

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

IES LM -79 2008

Test date	2015-09-13	Test Ambient :	25.2 °C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	IGTTU-3001550-4 (5000K)		

With OSRAM QTP 2x32T8/UNV ISN -SC

Electrical Measurement for 2-lamp in Lithonia 2PM3N 12 cell 2x4 parabolic :

Sample No.	Voltage (V ac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE1 50912	120.0	60	0.2484	29.31	0.9832	6.62
-P1,P2	277.0	60	0.1172	29.33	0.9036	8.44

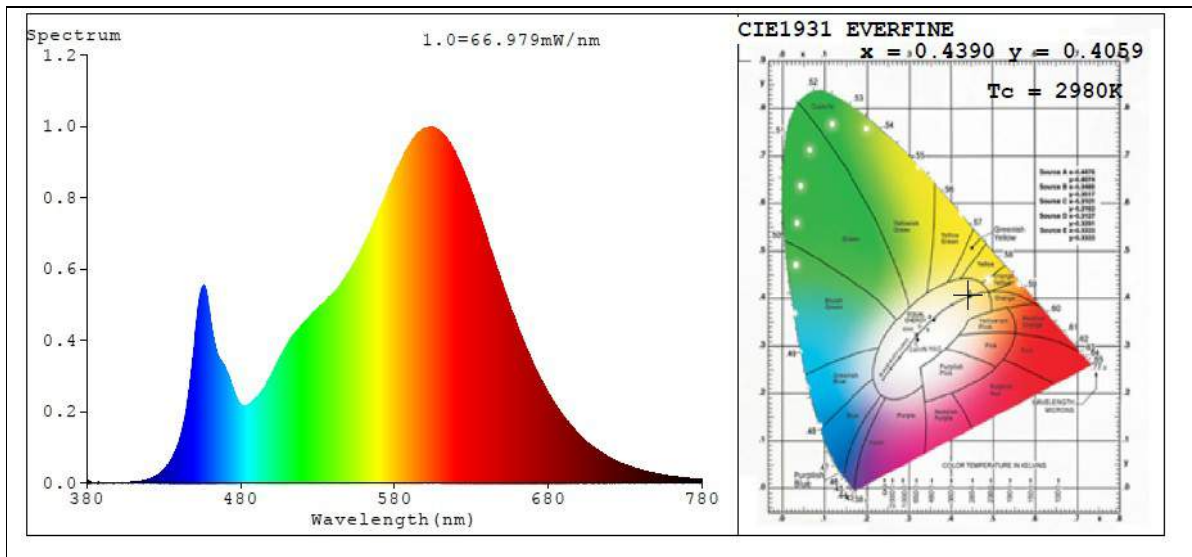
Color Data for 2-lamp in Lithonia 2PM3N 12 cell 2x4 parabolic :

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	4
Frequency (Hz)	60	R2	92	R10	82
Color Rendering Index (CRI)	82.1	R3	94	R11	78
R9	4	R4	79	R12	70
CCT (K)	2980	R5	81	R13	84
Chromaticity (x, y)	x=0.4390 y=0.4059	R6	91	R14	98
Chromaticity (u', v')	u'=0.2511 v'=0.5224	R7	81	R15	73
Duv	0.0004	R8	57	--	--

Goniophotometer Method for 2-lamp in Lithonia 2PM3N 12 cell 2x4 parabolic :

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Total Luminous (lm)	3029.4
Luminous Efficacy (lm/W)	103.36
Beam Angle°	108.4
Center Beam Candle Power (cd)	1220
S/MH(C0/180)	1.34
S/MH(C90/270)	1.25
Parameter	Result
Test Voltage (V)	277.0
Frequency (Hz)	60
Total Luminous (lm)	3021.9
Luminous Efficacy (lm/W)	103.03

