



Dimming:  
PWM/TIME/0-5V/0-10V

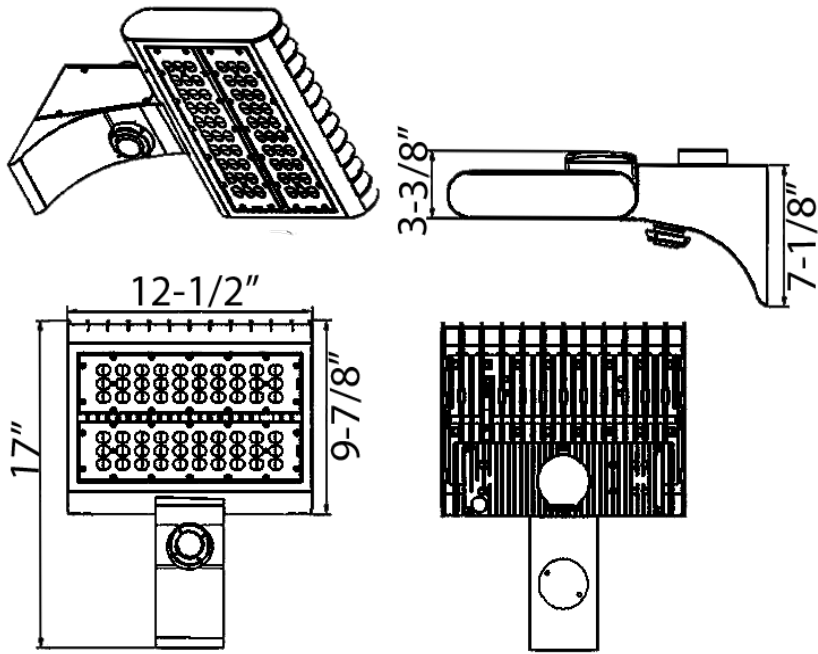
Cat# 71575A  
150 Watts  
Pole Mount



QPL ID #  
PLMWEKHWJOBH

Model: 71575A		
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC 50/60HZ
	Input Current	1.299A Max
	Input Power	150W
	Power Factor	PF≥ 0.90
	Luminance	18300 LM
	Luminous Efficiency	125 LM/W
	CRI	>80
	Beam Angle	Type III 150 x 105°
Main Structure	Aluminium + PC Lens	
LED DRIVER	Output Voltage	36-60VDC
	Output Current	4.4A
	Driver Efficiency	88%
LED	LED Manufacturer	Philips
	LED Type	3030 LED
	LED Quantity	120 PCS
	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°C—+80°C , 10—90% RH	
SAFETY&EMC	Safety Norms	UL1598, UL8750, EN60598, EN61347-2-13, EN62031, EN62471
	Withstand Voltage	I/P-FG: 2121VDC
	Grounding Resistance	≤0.5 Ω, OK
	Electromagnetic Compatibility	EN55015, EN61000-2-3, EN61000-3-3, EN61547
OTHERS	Dimension	Pls refer to attached dimension drawing
	Q'ty / Carton	1PCS
	Volume	
	EPA Rating	1.16ft²

Dimensions:



## **LM-79-08 Test Report**

For

Morris Products Inc.

53 Carey Rd. Queensbury, NY 12804

## **Outdoor Pole/Arm-mounted Area and Roadway Luminaires**

Model name(s): 71575A

Representative (Tested) Model: 71575A

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

Test & Report By:

*Charman Chen*

Engineer: Charman Chen

Date: Feb.28,2017

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

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

**1.1 Product Information:**

Organization Name	Morris Products Inc.	
Brand Name	MORRIS	
Model Number	71575A	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Pole/Arm-mounted Area and Roadway Luminaires	
Rated Voltage / Frequency	277-480Vac, 50/60 Hz	
Nominal Power	150W	
Rated Initial Lamp Lumen	--	
Declared CCT	5000K	
LED Manufacturer	Philips Lumileds	
LED Model	L130-xyy003000W21	
Sample Number	GZE170125-K1(4000K);K2(5700K)	
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	Feb.22,2017
Date of Test	Feb.26,2017
Test item	<ol style="list-style-type: none"> <li>1. Total Luminous Flux</li> <li>2. Luminous Distribution Intensity</li> <li>3. Luminous Efficacy</li> <li>4. Correlated Color Temperature</li> <li>5. Color Rendering Index</li> <li>6. Chromaticity Coordinate</li> <li>7. Electrical Parameters</li> </ol>
Reference Standard	<ol style="list-style-type: none"> <li>1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products</li> <li>2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products</li> <li>3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources</li> <li>4. CIE 15-2004 Technical Report Colorimetry</li> <li>5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source</li> <li>6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems</li> </ol>
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  $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ , 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 277 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  $1\text{ }^{\circ}$  vertical intervals and  $22.5\text{ }^{\circ}$  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  $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ . 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 277 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  $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ . The sample was operated at 277 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.

