



Guangdong Meide Testing Technology Co., Ltd.



# TEST REPORT OF ANSI/IES LM-79-19

## APPROVED METHOD FOR OPTICAL AND ELECTRICAL MEASUREMENTS OF SOLID-STATE LIGHTING PRODUCTS

Client..... : ROYALUX EXPORTS

Address..... : 150-B, NOIDA SPECIAL ECONOMIC ZONE, NOIDA, GAUTAM BUDHHA NAGAR,  
UTTAR PRADESH, 201305

Test Model..... : 704Y504030W354050LY

Brand Name..... : **Rlux**

Testing Laboratory..... : Guangdong Meide Testing Technology Co., Ltd.

Address..... : 1st floor, B Area, Jinbaisheng Industrial Park, Headquarters 2 Road, Songshan Lake  
Hi-tech Industrial Development Zone, Dongguan City, Guangdong Pr., China.

Testing location..... : As above

Report No..... : C02A21030672L01005

Test Date..... : June. 03, 2020 – June. 06, 2020

Report Date..... : Apr. 25, 2021

Tested by:

Tim Qian/ Test Engineer

Checked by:

Luke Lei/ Project Engineer

Approved by:

Jessie Li/ Technical Manager



Note 1: The test data was only valid for the test sample(s). This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or use in part without prior written consent from Guangdong Meide Testing Technology Co., Ltd. This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Note 2: This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.



1.Product Description for Equipment under Test(EUT)

The client submitted 1 sample of model 704Y504030W354050LY. The sample was received on 2021-04-13, is in undamaged condition.

Table with 2 columns: Parameter and Value. Parameters include Model Tested, Manufacturer, Address, Product Type, Rated Voltage/Frequency, Rated Power, Nominal CCT, LED Driver Manufacturer, LED Driver Model No, LED Manufacturer, and LED Model No.

Model Similarity:

Model nomenclature: 7XXDyyyyyyWCVY

- 1. Code "7" denotes Product Series Name, 7=BACK-LIT PANEL LIGHT series;
2. Suffix "XX" can be 02,03 or 04 denotes luminaires shell Shape and Overall dimension...
4. Suffix "D" can be "Y" or "N" denotes the dimming function of luminaires...
5. Suffix "yyyyy" denotes multiple wattage of luminaires...
5. Suffix "C" can be two numbers denotes single LED Color Temperature...
6. Suffix "L" denotes range of input voltage; where L=Low voltage range.
7. Suffix "Y" can be blank or four characters denotes commercial code for marketing purpose.



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## 2. Standards Used

- ANSI/IES LM-79-19:APPROVED METHOD:OPTICAL AND ELECTRICAL MEASUREMENTS OF SOLID-STATE LIGHTING PRODUCTS
- IES TM-30-18 IES Method for Evaluating Light Source Color Rendition (This Method is not in Nvlap accreditation scope)
- ANSI C82.77-10:2014 Harmonic Emission Limits – Related Power Quality Requirements for Lighting Equipment-Solid State

## 3. Test equipment list

Test Equipment	Serial No	Model No	Calibration due date
Full-field Speed Goniophotometer	MD-E028	GO-R5000	2021/09/29
Digital Power Meter	MD-E001	PF2010	2021/09/29
AC Testing Power Source	MD-E002	DPS1060	2021/09/29
Total Spectral Radiant Flux Standard Lamp	MD-E007	D908S	2021/09/29
Integrating Sphere System	MD-E029	2M	2021/09/29
High Accuracy Array Spectroradio Meter	MD-E011	HAAS-3000	2021/09/29
Digital Power Meter	MD-E008	PF310	2021/09/29
AC Testing Power Source	MD-E010	DPS1010	2021/09/29
Standard Lamp	MD-E012	D204	2021/06/09

Statement of Traceability: Guangdong Meide Testing Technology Co., Ltd. attested that all calibration has been performed using suitable standards traceable to national primary standards and International System of Unit(SI).



## 4. Test Method

### Requirements of Ambient Condition

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 between 10% and 65%.

### Goniophotometer System

The sample was tested according to the ANSI/IES LM-79-19.

Photometric parameters were measured using a type C goniophotometer and software. The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, Luminous efficacy, zonal flux were calculated from the software taken at  $1^{\circ}$  vertical intervals and  $22.5^{\circ}$  horizontal intervals. Photometric distance was more than five times of the Largest dimension of the test SSL product.

### Integrating Sphere System

The sample was tested according to the ANSI/IES LM-79-19.

The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. Coating reflectance of the integrating sphere was 90% to 98%. Photometric measurement conditions was using  $4\pi$  geometry. The self-absorption factor is applied in the final test result. The sample was operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.

### Fidelity Index ( $R_f$ ) and Gamut Index ( $R_g$ ) 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.

### THD and PF Test

The sample was tested according to the ANSI C82.77-10:2014.

The sample was operated at rated voltage and was stabilized before measurement. The total harmonic distortion were calculated from the digital power meter.



