



**Catalog Number** 71368  
**UPC Number** 601986713689  
**Description** LED Bullet Flood Light  
12W 817 Lumen

#### Features

- Cree CXA LED's, CRI: 83
- Voltage: 120-277VAC
- Isolated Driver Compartment for Optimal Thermal Management
- Corrosion Resistant Die Cast Aluminum Housing
- Superior Architectural Green Powder Coat Finish
- Fluted Reflector & Tempered Glass Lens
- Waterproof & Durable Silicone Rubber Gaskets
- 1/2" NPT Knuckle Mount
- Power Factor: 95%
- Luminous Efficiency: 72 Lumens/watt
- Light Pattern: 23° Beam Spread Flood
- Operation Temperature: -40F to 131F
- 50,000+ Hour LED Life Expectancy
- IC Current Controlled LED Circuits
- Color Temperature: 3000K Warm White
- DLC (Design Light Consortium)
- cULus Listed
- 5 Year Warranty



#### General

Lumen Output: 817  
Color Temperature: 3000K Warm White  
CRI: 83  
Light Pattern: 23° Beam Spread Flood  
Operation Temperature: -40F to 131F  
Housing: Corrosion Resistant Die Cast Aluminum Housing  
Housing Color: Green

#### Dimension Information

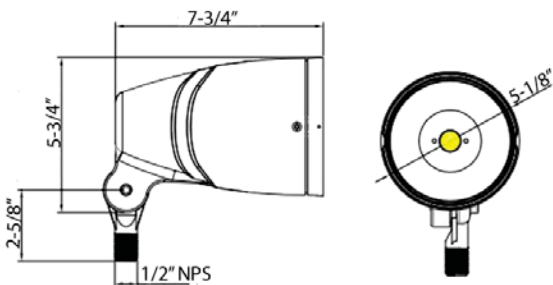
Height: 7-1/2"  
Depth: 6-5/8"  
Diameter: 4"  
Weight: 2 lbs

#### Specifications

Voltage: 120/208/240/277  
Input Current: .15A @ 120V  
Power Consumption: 12 Watts

#### Packaging

Box Qty 1  
Master Box Qty 6





Report No.:GZE150559-A

NVLAP LAB CODE 201011-0

## M-79-08 Test Report

For

**Morris Products Inc.**

**(Brand Name: Morris)**

53 Carey Road  
Queensbury, NY 12804

# Landscape/Accent Flood and Spot Luminaires

Model name(s): 71368

Test & Report By:

*Sean Zhuo*

Engineer: Sean Zhuo

Date:Jun.02, 2015

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

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U.S. Department of Energy

**Lighting Facts™ Uniform LM-79 Reporting Template****Laboratory Information:**

Name of Test Laboratory	Standard-Tech Co. Ltd
Date of Test Report	Jun 02, 2015
Test Report No.	GZE150559-A
Laboratory Contact Name	Tommy Liang

**Product Information:**

Organization Name	Morris Products Inc.	
Brand Name	Morris	
Model Number	71362	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Landscape/Accent Flood and Spot Luminaires	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	

**Integrating Sphere****Goniophotometer****Electrical Measurements:****Output****Output**

Input Wattage	--	11.31	W
Input Current	--	0.0952	A
Input Voltage (ac)	--	120.1	V
Power Factor	--	0.9888	
Off-State Power	--	0	W

**Photometric Characteristics**

Total Initial Lumen Output	--	817.21	lm
Initial Lumen Efficacy	--	72.26	lm/w
Correlated color temperature / CCT	3039	--	K
Color rendering index / CRI	83.0	--	
R9 Value	12	--	
Duv	0.0012	--	

**Luminous Intensity Distribution**

Center beam candlepower (if applicable)	-----	1738	cd
Beam angle (if applicable)		22.6	°
Zonal lumens in the 0°-60° zone		99.8	%
Zonal lumens in the 60°-90° zone		0.2	%
Zonal lumens in the 90°-120° zone		0	%
Zonal lumens in the 120°-180° zone		0	%

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Test Specifications:	
Date of Receipt	:May.22,2015
Date of Test	:May.29,2015
Test item	: Total Luminous Flux, Luminous Distribution Intensity, Luminous Efficacy, Correlated Color Temperature, Color Rendering Index, Chromaticity Coordinate, Electrical parameters
Reference Standard	IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources CIE 15-2004 Technical Report Colorimetry IESNA LM-16-93 Practical Guide to Colorimetry of Light Source IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	QD25

### Test Methods

#### 1. Photometric and Electrical measurements – Light Distribution 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 Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at  $1^{\circ}$  vertical intervals and  $22.5^{\circ}$  horizontal intervals.

