



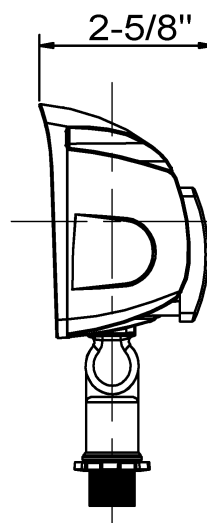
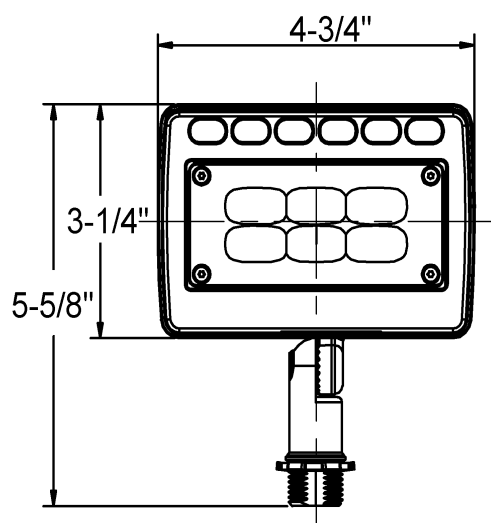
Cat # 71135A
12W Floodlight
1/2" Knuckle Mount



Model:		71135A
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC 50/60HZ
	Input Current	0.15A _{Max}
	Input Power	12W
	Power Factor	PF≥0.90
	Luminance	1423 LM
	Luminous Efficiency	118 LM/W
	CRI	>83
	Beam Angle	120°
	Main Structure	Aluminium + Tempered Glass
LED DRIVER	Output Voltage	24-48VDC
	Output Current	0.25A
	Driver Efficiency	88%
LED	LED Manufacturer	Phillips
	LED Type	Phillips LumiLED 3030
	LED Quantity	1PCS
	LED Efficacy	150 LM/W
	Color Temperature	5000K
Photocell	-	Not Included
LIFESPAN & ENVIRONMENT	Lifespan	50000 Hrs.
	Warranty	5 Years
	IP Rating	IP65, Wet Locations
	Operating Temperature	-40F - +131F
	Storage Temperature, Humidity	-40℃—+80℃ , 10—90% RH
SAFETY & EMC	Safety Norms	UL1598, UL8750, EN60598, EN61347-2-13, EN62031, EN62471
	Withstand Voltage	I/P-FG: 2121VDC
	Grounding Resistance	≤0.5Ω, 0K
	Electromagnetic Compatibility	EN55015, EN61000-2-3, EN61000-3-3, EN61547
OTHERS	Dimension	Pls refer to attached dimension drawing
	Net Weight	0.6KG
	Gross Weight	0.8KG
	Packing Size	inner box: L142*W120*H120 master carton: L378*W250*H155
	Q'ty/Carton	12 PCS
	Volume	0.52Cbm/carton

Dimension:

71135A



LM-79-08 Test Report

For

Morris Products Inc.

53 Carey Rd. Queensbury, NY 12804

Architectural Flood and Spot Luminaires

Model name(s): 71334A, 71135A, 71136A, 71137A

Representative (Tested) Model: 71334A

Model Different: All construction and rating are the same, except CCT

Test & Report By:

Johnson Sun

Engineer: Johnson Sun

Update: Nov.16, 2016

Review By:

Tommy Liang

Manager: Tommy Liang

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

Laboratory: Standard-Tech Co. Ltd Testing Center**NVLAP CODE: 201011-0**

Report Format Number STD/QR4909-A/2

Address: Standard-Tech Building, No.6 Guanhong Road, Guangzhou Science City, Guangzhou 510663, China

