



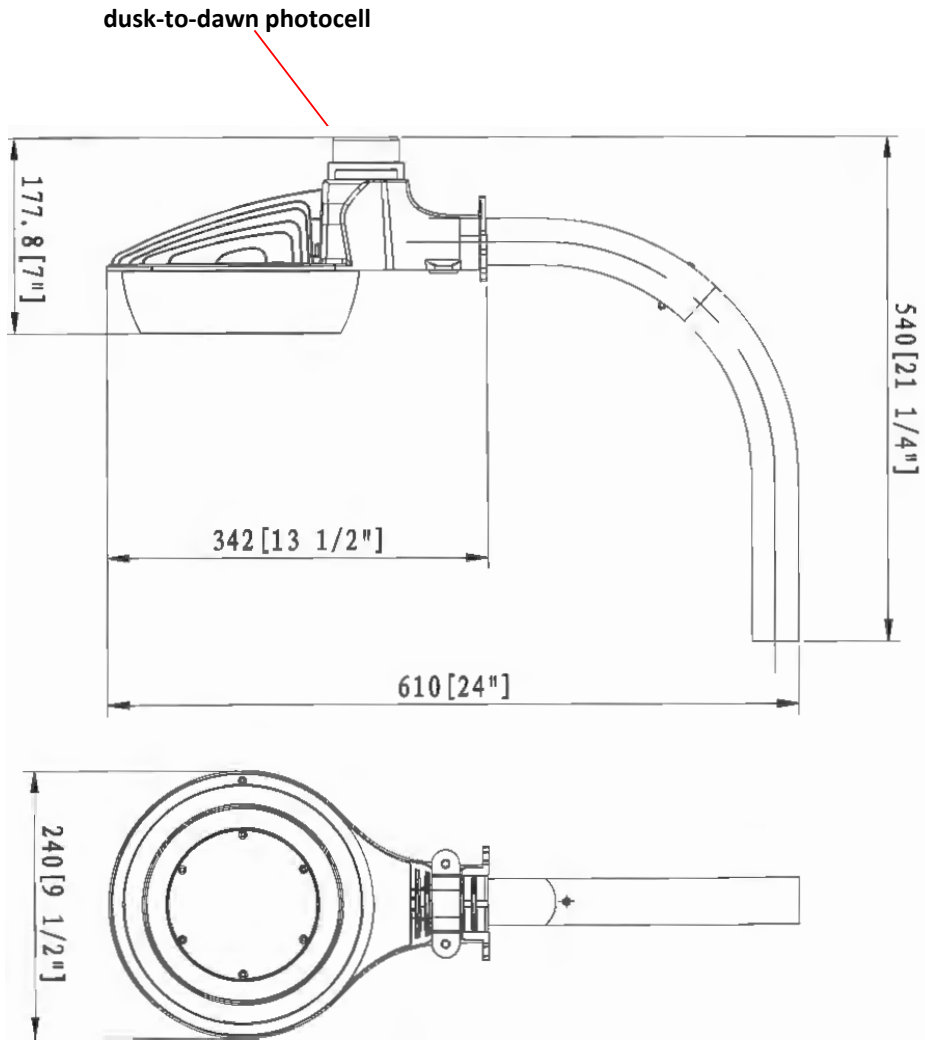
71333
LED Dusk To Dawn
(Area Light)



Model :		71333
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC
	Input Current	0.6A Max
	Input Power	50W
	Power Factor	PF≥0.9
	Luminance	5026 LM
	Luminous Efficiency	100 LM/W
	CRI	>80
	Beam Angle	134°
	Main Structure	AdC12 Aluminium Heat Sink + High Light Transmittance PC
LED DRIVER	Output Voltage	22-36VDC
	Output Current	1.38A
	Driver Efficiency	89%
LED	LED Manufacturer	Philips
	LED Type	3530
	LED Quantity	60 PCS
	LED Efficacy	150LM/W
	Color Temperature	5000K
Photocell	-	dusk-to-dawn, cULus listed
LIFESPAN & ENVIRONMENT	Lifespan	50000Hrs.
	Warranty	5 Years
	IP Rating	IP65 Wet Location Rated
	Operating Temperature	-40°F—+131°F
	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	25A 100mΩ
	Electromagnetic Compatibility	EN55015, EN61000-2-3, EN61000-3-3, EN61547
OTHERS	Dimension	Pls refer to attached dimension drawing
	Gross Weight	8.8 Lbs

Dimension :

71333





Report No.: GZE160901-E

NVLAP LAB CODE 201011-0

LM-79-08 Test Report

For

Morris Products Inc.

