



**71336
LED Floodlight**

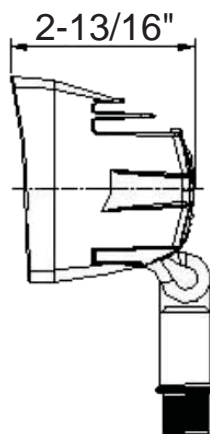
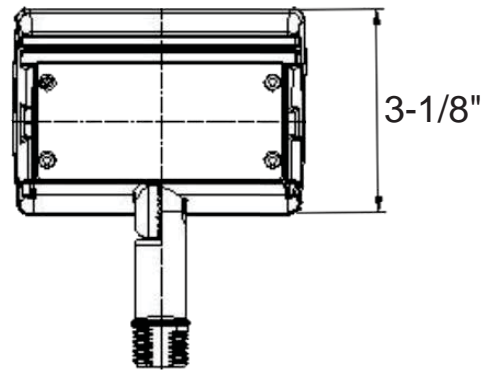
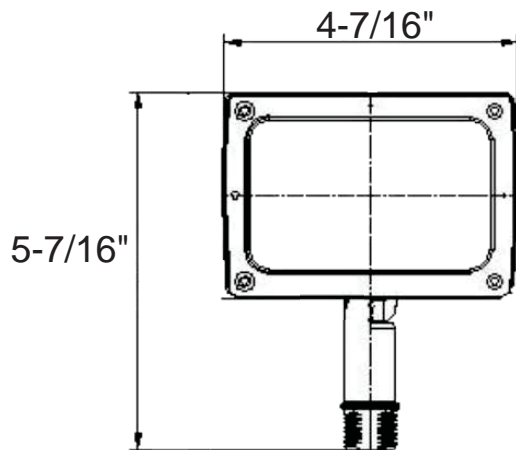


RoHS



Model :		71336
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC 50/60HZ
	Input Current	0.15A Max
	Input Power	11W
	Power Factor	PF≥0.90
	Luminance	942 LM
	Luminous Efficiency	85 LM/W
	CRI	83
	Beam Angle	120°
	Main Structure	Aluminium + Tempered Glass
LED DRIVER	Output Voltage	24-48VDC
	Output Current	0.25A
	Driver Efficiency	88%
LED	LED Manufacturer	cree
	LED Type	1512/COB
	LED Quantity	1PCS
	LED Efficacy	80 LM/W
	Color Temperature	WW/NW/CW (3087K)
Photocell	-	Sold Separately
LIFESPAN & ENVIRONMENT	Lifespan	50000Hrs.
	Warranty	5 Years
	IP Rating	IP65 Wet Locations
	Operating Temperature	-40F - +131F
	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	≤0.5Ω,OK
	Electromagnetic Compatibility	EN55015, EN61000-2-3, EN61000-3-3, EN61547
OTHERS	Dimension	Pls refer to attached dimension drawing
	Net Weight	0.6KG
	Gross Weight	0.8KG
	Packing Size	inner box: L142*W120*H120 master carton: L378*W250*H155
	Qty / Carton 纸箱	12PCS
	Volume	0.52CBm/carton

Dimension : **71336**





Report No.: GZE140709-J

LM-79-08 Test Report

For

Morris Products Inc.

53 Carey Rd.

Queensbury, NY 12804

Landscape/Accent Flood and Spot Luminaires

Model name(s): 71336

Representative (Tested) Model: 71336

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

Test & Report By:

Sean Zhuo

Engineer: Sean Zhuo

Date: Aug.04,2014

Update:Aug.18,2014

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	Aug.04,2014
Test Report No.	GZE140709-J'
Laboratory Contact Name	Tommy Liang

Product Information:

Organization Name	Morris Products	
Brand Name	Morris	
Model Number	71336	
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	s

Integrating Sphere
Goniophotometer
Electrical Measurements:
Output
Output

	Integrating Sphere	Goniophotometer	
Input Wattage	--	11.07	W
Input Current	--	0.0928	A
Input Voltage (ac)	--	120.1	V
Power Factor	--	0.9932	
Off-State Power	--	0	W

Photometric Characteristics

	Integrating Sphere	Goniophotometer	
Total Initial Lumen Output	--	942.15	lm
Initial Lumen Efficacy	--	85.11	lm/w
Correlated color temperature / CCT	3087	--	K
Color rendering index / CRI	83.0	--	
R9 Value	13	--	
Duv	0.0025	--	

