



LED
Wall-PACK/Flood Light

DataSheet
Cat# 71391



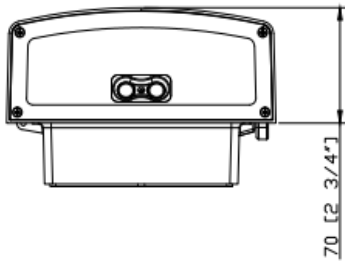
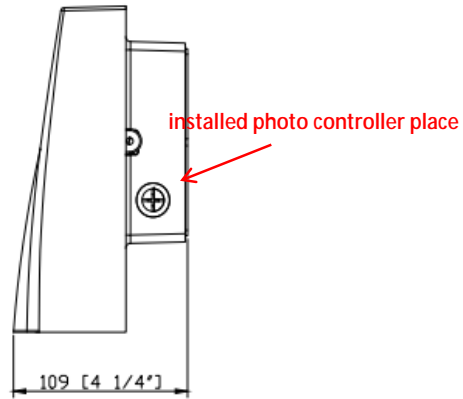
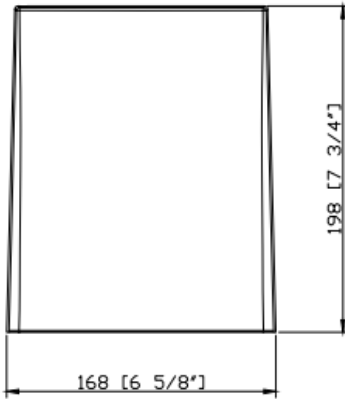
Wet Locations Use



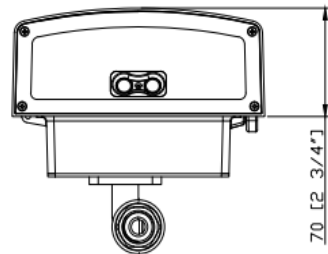
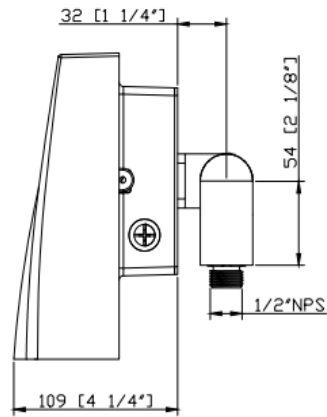
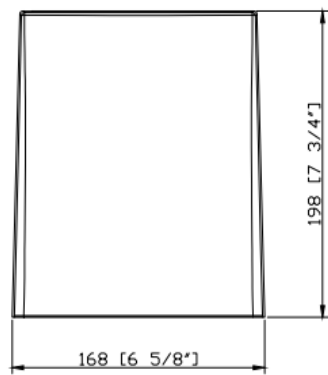
Model :		71391
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC
	Input Current	0.5A @100V / 0.2A @277V
	Input Power	28 W
	Power Factor	PF≥0.95
	Luminance	2687 LM
	Luminous Efficiency	93 LM/W
	CRI	72
	Beam Angle	140°
	Main Structure	Alluminium + Tempered Glass
LED DRIVER	Output Voltage	24-45VDC
	Output Current	0.7A
	Driver Efficiency	88%
LED	LED Brand	CXA1512
	LED Quantity	2 PCS
	LED Manufacturer	Cree
	LED Efficacy	120 LM/W
	Color Temperature	WW/NW/PW/CW (4962K)
LIFESPAN & ENVIRONMENT	Lifespan	50000 Hrs.
	Warranty	5 Years
	IP Rating	IP54 Wet Locations
	Operating Temperature	-40F - +104F
	Storage Temperature.Humidity	-40F - +176F , 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

Dimensions :