Tel: 8620-3229 0320

Fax: 8620-32290422

<http://www.standard-tech.com>

1.1 Product Information:

Organization Name	Morris Products Inc.	
Brand Name	MORRIS	
Model Number	71334A	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Architectural Flood and Spot Luminaires	
Rated Voltage / Frequency	100 -277Vac, 50/60 Hz	
Nominal Power	12W	
Rated Initial Lamp Lumen	--	
Declared CCT	5000K	
LED Manufacturer	Philips Lumileds	
LED Model	L130-2780003000W21	
Sample Number	GZE161105-BQ1(3000K),BQ2(5000K)	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Photo

1.2 Test Specifications:

Date of Receipt	: Nov.11,2016
Date of Test	: Nov.12,2016
Test item	1. Total Luminous Flux 2. Luminous Distribution Intensity 3. Luminous Efficacy 4. Correlated Color Temperature 5. Color Rendering Index 6. Chromaticity Coordinate 7. Electrical Parameters
Reference Standard	1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products 2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products 3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources 4. CIE 15-2004 Technical Report Colorimetry 5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source 6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	QD25

1.3 Test Methods**1) Photometric and Light Distribution Measurement – Goniophotometer Method:**

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1° vertical intervals and 22.5° horizontal intervals.

2) Chromaticity Measurement – Sphere-Spectroradiometer Method:

Chromaticity parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral power distribution taken at 5 nm intervals over the range of 380 to 780 nm.

3) Electrical Measurements:

Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Voltage, frequency, current, power, power factor and total harmonic distortion were measured by and read from the power meter.

2.1 Electrical, Photometric and Chromaticity Measurements*(Refer to Work Instruction QD25)*

Test date	2016-11-12	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	71334A		

Electrical Measurement :

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE161105-BQ1	120.0	60	0.0999	11.89	0.9914	9.41
	277.0	60	0.0489	12.44	0.9178	11.34
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

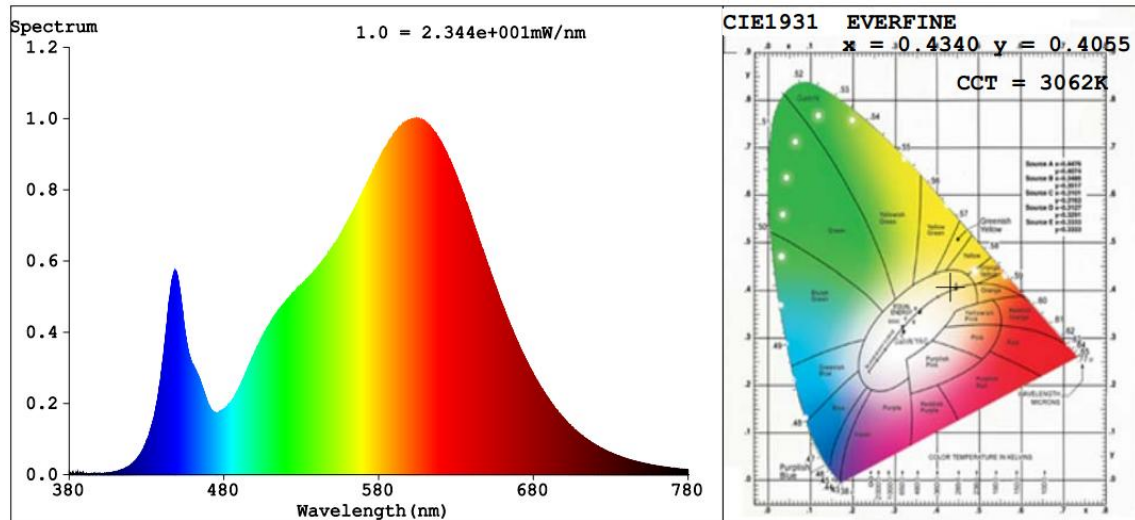
Chromaticity Measurement - Sphere-Spectroradiometer Method :