Luminous Intensity Distribution

	Integrating Sphere	Goniophotometer	
Center beam candlepower (if applicable)		480.9	cd
Beam angle (if applicable)		102.2	°
Zonal lumens in the 0°-60° zone	-----	98	%
Zonal lumens in the 60°-90° zone		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	: Jul.31,2014
Date of Test	: Aug.01,2014
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	71336
Luminaire Type	Landscape/Accent Flood and Spot Luminaires
Rated Voltage / Frequency	100 ~ 277 Vac, 50/60 Hz
Nominal Power	12W
Rated Initial Lamp Lumen	--
Declared CCT	3000K
LED Manufacturer	CREE
LED Model	CXA1512
Sample Receipt Date	Jul.31,2014
Sample Number	140709-27(3000K),28 (5000K)

Photo



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2.1 Electrical, Photometric and Chromaticity Measurements (Refer to Work Instruction QD25)	IES LM-79 2008
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Test date	2014-08-01	Test Ambient:	25.2 °C
Test Orientation	Lighting Downward, light surface parallel to horizontal line	Stabilization Time (min)	90
Model Number	71336		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
140709-27	120.1	60	0.0928	11.07	0.9932	14.07
	277.0	60	0.0428	11.23	0.9473	18.51

Sphere-Spectroradiometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Color Rendering Index (CRI)	83.0
R9	13
CCT (K)	3087
Chromaticity (x, y)	x=0.4344 y=0.4095
Chromaticity (u', v')	u'=0.2466 v'=0.5231
Duv	0.0025

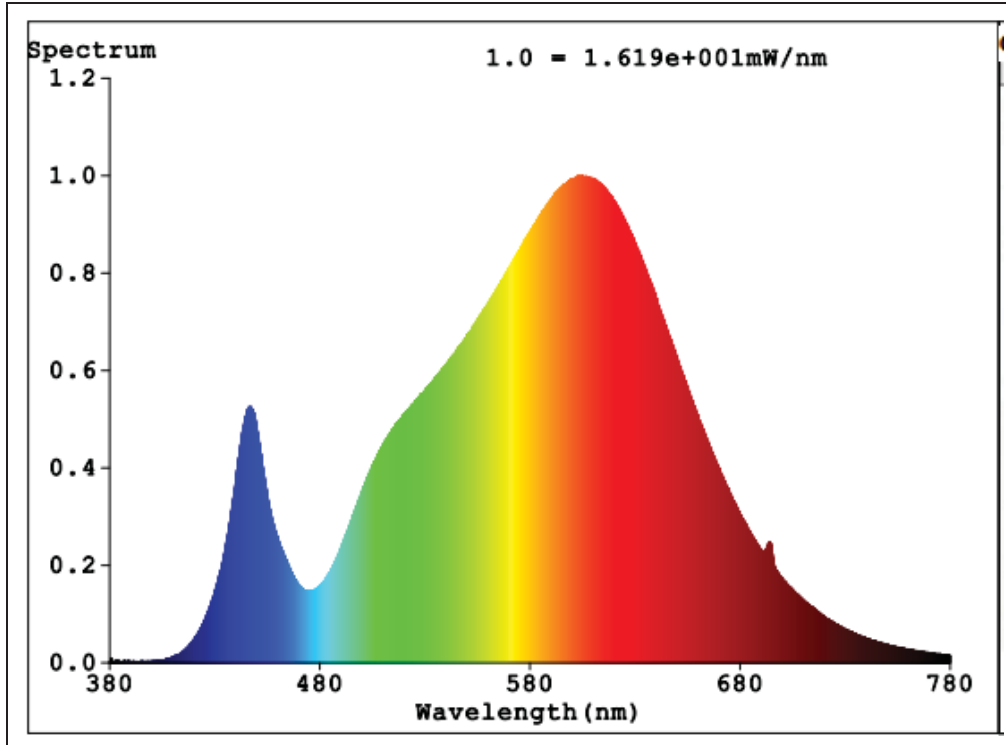
Special Color Rendering Indices			
R1	81	R9	13
R2	88	R10	74
R3	96	R11	82
R4	83	R12	69
R5	81	R13	82
R6	86	R14	97
R7	86	R15	74
R8	64	--	--

Goniophotometer Method:

Parameter	Result
Test Voltage (V)	120.1
Frequency (Hz)	60
Total Luminous (lm)	942.15
Luminous Efficacy (lm/W)	85.11
Beam Angle°	102.2
Center Beam Candle Power (cd)	480.9
S/MH(C0/180)	1.24
S/MH(C90/270)	1.13