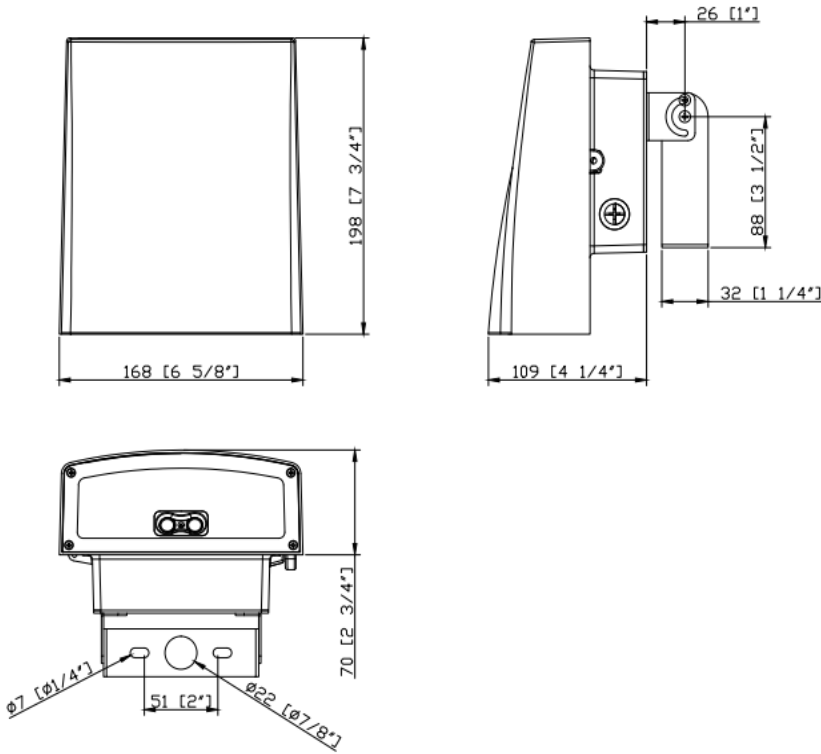
1. Direct to wall



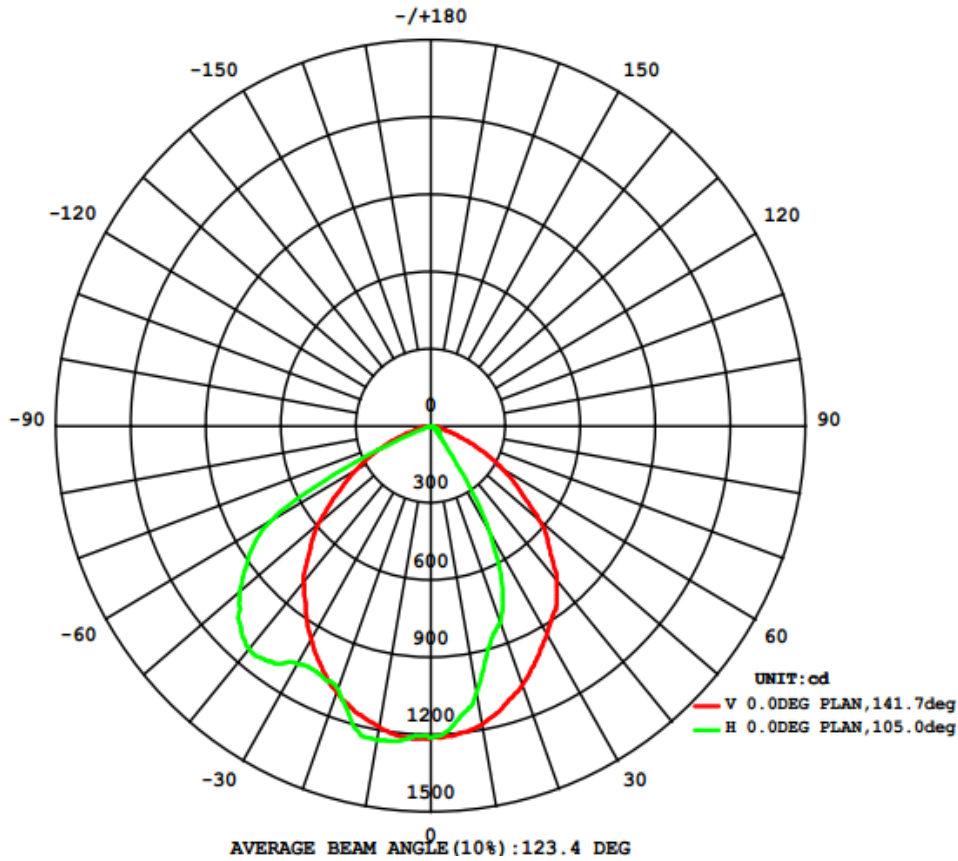
2. With Knuckle



3. With bracket



LUMINAIRE PHOTOMETRIC





Report No.: GZE140307-D

NVLAP LAB CODE 201011-0

LM-79-08 Test Report

For

Morris Products Inc.
53 Carey Rd.
Queensbury, NY 12804

Outdoor Wall-Mounted Area Luminaires

Model name(s): 71391

Test & Report By:

Sean Zhuo

Engineer: Sean Zhuo

Date: Mar.20,2014

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: 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>

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	Mar.20,2014
Test Report No.	GZE140307-D
Laboratory Contact Name	Tommy Liang

Product Information:

Organization Name	Morris Products Inc	
Brand Name	Morris	
Model Number	71391	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Wall-Mounted Area Luminaires	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Integrating Sphere
Goniophotometer
Electrical Measurements:
Output
Output

Input Wattage	--	28.68	W
Input Current	--	0.2444	A
Input Voltage (ac)	--	120.2	V
Power Factor	--	0.9768	
Off-State Power	--	0	W

Photometric Characteristics

Total Initial Lumen Output	--	2687.8	lm
Initial Lumen Efficacy	--	93.71	lm/w
Correlated color temperature / CCT	4962	--	K
Color rendering index / CRI	72.1	--	
R9 Value	0	--	
Duv	0.0009	--	
Luminous Intensity Distribution			