(Brand Name: Morris)

53 Carey Rd
Queensbury, NY 12804

LED Luminaires

Model name(s): 71333

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

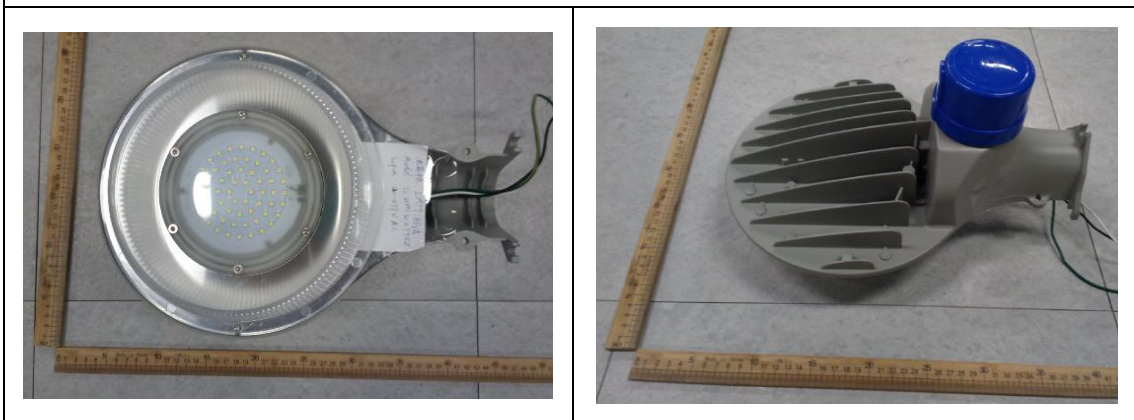
Address: Standard-Tech Building, No.6 Guanhong Road,Guangzhou Science City, Guangzhou 510663, China

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

1.1 Product Information:

Organization Name	Morris Products Inc.	
Brand Name	Morris	
Model Number	71333	
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"> 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	<ol style="list-style-type: none"> 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

<p>1) Photometric and Light Distribution Measurement – Goniophotometer Method:</p> <p>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.</p>
<p>2) Chromaticity Measurement – Sphere-Spectroradiometer Method:</p> <p>Chromaticity parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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.</p>
<p>3) Electrical Measurements:</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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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.</p>

2.1 Electrical, Photometric and Chromaticity Measurements <i>(Refer to Work Instruction QD25)</i>

Test date	2016-09-01	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	71333		

Electrical Measurement :

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE160901-	120.0	60	0.4003	46.96	0.9776	19.36
E1	277.0	60	0.1908	47.89	0.9063	15.79

Photometric Measurement – Goniophotometer Method :

Parameter	Result	
Test Voltage (V)	120.0	277.0
Frequency (Hz)	60	60
Total Luminous (lm)	5326.3	5347.0
Luminous Efficacy (lm/W)	113.42	111.65
Beam Angle (°)	99.9	--
Center Beam Candle Power (cd)	2098	--

Zonal Lumen Tabulation

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	1,656.3	31.1%
0-40	2,711.4	50.9%
0-60	4,400.5	82.6%
60-90	874.0	16.4%
70-100	520.3	9.8%
90-120	39.9	0.7%
0-90	5,274.5	99%
90-180	51.4	1%
0-180	5,325.9	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	199.4	3.7%	90-100	24.7	0.5%
10-20	577.3	10.8%	100-110	9.6	0.2%
20-30	879.7	16.5%	110-120	5.6	0.1%
30-40	1,055.0	19.8%	120-130	3.9	0.1%
40-50	1,010.2	19.0%	130-140	3.0	0.1%
50-60	678.9	12.7%	140-150	2.0	0%
60-70	378.3	7.1%	150-160	1.4	0%
70-80	332.9	6.3%	160-170	0.9	0%
80-90	162.7	3.1%	170-180	0.4	0%