#### 2. Photometric and Electrical Measurements – Integrating Sphere Method:

Photometric 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 Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at least 5 nm intervals over the range of 380 to 780 nm.

**1. Product Information:**

Brand Name	Morris
Model Number	71362
Luminaire Type	Landscape/Accent Flood and Spot Luminaires
Rated Voltage / Frequency	120-277Vac, 50/60Hz
Nominal Power	12W
Rated Initial Lamp Lumen	N/A
Declared CCT	3000K
LED Manufacturer	CREE
LED Model	CXA 1507
Power Supply:	N/A
Sample Receipt Date	May.22,2015
Sample Number	GZE150559-A1

**Photo**


<b>2.1 Electrical, Photometric and Chromaticity Measurements</b> (Refer to Work Instruction QD25)	<b>IES LM-79 2008</b>
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<b>Test date</b>	2015-05-29	<b>Test Ambient:</b>	25.1° C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	90
<b>Model Number</b>	71362		

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE150559 -A1	120.1	60	0.0952	11.31	0.9888	10.43

**Sphere-Spectroradiometer Method:**

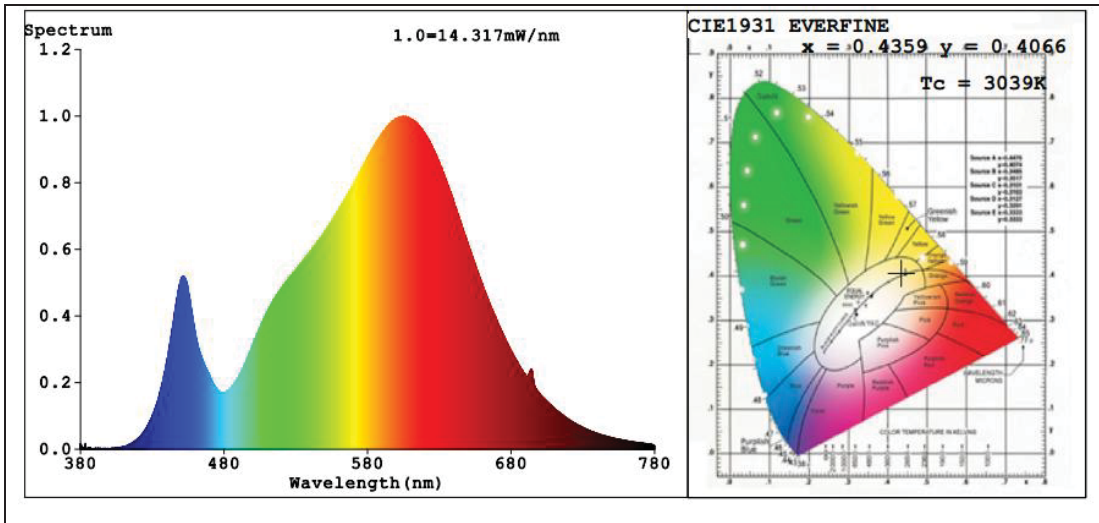
Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Color Rendering Index (CRI)	83.0
R9	12
CCT (K)	3039
Chromaticity (x, y)	x=0.4359 y=0.4066
Chromaticity (u', v')	u'=0.2488 v'=0.5222
Duv	0.0012

Special Color Rendering Indices			
R1	81	R9	12
R2	90	R10	76
R3	96	R11	80
R4	82	R12	68
R5	81	R13	83
R6	87	R14	98
R7	85	R15	75
R8	62	--	--

**Goniophotometer Method:**

Parameter	Result
Test Voltage (V)	120.1
Frequency (Hz)	60
Total Luminous (lm)	817.21
Luminous Efficacy (lm/W)	72.26
Beam Angle°	22.6
Center Beam Candle Power (cd)	1738
S/MH(C0/180)	0.37
S/MH(C90/270)	0.34

**Spectral Power Distribution & Chromaticity Diagram**



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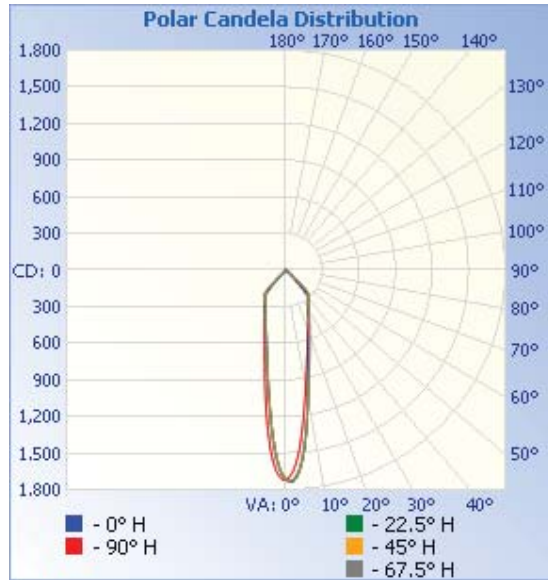
**Zonal Lumen Tabulation:**