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	9
Frequency (Hz)	60	R2	90	R10	77
CCT (K)	3062	R3	97	R11	81
Duv	0.0010	R4	82	R12	70
Chromaticity (x, y)	x=0.4340 y=0.4055	R5	81	R13	83
Chromaticity (u', v')	u'=0.2481 v'=0.5215	R6	88	R14	99
Color Rendering Index (CRI)	82.9	R7	84	R15	74
R9	9	R8	61	--	--

Photometric Measurement – Goniophotometer Method :

Parameter	Result		DLC V4.0 Pass Criteria	
Test Voltage (V)	120.0	277.0	--	
Frequency (Hz)	60	60		
Total Luminous (lm)	1302.5	1270.3	>=1000 (-10%)	
Luminous Efficacy (lm/W)	109.55	102.11	Standard: >= 90(-3%)	Premium: >= 110(-3%)
Zonal lumens in the 0-90 °zone (%)	100	--	>=85(-3)	
Beam Angle (°)	105.9	--	--	
Center Beam Candle Power (cd)	469	--	--	

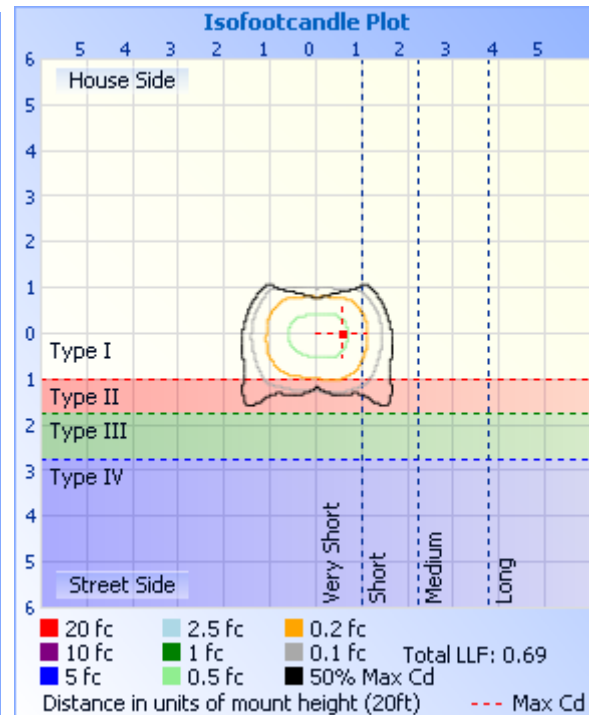
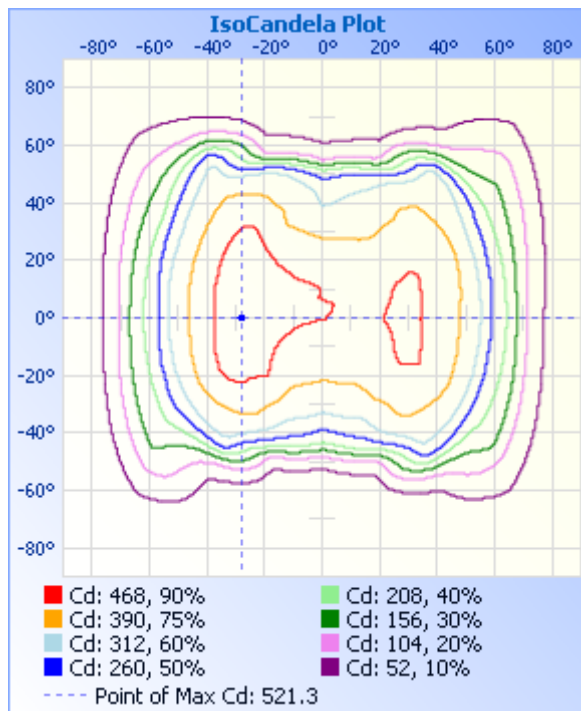
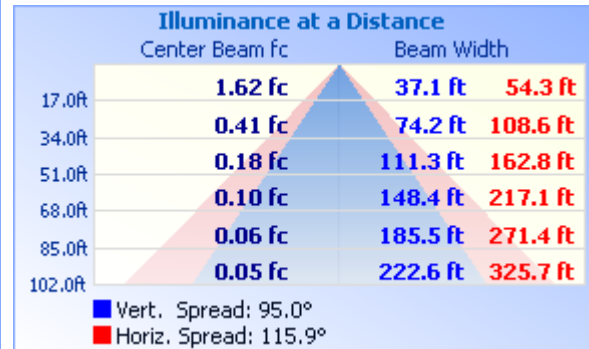
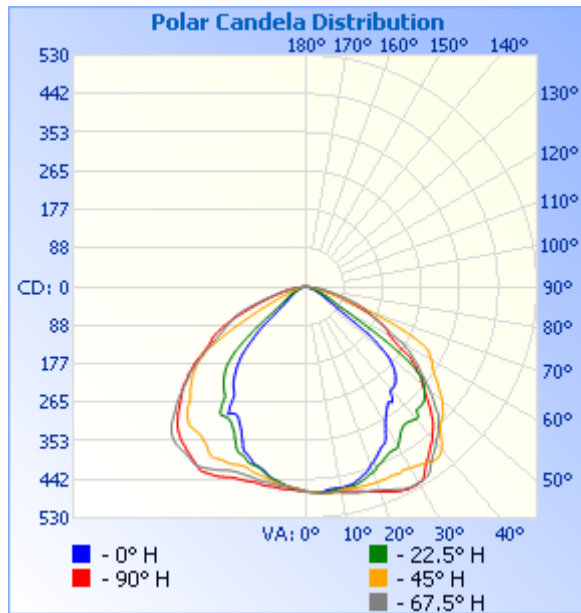
Spectral Power Distribution & Chromaticity Diagram