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**2.1 Electrical, Photometric and Chromaticity Measurements**

(Refer to Work Instruction QD25)

<b>Test date</b>	2017-02-26	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	71575A		

**Electrical Measurement :**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE170125-	277.0	60	0.5337	147.1	0.9951	6.38
K1	480.0	60	0.3169	145.2	0.9546	9.34
<b>DLC Pass Criteria</b>					>= 0.9(-3%)	<= 20(+5)

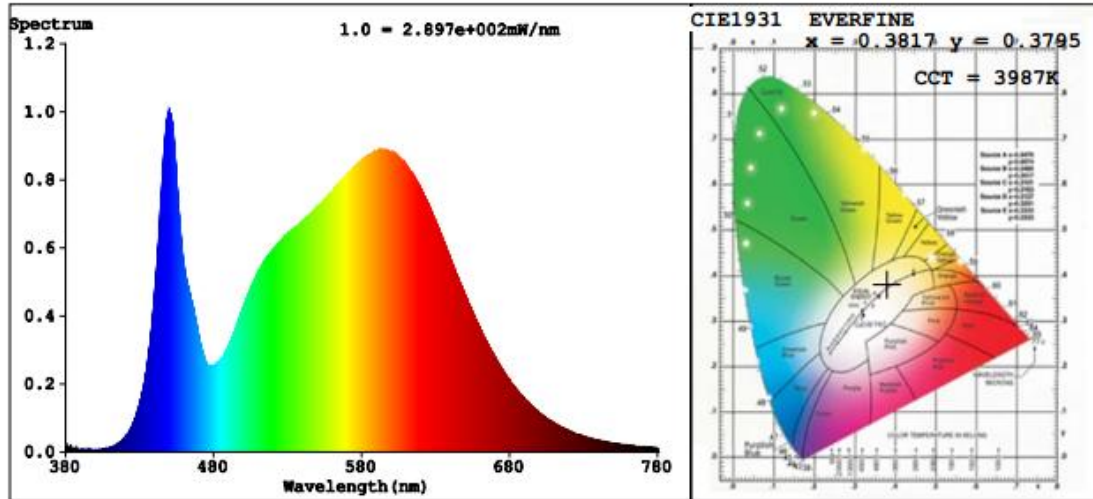
**Chromaticity Measurement - Sphere-Spectroradiometer Method :**

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	277.0	R1	81	R9	9
Frequency (Hz)	60	R2	89	R10	73
CCT (K)	3987	R3	94	R11	81
Duv	0.0009	R4	82	R12	62
Chromaticity (x, y)	x=0.3817 y=0.3795	R5	81	R13	83
Chromaticity (u', v')	u'=0.2248 v'=0.5030	R6	84	R14	97
Color Rendering Index (CRI)	82.9	R7	86	R15	75
R9	9	R8	65	--	--

**Photometric Measurement – Goniophotometer Method :**

Parameter	Result		DLC V4.1 Pass Criteria	
Test Voltage (V)	277.0	480.0	--	
Frequency (Hz)	60	60		
Total Luminous (lm)	17517	17325	>=10000 (-10%)	
Luminous Efficacy (lm/W)	119.08	119.32	Standard: >= 100(-3%)	Premium: >= 120(-3%)
Zonal lumens in the 0-90 °zone (%)	99.8	--	>=100(-1)	
Zonal lumens in the 80-90 °zone (%)	0.8	--	<=10(+3)	
Beam Angle (°)	125.2	--	--	
Center Beam Candle Power (cd)	4894	--	--	

**Spectral Power Distribution & Chromaticity Diagram**



**Zonal Lumen Tabulation**

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	4,065.6	23.2%
0-40	6,984.9	39.9%
0-60	13,909.1	79.4%
60-90	3,561.9	20.3%
70-100	1,101.1	6.3%
90-120	11.6	0.1%
0-90	17,471.0	99.8%
90-180	40.9	0.2%
0-180	17,512.0	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	467.8	2.7%	90-100	1.7	0%
10-20	1,384.8	7.9%	100-110	3.8	0%
20-30	2,213.0	12.6%	110-120	6.1	0%
30-40	2,919.3	16.7%	120-130	7.5	0%
40-50	3,437.1	19.6%	130-140	7.2	0%
50-60	3,487.1	19.9%	140-150	6.0	0%
60-70	2,462.5	14.1%	150-160	4.7	0%
70-80	963.5	5.5%	160-170	2.9	0%
80-90	135.9	0.8%	170-180	1.1	0%

