

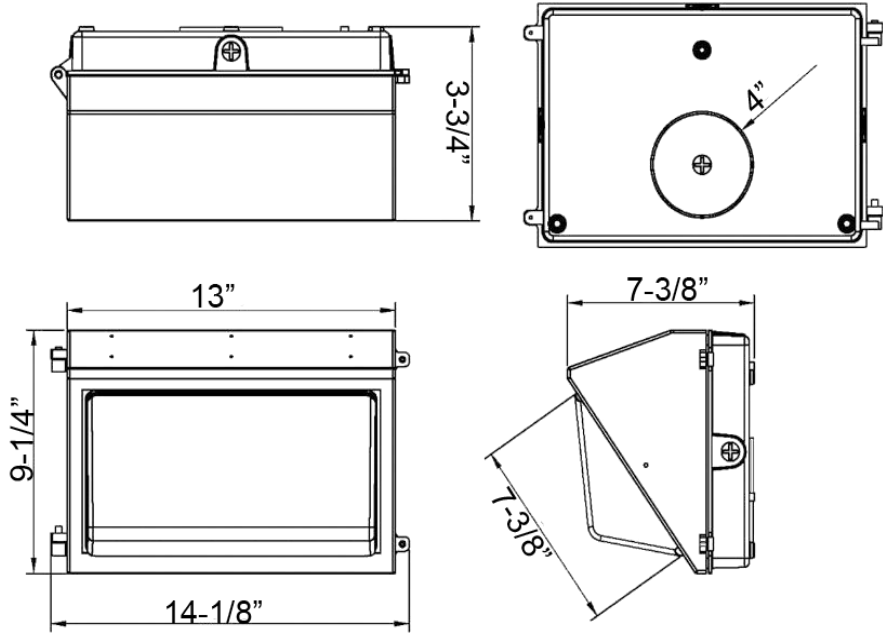


**Cat# 71437**  
**LED Classic Medium Wall-Pack**



Model :		71437
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC
	Input Current	.52A Max
	Input Power	50W
	Power Factor	PF≥0.9
	Luminance	5700LM
	Luminous Efficiency	120LM/W
	CRI	>80
	Beam Angle	120°
	Main Structure	Alluminium + Tempered Glass
	Surface	Baking Varnish
LED DRIVER	Output Voltage	23-42VDC
	Output Current	1.2A
	Driver Efficiency	88%
LED	LED Type	LUMILED LUXEON 3030
	LED Quantity	66 PCS
	LED Manufacturer	Cree
	LED Efficacy	140 lm/W
	Color Temperature	5091K
LIFESPAN & ENVIRONMENT	Lifespan	50000 Hrs.
	Warranty	5 Years
	IP Rating	IP65 Wet Location
	Operating Temperature	-40°F—+131°F
	Storage Temperature, Humidity	-40°F—+176°F , 10—90% RH
SAFETY&EMC	Safety Norms	EN60598, EN61347-2-13, EN62031, EN62471, UL1598, UL8750
	Withstand Voltage	I/P-FG: 2121VDC
	Grounding Resistance	25A 100mΩ
	Electromagnetic Compatibility	EN55015, EN61000-2-3, EN61000-3-3, EN61547
OTHERS	Diamension	Pls refer to attached dimension drawing
	Net Weight(Kg)	9.47
	Gross Weight(Kg)	11.464
	Box Size	
	Carton Size	390*230*315
	Q'ty / Carton	1

Dimension: 71437





Report No.: GZE160901-A

NVLAP LAB CODE 201011-0

# LM-79-08 Test Report

For

## O qttku'Rtqf wevu'Kpe0

\*Dtcpf 'Name:'O qttku+

\*\*\*\*\*75'Ectg{ 'Tf "

S wggpudwt {.'P [ "34: 26"

## LED Luminaires

Model name(s):

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

Test & Report By:

*Garman Mo*

Engineer: Garman Mo

Update: Sept.05,2016

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

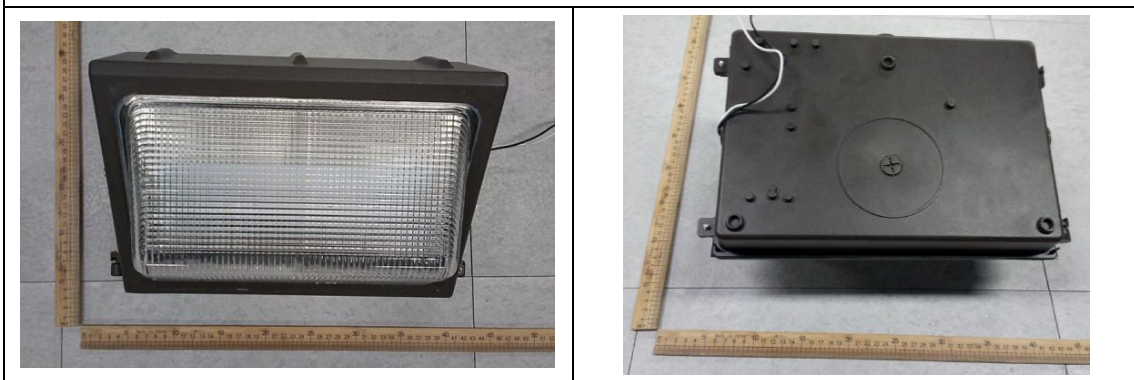
Address: Standard-Tech Building, No.6 Guanhong Road,Guangzhou Science City, Guangzhou 510663, China

Tel: 8620-3229 0320 Fax: 8620-32290422 <http://www.standard-tech.com>

**1.1 Product Information:**

Organization Name	O qttku'Rtqf weu"Kpe0	
Brand Name	Morris	
Model Number	71437	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	LED Luminaires	
Rated Voltage / Frequency	100 -277Vac, 50/60 Hz	
Nominal Power	50W	
Rated Initial Lamp Lumen	--	
Declared CCT	5000K	
LED Manufacturer	N/A	
LED Model	N/A	
Sample Number	GZE160901-E1(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	: Aug.31,2016
Date of Test	: Sept.01,2016
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

<p><b>1) Photometric and Light Distribution Measurement – Goniophotometer Method:</b></p> <p>Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at 25° C ± 1° 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.</p>
<p><b>2) Chromaticity Measurement – Sphere-Spectroradiometer Method:</b></p> <p>Chromaticity parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25° C ± 1° 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.</p>
<p><b>3) Electrical Measurements:</b></p> <p>Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at 25° C ± 1° 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.</p>

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

<b>Test date</b>	2016-09-01	<b>Test Ambient:</b>	25.2 ° C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	71437		

**Electrical Measurement :**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE160901-	120.0	60	0.4022	47.15	0.9768	15.57
A1	277.0	60	0.1917	47.46	0.8937	17.20

**Photometric Measurement – Goniophotometer Method :**

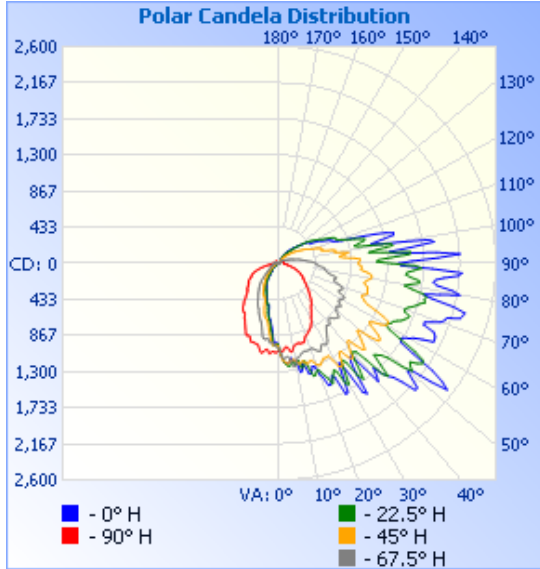
Parameter	Result	
Test Voltage (V)	120.0	277.0
Frequency (Hz)	60	60
Total Luminous (lm)	5776.5	5741.9
Luminous Efficacy (lm/W)	122.51	120.98
Total Luminous (lm) (0°-90° zone)	4500.2	4472.9
Luminous Efficacy (lm/W) (0°-90° zone)	95.44	94.25
Zonal lumens in the 80-90° zone (%) (0-90° zone)	13.4	--
Beam Angle (°)	101.8	--
Center Beam Candle Power (cd)	1032	--

**Zonal Lumen Tabulation**

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	778.9	13.5%
0-40	1,290.9	22.3%
0-60	2,580.1	44.7%
60-90	1,920.1	33.2%
70-100	1,755.7	30.4%
90-120	1,047.7	18.1%
0-90	4,500.2	77.9%
90-180	1,275.6	22.1%
0-180	5,775.8	100%