Zonal Lumen Tabulation

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	379.9	29.2%
0-40	642.5	49.3%
0-60	1,129.4	86.7%
60-90	172.8	13.3%
70-100	54.0	4.1%
90-120	0.1	0%
0-90	1,302.2	100%
90-180	0.1	0%
0-180	1,302.3	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	44.4	3.4%	90-100	0.0	0%
10-20	129.5	9.9%	100-110	0.0	0%
20-30	206.0	15.8%	110-120	0.0	0%
30-40	262.6	20.2%	120-130	0.0	0%
40-50	275.6	21.2%	130-140	0.0	0%
50-60	211.3	16.2%	140-150	0.0	0%
60-70	118.8	9.1%	150-160	0.0	0%
70-80	46.8	3.6%	160-170	0.0	0%
80-90	7.2	0.6%	170-180	0.0	0%



C (DEG) γ (DEG)	0	23	45	68	90	113	135	158	180	203	225	248	270	293	315	338
0	469	469	469	469	469	469	469	469	469	469	469	469	469	469	469	469
5	466	466	469	472	471	475	475	475	472	466	464	462	460	459	459	459
10	464	468	464	465	468	471	472	479	475	467	457	450	445	445	450	457
15	463	462	461	459	460	467	476	488	485	471	451	432	424	426	442	453
20	467	463	451	441	435	453	477	496	499	479	454	421	403	413	435	452
25	479	466	440	412	409	433	476	512	517	494	464	386	351	381	440	464
30	483	473	428	386	367	424	480	519	520	507	455	361	335	350	439	477
35	465	471	435	347	329	391	491	500	486	503	443	326	285	332	416	471
40	446	459	418	333	307	395	486	466	452	464	421	293	244	290	413	464
45	411	439	417	321	293	380	438	432	407	422	369	239	169	251	373	427
50	365	392	385	298	245	354	410	374	352	355	326	101	63.6	143	339	365
55	309	322	361	191	107	260	365	316	300	290	240	48.7	40.8	57.1	297	303
60	247	257	336	76.7	56.1	95.2	333	256	224	234	94.3	34.3	28.9	37.4	185	230
65	192	200	173	48.7	38.8	56.5	272	180	184	182	46.1	22.9	20.1	25.2	75.9	188
70	114	159	75.5	28.8	24.3	32.6	136	141	118	148	29.5	13.6	11.4	15.0	37.0	132
75	62.4	114	38.7	16.7	13.5	19.6	58.6	87.7	62.9	79.6	15.9	6.34	4.88	6.99	20.2	69.5
80	32.6	62.9	16.5	5.60	4.11	7.13	26.4	46.8	31.4	37.0	4.82	0.92	0.78	0.96	7.04	35.8
85	10.1	14.2	1.18	1.29	1.05	1.37	1.21	21.3	10.6	3.83	0.63	0.59	0.51	0.57	0.68	6.09
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.06	0.02	0.10	0.00	0.00	0.00	0.00	0.01	0.09
105	0.01	0.04	0.03	0.00	0.00	0.00	0.04	0.04	0.02	0.07	0.07	0.00	0.00	0.00	0.09	0.06
110	0.02	0.03	0.03	0.01	0.01	0.02	0.03	0.03	0.02	0.05	0.06	0.03	0.03	0.04	0.06	0.05
115	0.02	0.03	0.03	0.04	0.05	0.04	0.03	0.03	0.02	0.04	0.05	0.03	0.02	0.03	0.05	0.05
120	0.02	0.03	0.02	0.04	0.01	0.04	0.03	0.03	0.02	0.04	0.04	0.03	0.01	0.03	0.04	0.04
125	0.02	0.03	0.02	0.03	0.04	0.03	0.03	0.03	0.02	0.04	0.04	0.03	0.02	0.03	0.04	0.03
130	0.02	0.02	0.02	0.03	0.04	0.02	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03
135	0.02	0.02	0.02	0.02	0.01	0.02	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.03
140	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.03	0.03
145	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.02	0.03	0.03
150	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.03	0.03
155	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
160	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
165	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
170	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
175	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BUG Rating: B1-U1-G0**IESNA Luminaire Flux Distribution Table:**

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	193.23	14.8
FM - Front-Medium(30-60)	409.24	31.4
FH - Front-High(60-80)	100.1	7.7
FVH - Front-Very High(80-90)	4.6695	0.4
Total Forward Light	707.31	54.3

BL - Back-Low(0-30)	186.67	14.3
BM - Back-Medium(30-60)	340.44	26.1
BH - Back-High(60-80)	65.502	5.0
BVH - Back-Very High(80-90)	2.5075	0.2
Total Back Light	595.2	45.7

UL - Uplight-Low(90-100)	0.0077236	0.0
UH - Uplight-High(100-180)	0.13792	0.0
Total Up Light	0.14564	0.0

BUG(Back,Up,Glare) Rating	B1-U1-G0
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	595.12	0.080154	595.2
Street Side	707.24	0.065486	707.31

2.2 Electrical, Photometric and Chromaticity Measurements*(Refer to Work Instruction QD25)*

Test date	2016-11-12	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	71334A		

Electrical Measurement :

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE161105-BQ2	120.0	60	0.1006	11.96	0.9911	9.38
	277.0	60	0.0492	12.51	0.9174	11.31
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