Center beam candlepower (if applicable)	-----	1289	cd
Beam angle (if applicable)		94.7	°
Zonal lumens in the 0°-60° zone		87.13	%
Zonal lumens in the 60°-90° zone		12.72	%
Zonal lumens in the 90°-120° zone		0.04	%
Zonal lumens in the 120°-180° zone		0.11	%

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>

Test Specifications:	
Date of Receipt	: Mar.14.2014
Date of Test	: Mar.19.2014
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° vertical intervals and 22.5° 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	71391
Luminaire Type	Outdoor Wall-Mounted Area Luminaires
Rated Voltage / Frequency	100 ~ 277 Vac, 50/60 Hz
Nominal Power	30W
Rated Initial Lamp Lumen	--
Declared CCT	5000K
LED Manufacturer	CREE
LED Model	CXA1512
Sample Receipt Date	Mar.14.2014
Sample Number	140307-4

Photo



2.1 Electrical, Photometric and Chromaticity Measurements (Refer to Work Instruction QD25)	IES LM-79 2008
--	-----------------------

Test date	2014-03-19	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	71391		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
140307-4	120.2	60	0.2444	28.68	0.9768	15.85
	277.0	60	0.1158	29.27	0.9125	17.85

Sphere-Spectroradiometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Color Rendering Index (CRI)	72.1
R9	0
CCT (K)	4962
Chromaticity (x, y)	x=0.3463 y=0.3543
Chromaticity (u', v')	u'=0.2112 v'=0.4862
Duv	0.0009