## 5. Integrating Sphere Test Results

### 5.1 Test Data

Test Ambient Temperature	25.1°C	Test orientation	Downward
Operate time(Min.)	75	stabilization time(Min.)	60

### Model # 704Y504030W354050LY Optical and Electrical Measurement Result

Mode	Voltage (V)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	Luminous Flux(lm)	Efficacy (lm/W)	CCT (K)
50W-3500K	120.0	60	0.4094	48.86	0.9945	6370.6	130.38	3437
50W-4000K	120.0	60	0.4038	48.13	0.9934	6628.5	137.72	4119
50W-5000K	120.0	60	0.4097	48.79	0.9923	6443.0	132.06	4905
40W-3500K	120.0	60	0.3274	39.07	0.9944	5291.3	135.43	3433
40W-4000K	120.0	60	0.3227	38.48	0.9936	5495.0	142.80	4125
40W-5000K	120.0	60	0.3274	38.98	0.9924	5363.2	137.58	4900
30W-3500K	120.0	60	0.2471	29.47	0.9938	4122.0	139.87	3432
30W-4000K	120.0	60	0.2438	29.02	0.9920	4231.4	145.81	4136
30W-5000K	120.0	60	0.2448	29.17	0.9933	4174.2	143.08	4902

Mode	Ra	R9	Rf	Rg	x	y	u'	v'	Duv
50W-3500K	83.7	10	85	96	0.4095	0.3941	0.2371	0.5133	0.000554
50W-4000K	85.5	19	85	94	0.3759	0.3760	0.2224	0.5006	0.001
50W-5000K	84.9	17	85	94	0.3487	0.3622	0.2098	0.4903	0.00379
40W-3500K	83.8	11	85	95	0.4097	0.3940	0.2372	0.5133	0.000506
40W-4000K	85.6	20	85	94	0.3757	0.3758	0.2224	0.5004	0.000958
40W-5000K	85.0	18	85	94	0.3489	0.3624	0.2098	0.4904	0.00387
30W-3500K	83.9	11	85	95	0.4097	0.3940	0.2372	0.5133	0.000475
30W-4000K	85.7	20	85	94	0.3752	0.3754	0.2222	0.5002	0.000905
30W-5000K	85.1	19	85	94	0.3488	0.3623	0.2098	0.4903	0.00381



5.2 Model # 704Y504030W354050LY(Mode:50W-3500K) Color Rendering Index

Ra				
83.7				
R1	R2	R3	R4	R5
82	91	97	82	82
R6	R7	R8	R9	R10
88	85	63	10	79
R11	R12	R13	R14	R15
82	67	84	99	75



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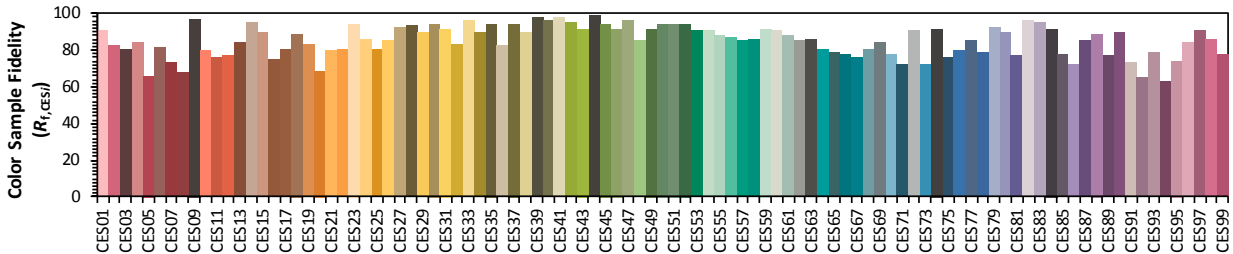
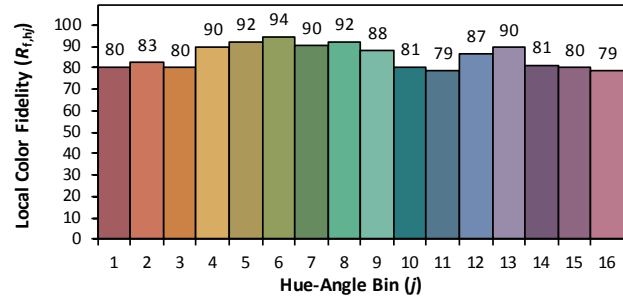
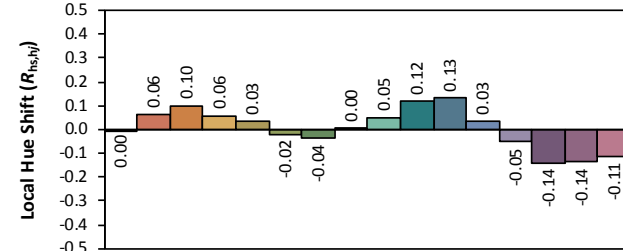
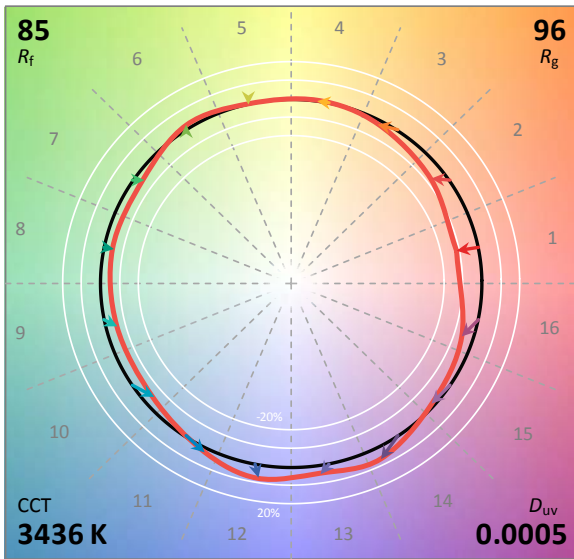
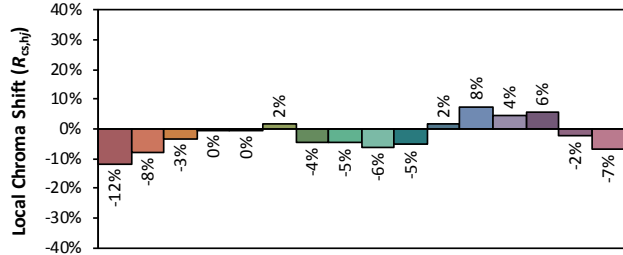
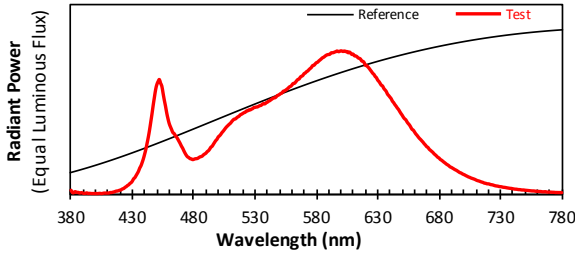