Spectral Power Distribution & Chromaticity Diagram



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

Report Format Number STD/QR4909-C/2

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

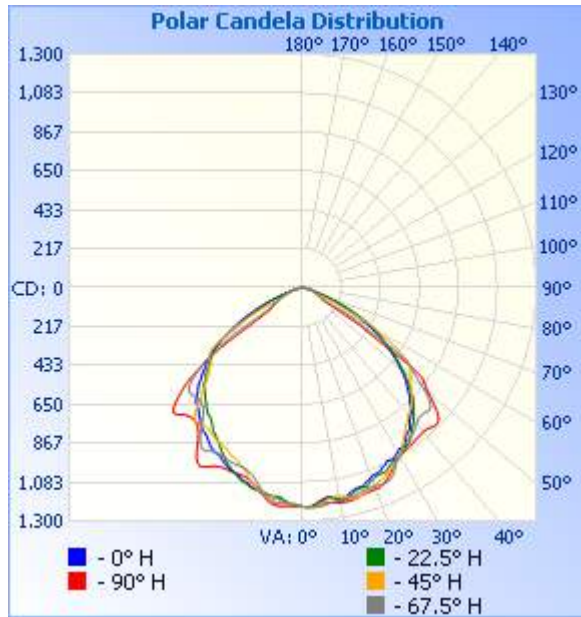
Tel: 8620-3229 0320 Fax: 8620-32290422 <http://www.standard-tech.com>

Zonal Lumen Tabulation

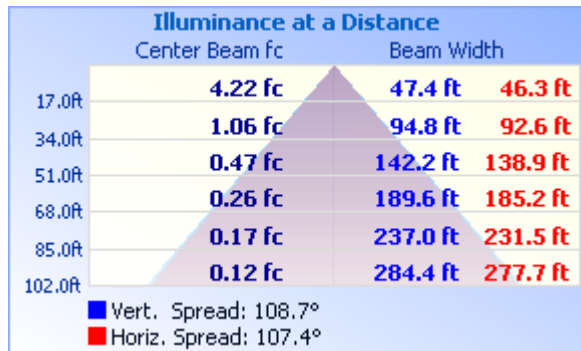
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	940.0	31%
0-40	1,562.0	51.6%
0-60	2,764.3	91.3%
60-90	264.4	8.7%
70-100	62.7	2.1%
90-120	0.0	0%
0-90	3,028.7	100%
90-180	0.3	0%
0-180	3,029.0	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	114.1	3.8%	90-100	0	0%
10-20	325.2	10.7%	100-110	0.0	0%
20-30	500.7	16.5%	110-120	0.0	0%
30-40	622.0	20.5%	120-130	0.0	0%
40-50	674.5	22.3%	130-140	0.0	0%
50-60	527.7	17.4%	140-150	0.0	0%
60-70	201.7	6.7%	150-160	0.1	0%
70-80	54.3	1.8%	160-170	0.1	0%
80-90	8.5	0.3%	170-180	0.0	0%

Photometric Data



Illuminance Plots



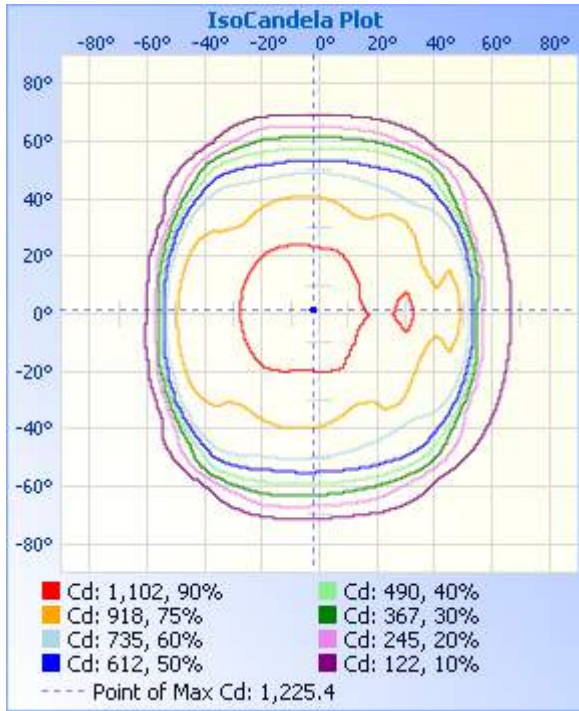
Laboratory: Standard-Tech Co. Ltd Testing Center
NVLAP CODE: 201011-0