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Luminaire
0-30	508.1	62.2%	62.2%
0-40	701.7	85.9%	85.9%
0-60	815.0	99.7%	99.8%
60-90	1.7	0.2%	0.2%
70-100	0.2	0%	0%
90-120	0	0%	0%
0-90	816.7	99.9%	100%
90-180	0.1	0%	0%
0-180	816.8	100%	100%

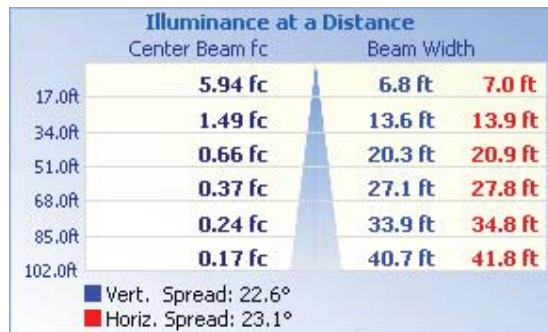
Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	120.5	14.8%	90-100	0	0%
10-20	190.4	23.3%	100-110	0	0%
20-30	197.2	24.1%	110-120	0	0%
30-40	193.6	23.7%	120-130	0	0%
40-50	107.9	13.2%	130-140	0	0%
50-60	5.4	0.7%	140-150	0	0%
60-70	1.5	0.2%	150-160	0.0	0%
70-80	0.2	0.0%	160-170	0.1	0%
80-90	0.0	0.0%	170-180	0.0	0%