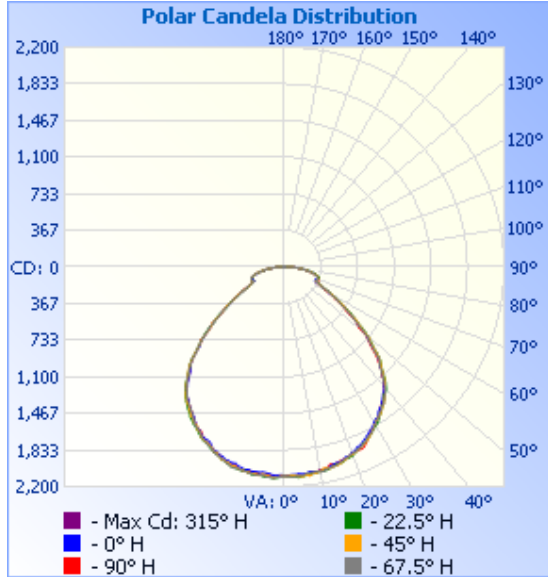
Laboratory: Standard-Tech Co. Ltd Testing Center
NVLAP CODE: 201011-0

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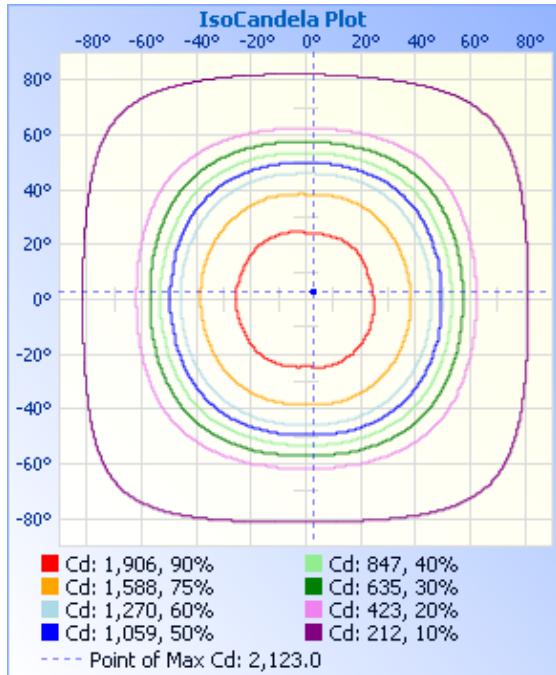
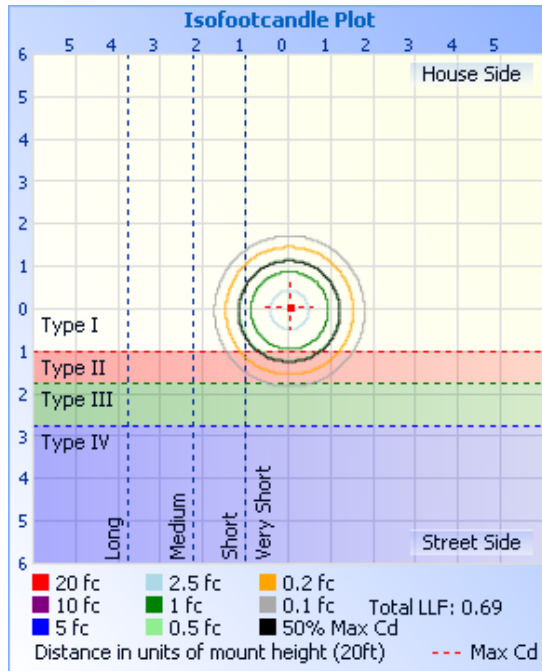
Photometric Data



Illuminance at a Distance

Center Beam fc	Beam Width	
17.0ft	7.26 fc	40.2 ft 40.0 ft
34.0ft	1.82 fc	80.3 ft 79.9 ft
51.0ft	0.81 fc	120.5 ft 119.9 ft
68.0ft	0.45 fc	160.6 ft 159.8 ft
85.0ft	0.29 fc	200.8 ft 199.8 ft
102.0ft	0.20 fc	241.0 ft 239.7 ft

