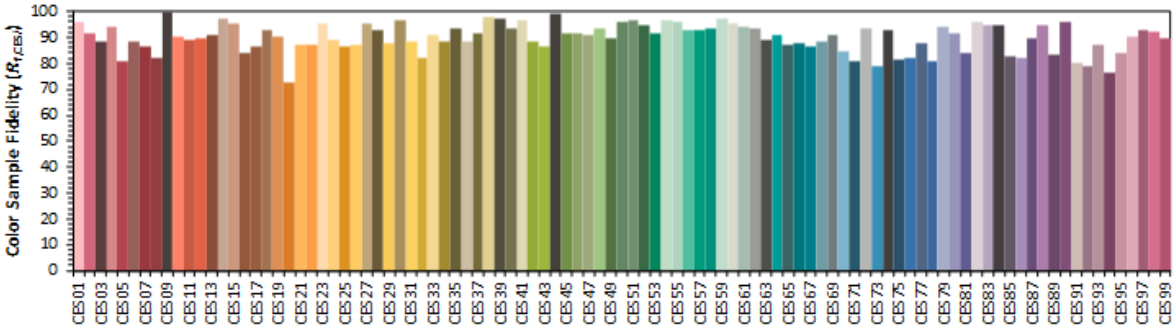












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

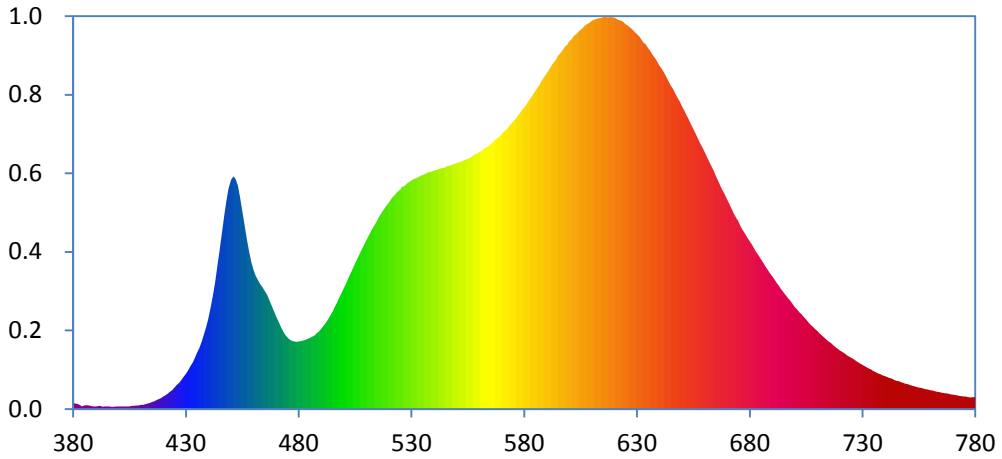
x	0.4352
y	0.4004
u'	0.2510
v'	0.5197

CIE 13.3-1995 (CRI)

R_a	91
R_9	53

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

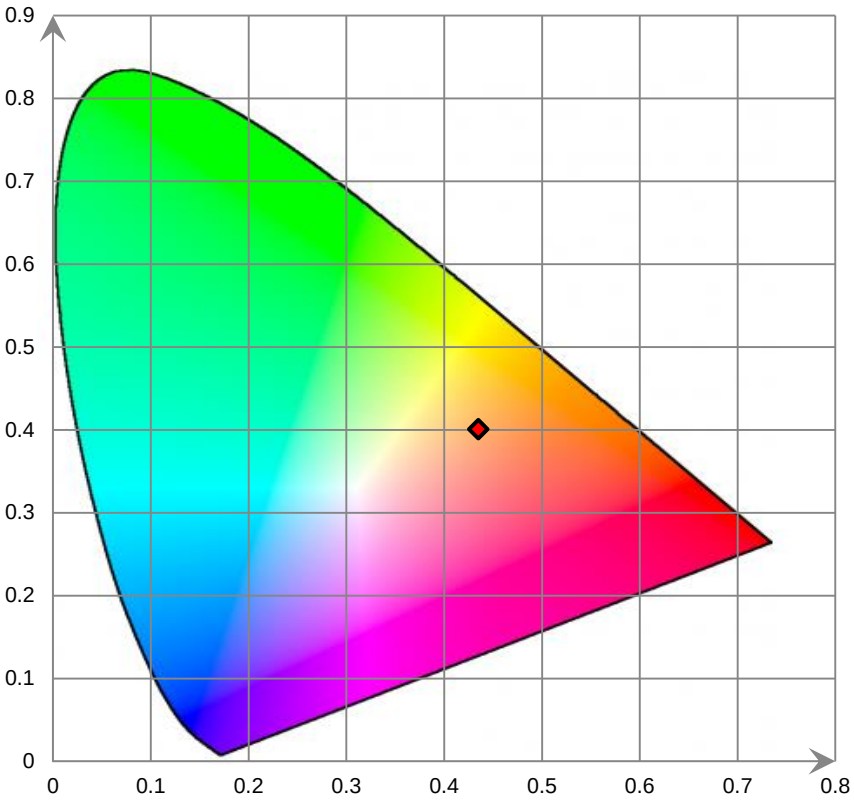
Relative Spectral Power Distribution



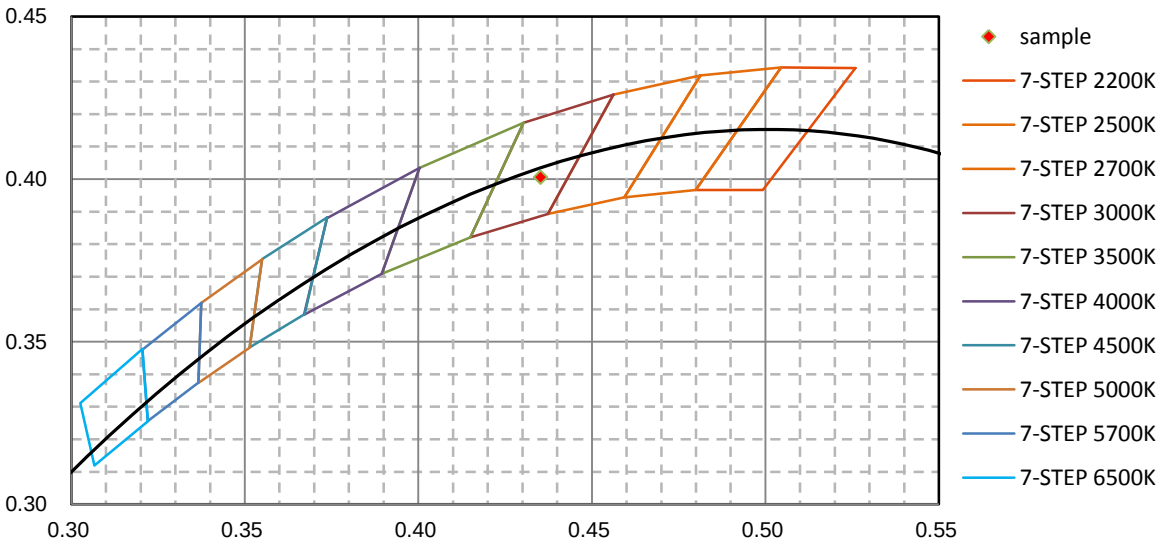
nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
380	2.886E-01	421	6.772E-01	462	6.368E+00	503	6.692E+00	544	1.191E+01
381	2.661E-01	422	7.557E-01	463	6.169E+00	504	6.922E+00	545	1.195E+01
382	2.483E-01	423	8.446E-01	464	6.017E+00	505	7.183E+00	546	1.202E+01
383	2.022E-01	424	9.338E-01	465	5.843E+00	506	7.401E+00	547	1.203E+01
384	1.206E-01	425	1.051E+00	466	5.666E+00	507	7.634E+00	548	1.208E+01
385	1.691E-01	426	1.186E+00	467	5.413E+00	508	7.871E+00	549	1.211E+01
386	1.929E-01	427	1.281E+00	468	5.136E+00	509	8.105E+00	550	1.215E+01
387	1.608E-01	428	1.421E+00	469	4.870E+00	510	8.323E+00	551	1.219E+01
388	1.411E-01	429	1.587E+00	470	4.604E+00	511	8.537E+00	552	1.222E+01
389	1.234E-01	430	1.734E+00	471	4.330E+00	512	8.752E+00	553	1.228E+01
390	1.187E-01	431	1.908E+00	472	4.070E+00	513	8.978E+00	554	1.232E+01
391	1.309E-01	432	2.110E+00	473	3.848E+00	514	9.163E+00	555	1.238E+01
392	1.458E-01	433	2.291E+00	474	3.662E+00	515	9.359E+00	556	1.241E+01
393	1.065E-01	434	2.525E+00	475	3.543E+00	516	9.571E+00	557	1.250E+01
394	1.204E-01	435	2.790E+00	476	3.421E+00	517	9.741E+00	558	1.257E+01
395	1.146E-01	436	3.025E+00	477	3.368E+00	518	9.910E+00	559	1.262E+01
396	1.221E-01	437	3.317E+00	478	3.338E+00	519	1.007E+01	560	1.268E+01
397	1.070E-01	438	3.689E+00	479	3.321E+00	520	1.021E+01	561	1.275E+01
398	1.087E-01	439	4.047E+00	480	3.336E+00	521	1.038E+01	562	1.285E+01
399	1.290E-01	440	4.472E+00	481	3.353E+00	522	1.051E+01	563	1.292E+01
400	1.147E-01	441	5.012E+00	482	3.389E+00	523	1.063E+01	564	1.299E+01
401	1.176E-01	442	5.591E+00	483	3.411E+00	524	1.076E+01	565	1.307E+01
402	1.162E-01	443	6.239E+00	484	3.463E+00	525	1.084E+01	566	1.318E+01
403	1.197E-01	444	7.052E+00	485	3.515E+00	526	1.099E+01	567	1.327E+01
404	1.208E-01	445	7.828E+00	486	3.577E+00	527	1.103E+01	568	1.339E+01
405	1.259E-01	446	8.676E+00	487	3.626E+00	528	1.114E+01	569	1.345E+01
406	1.517E-01	447	9.491E+00	488	3.730E+00	529	1.121E+01	570	1.359E+01
407	1.517E-01	448	1.026E+01	489	3.831E+00	530	1.129E+01	571	1.370E+01
408	1.735E-01	449	1.090E+01	490	3.947E+00	531	1.137E+01	572	1.380E+01
409	1.774E-01	450	1.133E+01	491	4.099E+00	532	1.141E+01	573	1.392E+01
410	1.977E-01	451	1.151E+01	492	4.257E+00	533	1.145E+01	574	1.407E+01
411	2.087E-01	452	1.137E+01	493	4.425E+00	534	1.153E+01	575	1.419E+01
412	2.252E-01	453	1.106E+01	494	4.619E+00	535	1.157E+01	576	1.432E+01
413	2.645E-01	454	1.048E+01	495	4.809E+00	536	1.162E+01	577	1.447E+01
414	2.973E-01	455	9.791E+00	496	5.041E+00	537	1.168E+01	578	1.463E+01
415	3.360E-01	456	9.108E+00	497	5.250E+00	538	1.172E+01	579	1.478E+01
416	3.688E-01	457	8.420E+00	498	5.505E+00	539	1.173E+01	580	1.491E+01
417	4.326E-01	458	7.812E+00	499	5.718E+00	540	1.179E+01	581	1.507E+01
418	4.833E-01	459	7.279E+00	500	5.966E+00	541	1.181E+01	582	1.523E+01
419	5.409E-01	460	6.880E+00	501	6.183E+00	542	1.185E+01	583	1.540E+01
420	6.206E-01	461	6.576E+00	502	6.446E+00	543	1.189E+01	584	1.557E+01

nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
585	1.572E+01	626	1.895E+01	667	1.103E+01	708	4.062E+00	749	1.248E+00
586	1.591E+01	627	1.886E+01	668	1.081E+01	709	3.953E+00	750	1.223E+00
587	1.606E+01	628	1.877E+01	669	1.061E+01	710	3.854E+00	751	1.183E+00
588	1.628E+01	629	1.864E+01	670	1.036E+01	711	3.734E+00	752	1.155E+00
589	1.643E+01	630	1.854E+01	671	1.013E+01	712	3.633E+00	753	1.117E+00
590	1.660E+01	631	1.843E+01	672	9.899E+00	713	3.534E+00	754	1.092E+00
591	1.676E+01	632	1.828E+01	673	9.671E+00	714	3.424E+00	755	1.060E+00
592	1.695E+01	633	1.811E+01	674	9.461E+00	715	3.329E+00	756	1.032E+00
593	1.712E+01	634	1.802E+01	675	9.291E+00	716	3.276E+00	757	1.013E+00
594	1.725E+01	635	1.785E+01	676	9.034E+00	717	3.160E+00	758	9.795E-01
595	1.745E+01	636	1.770E+01	677	8.842E+00	718	3.061E+00	759	9.585E-01
596	1.757E+01	637	1.751E+01	678	8.672E+00	719	2.990E+00	760	9.248E-01
597	1.773E+01	638	1.734E+01	679	8.474E+00	720	2.897E+00	761	9.112E-01
598	1.791E+01	639	1.717E+01	680	8.283E+00	721	2.832E+00	762	8.863E-01
599	1.801E+01	640	1.696E+01	681	8.108E+00	722	2.741E+00	763	8.539E-01
600	1.817E+01	641	1.682E+01	682	7.919E+00	723	2.661E+00	764	8.347E-01
601	1.827E+01	642	1.662E+01	683	7.734E+00	724	2.594E+00	765	8.036E-01
602	1.844E+01	643	1.643E+01	684	7.574E+00	725	2.527E+00	766	7.885E-01
603	1.854E+01	644	1.620E+01	685	7.407E+00	726	2.461E+00	767	7.626E-01
604	1.864E+01	645	1.600E+01	686	7.219E+00	727	2.381E+00	768	7.476E-01
605	1.875E+01	646	1.583E+01	687	7.044E+00	728	2.300E+00	769	7.219E-01
606	1.885E+01	647	1.561E+01	688	6.883E+00	729	2.244E+00	770	7.019E-01
607	1.897E+01	648	1.539E+01	689	6.701E+00	730	2.184E+00	771	6.924E-01
608	1.904E+01	649	1.521E+01	690	6.570E+00	731	2.110E+00	772	6.687E-01
609	1.911E+01	650	1.497E+01	691	6.405E+00	732	2.048E+00	773	6.456E-01
610	1.919E+01	651	1.476E+01	692	6.230E+00	733	1.992E+00	774	6.346E-01
611	1.925E+01	652	1.454E+01	693	6.096E+00	734	1.935E+00	775	6.186E-01
612	1.929E+01	653	1.431E+01	694	5.921E+00	735	1.869E+00	776	6.036E-01
613	1.932E+01	654	1.409E+01	695	5.779E+00	736	1.816E+00	777	5.870E-01
614	1.934E+01	655	1.386E+01	696	5.626E+00	737	1.759E+00	778	5.718E-01
615	1.937E+01	656	1.363E+01	697	5.487E+00	738	1.720E+00	779	5.725E-01
616	1.942E+01	657	1.340E+01	698	5.364E+00	739	1.656E+00	780	5.732E-01
617	1.935E+01	658	1.316E+01	699	5.200E+00	740	1.623E+00		
618	1.938E+01	659	1.293E+01	700	5.050E+00	741	1.570E+00		
619	1.937E+01	660	1.271E+01	701	4.921E+00	742	1.527E+00		
620	1.935E+01	661	1.247E+01	702	4.778E+00	743	1.500E+00		
621	1.929E+01	662	1.222E+01	703	4.672E+00	744	1.436E+00		
622	1.922E+01	663	1.201E+01	704	4.534E+00	745	1.390E+00		
623	1.921E+01	664	1.178E+01	705	4.427E+00	746	1.363E+00		
624	1.913E+01	665	1.152E+01	706	4.289E+00	747	1.320E+00		
625	1.903E+01	666	1.128E+01	707	4.155E+00	748	1.294E+00		

CIE 1931 x y Chromaticity Diagram



7-Step Chromaticity Quadrangles



Control Setting: 4000K

The diameter of the sphere: 2M

The coating reflectance of sphere: 98%

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

Test orientation: **Downward**

Photometric and Electrical Measurement Result

Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
120.0	60	0.1025	11.3	0.9187	1019.5	90.22

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
3.411	4114	-0.00266	0.3739	0.3670	0.2247	0.4963

Color Rendering Index

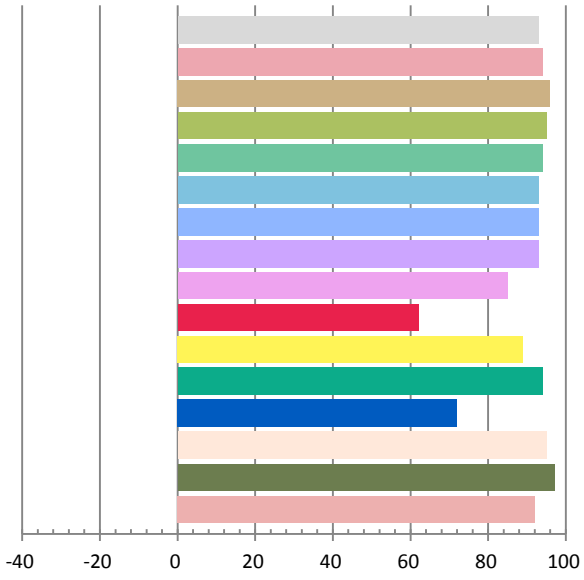
Ra
93.0

R1	R2	R3	R4
94	96	95	94

R5	R6	R7	R8
93	93	93	85

R9	R10	R11	R12
62	89	94	72

R13	R14	R15
95	97	92



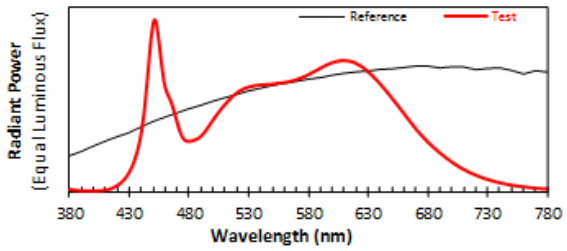
ANSI/IES TM-30-18 Color Rendition Report