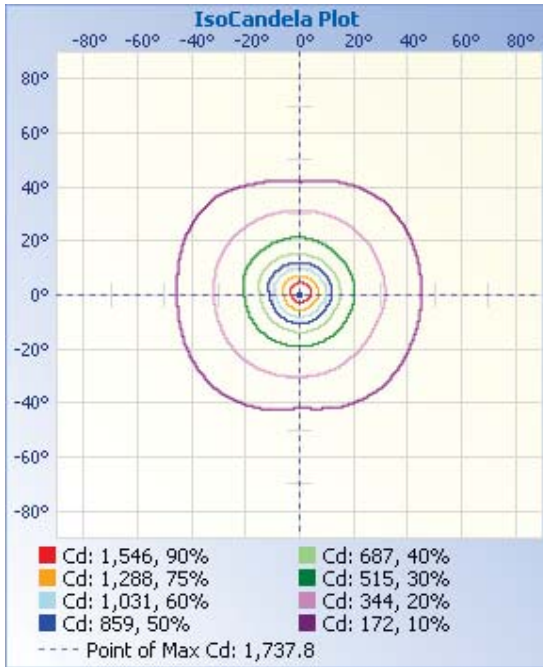
### Photometric Data



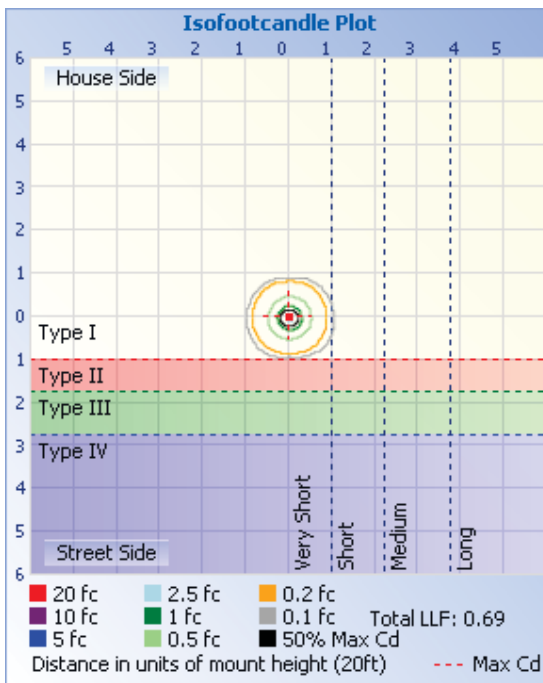
### Illuminance Plots



### ISOCANDELA DIAGRAM



### ISOLUX DIAGRAM



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**Candela Table - Type C**

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	1718	1718	1718	1718	1718	1718	1718	1718	1718	1718	1718	1718	1718	1718	1718	1718	1718
1	1738	1737	1730	1728	1696	1692	1685	1677	1674	1676	1675	1687	1714	1719	1728	1733	1738
2	1729	1730	1720	1717	1653	1639	1630	1616	1611	1610	1608	1628	1686	1697	1713	1724	1729
3	1699	1697	1687	1681	1587	1568	1552	1534	1521	1521	1523	1545	1633	1652	1675	1689	1699
4	1640	1640	1630	1623	1504	1478	1457	1435	1421	1416	1421	1448	1558	1583	1611	1630	1640
5	1560	1561	1554	1544	1406	1376	1349	1328	1310	1308	1314	1342	1467	1496	1529	1548	1560
6	1460	1466	1457	1449	1302	1270	1242	1221	1204	1199	1208	1236	1364	1397	1431	1449	1460
7	1352	1362	1352	1343	1201	1165	1138	1117	1105	1099	1106	1134	1260	1292	1321	1339	1352
8	1243	1253	1247	1239	1105	1068	1044	1026	1016	1010	1016	1040	1161	1190	1216	1229	1243
9	1141	1148	1146	1141	1020	984	958	945	938	933	932	956	1068	1092	1114	1124	1141
10	1045	1055	1054	1053	943	910	885	872	867	863	863	884	981	1000	1018	1029	1045
11	960	972	973	975	876	847	820	808	807	802	803	819	905	920	931	944	960
12	885	898	903	907	819	790	765	751	751	747	749	764	836	848	858	870	885
13	819	835	841	848	768	742	716	702	700	699	700	713	775	785	792	805	819
14	760	779	787	796	722	698	674	659	656	659	658	669	721	728	737	746	760
15	709	731	741	750	682	661	637	621	617	620	622	632	673	681	688	696	709
16	665	689	699	708	646	625	604	587	583	585	589	598	632	640	646	652	665
17	629	651	662	671	613	594	574	558	554	554	559	569	597	606	609	613	629
18	598	618	627	636	583	566	548	533	528	528	532	541	567	575	576	580	598
19	571	588	595	604	556	541	524	510	506	504	507	516	540	548	547	553	571
20	548	560	566	574	532	518	502	490	485	482	484	493	516	522	521	531	548
21	528	534	540	548	511	498	483	471	466	462	463	472	493	499	500	512	528
22	509	512	517	523	491	479	465	454	448	444	444	452	472	479	481	497	509
23	489	490	494	500	472	461	449	438	431	427	427	433	452	461	464	480	489
24	470	471	475	479	456	445	434	423	416	412	410	417	434	443	449	464	470
25	452	451	455	460	440	430	419	408	401	397	395	401	417	428	435	448	452
26	434	432	438	442	424	415	404	395	387	383	380	386	404	414	421	431	434
27	416	415	420	425	409	402	391	382	374	370	366	371	391	401	406	414	416
28	398	398	404	408	395	388	379	370	363	359	354	358	380	388	392	397	398
29	381	383	387	392	381	375	367	358	352	350	344	346	369	375	377	381	381