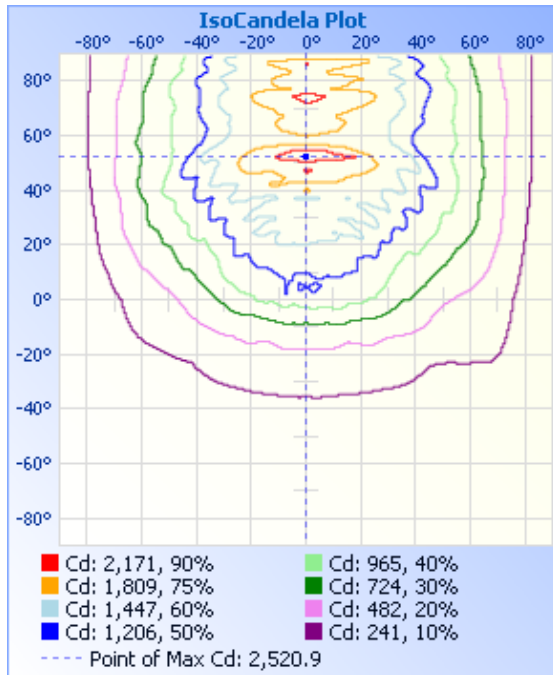
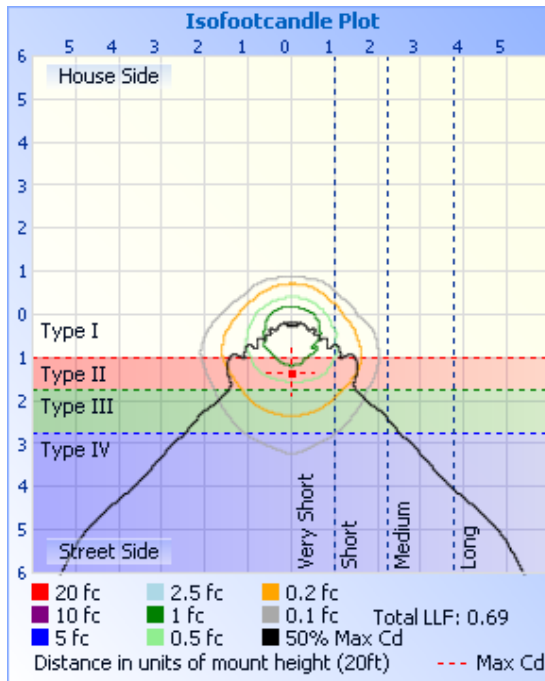
Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	98.2	1.7%	90-100	492.7	8.5%
10-20	267.1	4.6%	100-110	344.7	6%
20-30	413.7	7.2%	110-120	210.3	3.6%
30-40	511.9	8.9%	120-130	124.0	2.1%
40-50	604.7	10.5%	130-140	64.0	1.1%
50-60	684.5	11.9%	140-150	29.2	0.5%
60-70	657.0	11.4%	150-160	9.3	0.2%
70-80	659.6	11.4%	160-170	1.2	0%
80-90	603.5	10.4%	170-180	0.2	0%

**Photometric Data**



	Center Beam fc	Beam Width	
17.0ft	3.57 fc	34.5 ft	31.6 ft
34.0ft	0.89 fc	69.0 ft	63.2 ft
51.0ft	0.40 fc	103.5 ft	94.8 ft
68.0ft	0.22 fc	138.1 ft	126.4 ft
85.0ft	0.14 fc	172.6 ft	158.0 ft
102.0ft	0.10 fc	207.1 ft	189.6 ft