5.3.1 Model # 704Y504030W354050LY (Mode:50W-3500K) ANSI/IES TM-30-18 Color Rendition Report

ANSI/IES TM-30-18 Color Rendition Report

Source: HL-AS-2835DW-3C-S1-08L-PCT-HR3  
 Date: 2021/4/25

Manufacturer: ROYALUX EXPORTS  
 Model: 704D504030W354050LY



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

$x$  0.4095  
 $y$  0.3939  
 $u'$  0.2371  
 $v'$  0.5132

CIE 13.3-1995 (CRI)  
 $R_a$  84  
 $R_g$  10

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.0



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Model # 704Y504030W354050LY(Mode:50W-3500K) Relative Spectral Power Distribution

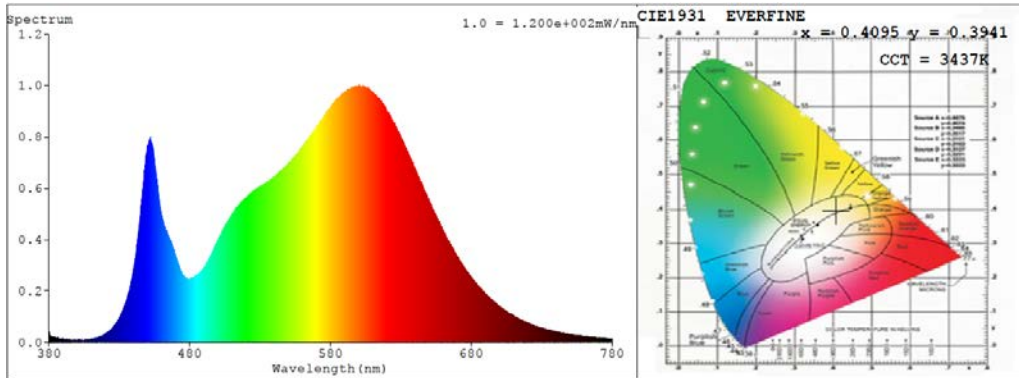


Table with 10 columns: nm, mW, nm, mW, nm, mW, nm, mW, nm, mW. It lists relative spectral power distribution data for wavelengths from 380 nm to 516 nm.