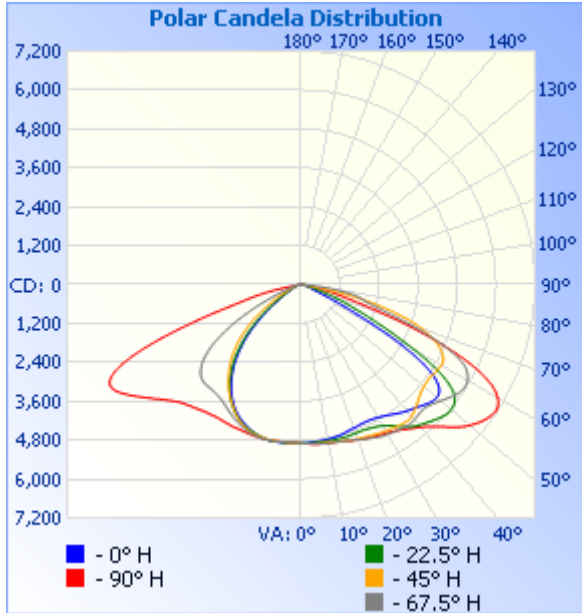
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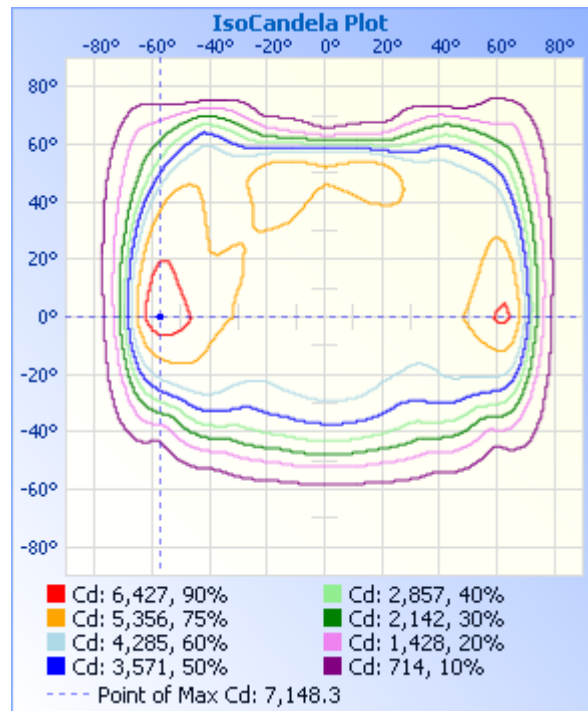
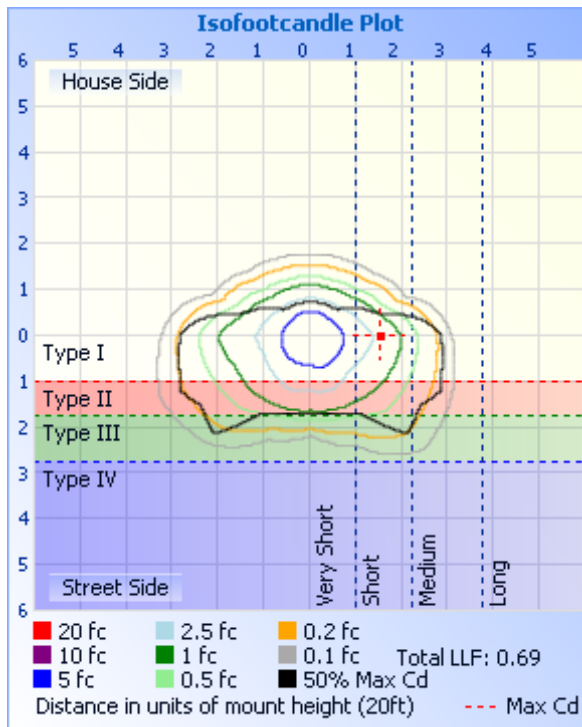
**Photometric Data**



**Illuminance at a Distance**

	Center Beam fc	Beam Width
17.0ft	16.9 fc	26.6 ft 92.8 ft
34.0ft	4.23 fc	53.2 ft 185.6 ft
51.0ft	1.88 fc	79.8 ft 278.5 ft
68.0ft	1.06 fc	106.4 ft 371.3 ft
85.0ft	0.68 fc	133.1 ft 464.1 ft
102.0ft	0.47 fc	159.7 ft 556.9 ft