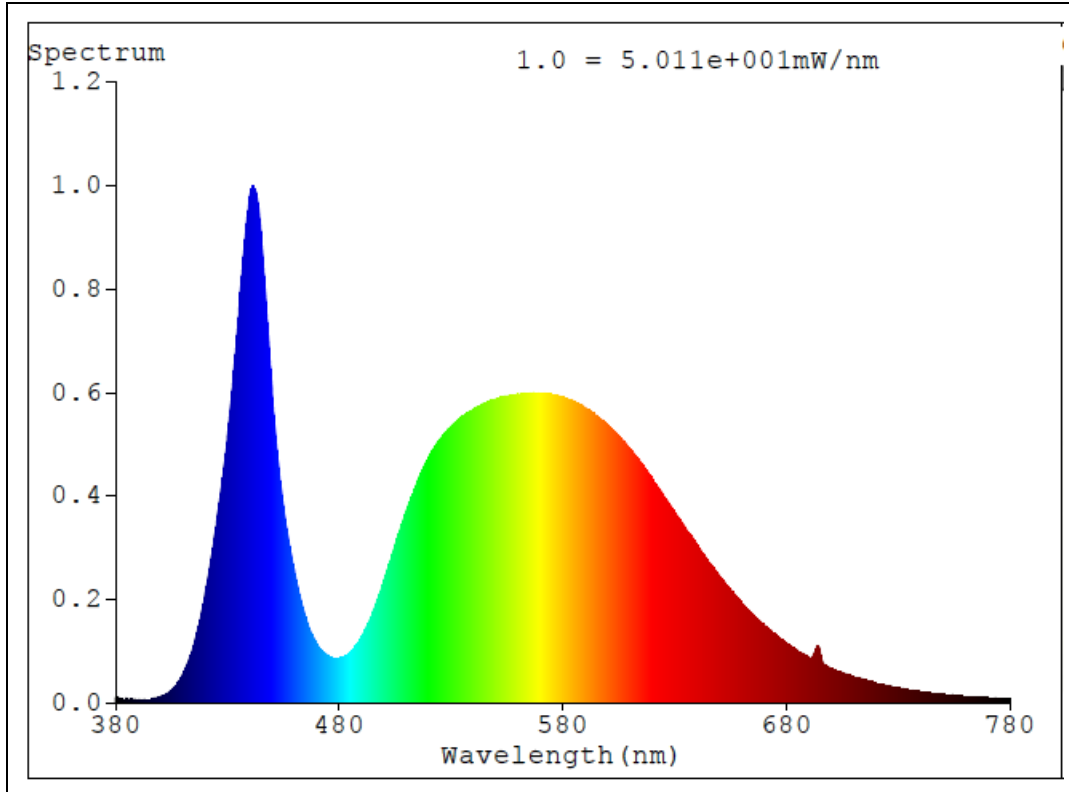
Special Color Rendering Indices			
R1	72	R9	0
R2	75	R10	41
R3	77	R11	73
R4	74	R12	47
R5	72	R13	71
R6	67	R14	87
R7	79	R15	66
R8	61	--	--

Goniophotometer Method:

Parameter	Result
Test Voltage (V)	120.2
Frequency (Hz)	60
Test Current (A)	0.2444
Power Factor	0.9768
Test Power (W)	28.68
Total Luminous (lm)	2687.8
Luminous Efficacy (lm/W)	93.71
Beam Angle°	94.7
Center Beam Candle Power (cd)	1289
S/MH(C0/180)	1.18
S/MH(C90/270)	0.83

Spectral Power Distribution

Spectral Power Distribution:



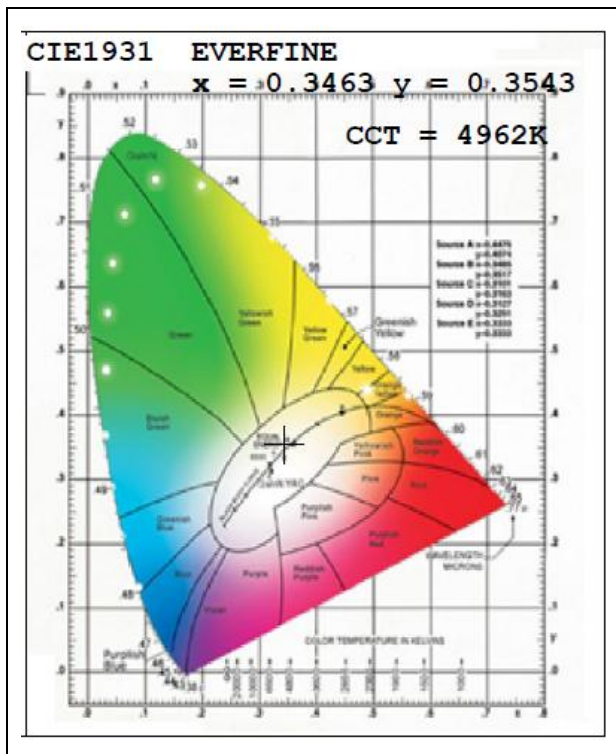
Laboratory: Standard-Tech Co. Ltd Testing Center
NVLAP CODE: 201011-0