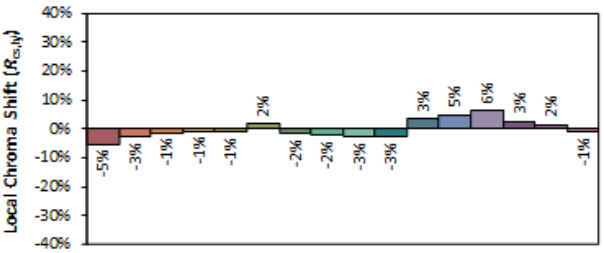
Source: User SPD

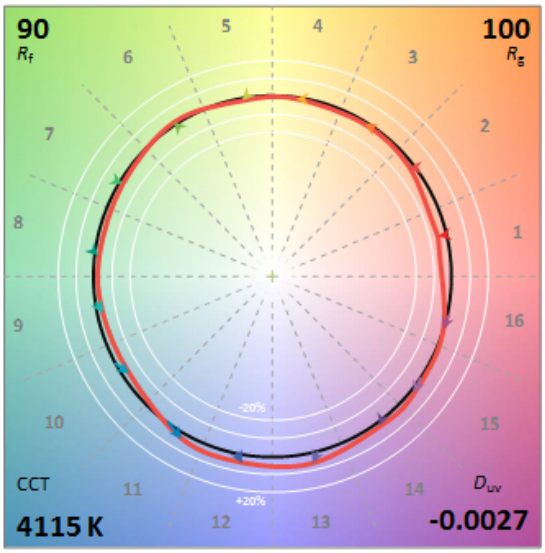
Manufacturer: GREEN CREATIVE LTD

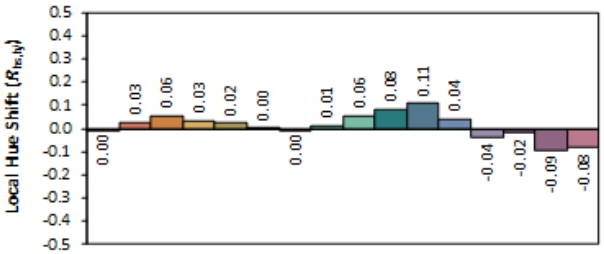
Date: 2024/5/30

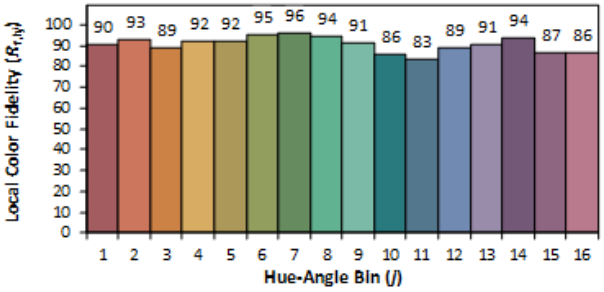
Model: SDSK6/9CCTS/DIM120V

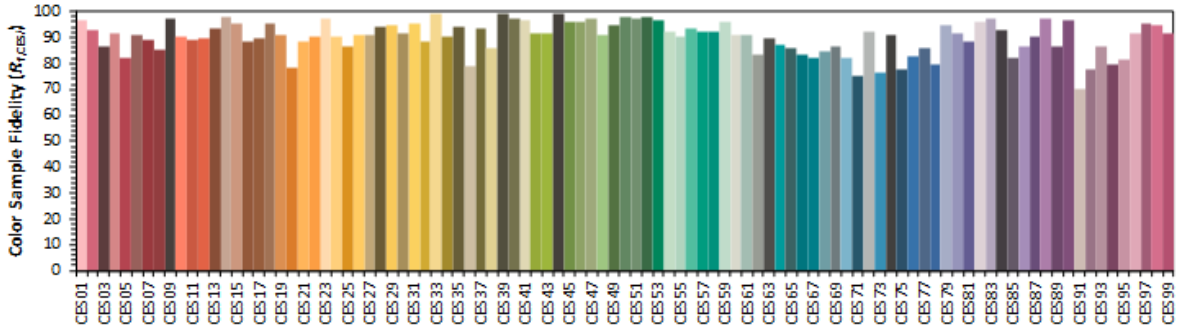












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

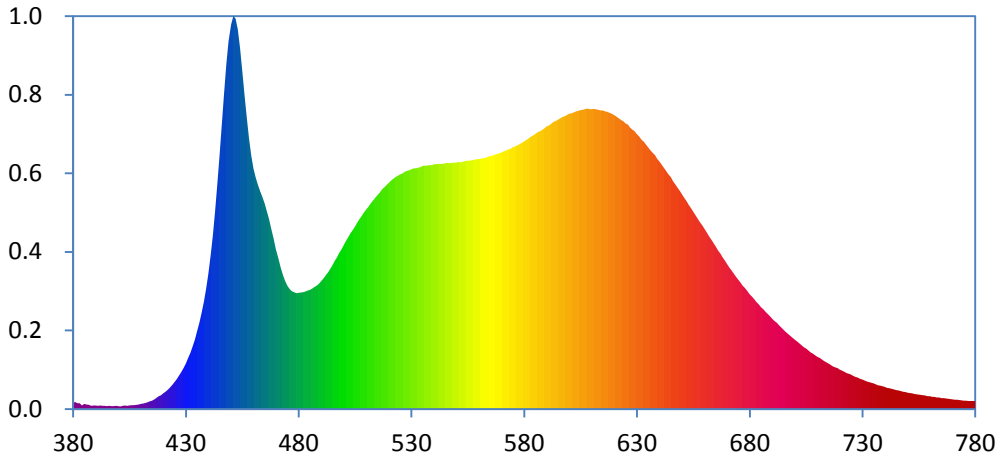
x	**0.3739**
y	**0.3669**
u'	**0.2247**
v'	**0.4962**

CIE 13.3-1995 (CRI)

R_a	93
R_9	61

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

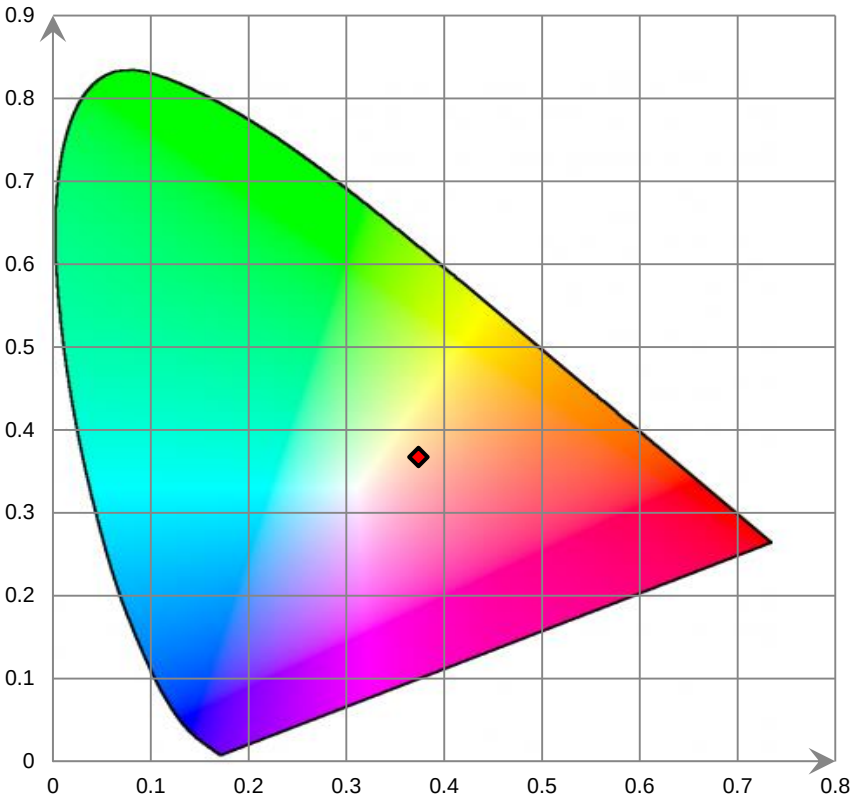
Relative Spectral Power Distribution



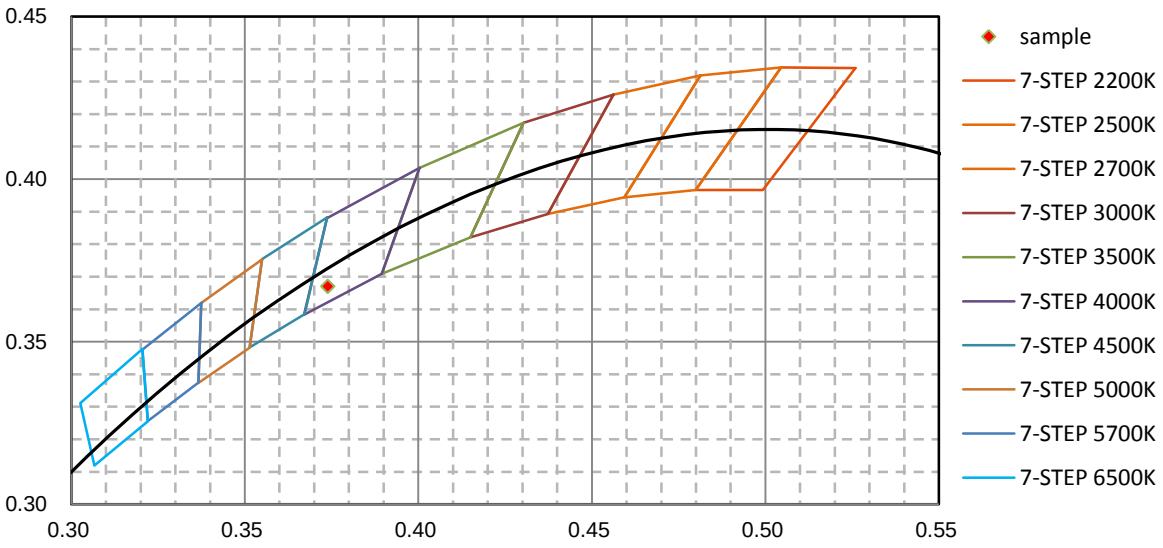
nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
380	3.407E-01	421	9.803E-01	462	1.269E+01	503	9.944E+00	544	1.387E+01
381	3.936E-01	422	1.090E+00	463	1.233E+01	504	1.013E+01	545	1.392E+01
382	3.273E-01	423	1.209E+00	464	1.200E+01	505	1.034E+01	546	1.393E+01
383	3.106E-01	424	1.356E+00	465	1.163E+01	506	1.055E+01	547	1.392E+01
384	1.905E-01	425	1.518E+00	466	1.118E+01	507	1.075E+01	548	1.393E+01
385	2.805E-01	426	1.684E+00	467	1.073E+01	508	1.092E+01	549	1.395E+01
386	2.502E-01	427	1.872E+00	468	1.016E+01	509	1.112E+01	550	1.396E+01
387	2.242E-01	428	2.075E+00	469	9.633E+00	510	1.130E+01	551	1.399E+01
388	1.730E-01	429	2.331E+00	470	9.044E+00	511	1.146E+01	552	1.397E+01
389	1.903E-01	430	2.583E+00	471	8.516E+00	512	1.164E+01	553	1.401E+01
390	1.890E-01	431	2.886E+00	472	8.008E+00	513	1.181E+01	554	1.405E+01
391	1.774E-01	432	3.188E+00	473	7.582E+00	514	1.197E+01	555	1.406E+01
392	1.857E-01	433	3.552E+00	474	7.242E+00	515	1.213E+01	556	1.407E+01
393	1.691E-01	434	3.938E+00	475	6.968E+00	516	1.228E+01	557	1.410E+01
394	1.832E-01	435	4.424E+00	476	6.793E+00	517	1.246E+01	558	1.413E+01
395	1.486E-01	436	4.894E+00	477	6.668E+00	518	1.255E+01	559	1.415E+01
396	1.665E-01	437	5.451E+00	478	6.609E+00	519	1.268E+01	560	1.416E+01
397	1.658E-01	438	6.065E+00	479	6.561E+00	520	1.281E+01	561	1.418E+01
398	1.568E-01	439	6.807E+00	480	6.581E+00	521	1.293E+01	562	1.421E+01
399	1.822E-01	440	7.662E+00	481	6.589E+00	522	1.303E+01	563	1.423E+01
400	1.599E-01	441	8.687E+00	482	6.614E+00	523	1.313E+01	564	1.429E+01
401	1.415E-01	442	9.815E+00	483	6.644E+00	524	1.320E+01	565	1.432E+01
402	1.823E-01	443	1.121E+01	484	6.709E+00	525	1.328E+01	566	1.435E+01
403	1.883E-01	444	1.273E+01	485	6.740E+00	526	1.334E+01	567	1.440E+01
404	1.753E-01	445	1.438E+01	486	6.815E+00	527	1.343E+01	568	1.444E+01
405	1.915E-01	446	1.611E+01	487	6.903E+00	528	1.349E+01	569	1.448E+01
406	2.045E-01	447	1.786E+01	488	6.980E+00	529	1.352E+01	570	1.454E+01
407	2.196E-01	448	1.950E+01	489	7.086E+00	530	1.358E+01	571	1.459E+01
408	2.383E-01	449	2.082E+01	490	7.226E+00	531	1.362E+01	572	1.465E+01
409	2.503E-01	450	2.178E+01	491	7.369E+00	532	1.362E+01	573	1.469E+01
410	2.762E-01	451	2.226E+01	492	7.565E+00	533	1.366E+01	574	1.474E+01
411	2.963E-01	452	2.211E+01	493	7.730E+00	534	1.371E+01	575	1.483E+01
412	3.415E-01	453	2.150E+01	494	7.939E+00	535	1.377E+01	576	1.489E+01
413	3.760E-01	454	2.045E+01	495	8.149E+00	536	1.378E+01	577	1.494E+01
414	4.240E-01	455	1.914E+01	496	8.384E+00	537	1.379E+01	578	1.501E+01
415	4.661E-01	456	1.778E+01	497	8.588E+00	538	1.380E+01	579	1.508E+01
416	5.352E-01	457	1.651E+01	498	8.836E+00	539	1.381E+01	580	1.516E+01
417	6.205E-01	458	1.533E+01	499	9.049E+00	540	1.386E+01	581	1.524E+01
418	7.122E-01	459	1.434E+01	500	9.282E+00	541	1.387E+01	582	1.534E+01
419	7.697E-01	460	1.361E+01	501	9.515E+00	542	1.389E+01	583	1.543E+01
420	8.757E-01	461	1.309E+01	502	9.731E+00	543	1.387E+01	584	1.549E+01

nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
585	1.558E+01	626	1.610E+01	667	8.800E+00	708	3.125E+00	749	9.535E-01
586	1.567E+01	627	1.594E+01	668	8.588E+00	709	3.037E+00	750	9.187E-01
587	1.572E+01	628	1.582E+01	669	8.407E+00	710	2.955E+00	751	8.979E-01
588	1.580E+01	629	1.573E+01	670	8.206E+00	711	2.889E+00	752	8.745E-01
589	1.590E+01	630	1.557E+01	671	8.008E+00	712	2.808E+00	753	8.401E-01
590	1.601E+01	631	1.544E+01	672	7.839E+00	713	2.722E+00	754	8.229E-01
591	1.607E+01	632	1.527E+01	673	7.664E+00	714	2.637E+00	755	8.109E-01
592	1.615E+01	633	1.515E+01	674	7.489E+00	715	2.563E+00	756	7.851E-01
593	1.625E+01	634	1.499E+01	675	7.318E+00	716	2.489E+00	757	7.688E-01
594	1.631E+01	635	1.482E+01	676	7.150E+00	717	2.413E+00	758	7.481E-01
595	1.639E+01	636	1.466E+01	677	6.976E+00	718	2.360E+00	759	7.282E-01
596	1.646E+01	637	1.452E+01	678	6.841E+00	719	2.309E+00	760	7.115E-01
597	1.655E+01	638	1.436E+01	679	6.677E+00	720	2.229E+00	761	6.857E-01
598	1.659E+01	639	1.416E+01	680	6.493E+00	721	2.170E+00	762	6.798E-01
599	1.666E+01	640	1.401E+01	681	6.355E+00	722	2.101E+00	763	6.507E-01
600	1.672E+01	641	1.384E+01	682	6.217E+00	723	2.032E+00	764	6.395E-01
601	1.675E+01	642	1.364E+01	683	6.055E+00	724	1.980E+00	765	6.177E-01
602	1.680E+01	643	1.347E+01	684	5.922E+00	725	1.925E+00	766	6.058E-01
603	1.686E+01	644	1.329E+01	685	5.766E+00	726	1.867E+00	767	5.882E-01
604	1.689E+01	645	1.313E+01	686	5.659E+00	727	1.804E+00	768	5.743E-01
605	1.693E+01	646	1.291E+01	687	5.506E+00	728	1.767E+00	769	5.475E-01
606	1.694E+01	647	1.272E+01	688	5.384E+00	729	1.708E+00	770	5.337E-01
607	1.698E+01	648	1.255E+01	689	5.244E+00	730	1.657E+00	771	5.257E-01
608	1.702E+01	649	1.235E+01	690	5.101E+00	731	1.611E+00	772	5.109E-01
609	1.699E+01	650	1.217E+01	691	4.988E+00	732	1.559E+00	773	4.989E-01
610	1.699E+01	651	1.195E+01	692	4.881E+00	733	1.518E+00	774	4.917E-01
611	1.699E+01	652	1.178E+01	693	4.743E+00	734	1.477E+00	775	4.714E-01
612	1.697E+01	653	1.157E+01	694	4.621E+00	735	1.441E+00	776	4.593E-01
613	1.694E+01	654	1.137E+01	695	4.490E+00	736	1.390E+00	777	4.435E-01
614	1.692E+01	655	1.118E+01	696	4.364E+00	737	1.344E+00	778	4.422E-01
615	1.691E+01	656	1.099E+01	697	4.261E+00	738	1.308E+00	779	4.428E-01
616	1.686E+01	657	1.078E+01	698	4.150E+00	739	1.279E+00	780	4.433E-01
617	1.681E+01	658	1.058E+01	699	4.030E+00	740	1.241E+00		
618	1.676E+01	659	1.038E+01	700	3.928E+00	741	1.193E+00		
619	1.670E+01	660	1.019E+01	701	3.821E+00	742	1.166E+00		
620	1.664E+01	661	9.986E+00	702	3.712E+00	743	1.137E+00		
621	1.654E+01	662	9.771E+00	703	3.602E+00	744	1.099E+00		
622	1.645E+01	663	9.580E+00	704	3.500E+00	745	1.066E+00		
623	1.636E+01	664	9.384E+00	705	3.425E+00	746	1.043E+00		
624	1.630E+01	665	9.189E+00	706	3.315E+00	747	1.003E+00		
625	1.617E+01	666	8.972E+00	707	3.203E+00	748	9.748E-01		

CIE 1931 x y Chromaticity Diagram



7-Step Chromaticity Quadrangles



Control Setting: 5000K

The diameter of the sphere: 2M

The coating reflectance of sphere: 98%

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

Test orientation: **Downward**

Photometric and Electrical Measurement Result

Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)
120.0	60	0.1017	11.17	0.9153	1006.5	90.11

Radiant Flux (W)	CCT (K)	Duv	x	y	u'	v'
3.358	5048	0.000369	0.3439	0.3514	0.2107	0.4844

Color Rendering Index

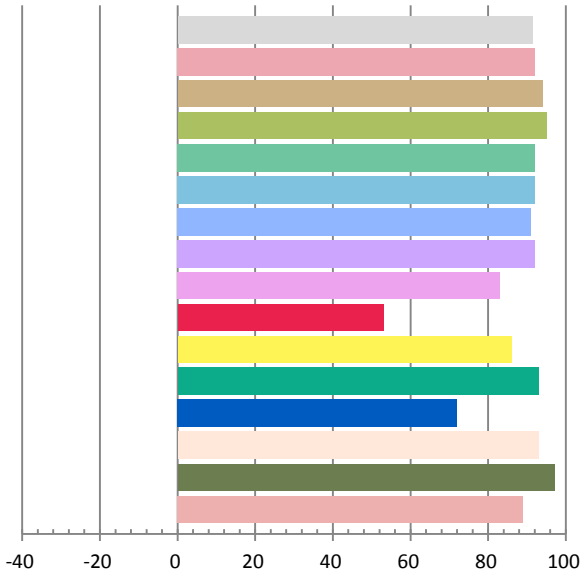
Ra
91.4

R1	R2	R3	R4
92	94	95	92

R5	R6	R7	R8
92	91	92	83

R9	R10	R11	R12
53	86	93	72

R13	R14	R15
93	97	89



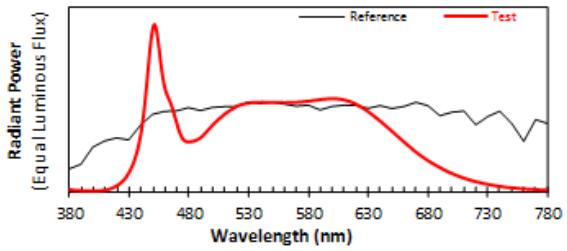
ANSI/IES TM-30-18 Color Rendition Report