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30	365	369	373	378	367	361	356	348	342	341	335	336	359	361	362	365	365
31	351	355	360	365	355	349	345	338	334	333	326	327	349	347	349	351	351
32	338	344	348	353	344	338	334	330	325	324	319	319	337	334	336	337	338
33	326	333	337	341	334	327	325	321	317	316	311	311	326	321	322	325	326
34	316	324	327	331	325	318	316	314	310	306	305	305	315	309	310	313	316
35	309	315	319	322	317	310	308	306	304	299	299	299	305	297	299	303	309
36	301	307	312	314	309	303	300	299	297	292	292	293	294	287	289	295	301
37	295	302	307	308	301	295	293	293	290	286	286	286	285	279	281	288	295
38	291	297	301	303	293	288	288	286	284	279	281	281	276	273	275	283	291
39	289	290	292	292	284	280	282	280	276	273	275	275	271	270	273	282	289
40	273	276	281	284	276	273	276	274	248	268	269	269	273	273	272	274	273
41	241	271	277	279	268	266	268	268	196	261	262	261	267	268	268	267	241
42	188	266	272	274	259	259	261	254	138	234	248	247	259	262	261	259	188
43	125	236	267	269	251	253	252	216	79	185	215	213	241	249	250	237	125
44	71	187	261	264	241	243	233	162	36	129	172	169	213	223	231	194	71
45	30	131	250	253	216	207	189	104	18	74	125	122	166	177	189	140	30
46	17	73	214	224	169	154	133	54	15	33	71	69	118	129	141	84	17
47	15	30	167	174	112	95	78	22	13	17	28	27	63	75	91	37	15
48	14	15	116	121	60	47	34	14	12	13	14	14	26	34	45	15	14
49	11	14	63	63	25	18	14	12	11	11	11	12	13	14	16	12	11
50	10	12	24	26	14	12	11	10	10	9	10	10	12	12	12	11	10
51	9	9	13	14	12	10	9	9	9	8	7	8	10	11	11	8	9
52	9	8	12	11	10	9	7	8	8	7	6	7	8	8	8	7	9
53	8	7	10	10	8	7	7	7	7	7	6	6	7	7	7	6	8
54	7	7	7	8	7	6	6	6	6	6	5	5	6	6	6	6	7
55	6	6	6	7	6	6	5	6	6	5	4	4	5	5	5	5	6
56	6	5	6	6	5	5	5	5	5	5	4	4	5	5	5	4	6
57	5	5	5	5	5	4	4	4	5	4	3	3	4	4	4	4	5
58	5	4	4	5	4	4	3	4	4	4	3	3	4	4	3	3	5
59	4	4	4	4	3	3	3	3	4	3	3	2	3	3	3	3	4
60	4	4	3	4	3	3	2	3	3	3	2	2	3	3	3	3	4
61	4	3	3	3	2	2	2	3	3	3	2	2	2	2	2	2	4

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62	3	3	3	3	2	2	2	2	3	2	2	1	2	2	2	2	3
63	3	2	2	2	2	2	1	2	2	2	1	1	2	2	2	2	3
64	3	2	2	2	1	1	1	2	2	2	1	1	1	1	1	2	3
65	2	2	2	2	1	1	1	1	2	1	1	1	1	1	1	1	2
66	2	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2
67	2	1	1	1	1	0	1	1	2	1	0	0	1	1	1	1	2
68	2	1	1	1	1	0	0	1	1	1	0	0	1	1	1	1	2
69	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	1	1
70	1	1	1	0	0	0	0	1	1	1	0	0	0	0	0	1	1
71	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	1
72	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
73	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
74	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
75	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
76	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Laboratory: Standard-Tech Co. Ltd Testing Center

NVLAP CODE: 201011-0

Report Format Number STD/QR4909-A/2

Address: 8th floor, Block B, No. 11 Caipin Road, Guangzhou Science City, Tianhe, Guangzhou 510663, China

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

126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
163	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
164	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
165	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
166	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
167	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
168	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
169	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
170	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
171	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
172	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
173	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
174	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0
175	1	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	1
176	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0
177	1	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	1
178	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
179	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1



**BUG Rating:**

**IESNA Luminaire Flux Distribution Table:**

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	267.07	32.7
FM - Front-Medium(30-60)	159.24	19.5
FH - Front-High(60-80)	0.94383	0.1
FVH - Front-Very High(80-90)	0.00039379	0.0
<b>Total Forward Light</b>	<b>427.26</b>	<b>52.3</b>

BL - Back-Low(0-30)	241.29	29.5
BM - Back-Medium(30-60)	147.83	18.1
BH - Back-High(60-80)	0.70735	0.1
BVH - Back-Very High(80-90)	0	0.0
<b>Total Back Light</b>	<b>389.95</b>	<b>47.7</b>

UL - Uplight-Low(90-100)	0	0.0
UH - Uplight-High(100-180)	0.12708	0.0
<b>Total Up Light</b>	<b>0.12708</b>	<b>0.0</b>

<b>BUG(Back,Up,Glare) Rating</b>	<b>B1-U1-G0</b>
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	427.25	0.010627	427.26
Street Side	389.83	0.11646	389.95

### 3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2014-07-01	2015-06-30
ST-R-331	Spectral analysis system HAAS-2000	2014-07-01	2015-06-30
D204	Standard Lamp	2014-07-01	2015-06-30
PF2010	Power Meter for Integrating Sphere	2014-07-01	2015-06-30
EE-09	Goniophotometer system	2014-07-01	2015-06-30
D908S	Standard Lamp	2014-07-01	2015-06-30
PF210	Power Meter for Goniophotometer	2014-07-01	2015-06-30
ST-R-181A	Temperature Tester	2014-07-01	2015-06-30
<b>Uncertainty</b> Photometric Measurement (Sphere):1.74% Chromaticity Measurement(Sphere):14.3K Photometric Measurement(Goniophotometer):1.62%			

\*\*\*\*\* END OF DATASHEET PACKAGE \*\*\*\*\*