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>

Chromaticity Diagram



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>

Zonal Lumen Tabulation

Zone	Lumens	% Lamp / Luminaire
0~ 10°	119.8	4.46%
10 ~ 20°	326	12.13%
20 ~ 30°	466.1	17.34%
30~ 40°	515.3	19.17%
40 ~ 50°	495.8	18.44%
50~ 60°	419.4	15.60%
60 ~ 70°	272.3	10.13%
70 ~ 80 °	66.99	2.49%
80 ~ 90 °	2.456	0.09%
90 ~ 100 °	0	0.00%
100 ~ 110 °	0.0944	0.00%
110 ~ 120 °	0.3506	0.01%
120 ~ 130 °	0.5207	0.02%
130 ~ 140 °	0.679	0.03%
140 ~ 150 °	0.7073	0.03%
150 ~ 160 °	0.6754	0.03%
160 ~ 170 °	0.4942	0.02%
170 ~ 180 °	0.1996	0.01%

Zone	Lumens	% Lamp / Luminaire
0~60 °	2342	87.13%
60 ~90°	342	12.72%
0 ~90°	2684	99.85%
90~180°	4	0.15%
0~180°	2688	100.00%

Laboratory: Standard-Tech Co. Ltd Testing Center

NVLAP CODE: 201011-0

Report Format Number STD/QR4909-A/2

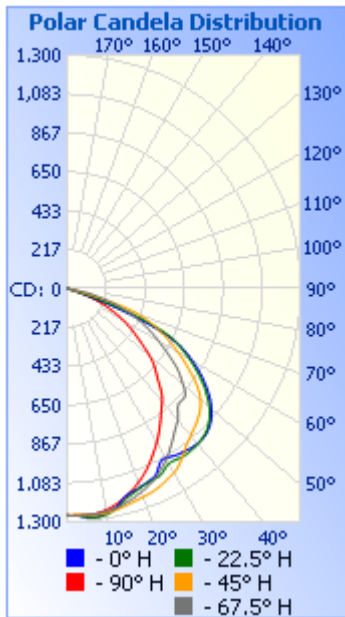
Address: 8th floor, Block B, No. 11 Caipin Road, Guangzhou Science City, Tianhe, Guangzhou 510663, China