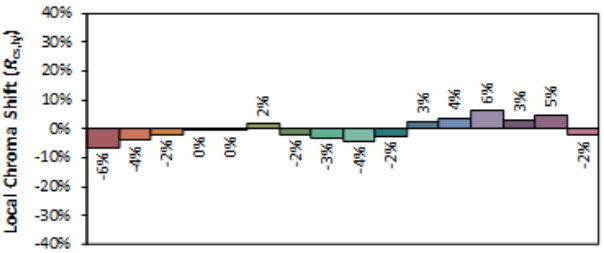
Source: User SPD

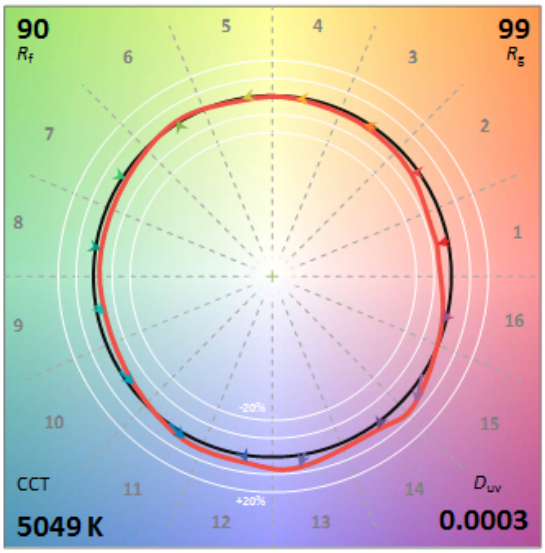
Manufacturer: GREEN CREATIVE LTD

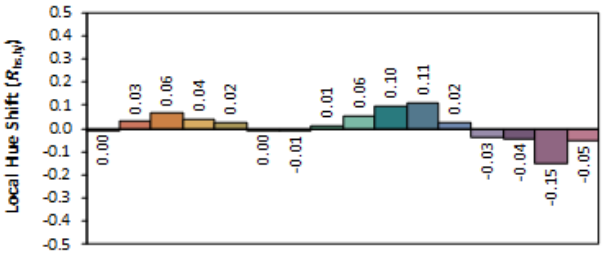
Date: 2024/5/30

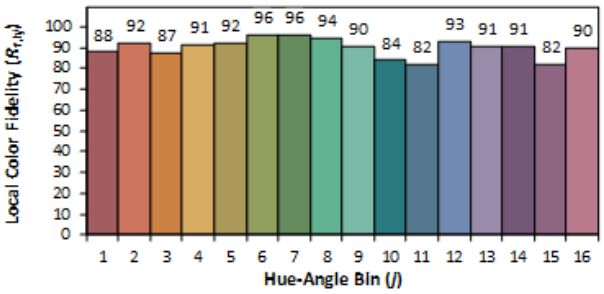
Model: SDSK6/9CCTS/DIM120V

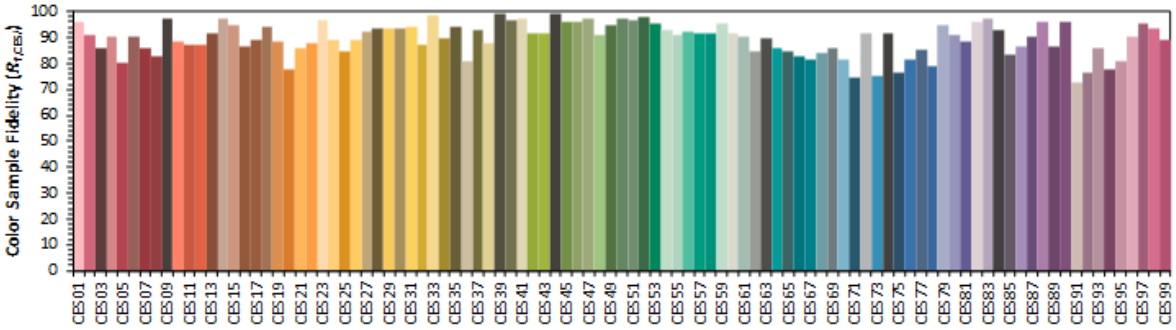












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

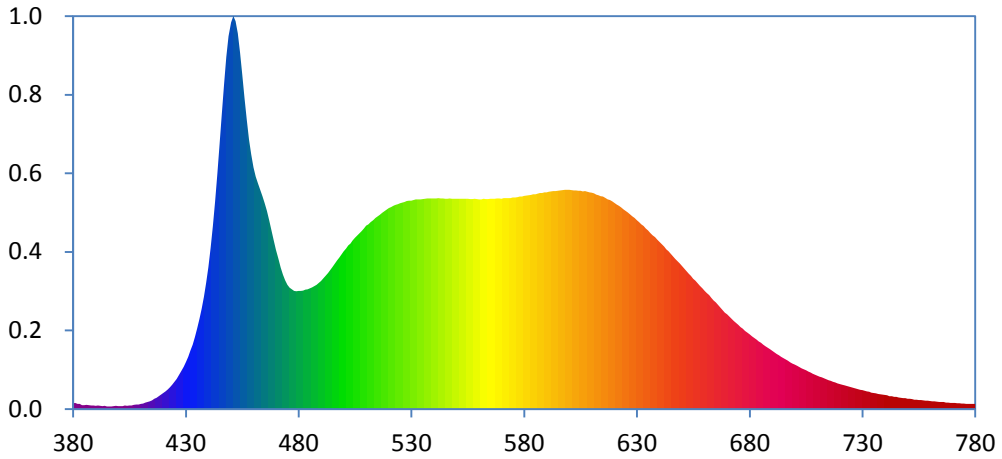
x	**0.3438**
y	**0.3512**
u'	**0.2107**
v'	**0.4843**

CIE 13.3-1995 (CRI)

R_a	91
R_9	53

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

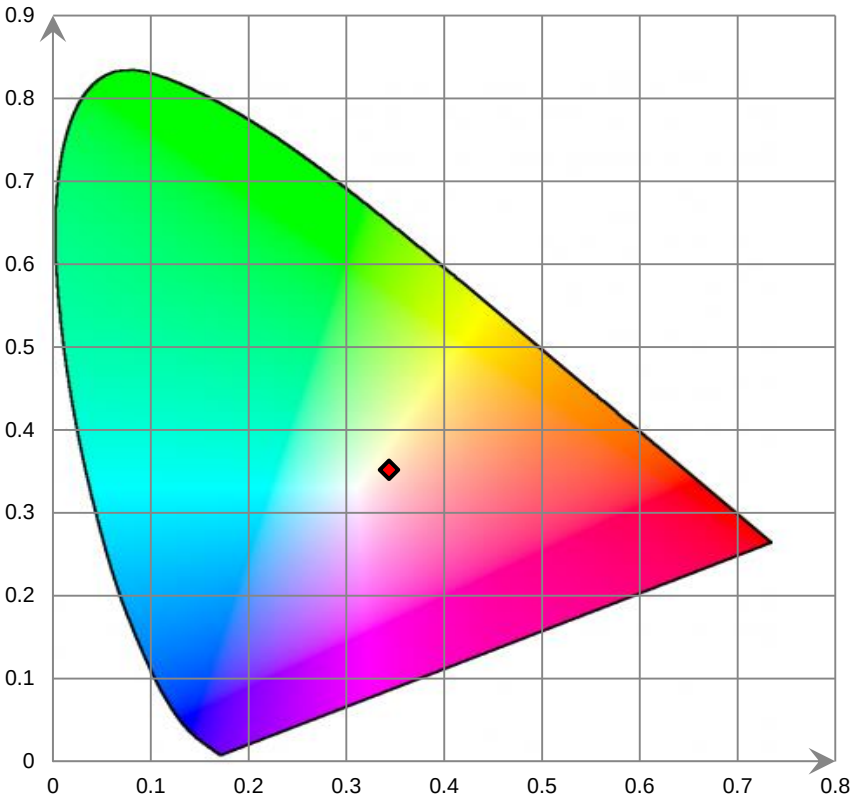
Relative Spectral Power Distribution



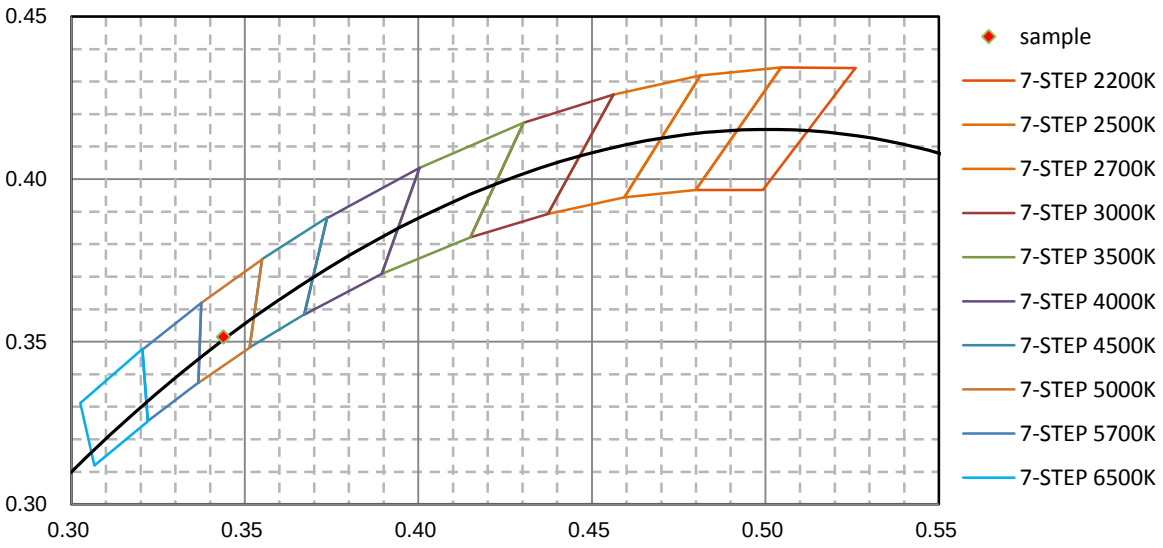
nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
380	3.774E-01	421	1.197E+00	462	1.542E+01	503	1.131E+01	544	1.439E+01
381	4.111E-01	422	1.338E+00	463	1.498E+01	504	1.152E+01	545	1.438E+01
382	3.387E-01	423	1.483E+00	464	1.454E+01	505	1.170E+01	546	1.438E+01
383	3.458E-01	424	1.664E+00	465	1.406E+01	506	1.185E+01	547	1.439E+01
384	2.463E-01	425	1.858E+00	466	1.354E+01	507	1.200E+01	548	1.436E+01
385	2.608E-01	426	2.056E+00	467	1.289E+01	508	1.216E+01	549	1.437E+01
386	2.858E-01	427	2.308E+00	468	1.222E+01	509	1.234E+01	550	1.436E+01
387	2.640E-01	428	2.573E+00	469	1.155E+01	510	1.252E+01	551	1.436E+01
388	2.420E-01	429	2.890E+00	470	1.089E+01	511	1.261E+01	552	1.437E+01
389	2.366E-01	430	3.210E+00	471	1.025E+01	512	1.278E+01	553	1.437E+01
390	2.181E-01	431	3.568E+00	472	9.664E+00	513	1.290E+01	554	1.437E+01
391	2.253E-01	432	3.985E+00	473	9.182E+00	514	1.304E+01	555	1.436E+01
392	2.094E-01	433	4.396E+00	474	8.778E+00	515	1.316E+01	556	1.435E+01
393	1.893E-01	434	4.911E+00	475	8.491E+00	516	1.328E+01	557	1.434E+01
394	2.147E-01	435	5.515E+00	476	8.282E+00	517	1.340E+01	558	1.437E+01
395	1.650E-01	436	6.132E+00	477	8.165E+00	518	1.351E+01	559	1.434E+01
396	1.688E-01	437	6.840E+00	478	8.066E+00	519	1.362E+01	560	1.433E+01
397	1.719E-01	438	7.646E+00	479	8.031E+00	520	1.373E+01	561	1.433E+01
398	1.895E-01	439	8.611E+00	480	8.062E+00	521	1.380E+01	562	1.436E+01
399	2.104E-01	440	9.673E+00	481	8.067E+00	522	1.389E+01	563	1.435E+01
400	1.877E-01	441	1.099E+01	482	8.083E+00	523	1.395E+01	564	1.435E+01
401	1.920E-01	442	1.248E+01	483	8.153E+00	524	1.400E+01	565	1.437E+01
402	1.988E-01	443	1.417E+01	484	8.169E+00	525	1.407E+01	566	1.437E+01
403	2.254E-01	444	1.604E+01	485	8.248E+00	526	1.411E+01	567	1.437E+01
404	2.189E-01	445	1.808E+01	486	8.310E+00	527	1.414E+01	568	1.439E+01
405	2.360E-01	446	2.017E+01	487	8.393E+00	528	1.420E+01	569	1.439E+01
406	2.445E-01	447	2.218E+01	488	8.487E+00	529	1.422E+01	570	1.438E+01
407	2.763E-01	448	2.406E+01	489	8.619E+00	530	1.424E+01	571	1.441E+01
408	2.941E-01	449	2.549E+01	490	8.745E+00	531	1.427E+01	572	1.441E+01
409	3.067E-01	450	2.642E+01	491	8.911E+00	532	1.433E+01	573	1.441E+01
410	3.407E-01	451	2.685E+01	492	9.106E+00	533	1.432E+01	574	1.442E+01
411	3.653E-01	452	2.651E+01	493	9.280E+00	534	1.433E+01	575	1.445E+01
412	4.225E-01	453	2.568E+01	494	9.492E+00	535	1.435E+01	576	1.446E+01
413	4.701E-01	454	2.436E+01	495	9.701E+00	536	1.436E+01	577	1.448E+01
414	5.232E-01	455	2.284E+01	496	9.919E+00	537	1.438E+01	578	1.452E+01
415	5.924E-01	456	2.123E+01	497	1.014E+01	538	1.439E+01	579	1.452E+01
416	6.826E-01	457	1.977E+01	498	1.034E+01	539	1.438E+01	580	1.457E+01
417	7.592E-01	458	1.842E+01	499	1.056E+01	540	1.439E+01	581	1.459E+01
418	8.640E-01	459	1.738E+01	500	1.078E+01	541	1.439E+01	582	1.461E+01
419	9.672E-01	460	1.650E+01	501	1.095E+01	542	1.441E+01	583	1.462E+01
420	1.080E+00	461	1.586E+01	502	1.117E+01	543	1.438E+01	584	1.467E+01

nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
585	1.467E+01	626	1.343E+01	667	6.932E+00	708	2.406E+00	749	7.270E-01
586	1.471E+01	627	1.329E+01	668	6.762E+00	709	2.336E+00	750	6.999E-01
587	1.475E+01	628	1.317E+01	669	6.586E+00	710	2.266E+00	751	6.911E-01
588	1.476E+01	629	1.305E+01	670	6.477E+00	711	2.199E+00	752	6.779E-01
589	1.480E+01	630	1.290E+01	671	6.317E+00	712	2.164E+00	753	6.348E-01
590	1.480E+01	631	1.278E+01	672	6.160E+00	713	2.084E+00	754	6.341E-01
591	1.484E+01	632	1.262E+01	673	6.016E+00	714	2.022E+00	755	6.126E-01
592	1.487E+01	633	1.250E+01	674	5.876E+00	715	1.957E+00	756	5.979E-01
593	1.489E+01	634	1.233E+01	675	5.743E+00	716	1.914E+00	757	5.757E-01
594	1.489E+01	635	1.220E+01	676	5.602E+00	717	1.860E+00	758	5.714E-01
595	1.491E+01	636	1.203E+01	677	5.482E+00	718	1.814E+00	759	5.545E-01
596	1.493E+01	637	1.187E+01	678	5.341E+00	719	1.750E+00	760	5.370E-01
597	1.496E+01	638	1.173E+01	679	5.221E+00	720	1.690E+00	761	5.224E-01
598	1.497E+01	639	1.157E+01	680	5.096E+00	721	1.645E+00	762	5.088E-01
599	1.498E+01	640	1.141E+01	681	4.953E+00	722	1.618E+00	763	4.966E-01
600	1.498E+01	641	1.125E+01	682	4.849E+00	723	1.576E+00	764	4.827E-01
601	1.496E+01	642	1.110E+01	683	4.729E+00	724	1.516E+00	765	4.692E-01
602	1.494E+01	643	1.092E+01	684	4.620E+00	725	1.472E+00	766	4.644E-01
603	1.494E+01	644	1.078E+01	685	4.511E+00	726	1.426E+00	767	4.414E-01
604	1.491E+01	645	1.061E+01	686	4.393E+00	727	1.386E+00	768	4.412E-01
605	1.491E+01	646	1.042E+01	687	4.278E+00	728	1.340E+00	769	4.203E-01
606	1.488E+01	647	1.026E+01	688	4.179E+00	729	1.303E+00	770	4.071E-01
607	1.489E+01	648	1.011E+01	689	4.078E+00	730	1.275E+00	771	3.996E-01
608	1.484E+01	649	9.950E+00	690	3.973E+00	731	1.230E+00	772	3.868E-01
609	1.481E+01	650	9.761E+00	691	3.872E+00	732	1.195E+00	773	3.881E-01
610	1.477E+01	651	9.599E+00	692	3.763E+00	733	1.168E+00	774	3.720E-01
611	1.473E+01	652	9.426E+00	693	3.668E+00	734	1.117E+00	775	3.687E-01
612	1.465E+01	653	9.258E+00	694	3.561E+00	735	1.093E+00	776	3.518E-01
613	1.461E+01	654	9.082E+00	695	3.473E+00	736	1.065E+00	777	3.475E-01
614	1.455E+01	655	8.903E+00	696	3.373E+00	737	1.019E+00	778	3.452E-01
615	1.452E+01	656	8.754E+00	697	3.286E+00	738	1.003E+00	779	3.457E-01
616	1.443E+01	657	8.590E+00	698	3.194E+00	739	9.672E-01	780	3.461E-01
617	1.432E+01	658	8.410E+00	699	3.109E+00	740	9.473E-01		
618	1.427E+01	659	8.250E+00	700	3.029E+00	741	9.231E-01		
619	1.418E+01	660	8.069E+00	701	2.944E+00	742	8.785E-01		
620	1.407E+01	661	7.908E+00	702	2.860E+00	743	8.617E-01		
621	1.397E+01	662	7.772E+00	703	2.781E+00	744	8.314E-01		
622	1.388E+01	663	7.584E+00	704	2.701E+00	745	8.167E-01		
623	1.379E+01	664	7.408E+00	705	2.633E+00	746	7.823E-01		
624	1.365E+01	665	7.274E+00	706	2.558E+00	747	7.693E-01		
625	1.354E+01	666	7.095E+00	707	2.483E+00	748	7.425E-01		

CIE 1931 x y Chromaticity Diagram



7-Step Chromaticity Quadrangles



[Goniophotometer System]

Test facility was located at No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.

Control Setting: 3500K

The photometric distance: 2.513m

Total operating time for luminous intensity distribution: **1.5 hour**

Test orientation: **Downward**

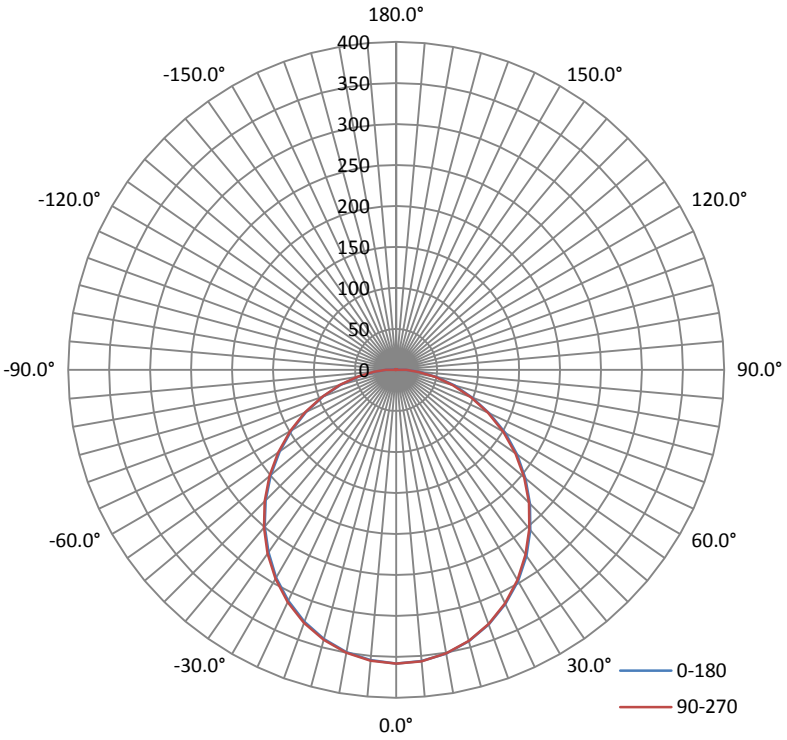
Electrical Measurement

Input Voltage (V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.03	60	0.1004	11.160	0.9261

Photometric Measurement

Luminous Flux (lm)	Efficacy (lm/W)	I_{max} (cd)	S/MH (C0/180)	S/MH (C90/270)
1016.99	91.13	358.5	1.24	1.23

Luminous Intensity Distribution



	C0/180	C45/225	C90/270	C135/315	AVG.
Beam Angle (50% I_{max}):	109.2	109.2	109.1	109.2	109.2
Field Angle (10% I_{max}):	165.8	165.7	165.6	165.7	165.7