Report Format Number STD/QR4909-C/2

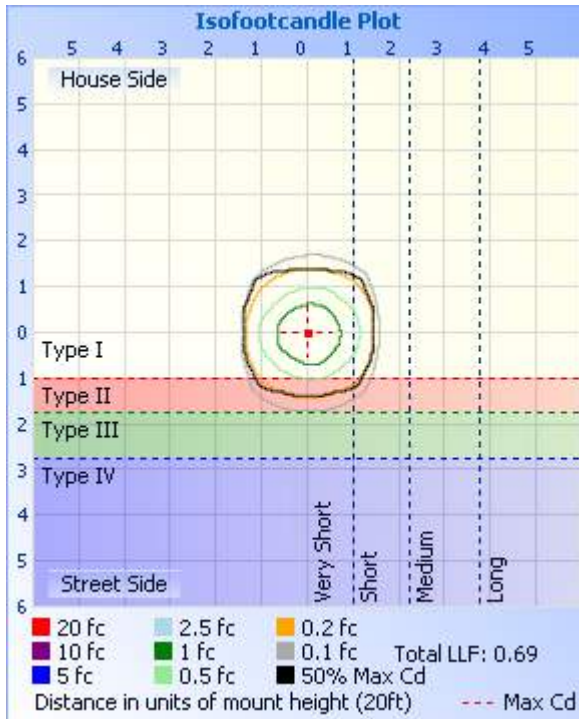
Address: 8th floor, Block B, No. 11 Caipin Road, Guangzhou Science City, Tianhe, Guangzhou 510663, China

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

ISOCANDELA DIAGRAM



ISOLUX DIAGRAM



Laboratory: Standard-Tech Co. Ltd Testing Center

NVLAP CODE: 201011-0

Report Format Number STD/QR4909-C/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>

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	1220	1220	1220	1220	1220	1220	1220	1220	1220	1220	1220	1220	1220	1220	1220	1220	1220
1	1222	1223	1223	1224	1221	1220	1222	1216	1214	1212	1215	1215	1219	1220	1220	1223	1222
2	1221	1223	1225	1223	1220	1216	1214	1208	1211	1206	1208	1210	1218	1216	1220	1219	1221
3	1215	1216	1224	1225	1219	1212	1208	1211	1212	1206	1207	1209	1218	1217	1214	1214	1215
4	1198	1202	1218	1223	1215	1209	1209	1202	1200	1198	1204	1204	1219	1220	1207	1195	1198
5	1189	1194	1206	1220	1210	1203	1203	1196	1191	1192	1199	1206	1222	1217	1195	1183	1189
6	1179	1190	1194	1216	1209	1200	1195	1185	1176	1180	1194	1208	1224	1216	1187	1177	1179
7	1175	1181	1188	1211	1208	1199	1188	1176	1179	1172	1184	1206	1223	1212	1184	1172	1175
8	1181	1182	1184	1206	1209	1195	1178	1177	1181	1174	1177	1202	1216	1204	1181	1173	1181
9	1189	1187	1177	1204	1212	1194	1171	1175	1175	1170	1175	1192	1206	1191	1176	1175	1189
10	1208	1198	1175	1203	1215	1194	1168	1163	1167	1165	1173	1178	1191	1176	1176	1192	1208
11	1198	1208	1184	1201	1217	1196	1171	1161	1160	1163	1163	1161	1172	1157	1179	1201	1198
12	1185	1197	1193	1201	1218	1194	1168	1154	1151	1161	1156	1140	1156	1138	1179	1191	1185
13	1172	1187	1201	1199	1217	1196	1162	1149	1153	1149	1145	1117	1141	1123	1182	1181	1172
14	1163	1177	1207	1196	1212	1192	1164	1146	1152	1148	1131	1097	1127	1109	1175	1167	1163
15	1157	1167	1210	1191	1207	1186	1162	1138	1137	1147	1116	1082	1116	1094	1157	1158	1157
16	1156	1161	1200	1183	1201	1182	1159	1134	1128	1137	1096	1070	1107	1079	1138	1156	1156
17	1156	1161	1192	1179	1197	1175	1157	1122	1127	1129	1072	1061	1101	1073	1116	1154	1156
18	1140	1163	1187	1177	1196	1167	1153	1118	1115	1124	1061	1057	1099	1070	1094	1149	1140
19	1133	1147	1177	1176	1193	1168	1150	1111	1103	1111	1050	1053	1098	1066	1076	1137	1133
20	1119	1139	1169	1177	1193	1165	1140	1097	1100	1100	1036	1053	1099	1066	1066	1125	1119
21	1114	1131	1165	1179	1193	1161	1133	1096	1092	1091	1028	1052	1098	1073	1057	1110	1114
22	1114	1125	1158	1180	1184	1157	1126	1091	1090	1079	1021	1051	1098	1077	1049	1102	1114
23	1109	1125	1155	1180	1176	1151	1122	1086	1079	1067	1014	1048	1096	1080	1038	1098	1109
24	1095	1125	1143	1177	1163	1147	1112	1082	1069	1053	1007	1044	1097	1080	1029	1090	1095
25	1088	1118	1129	1168	1148	1139	1104	1074	1058	1034	996	1040	1099	1075	1017	1076	1088
26	1073	1103	1122	1155	1131	1127	1099	1066	1046	1021	991	1038	1107	1072	1003	1053	1073
27	1078	1098	1116	1132	1115	1106	1092	1057	1040	1007	987	1037	1116	1071	998	1032	1078
28	1078	1085	1105	1108	1101	1090	1085	1045	1040	987	981	1036	1131	1074	1001	1023	1078
29	1067	1088	1098	1091	1089	1074	1083	1042	1031	975	977	1040	1141	1072	1000	1018	1067