Spectral Power Distribution

Spectral Power Distribution:



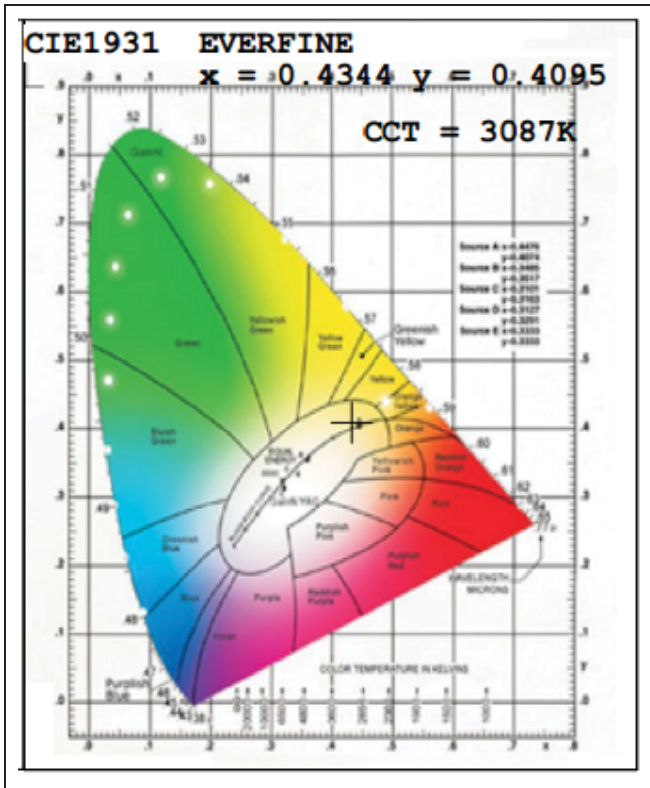
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Chromaticity Diagram



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Zonal Lumen Tabulation

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Luminaire
0-30	336.9	35.8%	35.8%
0-40	555.0	58.9%	58.9%
0-60	922.8	97.9%	98%
60-90	18.8	2%	2%
70-100	0.9	0.1%	0.1%
90-120	0	0%	0%
0-90	941.6	99.9%	100%
90-180	0.4	0%	0%
0-180	942.0	100%	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	42.0	4.5%	90-100	0	0%
10-20	116.3	12.3%	100-110	0	0%
20-30	178.6	19.0%	110-120	0	0%
30-40	218.1	23.1%	120-130	0.0	0%
40-50	218.4	23.2%	130-140	0.1	0%
50-60	149.4	15.9%	140-150	0.1	0%
60-70	17.9	1.9%	150-160	0.1	0%
70-80	0.8	0.1%	160-170	0.1	0%
80-90	0.1	0.0%	170-180	0.0	0%

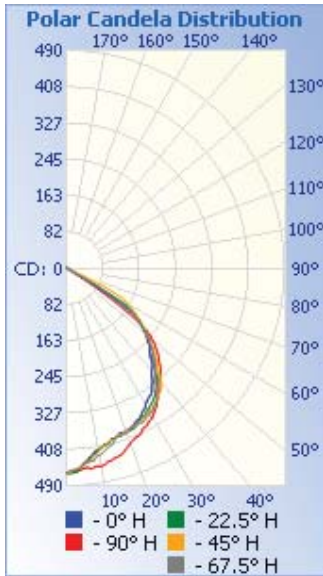
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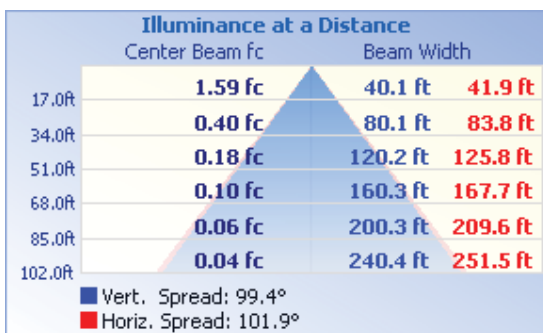
Photometric Data



Flood Summary

	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	98.9%	931.3	114.5	117.1
Beam (50%):	83.7%	788.8	101.9	99.4
Total:	100%	941.8		