Luminous Intensity (cd) Distribution Data

C / γ	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
0°	358	358	358	358	358	358	358	358
1°	358	358	358	358	358	359	358	358
2°	357	358	357	357	358	358	358	358
3°	357	357	357	357	357	358	357	357
4°	356	356	356	357	357	357	357	357
5°	355	355	356	356	356	357	356	356
6°	355	355	355	355	355	356	355	355
7°	354	354	354	354	354	355	354	355
8°	352	353	353	353	353	354	353	354
9°	351	351	351	351	352	352	352	352
10°	349	350	350	350	350	351	351	351
11°	348	348	348	348	349	349	349	349
12°	346	346	346	347	347	348	347	348
13°	344	344	344	345	345	346	346	346
14°	342	342	342	343	343	344	343	344
15°	340	340	340	341	341	342	342	342
16°	337	338	338	339	339	340	339	340
17°	335	335	335	336	336	337	337	337
18°	332	333	333	334	334	335	334	335
19°	330	330	330	331	331	332	332	332
20°	327	328	327	328	328	329	329	330
21°	324	324	324	325	325	326	326	327
22°	321	321	322	322	322	323	323	324
23°	318	318	318	319	319	320	320	321
24°	314	315	315	315	316	317	317	318
25°	311	311	311	312	312	314	314	314
26°	307	308	308	309	309	310	310	311
27°	303	304	304	305	305	307	306	307
28°	300	301	301	302	302	303	303	304
29°	296	297	296	298	298	299	299	300
30°	293	293	293	294	294	295	295	296
31°	289	289	289	290	290	291	291	292
32°	284	285	285	286	286	287	287	288
33°	280	281	281	281	282	283	283	284
34°	276	276	276	277	277	279	279	280
35°	271	272	272	273	273	275	275	276
36°	267	268	268	269	269	270	270	271
37°	263	263	263	264	264	266	266	267
38°	258	259	259	260	260	261	261	262
39°	254	254	254	255	255	257	257	258
40°	249	250	249	250	251	252	252	253
41°	244	245	245	245	246	248	248	249
42°	240	240	240	241	241	243	243	244
43°	235	235	235	236	236	238	238	239
44°	230	230	230	231	232	233	233	234
45°	225	225	226	226	227	228	228	229
46°	220	221	220	222	222	223	223	225
47°	215	216	215	216	217	218	218	219
48°	210	211	210	212	211	213	213	214

Luminous Intensity (cd) Distribution Data

C / γ	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
49°	205	205	205	206	207	208	208	210
50°	200	201	200	201	202	203	203	204
51°	195	195	195	196	196	198	198	199
52°	189	190	190	191	191	193	193	194
53°	184	185	185	186	186	188	188	189
54°	179	180	180	181	181	182	182	184
55°	173	174	174	175	176	177	177	178
56°	168	169	169	170	170	172	172	173
57°	163	164	164	165	165	167	167	168
58°	158	159	159	160	160	161	161	162
59°	153	153	153	154	154	156	156	157
60°	147	148	148	149	149	151	151	152
61°	142	143	143	143	144	145	145	146
62°	137	137	137	138	139	140	140	141
63°	131	131	132	132	133	134	135	135
64°	126	126	127	127	128	128	129	129
65°	121	121	121	122	123	123	124	124
66°	115	116	116	116	117	118	119	119
67°	110	110	111	111	112	113	113	113
68°	105	105	106	106	107	107	108	108
69°	100	100	100	101	101	102	103	103
70°	95	95	95	96	96	97	97	98
71°	89	90	90	90	91	92	92	93
72°	84	85	85	85	86	87	87	87
73°	79	80	80	80	81	82	82	82
74°	74	75	75	75	76	76	77	77
75°	69	70	70	70	71	72	72	72
76°	64	65	65	66	66	67	67	67
77°	60	60	60	61	62	62	62	63
78°	55	55	55	56	57	57	57	58
79°	50	51	51	51	52	53	53	53
80°	46	46	46	47	47	48	48	49
81°	41	42	42	43	43	44	44	44
82°	37	38	38	38	39	39	39	40
83°	33	34	34	34	34	35	35	36
84°	30	30	30	31	31	31	32	32
85°	26	27	26	27	27	28	28	29
86°	23	23	23	24	23	24	24	25
87°	20	20	20	20	20	21	21	22
88°	17	17	17	18	17	18	18	19
89°	14	12	14	15	15	16	16	16
90°	12	7	12	13	13	13	13	11
91°	8	2	9	10	10	10	11	5
92°	4	0	6	6	6	8	7	0
93°	0	0	3	0	3	1	4	0
94°	3	4	0	0	0	0	0	1
95°	5	5	0	0	0	0	0	6
96°	4	4	1	0	0	0	1	5
97°	3	3	3	0	0	0	3	4

Luminous Intensity (cd) Distribution Data

C / γ	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
98°	3	3	3	0	0	0	3	4
99°	2	2	2	1	0	1	3	3
100°	2	2	2	1	0	2	3	3
101°	2	2	2	1	1	1	2	3
102°	1	2	1	1	1	1	2	2
103°	1	1	1	1	1	1	2	2
104°	1	1	1	0	1	1	2	2
105°	1	1	1	0	0	1	1	2
106°	1	1	1	0	0	1	1	2
107°	1	1	1	0	0	0	1	2
108°	1	1	1	0	0	0	1	1
109°	1	1	1	0	0	0	1	1
110°	1	1	1	0	0	0	1	1
111°	1	1	1	0	0	0	1	1
112°	1	1	1	0	0	1	1	1
113°	1	1	1	0	0	1	1	2
114°	1	1	1	0	0	1	1	2
115°	1	1	1	0	0	1	1	2
116°	1	1	1	0	0	1	1	2
117°	1	1	1	0	0	1	1	2
118°	2	1	1	0	0	1	1	2
119°	2	1	1	0	0	1	1	2
120°	2	1	1	1	0	1	1	2
121°	1	1	1	1	1	1	1	2
122°	0	1	1	1	1	1	1	2
123°	0	1	1	1	1	1	1	2
124°	0	1	1	1	1	1	1	2
125°	0	1	1	1	1	1	1	2
126°	1	1	1	1	1	1	1	2
127°	1	1	1	1	1	1	1	2
128°	1	1	1	1	1	1	1	2
129°	1	1	1	1	1	1	1	1
130°	0	1	1	1	1	1	1	1
131°	0	0	1	1	1	1	1	1
132°	0	0	1	1	1	1	1	1
133°	0	0	1	1	1	1	1	0
134°	1	0	1	1	1	1	1	0
135°	1	1	1	1	1	1	1	0
136°	0	1	1	1	1	1	1	1
137°	1	1	1	1	1	1	1	1
138°	1	1	1	1	1	1	1	1
139°	1	1	1	1	1	1	1	1
140°	1	1	1	1	1	1	1	1
141°	1	1	1	1	1	1	1	2
142°	1	1	1	1	1	1	1	2
143°	1	1	1	1	1	1	1	2
144°	1	1	1	1	1	1	1	2
145°	1	1	1	1	1	1	1	2
146°	1	1	1	1	1	1	1	1

Luminous Intensity (cd) Distribution Data

C / γ	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
147°	1	1	1	1	1	1	1	1
148°	1	1	1	1	1	1	1	1
149°	1	1	1	1	1	1	1	1
150°	1	1	1	1	1	1	1	1
151°	1	1	1	1	1	1	1	1
152°	1	1	1	1	1	1	1	1
153°	1	1	1	1	1	1	1	1
154°	1	1	1	1	1	1	1	1
155°	1	1	1	1	1	1	1	1
156°	1	1	1	1	1	1	1	1
157°	1	1	1	1	1	1	1	1
158°	1	1	1	1	1	1	1	1
159°	1	1	1	1	1	1	1	1
160°	1	1	1	1	1	1	1	1
161°	1	1	1	1	1	1	1	1
162°	1	1	1	1	1	1	1	1
163°	1	1	1	1	1	1	1	1
164°	1	1	1	1	1	1	1	1
165°	1	1	1	1	1	1	1	1
166°	1	1	1	1	1	1	1	1
167°	1	1	1	1	1	1	1	1
168°	1	1	1	1	1	1	1	1
169°	1	1	1	1	1	1	1	1
170°	1	1	1	1	1	1	1	1
171°	1	1	1	1	1	1	1	1
172°	1	1	1	1	1	1	1	1
173°	1	1	1	1	1	1	1	1
174°	1	1	1	1	1	1	1	1
175°	1	1	1	1	1	1	1	1
176°	1	1	1	1	1	1	1	1
177°	1	1	1	0	1	1	1	1
178°	1	0	0	0	0	1	1	1
179°	0	0	0	0	0	0	0	1
180°	0	0	0	0	0	0	0	0

Luminous Intensity (cd) Distribution Data (cont.)

C / γ	180°	202.5°	225°	247.5°	270°	292.5°	315°	337.5°
0°	358	358	358	358	358	358	358	358
1°	358	358	358	358	358	358	358	358
2°	358	358	358	358	358	358	358	358
3°	357	358	357	358	357	358	357	357
4°	357	357	357	357	357	357	357	357
5°	356	356	356	356	357	357	356	356
6°	356	356	356	355	356	356	355	355
7°	355	355	355	355	355	355	354	354
8°	354	354	354	353	354	354	353	353
9°	353	353	353	352	352	352	352	351
10°	351	352	351	351	351	351	350	350
11°	350	350	349	349	349	349	349	348
12°	348	348	348	348	348	348	347	347
13°	347	346	346	346	346	346	345	345
14°	344	345	345	344	344	344	343	343
15°	343	342	342	342	342	342	341	341
16°	340	341	340	339	340	340	339	338
17°	338	338	338	337	337	337	336	336
18°	336	336	336	335	335	335	334	333
19°	333	333	333	332	332	332	331	331
20°	331	331	330	329	330	329	328	328
21°	328	328	327	327	327	326	325	325
22°	325	325	325	324	324	323	322	322
23°	322	322	321	321	320	320	319	319
24°	318	319	318	317	317	317	316	316
25°	315	315	315	314	314	313	313	312
26°	312	312	312	311	310	310	309	309
27°	309	309	308	307	307	306	306	305
28°	305	305	305	304	304	303	302	301
29°	301	301	301	300	300	299	298	298
30°	297	297	297	296	296	295	295	294
31°	294	293	293	292	292	291	291	290
32°	290	289	289	288	288	287	286	286
33°	286	285	285	284	284	283	282	282
34°	281	281	281	280	280	279	278	277
35°	277	277	277	276	275	275	274	273
36°	273	272	273	271	271	270	270	269
37°	268	268	268	267	267	266	265	264
38°	264	264	264	262	262	261	261	260
39°	259	259	259	258	258	257	256	255
40°	255	255	255	253	253	252	251	251
41°	250	250	250	249	248	247	247	246
42°	246	245	245	244	244	242	242	241
43°	241	240	240	239	239	238	237	236
44°	236	236	236	234	234	233	232	232
45°	231	231	231	229	229	228	228	227
46°	226	226	226	224	224	223	222	222
47°	221	221	221	220	219	218	217	217
48°	216	216	216	214	214	213	213	212

Luminous Intensity (cd) Distribution Data (cont.)