Tel: 8620-3229 0320

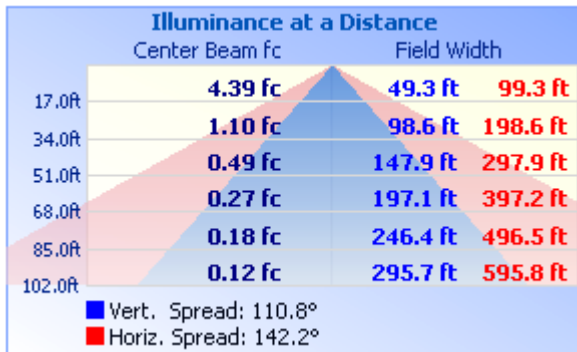
Fax: 8620-32290422

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

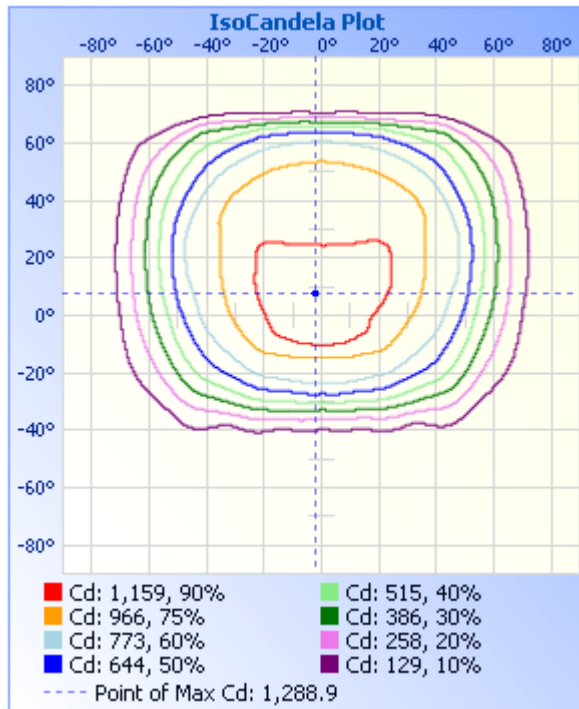
Photometric Data



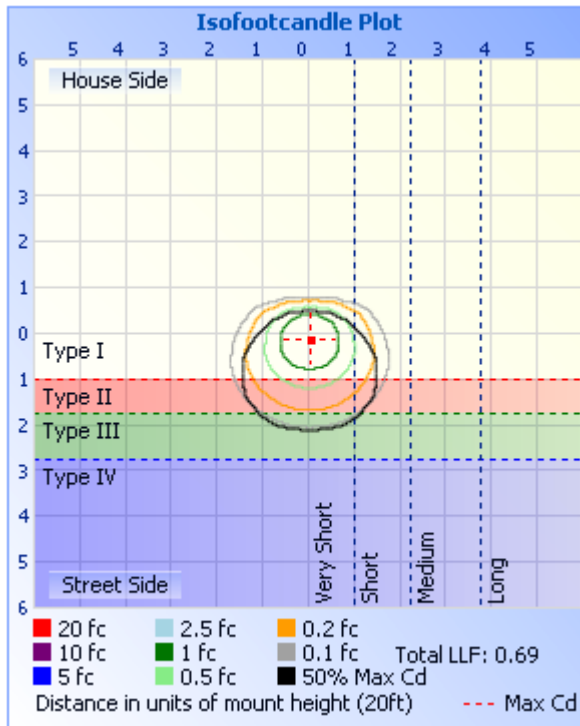
Illuminance Plots



ISOCANDELA DIAGRAM



ISOLUX DIAGRAM



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>

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	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268
1	1270	1272	1269	1270	1269	1265	1265	1265	1266	1265	1266	1265	1266	1270	1269	1270	1270
2	1269	1269	1265	1271	1270	1261	1264	1262	1261	1261	1264	1262	1262	1273	1265	1269	1269
3	1272	1274	1265	1271	1271	1260	1259	1255	1255	1254	1259	1260	1259	1273	1268	1274	1272
4	1277	1277	1266	1269	1272	1256	1254	1248	1247	1245	1253	1254	1256	1271	1272	1279	1277
5	1283	1281	1269	1268	1272	1253	1248	1244	1244	1240	1245	1249	1252	1273	1275	1282	1283
6	1286	1286	1272	1269	1271	1249	1243	1236	1243	1233	1239	1243	1248	1275	1277	1286	1286
7	1286	1287	1275	1268	1269	1244	1237	1234	1238	1232	1232	1237	1243	1275	1280	1285	1286
8	1285	1289	1275	1268	1266	1238	1235	1225	1223	1223	1222	1230	1238	1276	1280	1284	1285
9	1281	1285	1275	1266	1261	1231	1231	1205	1196	1203	1220	1222	1232	1274	1279	1279	1281
10	1276	1282	1274	1264	1256	1224	1220	1176	1159	1174	1215	1216	1224	1273	1277	1275	1276
11	1268	1274	1271	1261	1250	1217	1206	1138	1114	1137	1199	1206	1216	1272	1275	1268	1268
12	1257	1265	1269	1259	1242	1210	1186	1092	1064	1095	1177	1196	1208	1269	1270	1259	1257
13	1246	1255	1265	1255	1234	1206	1160	1044	1013	1050	1150	1186	1198	1264	1265	1249	1246
14	1229	1241	1260	1251	1224	1201	1128	999	972	1004	1117	1177	1189	1261	1261	1238	1229
15	1212	1230	1258	1244	1215	1192	1091	961	946	963	1082	1169	1179	1255	1258	1227	1212
16	1202	1218	1253	1238	1204	1180	1052	929	924	935	1046	1161	1168	1248	1256	1217	1202
17	1195	1208	1249	1232	1193	1166	1015	908	908	912	1008	1146	1157	1241	1255	1206	1195
18	1192	1201	1246	1224	1181	1149	983	886	893	895	974	1131	1144	1232	1254	1197	1192
19	1188	1194	1242	1217	1169	1133	952	869	879	878	942	1112	1132	1225	1253	1189	1188
20	1184	1188	1240	1211	1156	1115	923	853	861	863	915	1092	1120	1218	1251	1182	1184
21	1178	1182	1237	1203	1143	1095	899	837	842	849	892	1069	1108	1208	1249	1178	1178
22	1173	1178	1234	1195	1129	1070	880	819	821	830	875	1047	1095	1199	1247	1175	1173
23	1169	1175	1231	1186	1113	1046	863	798	787	806	856	1022	1081	1191	1242	1173	1169
24	1164	1172	1226	1177	1098	1020	846	777	755	784	839	996	1067	1181	1238	1170	1164
25	1158	1170	1221	1167	1082	993	829	753	721	754	822	968	1052	1169	1234	1168	1158
26	1144	1169	1215	1157	1064	967	813	716	683	724	806	944	1039	1157	1229	1165	1144