■ Vert. Spread: 90.9°  
■ Horiz. Spread: 85.8°



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Table--1

UNIT: cd

C (DEG) \ T (DEG)	0	23	45	68	90	113	135	158	180	203	225	248	270	293	315	338	
0	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	1032	
5	1068	1115	1199	1242	1206	1237	1207	1121	1008	915	944	931	882	931	967	952	
10	1072	1135	1150	1205	1202	1186	1198	1185	1010	926	769	670	672	686	758	927	
15	1007	1105	1287	1328	1361	1227	1241	1103	994	755	612	499	510	523	666	808	
20	996	1166	1288	1289	1421	1356	1286	1095	924	632	482	473	432	462	514	687	
25	942	1124	1253	1522	1490	1523	1257	1163	868	558	432	369	359	369	431	591	
30	824	1096	1467	1723	1469	1673	1425	1121	761	487	362	311	306	326	382	519	
35	725	1004	1383	1789	1599	1634	1290	986	663	415	301	259	245	260	317	438	
40	681	948	1311	1433	1849	1391	1303	943	595	334	250	187	161	192	261	378	
45	568	1024	1393	1716	1932	1713	1455	934	511	265	198	136	127	141	206	310	
50	497	997	1531	1918	2011	1928	1245	889	431	208	148	112	111	115	158	230	
55	458	949	1304	2207	2247	2097	1398	900	367	155	112	97.4	75.3	98.1	118	174	
60	425	942	1595	1535	1797	1477	1480	871	324	122	97.9	61.0	42.0	58.9	94.9	134	
65	371	946	1172	1721	2064	1621	1174	784	274	101	83.7	39.2	26.7	41.4	82.4	109	
70	327	828	1170	1688	2065	1607	1095	782	211	92.8	57.9	18.4	7.52	17.7	68.1	95.3	
75	245	746	1173	1936	2308	1813	1095	704	145	82.8	30.6	3.20	3.28	3.00	37.0	88.8	
80	159	659	1226	1620	2199	1526	1096	583	95.9	65.8	19.3	3.57	3.66	3.16	23.0	72.1	
85	96.5	626	1086	1625	1988	1526	1010	519	70.8	53.2	15.3	4.10	4.68	3.69	17.5	57.8	
90	68.5	539	1059	1316	1428	1352	949	436	56.5	46.7	12.1	4.21	5.00	3.85	13.5	52.3	
95	56.1	410	816	1621	1404	1580	791	335	52.9	41.0	9.79	4.31	5.00	3.85	10.8	48.2	
100	51.4	335	800	1418	1486	1360	776	257	54.2	35.7	7.88	4.10	4.90	3.80	8.92	43.9	
105	52.4	236	631	1152	1421	1052	602	176	55.3	30.5	6.45	3.89	4.84	3.69	7.38	37.9	
110	52.1	176	601	869	802	830	531	135	53.3	23.8	5.39	3.41	4.41	3.32	6.47	31.4	
115	48.8	131	449	761	654	729	402	102	48.1	18.7	4.76	3.36	4.14	3.27	5.46	24.7	
120	40.9	99.8	367	618	531	574	329	79.8	39.8	14.7	4.07	3.14	3.93	3.10	4.65	19.0	
125	32.6	76.4	280	494	441	473	255	61.7	31.9	11.9	3.18	2.72	3.44	2.68	3.91	14.7	
130	23.9	60.6	222	395	355	363	199	52.7	24.6	9.09	2.96	2.72	3.01	2.68	3.37	10.7	
135	17.1	49.6	167	281	276	265	152	42.0	17.5	6.90	2.70	2.66	2.91	2.73	2.62	7.72	
140	12.2	36.5	128	198	217	195	117	30.0	12.4	5.39	2.22	2.56	2.91	2.62	2.25	5.52	
145	8.40	23.7	98.9	148	170	146	90.5	19.1	8.52	4.39	2.17	2.56	2.91	2.62	2.25	3.86	
150	5.77	13.2	66.3	101	124	103	59.7	9.46	5.60	3.60	2.17	2.45	2.69	2.52	2.19	2.36	
155	3.67	4.78	31.4	64.2	80.6	64.7	29.7	5.16	3.56	2.40	2.17	2.18	2.37	2.25	2.14	1.99	
160	1.67	2.62	13.4	27.2	35.1	26.7	12.3	2.90	1.94	1.57	1.96	2.13	2.15	2.19	2.14	1.88	
165	1.62	1.47	1.54	9.50	12.2	8.90	1.34	1.56	1.73	1.57	1.96	2.13	2.04	2.03	2.14	1.93	
170	1.83	1.57	1.48	1.55	1.29	1.50	1.39	1.56	2.20	2.15	2.49	2.88	2.53	2.35	2.35	2.31	
175	1.99	2.09	2.06	1.70	1.35	1.65	1.71	2.09	2.20	2.15	2.49	2.87	2.37	2.14	2.19	2.31	
180	2.10	2.09	2.22	2.02	1.56	1.93	2.19	2.26	2.20	2.09	2.12	2.24	2.04	1.60	1.77	2.15	

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