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nm	mW	nm	mW	nm	mW	nm	mW	nm	mW
550	0.6949	599	0.9934	648	0.5762	697	0.153	746	0.035
551	0.7015	600	0.9971	649	0.5626	698	0.1501	747	0.0333
552	0.7053	601	0.995	650	0.5506	699	0.1445	748	0.0325
553	0.7168	602	0.9926	651	0.5362	700	0.1404	749	0.0325
554	0.719	603	0.9965	652	0.5257	701	0.1366	750	0.0311
555	0.7247	604	0.991	653	0.5184	702	0.1316	751	0.0302
556	0.7311	605	0.9925	654	0.5035	703	0.1277	752	0.0294
557	0.7382	606	0.9836	655	0.4924	704	0.123	753	0.0285
558	0.747	607	0.9889	656	0.4823	705	0.1202	754	0.0276
559	0.7509	608	0.9807	657	0.4678	706	0.1159	755	0.0267
560	0.759	609	0.972	658	0.4532	707	0.1129	756	0.0259
561	0.7705	610	0.9743	659	0.4477	708	0.1099	757	0.0259
562	0.7711	611	0.963	660	0.4353	709	0.1069	758	0.025
563	0.7794	612	0.9615	661	0.4221	710	0.1027	759	0.0236
564	0.7904	613	0.9576	662	0.4124	711	0.0986	760	0.0231
565	0.7989	614	0.9488	663	0.4011	712	0.096	761	0.0226
566	0.8023	615	0.945	664	0.3907	713	0.0935	762	0.022
567	0.8154	616	0.9401	665	0.3824	714	0.0899	763	0.0219
568	0.8211	617	0.9267	666	0.3728	715	0.0871	764	0.0202
569	0.8265	618	0.924	667	0.3636	716	0.0845	765	0.0197
570	0.8392	619	0.9152	668	0.3524	717	0.08	766	0.0203
571	0.8435	620	0.8965	669	0.3435	718	0.0791	767	0.0204
572	0.8528	621	0.895	670	0.3326	719	0.0757	768	0.0181
573	0.8576	622	0.886	671	0.3275	720	0.0751	769	0.0179
574	0.867	623	0.8763	672	0.3154	721	0.0738	770	0.0178
575	0.8748	624	0.8644	673	0.308	722	0.0702	771	0.0178
576	0.8825	625	0.8532	674	0.3004	723	0.0689	772	0.017
577	0.8954	626	0.8411	675	0.2931	724	0.067	773	0.0167
578	0.8964	627	0.8333	676	0.2832	725	0.064	774	0.0163
579	0.9058	628	0.819	677	0.276	726	0.0616	775	0.0152
580	0.9147	629	0.811	678	0.2681	727	0.0602	776	0.0153
581	0.9182	630	0.7942	679	0.2592	728	0.059	777	0.0149
582	0.9268	631	0.7848	680	0.2544	729	0.0567	778	0.0149
583	0.9338	632	0.7717	681	0.2448	730	0.0554	779	0.0146
584	0.9411	633	0.7585	682	0.2395	731	0.0545	780	0.0141
585	0.9488	634	0.7535	683	0.2328	732	0.0521		
586	0.953	635	0.7366	684	0.2255	733	0.051		
587	0.9597	636	0.7263	685	0.2194	734	0.05		
588	0.9661	637	0.7155	686	0.2121	735	0.0481		
589	0.9699	638	0.697	687	0.2068	736	0.0466		
590	0.9718	639	0.6872	688	0.201	737	0.0452		
591	0.9734	640	0.6761	689	0.193	738	0.0439		
592	0.9826	641	0.6655	690	0.1894	739	0.0432		
593	0.9837	642	0.6484	691	0.1842	740	0.0413		
594	0.985	643	0.6383	692	0.1791	741	0.0397		
595	0.9889	644	0.6247	693	0.1737	742	0.0383		
596	0.9918	645	0.6138	694	0.1697	743	0.038		
597	0.9964	646	0.6009	695	0.1643	744	0.0365		
598	0.9912	647	0.5906	696	0.1585	745	0.0351		



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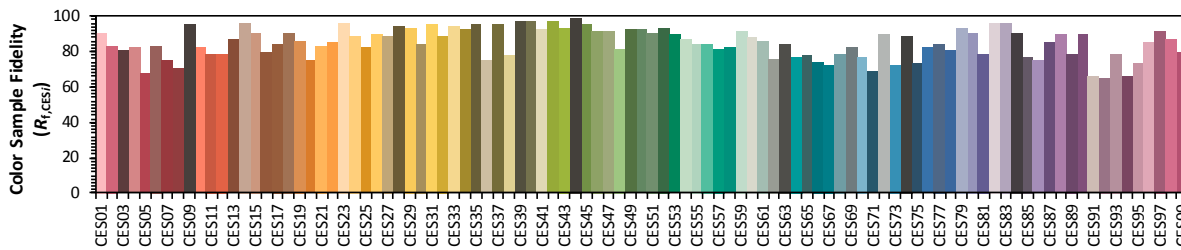
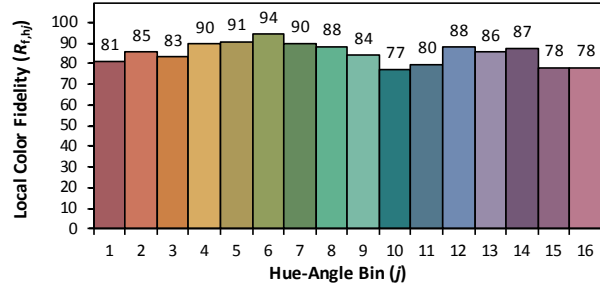
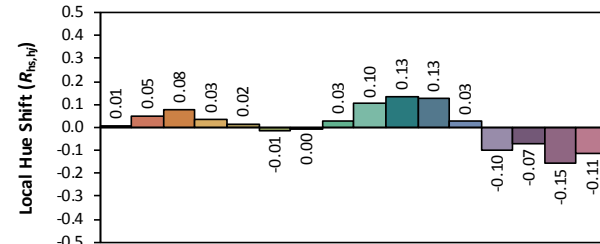
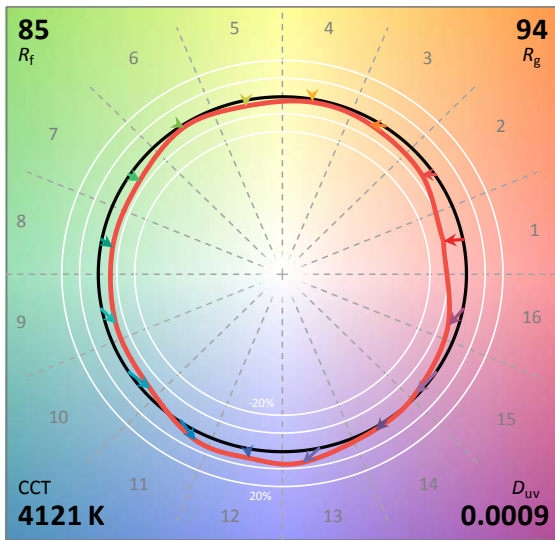
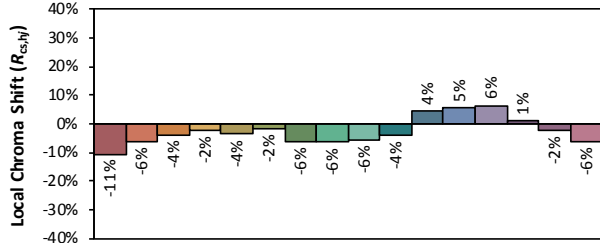
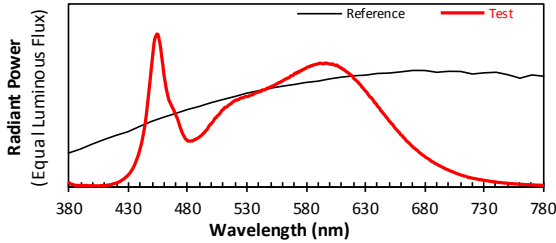