C / γ	180°	202.5°	225°	247.5°	270°	292.5°	315°	337.5°
49°	211	211	211	209	209	208	207	207
50°	206	206	206	204	204	202	202	202
51°	201	200	200	199	199	197	197	196
52°	196	195	195	194	194	192	192	191
53°	191	190	190	189	188	187	187	186
54°	185	185	185	183	183	182	182	181
55°	180	179	180	178	178	177	177	176
56°	175	174	174	173	172	171	171	170
57°	170	169	169	168	167	166	166	165
58°	164	164	164	162	162	161	161	160
59°	159	158	158	157	157	155	155	154
60°	154	153	153	151	151	150	150	149
61°	148	148	148	146	146	145	145	144
62°	143	142	142	141	140	139	139	139
63°	137	137	136	135	135	134	133	133
64°	131	131	131	130	129	129	128	128
65°	126	126	125	125	124	123	123	122
66°	121	121	120	119	118	118	117	117
67°	115	115	115	114	113	113	112	112
68°	110	110	109	109	108	107	107	107
69°	105	105	104	103	103	102	102	101
70°	99	99	99	98	97	97	96	96
71°	94	94	94	93	92	92	91	91
72°	89	89	88	88	87	87	86	86
73°	84	84	83	83	82	81	81	81
74°	79	79	78	78	77	76	76	76
75°	74	74	73	72	72	71	71	71
76°	69	69	68	67	67	66	66	66
77°	64	64	63	63	62	62	61	62
78°	59	59	59	58	57	57	57	57
79°	55	54	54	53	53	52	52	52
80°	50	50	50	48	48	48	48	47
81°	46	45	45	44	44	43	43	43
82°	42	41	41	40	40	39	39	39
83°	38	37	37	36	36	35	35	35
84°	34	33	33	32	32	31	31	31
85°	30	29	29	28	28	27	27	27
86°	26	26	26	25	25	24	24	24
87°	23	23	22	22	21	21	21	21
88°	20	20	19	19	18	18	18	18
89°	17	17	17	16	16	15	15	15
90°	12	14	13	14	13	13	11	12
91°	6	7	9	11	10	11	7	2
92°	1	4	6	7	7	6	3	1
93°	0	0	0	4	2	3	0	0
94°	0	1	0	0	0	0	0	3
95°	3	6	0	0	0	0	0	5
96°	5	5	0	0	0	0	0	4
97°	4	4	2	0	0	0	2	3

Luminous Intensity (cd) Distribution Data (cont.)

C / γ	180°	202.5°	225°	247.5°	270°	292.5°	315°	337.5°
98°	4	4	3	0	0	0	3	3
99°	3	3	3	1	0	1	2	2
100°	3	3	2	1	0	1	2	2
101°	3	2	2	1	1	1	2	2
102°	2	2	2	1	1	1	1	1
103°	2	2	2	1	1	1	1	1
104°	2	2	1	1	1	0	1	1
105°	2	2	1	0	2	0	1	1
106°	2	1	1	0	1	0	1	1
107°	2	1	1	0	0	0	0	1
108°	2	1	1	0	0	0	0	1
109°	1	1	0	0	0	0	0	1
110°	1	1	0	0	0	0	0	1
111°	1	1	0	0	0	0	0	1
112°	1	1	0	0	0	0	1	1
113°	1	1	0	0	0	0	1	1
114°	1	1	0	0	0	1	1	1
115°	1	1	0	1	0	1	1	1
116°	1	1	1	1	1	1	1	1
117°	1	1	1	1	1	1	1	1
118°	1	1	1	1	1	1	1	1
119°	1	1	1	1	1	1	1	1
120°	2	1	1	1	1	1	1	1
121°	2	1	1	1	1	1	1	1
122°	1	1	1	1	1	1	1	1
123°	0	1	1	1	1	1	1	1
124°	0	1	1	1	1	1	1	1
125°	0	1	1	1	1	1	1	1
126°	0	1	1	1	1	1	1	1
127°	0	1	1	1	1	1	1	1
128°	0	1	1	1	1	1	1	1
129°	0	1	1	1	1	1	1	1
130°	0	1	1	1	1	1	1	1
131°	0	1	1	1	1	1	1	1
132°	0	0	1	1	1	1	1	0
133°	0	0	1	1	1	1	1	0
134°	0	0	1	1	1	1	1	0
135°	0	0	1	1	1	1	1	0
136°	0	0	1	1	1	1	1	0
137°	0	0	1	1	1	1	1	0
138°	0	0	1	1	1	1	1	1
139°	0	1	1	1	1	1	1	1
140°	0	1	1	1	1	1	1	1
141°	0	1	1	1	1	1	1	1
142°	1	1	1	1	1	1	1	1
143°	1	1	1	1	1	1	1	1
144°	1	1	1	1	1	1	1	1
145°	1	1	1	1	1	1	1	0
146°	1	1	1	1	1	1	1	1

Luminous Intensity (cd) Distribution Data (cont.)

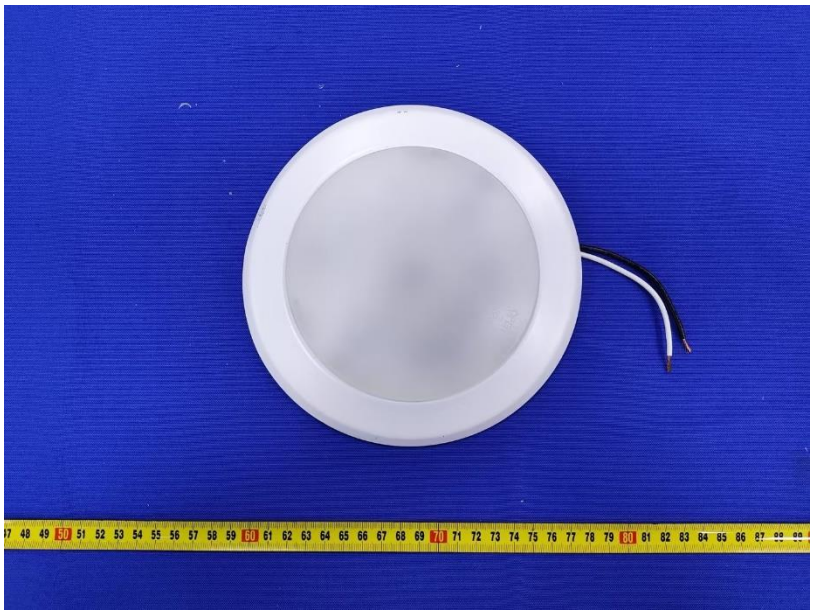
C / γ	180°	202.5°	225°	247.5°	270°	292.5°	315°	337.5°
147°	1	1	1	1	1	1	1	1
148°	1	1	1	1	1	1	1	1
149°	1	1	1	1	1	1	0	1
150°	0	1	0	1	1	1	0	1
151°	0	1	0	1	1	1	0	1
152°	1	1	1	1	1	1	0	1
153°	1	1	1	1	1	1	0	0
154°	1	1	1	1	1	1	0	0
155°	1	1	1	1	1	1	0	0
156°	1	1	1	1	1	1	0	0
157°	1	1	1	1	1	1	0	1
158°	1	1	1	1	1	1	0	1
159°	1	1	1	1	1	1	0	1
160°	1	1	1	1	1	1	0	1
161°	1	1	1	1	1	1	0	1
162°	1	1	1	0	1	0	0	1
163°	1	1	1	0	0	0	1	1
164°	1	1	1	0	0	0	1	1
165°	1	1	1	0	0	0	1	1
166°	0	1	1	0	0	0	1	1
167°	0	1	1	1	0	1	1	1
168°	0	1	1	1	1	1	1	1
169°	0	1	1	1	1	1	1	1
170°	0	1	0	1	1	1	1	1
171°	1	1	0	1	1	1	1	1
172°	1	0	0	1	1	1	1	1
173°	1	0	0	1	1	1	1	1
174°	0	0	0	1	1	1	1	1
175°	0	0	0	1	1	1	1	1
176°	0	0	1	1	1	1	1	1
177°	0	1	1	1	1	1	1	1
178°	0	1	1	1	1	1	1	0
179°	0	1	0	1	1	1	0	0
180°	0	0	0	0	0	0	0	0

Zonal Lumen Density Measurement

Deg	Flux (lm)	%
Deg	Flux (lm)	%
0-5	8.5	0.84
5-10	25.3	2.49
10-15	41.0	4.03
15-20	55.2	5.43
20-25	67.3	6.62
25-30	77.0	7.57
30-35	83.8	8.24
35-40	87.8	8.63
40-45	88.8	8.74
45-50	87.0	8.56
50-55	82.5	8.11
55-60	75.6	7.44
60-65	66.5	6.53
65-70	55.7	5.48
70-75	44.0	4.32
75-80	31.8	3.13
80-85	20.3	2.00
85-90	10.8	1.07
90-95	2.4	0.23
95-100	1.1	0.10
100-105	0.7	0.07
105-110	0.4	0.04
110-115	0.4	0.04
115-120	0.4	0.05
120-125	0.4	0.04
125-130	0.4	0.03
130-135	0.3	0.03
135-140	0.3	0.03
140-145	0.3	0.03
145-150	0.2	0.02
150-155	0.2	0.02
155-160	0.2	0.01
160-165	0.1	0.02
165-170	0.1	0.00
170-175	0.0	0.01

Deg	Flux (lm)	%
Deg	Flux (lm)	%
0-5	8.5	0.84
0-10	33.8	3.33
0-15	74.9	7.36
0-20	130.1	12.79
0-25	197.4	19.41
0-30	274.4	26.98
0-35	358.2	35.22
0-40	446.0	43.85
0-45	534.8	52.59
0-50	621.8	61.15
0-55	704.4	69.26
0-60	780.0	76.70
0-65	846.5	83.23
0-70	902.2	88.71
0-75	946.1	93.03
0-80	977.9	96.16
0-85	998.3	98.16
0-90	1009.1	99.23
0-95	1011.5	99.46
0-100	1012.6	99.56
0-105	1013.3	99.63
0-110	1013.7	99.67
0-115	1014.1	99.71
0-120	1014.5	99.76
0-125	1014.9	99.80
0-130	1015.3	99.83
0-135	1015.6	99.86
0-140	1015.9	99.89
0-145	1016.1	99.92
0-150	1016.4	99.94
0-155	1016.6	99.96
0-160	1016.7	99.97
0-165	1016.9	99.99
0-170	1016.9	99.99
0-175	1017.0	100.00

6. Product Photo



Directions

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