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

Report Format Number STD/QR4909-C/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	1058	1086	1088	1076	1081	1062	1075	1038	1024	962	973	1050	1146	1075	996	1008	1058
31	1047	1076	1072	1062	1076	1052	1064	1033	1009	948	965	1057	1137	1081	986	989	1047
32	1052	1068	1049	1050	1071	1041	1051	1027	996	941	958	1056	1115	1088	973	973	1052
33	1046	1057	1027	1042	1067	1030	1035	1015	983	921	952	1043	1082	1084	958	963	1046
34	1029	1050	1009	1035	1064	1022	1013	1003	973	905	946	1021	1045	1066	955	957	1029
35	1005	1044	991	1030	1063	1020	992	990	971	892	943	992	1013	1039	959	944	1005
36	995	1024	974	1023	1060	1017	981	975	957	881	948	960	987	1005	970	917	995
37	989	1007	960	1018	1054	1013	962	970	946	880	951	927	970	969	971	896	989
38	970	988	946	1010	1051	1011	951	958	925	862	953	898	959	939	972	886	970
39	947	976	931	997	1049	1003	940	950	917	854	954	878	955	915	966	881	947
40	934	962	920	988	1047	996	922	928	900	834	934	866	953	897	970	862	934
41	925	944	914	977	1048	990	913	914	888	828	904	857	953	881	969	840	925
42	905	922	902	971	1052	987	907	904	878	810	870	848	958	872	950	826	905
43	878	908	892	972	1060	985	890	897	872	797	830	846	968	870	911	823	878
44	860	891	877	972	1066	984	887	885	851	786	804	846	983	873	863	805	860
45	840	870	861	977	1065	987	882	883	827	783	774	851	997	876	828	784	840
46	815	841	846	981	1054	995	876	874	810	761	745	860	1000	882	802	769	815
47	794	816	827	975	1029	993	868	851	794	738	720	858	985	888	770	758	794
48	777	791	810	955	993	978	846	827	764	724	703	852	949	893	743	739	777
49	750	764	797	924	955	957	836	813	742	710	691	836	907	883	716	718	750
50	719	740	786	885	917	920	824	788	722	680	674	805	862	855	705	703	719
51	692	712	774	843	885	882	819	754	694	668	656	766	810	816	692	680	692
52	667	681	764	801	861	838	812	728	681	655	655	720	728	776	671	650	667
53	639	652	754	767	836	802	814	695	647	634	654	672	651	727	652	631	639
54	609	624	735	737	746	771	806	668	625	629	640	598	550	665	646	609	609
55	583	599	705	707	535	742	783	641	601	606	629	531	285	586	638	588	583
56	549	567	668	596	428	701	752	605	567	581	610	450	229	518	620	571	549
57	525	539	627	438	371	531	714	581	539	547	561	258	215	347	606	544	525
58	490	512	583	369	174	402	658	547	503	501	512	207	203	224	563	523	490
59	462	486	534	318	133	347	602	523	475	456	463	193	192	205	509	491	462
60	426	458	488	152	125	179	553	490	447	411	412	180	182	190	464	458	426
61	391	428	451	122	119	136	514	462	410	374	357	169	172	178	409	415	391