5.3.2 Model # 704Y504030W354050LY (Mode:50W-4000K) ANSI/IES TM-30-18 Color Rendition Report

ANSI/IES TM-30-18 Color Rendition Report

Source: HL-AS-2835DW-3C-S1-08L-PCT-HR3  
 Date: 2021/4/25

Manufacturer: ROYALUX EXPORTS  
 Model: 704D504030W354050LY



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

$x$  0.3759  
 $y$  0.3758  
 $u'$  0.2225  
 $v'$  0.5005

CIE 13.3-1995 (CRI)	
$R_a$	86
$R_9$	19

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.0



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5.3.3 Model # 704Y504030W354050LY (Mode:50W-5000K) ANSI/IES TM-30-18 Color Rendition Report

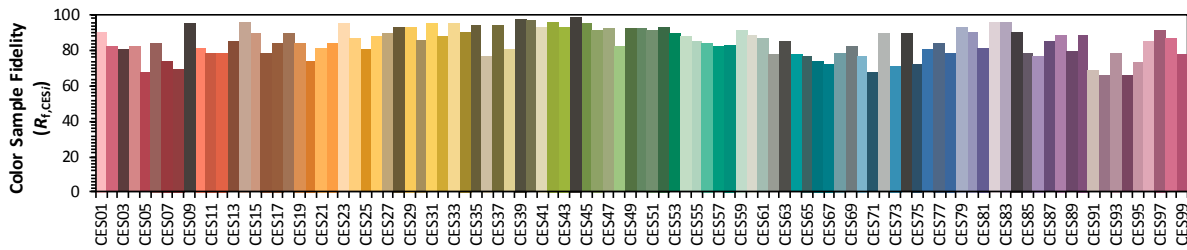
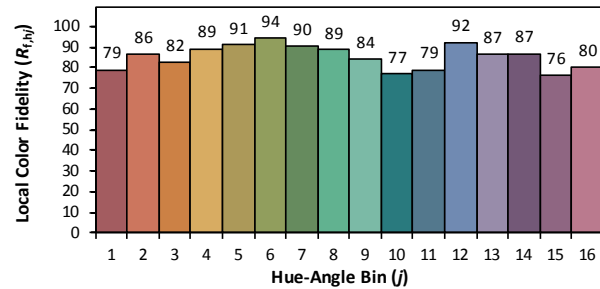
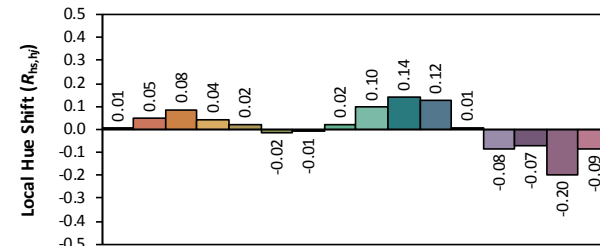
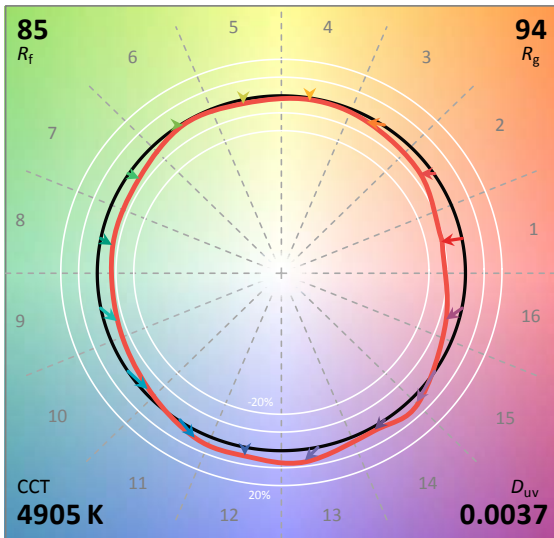
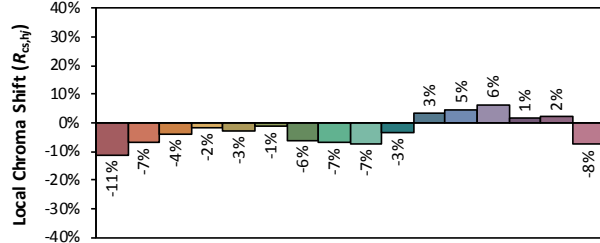
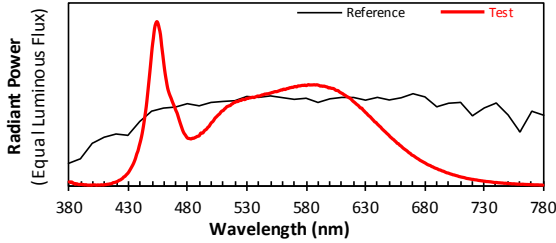
ANSI/IES TM-30-18 Color Rendition Report