■ Vert. Spread: 76.1°  
■ Horiz. Spread: 139.8°



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Table--1

UNIT: cd

C (DEG) y (DEG)	0	23	45	68	90	113	135	158	180	203	225	248	270	293	315	338	
0	4894	4894	4894	4894	4894	4894	4894	4894	4894	4894	4894	4894	4894	4894	4894	4894	
5	4875	4873	4860	4863	4868	4892	4917	4932	4935	4940	4937	4927	4904	4900	4883	4879	
10	4884	4875	4835	4817	4838	4892	4942	4964	4959	4966	4953	4942	4910	4900	4881	4897	
15	4886	4894	4827	4762	4788	4895	4990	4998	5001	4961	4937	4896	4854	4845	4858	4893	
20	4865	4906	4830	4708	4709	4879	5063	5087	5090	4935	4802	4745	4716	4737	4768	4814	
25	4856	4926	4848	4677	4674	4901	5127	5215	5176	4862	4562	4497	4502	4559	4564	4663	
30	4843	4952	4900	4748	4732	5027	5209	5325	5285	4743	4258	4154	4192	4257	4248	4476	
35	4876	4969	5034	4929	4885	5340	5300	5415	5459	4732	3944	3735	3758	3848	3890	4307	
40	4994	4927	5203	5212	5080	5658	5299	5427	5736	4824	3575	3212	3199	3296	3449	4251	
45	5167	4715	5204	5536	5275	5877	5084	5385	6199	4817	3072	2556	2508	2624	2929	4245	
50	5519	4630	5063	5840	5437	6021	4913	5588	6759	4456	2405	1787	1703	1866	2319	4026	
55	6040	4713	4827	5653	5039	5702	4901	5871	7095	3587	1593	1057	975	1120	1611	3436	
60	6571	4820	4690	3777	3058	4060	4983	5916	6992	2266	868	596	551	625	946	2417	
65	6323	4790	4140	1657	849	2082	4748	5333	5707	1033	467	395	326	397	510	1272	
70	4010	4130	3094	613	370	969	3953	3552	3006	422	324	267	229	270	327	532	
75	1666	2673	1756	249	220	326	2467	2106	1151	273	205	171	186	170	209	281	
80	367	1614	216	129	133	144	505	1453	243	163	114	105	124	101	104	169	
85	83.1	435	47.0	51.3	49.6	53.7	58.2	412	86.8	47.2	28.7	33.5	36.1	31.9	29.3	49.8	
90	2.57	3.94	1.71	0.16	0.01	0.16	1.77	3.56	2.42	2.29	0.46	0.00	0.00	0.00	1.45	2.63	
95	2.70	1.29	0.35	0.00	0.00	0.00	0.16	1.15	2.96	3.78	2.19	0.00	0.00	0.15	3.24	3.73	
100	5.76	0.84	0.05	0.00	0.00	0.00	0.00	0.99	5.23	5.70	4.18	0.65	0.05	1.25	5.27	5.97	
105	9.41	1.93	0.15	0.00	0.00	0.00	0.00	2.28	7.94	8.07	5.67	2.29	1.24	3.14	6.87	8.98	
110	12.4	4.01	0.74	0.10	0.35	0.25	0.84	4.26	9.82	9.61	6.52	4.43	3.43	5.09	7.76	11.3	
115	13.8	6.28	1.99	0.60	0.89	0.85	1.94	6.25	10.2	10.4	7.61	5.67	5.51	6.48	8.56	11.8	
120	14.7	8.17	3.52	1.89	1.54	1.49	3.23	7.54	10.6	10.4	9.20	7.37	7.31	8.09	9.45	11.4	
125	15.4	9.80	4.37	3.87	5.91	3.54	4.27	8.58	10.7	10.3	9.00	9.20	9.99	9.88	9.20	11.5	
130	15.7	10.2	5.07	5.47	9.04	5.24	5.12	9.27	10.6	9.26	9.20	10.4	11.5	11.3	9.45	10.4	
135	14.0	10.0	6.02	7.05	9.09	6.97	5.97	8.78	9.91	9.11	8.45	10.8	11.5	11.2	9.10	9.97	
140	12.6	10.0	6.86	7.86	10.2	7.97	6.57	9.17	9.76	9.41	7.66	10.7	10.9	10.5	8.06	10.2	
145	11.8	8.72	8.30	9.05	12.0	9.22	6.47	8.78	9.61	9.36	8.06	10.3	10.4	10.2	8.86	9.82	
150	11.2	8.52	9.89	10.7	13.1	10.5	7.95	8.98	9.51	9.41	9.20	10.0	10.7	10.3	10.5	9.77	
155	9.03	9.11	11.1	11.7	13.2	10.9	9.30	9.42	8.83	9.51	9.15	10.00	10.0	10.0	10.1	9.27	
160	8.93	9.11	10.9	11.7	12.5	10.9	9.70	9.62	8.19	9.01	9.10	10.00	10.7	10.3	10.0	9.28	
165	9.07	5.18	10.8	10.5	10.5	10.3	9.95	9.13	9.12	8.62	9.30	10.00	10.3	10.7	10.0	9.57	
170	9.86	10.2	12.4	11.7	11.7	11.7	11.9	9.47	10.5	10.4	11.1	12.4	12.7	12.5	12.0	12.2	
175	10.1	11.3	12.7	12.3	13.1	11.9	12.6	9.97	10.8	10.7	11.6	12.5	12.6	13.3	12.1	12.5	
180	9.28	11.1	11.9	11.8	12.5	12.0	12.0	10.1	9.66	9.59	11.0	11.6	11.8	12.6	11.7	12.0	