27	1122	1162	1208	1143	1048	945	798	684	643	690	790	923	1024	1145	1223	1162	1122
28	1104	1151	1201	1130	1031	922	782	649	599	652	772	902	1010	1132	1217	1153	1104
29	1094	1140	1195	1117	1015	897	762	613	552	613	752	879	996	1119	1209	1139	1094

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>

30	1095	1132	1189	1103	997	870	740	575	501	571	729	855	980	1106	1201	1127	1095
31	1100	1129	1182	1088	980	843	713	533	452	527	703	830	964	1093	1190	1124	1100
32	1105	1132	1171	1074	962	816	687	491	404	486	676	806	949	1078	1178	1126	1105
33	1111	1135	1158	1058	943	789	659	455	357	450	648	783	934	1063	1163	1130	1111
34	1116	1139	1146	1043	925	764	630	422	312	412	618	761	917	1048	1149	1133	1116
35	1118	1140	1132	1028	907	746	598	380	270	362	586	740	901	1031	1134	1137	1118
36	1121	1142	1117	1012	889	726	564	326	231	311	552	721	884	1015	1119	1138	1121
37	1126	1140	1103	997	871	709	530	278	193	264	518	701	868	999	1102	1136	1126
38	1128	1137	1090	984	854	691	493	235	158	222	478	684	851	986	1088	1132	1128
39	1130	1137	1082	971	839	672	455	196	130	186	437	666	836	973	1078	1128	1130
40	1131	1135	1074	960	824	652	414	160	108	153	396	646	822	961	1071	1124	1131
41	1131	1132	1064	943	809	631	375	129	92	125	355	627	804	942	1061	1121	1131
42	1129	1127	1056	922	788	610	335	104	74	104	317	606	779	921	1051	1116	1129
43	1126	1122	1050	906	764	589	297	85	63	87	277	583	752	905	1045	1109	1126
44	1121	1116	1040	895	738	567	260	69	54	71	235	559	728	900	1038	1101	1121
45	1114	1107	1030	894	715	544	222	57	48	60	193	535	709	899	1028	1091	1114
46	1105	1096	1022	895	695	521	185	49	43	51	158	510	691	894	1019	1081	1105
47	1095	1084	1011	894	676	496	148	43	41	44	124	484	674	888	1012	1069	1095
48	1082	1070	1000	886	657	471	114	38	39	39	93	455	655	880	1002	1057	1082
49	1068	1053	987	871	637	444	84	34	38	35	69	428	634	866	990	1041	1068
50	1051	1036	972	849	615	417	61	33	37	34	50	400	606	848	975	1024	1051
51	1033	1017	954	826	587	389	42	32	36	33	36	370	574	824	958	1006	1033
52	1014	995	934	804	558	360	29	31	35	32	24	338	541	800	937	987	1014
53	992	973	910	783	531	330	18	31	34	31	16	306	512	776	914	966	992
54	970	951	884	759	506	300	14	30	33	30	12	271	486	750	888	943	970
55	946	926	856	730	482	269	11	28	31	29	10	236	462	721	861	918	946
56	920	901	828	701	460	238	10	28	30	29	9	201	438	692	833	892	920
57	894	874	800	672	438	208	9	27	28	27	8	168	414	663	806	866	894
58	866	846	772	643	416	177	9	25	26	25	8	139	391	636	779	839	866
59	838	817	745	616	393	149	8	23	25	22	7	111	367	609	752	810	838
60	807	788	718	592	370	122	7	20	23	20	7	86	343	583	725	781	807
61	777	760	692	568	346	96	6	18	22	18	6	64	318	558	698	751	777