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

Report Format Number STD/QR4909-C/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	361	397	395	113	114	125	472	434	382	341	308	158	163	166	348	368	361
63	326	365	291	106	109	116	425	398	350	309	209	148	153	156	285	321	326
64	292	330	230	100	104	109	303	364	314	282	147	138	143	145	196	279	292
65	258	299	191	94	99	103	241	332	283	253	132	128	134	135	138	246	258
66	225	264	119	89	94	97	160	297	253	227	118	119	125	126	123	213	225
67	196	231	90	83	89	90	111	264	223	201	106	110	116	116	110	183	196
68	165	200	79	78	84	85	97	233	192	177	96	102	109	107	98	157	165
69	136	169	70	73	78	79	86	202	163	153	86	93	101	99	88	133	136
70	114	134	63	68	74	74	76	169	137	124	77	86	93	91	79	109	114
71	93	103	57	63	69	69	68	133	118	97	68	78	86	83	70	91	93
72	78	80	52	58	64	64	60	104	100	80	60	71	78	75	62	72	78
73	66	62	47	54	60	59	54	86	84	67	53	64	71	68	54	59	66
74	55	52	42	50	56	55	49	71	70	56	46	57	63	60	48	51	55
75	47	43	37	46	51	51	43	59	58	47	40	50	57	53	41	43	47
76	39	37	32	41	47	46	38	49	48	40	35	44	50	46	35	37	39
77	33	31	27	36	43	41	33	40	39	34	30	38	43	40	30	31	33
78	27	25	23	32	39	36	28	33	32	28	26	32	37	34	26	26	27
79	23	21	20	28	36	32	24	27	27	24	22	28	31	28	22	22	23
80	18	17	16	25	32	28	20	22	22	19	19	23	26	24	19	18	18
81	15	14	14	21	27	24	17	18	17	16	15	19	21	20	16	15	15
82	12	11	12	17	23	20	14	14	14	13	13	15	18	16	13	12	12
83	9	9	10	14	18	16	11	11	11	10	10	12	14	13	10	9	9
84	7	7	7	11	15	12	9	8	8	7	7	9	10	10	8	7	7
85	5	5	5	8	11	9	6	6	6	5	5	6	7	7	6	5	5
86	3	3	4	6	8	6	4	4	4	3	3	4	5	4	3	3	3
87	2	2	2	3	5	4	2	2	2	2	1	2	3	2	2	2	2
88	1	1	1	1	2	1	1	1	0	0	0	0	1	0	0	1	1
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

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

Report Format Number STD/QR4909-C/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>

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-C/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	1	0
153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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

Laboratory: Standard-Tech Co. Ltd Testing Center

NVLAP CODE: 201011-0

Report Format Number STD/QR4909-C/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>

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	1	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	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-C/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>

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

Test date	2015-09-13	Test Ambient:	25.1 °C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	IGTTU-3001550-4 (5000K)		

With ballast OSRAM QTP 2x32T8/UNV ISN -SC

Electrical Measurement for Bare Lamp:

Sample No.	Voltage (V ac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE 150912	120.0	60	0.1276	14.93	0.9751	7.08
-P3	277.0	60	0.0594	14.90	0.9061	8.58

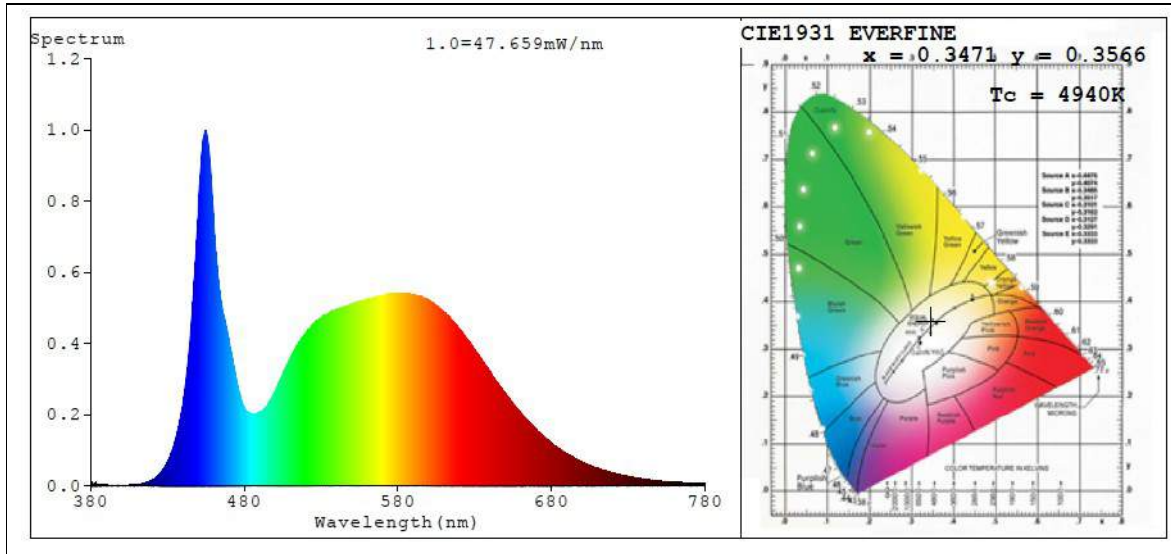
Sphere-Spectroradiometer Method for Bare Lamp :

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	11
Frequency (Hz)	60	R2	89	R10	72
Color Rendering Index (CRI)	82.5	R3	93	R11	77
R9	11	R4	79	R12	50
CCT (K)	4940	R5	80	R13	84
Chromaticity (x, y)	x=0.3471 y=0.3566	R6	83	R14	96
Chromaticity (u', v')	u'=0.2109 v'=0.4874	R7	87	R15	77
Duv	0.0017	R8	68	--	--
Total Initial Lumen Output(lm)	1913				
Initial Lumen Efficacy(lm/w)	128.13				

Sphere-Spectroradiometer Method for Bare Lamp(277V):

Parameter	Result
Test Voltage (V)	277.0
Frequency (Hz)	60
Total Initial Lumen Output(lm)	1894
Initial Lumen Efficacy(lm/w)	127.11

Spectral Power Distribution & Chromaticity Diagram



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

Report Format Number STD/QR4909-C/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>

3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2015-07-01	2016-06-30
ST-R-331	Spectral analysis system HAAS-2000	2015-07-01	2016-06-30
D204	Standard Lamp	2015-07-01	2016-06-30
PF2010	Power Meter for Integrating Sphere	2015-07-01	2016-06-30
EE-09	Goniophotometer system	2015-07-01	2016-06-30
D908S	Standard Lamp	2015-07-01	2016-06-30
PF210	Power Meter for Goniophotometer	2015-07-01	2016-06-30
ST-R-181A	Temperature Tester	2015-07-01	2016-06-30
Uncertainty: Photometric Measurement (Sphere):1.74% Chromaticity Measurement(Sphere):14.3K Photometric Measurement(Goniophotometer):1.62%			

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