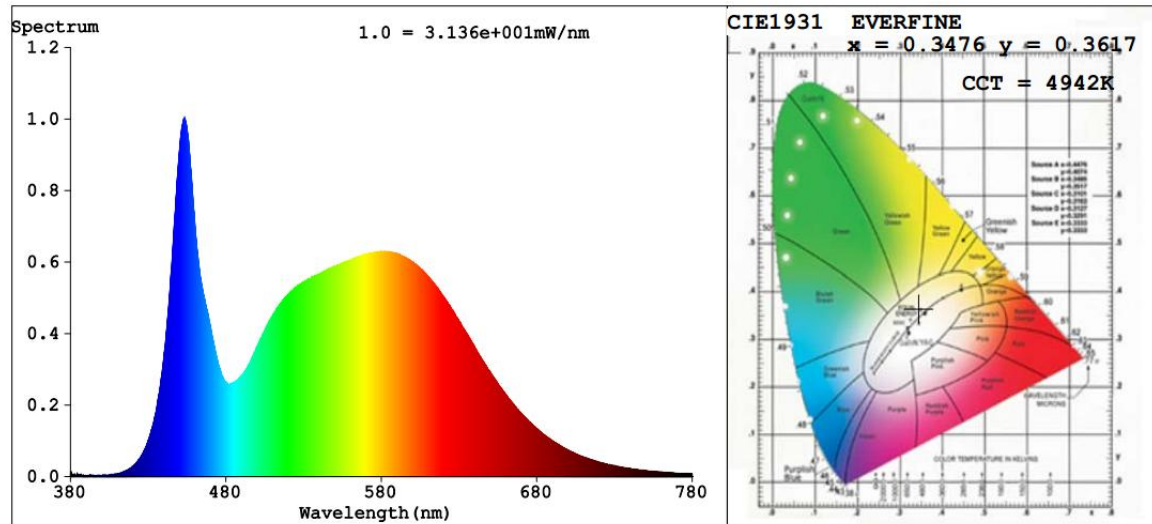
Chromaticity Measurement - Sphere-Spectroradiometer Method :

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	80	R9	6
Frequency (Hz)	60	R2	89	R10	72
CCT (K)	4942	R3	94	R11	78
Duv	0.0040	R4	80	R12	54
Chromaticity (x, y)	x=0.3476 y=0.3617	R5	80	R13	83
Chromaticity (u', v')	u'=0.2093 v'=0.4899	R6	83	R14	97
Color Rendering Index (CRI)	82.4	R7	87	R15	74
R9	6	R8	66	--	--

Photometric Measurement – Sphere-Spectroradiometer Method :

Parameter	Result		DLC V4.0 Pass Criteria	
Test Voltage (V)	120.0	277.0	--	
Frequency (Hz)	60	60		
Total Luminous (lm)	1423	1388	>=1000 (-10%)	
Luminous Efficacy (lm/W)	118.98	110.95	Standard: >= 90(-3%)	Premium: >= 110(-3%)

Spectral Power Distribution & Chromaticity Diagram



Laboratory: Standard-Tech Co. Ltd Testing Center

NVLAP CODE: 201011-0

Report Format Number STD/QR4909-A/2

Address: Standard-Tech Building, No.6 Guanhong Road, Guangzhou Science City, Guangzhou 510663, China

Tel: 8620-3229 0320

Fax: 8620-32290422

<http://www.standard-tech.com>

3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2016-07-01	2017-06-30
ST-R-331	Spectral analysis system HAAS-2000	2016-07-01	2017-06-30
D204	Standard Lamp	2016-07-01	2017-06-30
PF2010	Power Meter for Integrating Sphere	2016-07-01	2017-06-30
EE-09	Goniophotometer system	2016-07-01	2017-06-30
D908S	Standard Lamp	2016-07-01	2017-06-30
PF210	Power Meter for Goniophotometer	2016-07-01	2017-06-30
ST-R-181A	Temperature Tester	2016-07-01	2017-06-30
Uncertainty: Photometric Measurement (Sphere):1.74% Chromaticity Measurement(Sphere):14.3K Photometric Measurement(Goniophotometer):1.62%			

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

Laboratory: Standard-Tech Co. Ltd Testing Center

NVLAP CODE: 201011-0

Report Format Number STD/QR4909-A/2

Address: Standard-Tech Building, No.6 Guanhong Road,Guangzhou Science City, Guangzhou 510663, China

Tel: 8620-3229 0320

Fax: 8620-32290422

<http://www.standard-tech.com>