Illuminance Plots



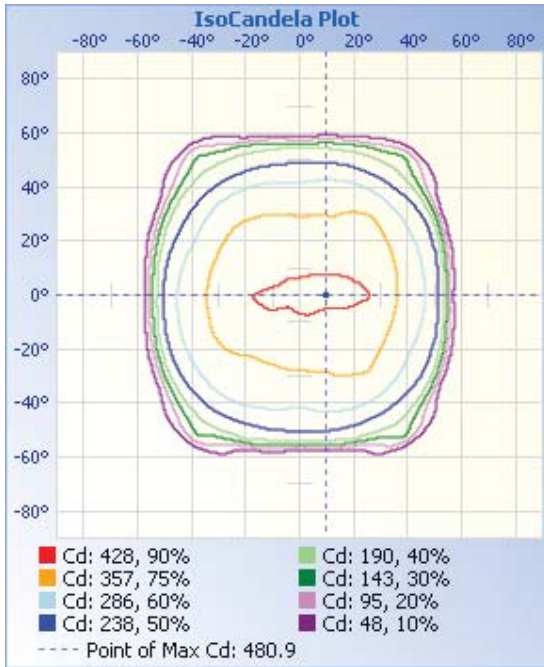
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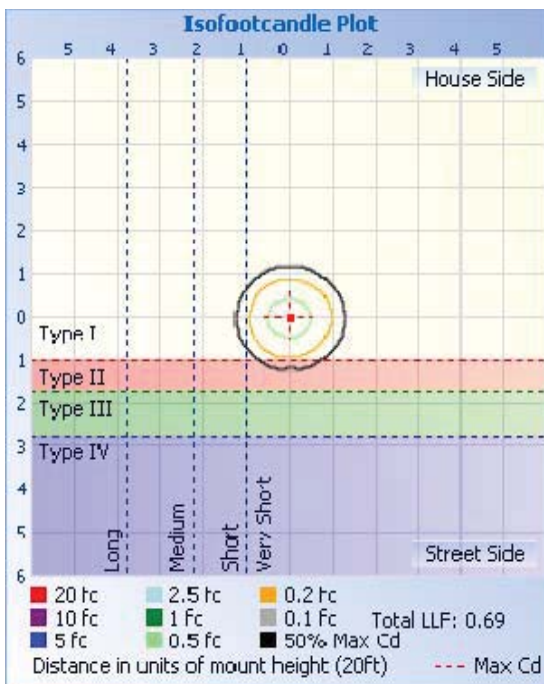
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ISOCANDELA DIAGRAM



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	459	459	459	459	459	459	459	459	459	459	459	459	459	459	459	459	459
1	457	461	458	454	457	456	453	456	461	457	457	455	459	462	458	455	457
2	459	458	453	455	452	455	448	453	456	463	457	454	463	466	457	454	459
3	453	457	450	452	455	454	445	447	455	453	455	455	459	469	456	454	453
4	448	448	447	449	453	450	441	439	447	451	451	449	463	476	456	451	448
5	442	440	445	438	450	444	434	432	441	447	452	448	473	473	453	445	442
6	434	435	437	438	449	444	428	429	433	445	444	444	481	470	453	438	434
7	428	431	438	436	454	444	421	418	423	433	435	444	474	470	447	436	428
8	422	422	426	437	450	442	418	412	419	425	431	440	472	470	444	429	422
9	415	421	423	427	449	433	416	408	412	422	424	434	478	474	438	423	415
10	415	412	417	426	451	439	406	408	409	420	418	431	476	470	433	416	415
11	410	408	408	422	449	437	406	405	407	414	414	427	475	467	426	413	410
12	405	407	408	417	443	438	405	401	403	408	413	422	472	456	418	407	405
13	405	406	403	413	443	427	400	399	398	406	410	420	471	455	413	405	405
14	401	401	399	410	440	425	397	398	399	400	402	412	472	452	412	403	401
15	397	396	400	407	438	422	398	399	397	403	403	414	467	447	409	397	397
16	396	396	396	396	436	415	397	392	393	396	402	414	456	434	403	395	396
17	392	395	392	394	434	415	393	387	387	397	398	412	457	432	400	393	392
18	389	394	392	396	428	410	392	386	388	396	397	408	458	431	397	389	389
19	390	390	391	392	423	410	392	386	382	396	396	406	453	426	397	386	390
20	388	391	388	394	418	397	383	384	385	389	398	404	444	425	393	388	388
21	387	391	391	389	414	397	379	379	382	391	394	403	439	421	390	385	387
22	387	390	383	384	410	398	381	378	377	385	390	407	434	417	393	386	387
23	383	389	385	385	409	390	378	376	377	386	391	404	434	420	388	383	383
24	378	386	384	386	408	387	374	370	370	382	391	403	437	415	389	381	378
25	376	378	382	383	400	388	366	367	370	379	388	406	431	413	388	378	376
26	374	378	382	385	397	386	365	365	366	375	389	403	425	415	388	375	374
27	369	374	377	384	396	383	365	356	356	369	387	402	416	412	388	373	369
28	363	373	377	380	391	379	359	355	355	364	386	394	414	411	387	371	363
29	361	369	373	378	388	378	358	348	351	358	385	394	408	409	390	367	361