**2.2 Electrical, Photometric and Chromaticity Measurements**

*(Refer to Work Instruction QD25)*

<b>Test date</b>	2017-02-26	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	71575A		

**Electrical Measurement :**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE170125-	277.0	60	0.5265	145.2	0.9957	7.24
K2	480.0	60	0.3143	143.5	0.9511	10.61
<b>DLC Pass Criteria</b>					>= 0.9(-3%)	<= 20(+5)

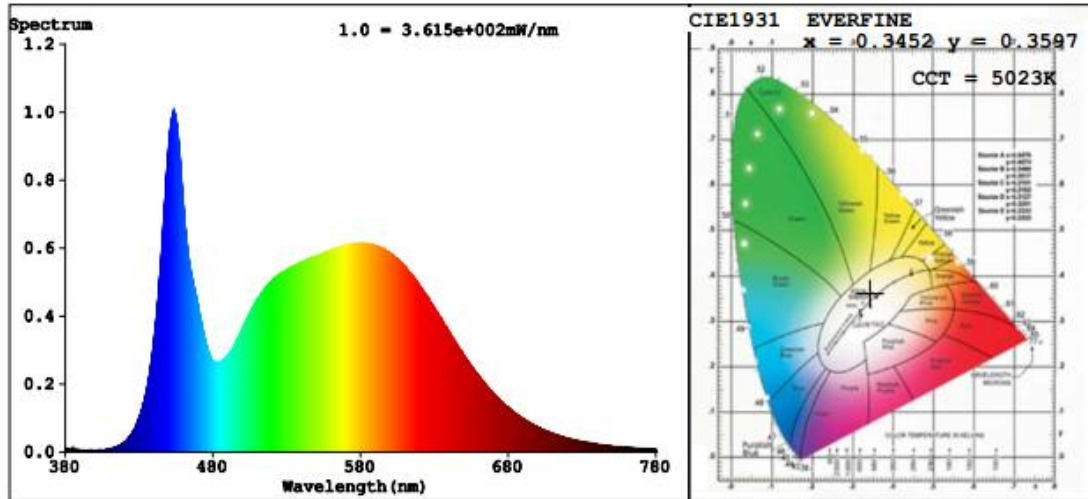
**Chromaticity Measurement - Sphere-Spectroradiometer Method :**

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	277.0	R1	81	R9	5
Frequency (Hz)	60	R2	89	R10	73
CCT (K)	5023	R3	94	R11	80
Duv	0.0040	R4	81	R12	59
Chromaticity (x, y)	x=0.3452 y=0.3597	R5	81	R13	83
Chromaticity (u', v')	u'=0.2084 v'=0.4886	R6	84	R14	97
Color Rendering Index (CRI)	82.8	R7	87	R15	75
R9	5	R8	66	--	--

**Photometric Measurement – Sphere-Spectroradiometer Method :**

Parameter	Result		DLC V4.1 Pass Criteria	
Test Voltage (V)	277.0	480.0	--	
Frequency (Hz)	60	60		
Total Luminous (lm)	17919	17768	>=10000 (-10%)	
Luminous Efficacy (lm/W)	123.41	123.82	Standard: >= 100(-3%)	Premium: >= 120(-3%)

**Spectral Power Distribution & Chromaticity Diagram**



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**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 \*\*\*\*\***

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