Source: HL-AS-2835DW-3C-S1-08L-PCT-HR3

Manufacturer: ROYALUX EXPORTS

Date: 2021/4/25

Model: 704D504030W354050LY



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

$x$  0.3487  
 $y$  0.3620  
 $u'$  0.2098  
 $v'$  0.4902

CIE 13.3-1995 (CRI)

$R_a$  85  
 $R_g$  17

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.0



6. Goniophotometer Test results for model # 704Y504030W354050LY(Mode:50W-3500K)

6.1 Test Data

Test Ambient Temperature	25.1°C	Test orientation	Downward
Operate time(Min.)	90	stabilization time(Min.)	60

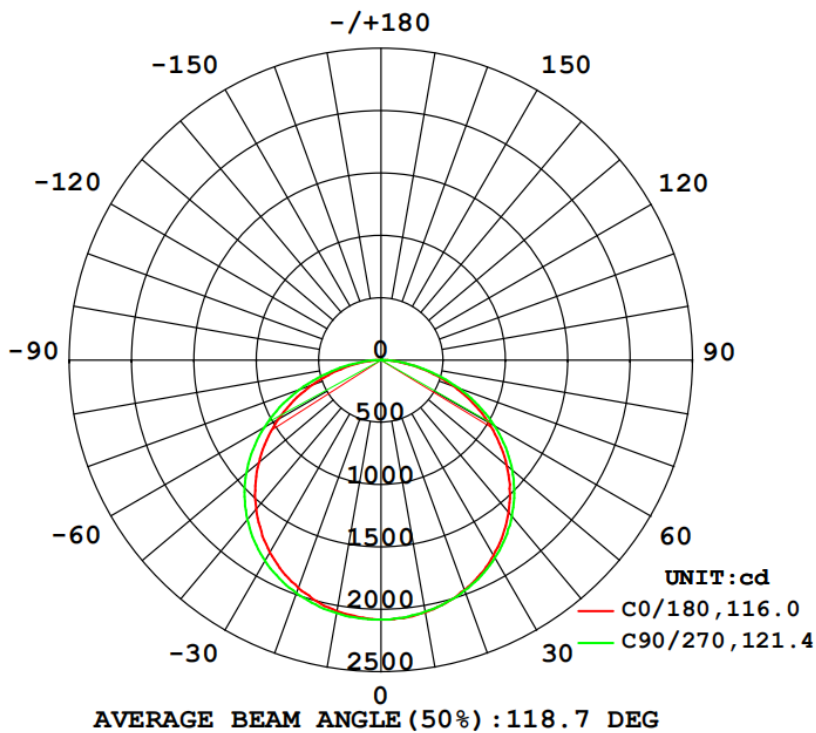
Electrical Measurement

Input Voltage (V)	Frequency (Hz)	Input Current(A)	Power Factor	Power(W)
120.1	60	0.4093	0.9940	48.85

Optical Measurement

Luminous Flux (lm)	Efficacy(lm/W)	ZL (0-60°)	Spacing Criteria (C0/180°)	Spacing Criteria (C90/270°)
6371.16	130.42	77.4%	1.27	1.33