■ Vert. Spread: 99.5°
■ Horiz. Spread: 99.2°



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Table--1

UNIT: cd

Y (DEG)	C (DEG)															
	0	23	45	68	90	113	135	158	180	203	225	248	270	293	315	338
0	2098	2098	2098	2098	2098	2098	2098	2098	2098	2098	2098	2098	2098	2098	2098	2098
5	2088	2098	2122	2088	2082	2105	2105	2094	2092	2090	2094	2093	2069	2113	2088	2105
10	2070	2062	2100	2081	2069	2077	2072	2084	2066	2069	2080	2070	2061	2089	2088	2089
15	2052	2047	2063	2042	2032	2043	2054	2048	2034	2028	2055	2052	2032	2065	2057	2070
20	1978	1975	1987	1993	1978	2006	1996	1985	1987	1981	2006	1984	1970	1990	1981	1999
25	1896	1886	1913	1916	1902	1929	1934	1924	1940	1910	1917	1917	1892	1917	1911	1908
30	1790	1784	1807	1811	1795	1832	1814	1817	1824	1817	1820	1808	1788	1814	1806	1800
35	1667	1669	1688	1700	1694	1705	1709	1700	1688	1679	1706	1691	1668	1696	1681	1666
40	1518	1526	1553	1564	1555	1583	1569	1566	1555	1534	1544	1535	1511	1541	1530	1524
45	1303	1313	1354	1359	1345	1362	1359	1349	1335	1333	1341	1330	1308	1320	1308	1297
50	1001	1030	1084	1089	1083	1099	1108	1088	1071	1040	1032	1022	1012	1033	999	1009
55	735	744	747	790	780	813	781	774	758	753	738	729	726	712	731	727
60	495	502	525	527	520	541	553	525	509	498	478	493	477	484	479	489
65	338	339	356	360	353	374	366	362	355	347	341	336	332	338	340	337
70	350	340	344	348	349	361	359	358	363	366	358	351	344	350	355	353
75	315	304	313	327	337	344	334	325	334	340	331	317	309	314	320	319
80	231	227	237	252	265	268	256	249	253	258	251	237	225	228	235	234
85	137	140	148	152	160	163	158	153	152	149	145	138	132	135	135	136
90	63.3	68.2	70.9	70.3	72.1	75.2	75.7	73.3	68.5	64.6	63.8	61.8	62.8	62.6	60.3	60.2
95	18.7	17.1	8.91	9.71	6.25	6.76	12.2	20.5	22.0	18.5	9.05	11.7	9.46	10.3	7.66	15.7
100	6.36	3.64	8.54	19.2	19.8	19.0	7.00	1.55	4.56	1.61	7.05	18.0	19.0	17.8	8.34	3.72
105	13.9	9.50	8.41	11.0	12.0	10.8	6.91	5.54	9.45	6.40	5.65	9.60	11.0	9.99	7.46	8.65
110	15.0	11.0	5.56	6.61	7.45	6.17	4.01	8.00	10.9	8.08	3.09	4.93	6.26	5.71	4.42	10.2
115	12.1	9.99	4.43	3.89	4.44	3.43	3.26	6.62	7.63	6.64	3.10	2.49	3.37	2.78	3.73	9.28
120	10.3	9.03	4.58	2.60	2.53	2.09	3.62	5.76	5.35	5.54	4.01	1.86	1.42	1.98	4.22	8.26
125	8.97	8.24	4.91	2.33	2.06	2.19	4.00	5.23	3.60	4.59	4.05	2.39	1.74	2.25	4.64	7.36
130	7.80	7.35	5.02	2.97	2.11	2.67	3.95	4.59	2.76	4.01	3.89	3.13	2.27	2.89	4.48	6.66
135	6.48	6.18	4.48	3.40	2.58	3.20	3.89	3.95	2.33	3.43	3.62	3.18	2.69	3.15	4.10	5.70
140	5.15	5.02	4.11	3.45	3.00	3.26	3.63	3.47	2.34	2.90	3.04	3.24	2.64	2.99	3.15	4.47
145	3.72	3.54	3.47	3.24	2.85	3.26	3.09	3.09	2.60	2.69	2.72	2.97	2.90	3.05	2.93	3.14
150	2.97	2.80	4.32	3.24	3.21	3.15	3.09	2.83	2.76	2.75	2.78	2.87	3.11	3.10	3.04	2.93
155	2.76	2.69	3.42	3.39	3.27	3.15	3.20	2.88	2.44	2.80	2.83	3.08	3.00	3.05	3.04	2.99
160	2.49	2.80	3.42	3.34	3.27	3.15	3.25	2.93	2.76	2.64	2.88	3.08	3.16	3.15	3.04	3.15
165	2.92	2.85	3.47	3.34	3.22	3.21	3.25	2.93	3.02	2.80	3.10	3.34	3.22	3.15	3.04	3.41
170	3.23	3.01	3.90	3.82	3.58	3.79	3.89	2.99	3.55	3.59	3.63	4.19	4.32	4.22	4.16	4.43
175	3.76	3.27	4.11	3.82	4.27	3.95	4.37	3.25	3.61	3.80	3.58	4.19	4.21	4.59	4.11	4.48
180	3.45	3.54	4.16	3.82	4.37	4.01	4.48	3.57	3.29	3.64	3.63	4.09	3.79	4.22	3.95	4.32

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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 *******