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>

62	745	730	665	543	323	73	6	16	20	16	6	45	294	532	671	722	745
63	711	700	637	518	300	53	5	14	18	15	6	30	270	507	643	690	711
64	666	670	610	494	275	36	5	13	16	13	6	19	246	480	616	659	666
65	605	632	582	470	252	23	5	12	14	12	6	12	222	454	587	622	605
66	532	583	552	444	228	15	5	11	12	11	5	8	199	427	558	574	532
67	449	518	524	418	205	10	5	10	10	10	5	6	177	400	528	511	449
68	362	442	493	390	181	7	4	9	9	9	5	5	156	374	497	437	362
69	275	358	463	362	159	6	4	8	7	9	4	5	136	346	466	356	275
70	194	275	431	334	139	5	4	8	7	8	4	4	119	318	433	274	194
71	123	193	390	305	119	4	3	7	6	7	3	4	104	290	393	196	123
72	67	120	333	276	102	4	3	7	6	7	3	3	90	262	338	125	67
73	35	66	265	246	87	3	3	6	6	6	3	3	80	233	270	70	35
74	21	31	195	217	73	3	2	6	5	6	2	2	69	205	200	34	21
75	12	17	126	188	61	3	2	6	5	5	2	2	60	176	132	18	12
76	10	9	68	161	51	2	2	6	5	5	2	2	51	150	74	10	10
77	8	8	29	136	43	2	2	6	5	5	2	2	42	126	34	8	8
78	7	6	14	111	36	2	2	5	5	5	2	2	34	103	15	7	7
79	5	5	8	79	30	2	2	5	5	5	2	1	27	79	8	5	5
80	4	4	7	47	22	1	2	5	5	5	2	1	17	50	6	4	4
81	3	3	5	23	13	1	1	5	6	5	1	1	7	26	5	3	3
82	2	2	4	9	6	1	1	5	5	4	1	1	3	9	4	3	2
83	2	2	3	5	4	1	1	4	3	3	1	1	2	4	3	2	2
84	1	1	2	4	2	0	1	2	2	2	1	0	2	3	2	1	1
85	1	1	1	2	1	0	1	2	2	2	1	0	1	2	1	1	1
86	0	0	0	1	1	0	1	1	1	1	1	0	1	1	0	0	0
87	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	1	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

3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2013-07-08	2014-07-07
ST-R-331	Spectral analysis system HAAS-2000	2013-06-21	2014-06-20
D204	Standard Lamp	2013-06-28	2014-06-27
PF2010	Power Meter for Integrating Sphere	2013-06-20	2014-06-19
EE-09	Goniophotometer system	2013-06-21	2014-06-20
D908S	Standard Lamp	2013-07-05	2014-07-04
PF210	Power Meter for Goniophotometer	2013-06-20	2014-06-19
ST-R-181A	Temperature Tester	2013-08-14	2014-08-13

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

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>