6.2 Luminous Intensity Distribution





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### 6.3 Zonal Flux Diagram

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	2056	2054	2049	2043	2045	2050	2060	2063	0- 10	197.4	197.4	3.1,3.1
20	1961	1968	1966	1952	1946	1968	1989	1981	10- 20	569.9	767.3	12,12
30	1808	1822	1831	1800	1783	1820	1860	1842	20- 30	876.9	1644	25.8,25.8
40	1595	1616	1634	1587	1560	1611	1670	1642	30- 40	1080	2724	42.8,42.8
50	1319	1349	1375	1316	1281	1341	1411	1377	40- 50	1148	3871	60.8,60.8
60	991.7	1021	1050	987.7	952.4	1013	1084	1050	50- 60	1063	4934	77.4,77.4
70	624.9	650.5	668.7	616.7	589.0	635.5	696.5	672.9	60- 70	826.0	5760	90.4,90.4
80	259.6	273.2	277.3	247.2	235.7	261.1	297.6	289.8	70- 80	477.2	6237	97.9,97.9
90	4.428	9.985	5.595	8.205	3.212	2.197	2.916	6.705	80- 90	128.0	6365	99.9,99.9
100	0.4880	0.4379	0.4605	0.4922	0.8606	0.8272	0.7948	0.7655	90-100	0.9653	6366	99.9,99.9
110	0.5945	0.5609	0.6202	0.6029	0.8806	0.8590	0.8021	0.7501	100-110	0.7342	6367	99.9,99.9
120	0.7116	0.7219	0.8885	0.7745	0.7350	0.7962	0.8122	0.6571	110-120	0.7239	6367	99.9,99.9
130	0.9273	1.036	1.153	1.073	0.9903	1.051	1.027	0.9592	120-130	0.7889	6368	100,100
140	1.243	1.166	1.253	1.248	1.539	1.466	1.235	1.294	130-140	0.9092	6369	100,100
150	1.083	1.148	1.225	1.268	1.737	1.701	1.392	1.512	140-150	0.8535	6370	100,100
160	1.177	1.272	1.373	1.417	1.689	1.790	1.656	1.585	150-160	0.6635	6371	100,100
170	1.261	1.416	1.541	1.610	1.607	1.561	1.602	1.662	160-170	0.4250	6371	100,100
180	1.552	1.437	1.597	1.712	1.574	1.471	1.502	1.678	170-180	0.1487	6371	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



6.4 UGR (Unified Glare Rating) Table

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	16.9	18.4	17.2	18.6	18.9	17.1	18.7	17.4	18.9	19.1
3H	18.5	19.9	18.8	20.1	20.4	18.8	20.2	19.1	20.4	20.7
4H	19.1	20.4	19.4	20.7	20.9	19.4	20.8	19.7	21.0	21.3
6H	19.5	20.8	19.8	21.1	21.3	19.9	21.1	20.2	21.4	21.7
8H	19.6	20.9	20.0	21.1	21.4	20.0	21.2	20.3	21.5	21.8
12H	19.7	20.9	20.0	21.2	21.5	20.0	21.2	20.4	21.5	21.8
4H 2H	17.6	18.9	17.9	19.2	19.4	17.8	19.1	18.1	19.4	19.6
3H	19.3	20.5	19.7	20.8	21.1	19.6	20.8	19.9	21.1	21.4
4H	20.0	21.1	20.4	21.4	21.8	20.3	21.4	20.7	21.7	22.1
6H	20.6	21.5	21.0	21.9	22.3	20.9	21.9	21.3	22.2	22.6
8H	20.8	21.7	21.2	22.0	22.4	21.1	22.0	21.5	22.4	22.7
12H	20.9	21.7	21.3	22.1	22.5	21.2	22.0	21.6	22.4	22.8
8H 4H	20.3	21.2	20.7	21.6	22.0	20.6	21.5	21.0	21.9	22.3
6H	21.0	21.8	21.5	22.2	22.6	21.3	22.1	21.8	22.5	22.9
8H	21.3	21.9	21.7	22.4	22.8	21.6	22.2	22.0	22.7	23.1
12H	21.5	22.0	21.9	22.5	23.0	21.8	22.3	22.2	22.8	23.3
12H 4H	20.3	21.2	20.8	21.6	22.0	20.6	21.4	21.0	21.8	22.2
6H	21.1	21.8	21.5	22.2	22.6	21.4	22.0	21.8	22.5	22.9
8H	21.4	22.0	21.9	22.4	22.9	21.7	22.2	22.2	22.7	23.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 6371 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 6.4)



Guangdong Meide Testing Technology Co., Ltd.



6.5 Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	2081	2081	2081	2081	2081	2081	2081	2081	2081	2081	2081	2081	2081	2081	2081	2081			
5	2077	2078	2075	2076	2072	2073	2068	2072	2069	2074	2073	2079	2079	2078	2080	2080			
10	2056	2050	2054	2056	2049	2045	2043	2044	2045	2053	2050	2060	2060	2061	2063	2059			
15	2018	2015	2018	2021	2015	2009	2003	2005	2001	2006	2017	2029	2031	2033	2029	2025			
20	1961	1963	1968	1972	1966	1962	1952	1943	1946	1955	1968	1981	1989	1988	1981	1974			
25	1892	1897	1901	1910	1907	1899	1883	1871	1872	1884	1898	1922	1931	1931	1918	1907			
30	1808	1811	1822	1833	1831	1820	1800	1781	1783	1796	1820	1849	1860	1859	1842	1826			
35	1708	1710	1729	1741	1741	1725	1699	1678	1677	1692	1722	1755	1773	1770	1750	1727			
40	1595	1600	1616	1634	1634	1616	1587	1559	1560	1577	1611	1647	1670	1665	1642	1614			
45	1461	1468	1490	1512	1513	1493	1458	1431	1427	1446	1484	1527	1550	1545	1519	1487			
50	1319	1325	1349	1373	1375	1353	1316	1283	1281	1301	1341	1389	1411	1405	1377	1344			
55	1160	1169	1193	1218	1221	1197	1159	1127	1122	1144	1182	1232	1256	1252	1220	1188			
60	992	999	1021	1047	1050	1028	988	954	952	972	1013	1059	1084	1080	1050	1019			
65	812	818	840	864	865	843	806	775	774	791	829	872	896	893	866	837			
70	625	631	651	668	669	648	617	589	589	603	636	674	697	696	673	648			
75	436	441	455	470	469	452	426	403	406	416	442	474	493	493	476	457			
80	260	264	273	280	277	265	247	232	236	243	261	283	298	300	290	278			
85	107	108	114	116	112	105	95.9	89.2	92.3	95.8	105	115	124	128	126	118			
90	4.43	10.7	9.99	6.90	5.59	4.81	8.20	7.49	3.21	2.84	2.20	2.00	2.92	4.88	6.71	7.42			
95	0.43	0.42	0.38	0.37	0.37	0.39	0.42	0.47	0.76	0.75	0.72	0.69	0.68	0.67	0.67	0.72			
100	0.49	0.48	0.44	0.44	0.46	0.46	0.49	0.55	0.86	0.87	0.83	0.80	0.79	0.76	0.77	0.82			
105	0.55	0.53	0.50	0.51	0.54	0.54	0.56	0.62	0.91	0.94	0.88	0.86	0.84	0.80	0.80	0.86			
110	0.59	0.58	0.56	0.58	0.62	0.62	0.60	0.68	0.88	0.92	0.86	0.85	0.80	0.75	0.75	0.82			
115	0.65	0.62	0.63	0.68	0.74	0.71	0.66	0.73	0.81	0.87	0.81	0.79	0.74	0.70	0.68	0.76			
120	0.71	0.70	0.72	0.82	0.89	0.82	0.77	0.79	0.74	0.82	0.80	0.82	0.81	0.74	0.66	0.69			
125	0.80	0.81	0.88	0.97	1.05	0.94	0.94	0.91	0.77	0.88	0.89	0.91	0.91	0.85	0.78	0.74			
130	0.93	0.95	1.04	1.07	1.15	1.07	1.07	1.08	0.99	1.08	1.05	1.02	1.03	0.98	0.96	0.91			
135	1.11	1.07	1.14	1.17	1.22	1.17	1.17	1.23	1.29	1.34	1.26	1.18	1.15	1.13	1.15	1.15			
140	1.24	1.17	1.17	1.20	1.25	1.23	1.25	1.30	1.54	1.55	1.47	1.29	1.23	1.22	1.29	1.37			
145	1.27	1.22	1.20	1.19	1.27	1.27	1.29	1.32	1.72	1.68	1.62	1.37	1.33	1.32	1.48	1.55			
150	1.08	1.06	1.15	1.16	1.22	1.29	1.27	1.21	1.74	1.72	1.70	1.51	1.39	1.36	1.51	1.57			
155	1.15	1.14	1.17	1.15	1.28	1.35	1.33	1.24	1.75	1.77	1.75	1.70	1.57	1.46	1.56	1.66			
160	1.18	1.16	1.27	1.20	1.37	1.43	1.42	1.29	1.69	1.73	1.79	1.77	1.66	1.57	1.59	1.69			
165	1.17	1.21	1.31	1.36	1.44	1.52	1.47	1.29	1.65	1.63	1.76	1.71	1.63	1.58	1.56	1.71			
170	1.26	1.25	1.42	1.44	1.54	1.62	1.61	1.35	1.61	1.61	1.56	1.63	1.60	1.60	1.66	1.71			
175	1.45	1.36	1.48	1.51	1.63	1.71	1.73	1.53	1.59	1.59	1.52	1.62	1.58	1.64	1.71	1.75			
180	1.55	1.57	1.44	1.49	1.60	1.70	1.71	1.60	1.57	1.57	1.47	1.49	1.50	1.61	1.68	1.69			

8. THD and PF Test for model # 704Y504030W354050LY(Mode:50W)

Voltage (V AC)	Frequency (Hz)	Power Factor	THD (%)	CCT (K)
120.0	60	0.9941	9.61	3500
277.0	60	0.9838	9.85	3500



8.Photo of sample



Figure 1 for model 704Y504030W354050LY



Figure 2 for model 704Y504030W354050LY

\*\*\*\*\* END OF THE TEST REPORT\*\*\*\*\*