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30	354	366	372	374	385	377	356	343	344	359	380	390	400	404	390	364	354
31	349	362	369	374	380	374	354	341	340	356	383	384	396	403	389	361	349
32	344	358	366	368	374	369	351	340	334	353	380	378	389	398	387	354	344
33	342	354	364	362	369	368	349	333	327	351	372	374	377	389	383	352	342
34	340	350	359	360	362	362	343	327	318	343	371	364	374	379	379	348	340
35	334	345	358	350	357	356	340	322	315	337	366	352	365	375	378	346	334
36	325	340	351	344	349	348	337	319	309	332	362	342	352	367	371	343	325
37	320	335	347	334	345	344	336	314	305	329	356	334	348	356	367	341	320
38	311	328	344	324	339	339	330	310	297	323	353	324	336	348	363	334	311
39	302	324	338	315	331	332	328	304	296	316	345	317	328	338	358	329	302
40	297	312	329	310	325	325	326	299	289	312	336	309	328	325	347	325	297
41	294	304	317	303	319	318	322	297	284	303	328	302	320	322	337	316	294
42	287	297	305	297	315	310	311	292	279	297	319	299	311	315	329	312	287
43	276	289	298	288	309	306	308	288	279	294	311	293	308	307	319	303	276
44	270	283	292	281	300	301	300	283	277	288	300	288	301	301	308	292	270
45	263	276	281	275	292	292	292	277	268	283	292	283	294	292	297	284	263
46	260	269	274	268	286	283	280	271	260	279	283	276	287	286	285	280	260
47	253	262	264	258	279	277	273	265	254	272	274	274	279	279	275	273	253
48	246	252	251	251	269	268	265	256	250	263	263	269	273	272	264	264	246
49	238	244	244	244	262	261	259	247	244	253	254	261	263	263	254	255	238
50	232	236	235	235	250	252	248	239	238	244	247	250	255	255	247	245	232
51	225	226	228	226	242	242	239	234	233	238	237	245	249	251	236	236	225
52	217	215	222	221	229	232	230	225	226	230	229	237	231	241	228	226	217
53	210	208	213	210	204	225	221	219	215	222	222	229	193	234	219	215	210
54	201	200	206	201	171	210	210	212	186	215	216	218	147	215	211	205	201
55	192	193	196	182	134	185	202	202	138	203	208	189	101	184	203	199	192
56	174	187	188	156	99	154	194	179	89	172	198	152	57	144	192	191	174
57	134	180	181	125	66	121	184	138	41	126	188	107	26	99	185	180	134
58	86	159	173	93	39	88	175	91	11	77	180	65	15	57	178	167	86
59	41	119	164	63	22	57	166	46	4	33	176	30	10	26	169	129	41
60	11	73	157	37	15	34	156	13	4	8	167	14	8	14	161	82	11
61	5	31	149	19	13	19	144	4	7	4	154	9	7	9	147	38	5

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62	4	7	135	13	12	14	122	3	17	3	130	7	7	8	122	9	4
63	3	4	113	11	10	12	87	3	12	3	80	6	6	7	87	4	3
64	3	3	84	9	9	11	48	2	4	2	37	5	5	6	52	3	3
65	3	3	46	8	8	10	19	2	2	2	10	4	4	5	21	3	3
66	3	2	18	7	7	8	5	1	2	2	3	3	4	4	6	3	3
67	2	2	5	6	6	7	3	1	1	2	2	3	3	3	3	2	2
68	2	2	3	5	5	6	2	1	1	1	1	2	2	3	2	2	2
69	2	2	2	4	4	5	2	1	1	1	1	2	2	2	2	2	2
70	2	2	2	4	3	4	1	1	1	1	1	1	1	2	2	2	2
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77	1	1	1	1	0	0	0	0	1	0	0	0	0	0	1	1	1
78	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
79	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
80	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
81	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
82	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
83	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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

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2.2 Electrical, Photometric and Chromaticity Measurements (Refer to Work Instruction QD25)	IES LM-79 2008
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Test date	2014-08-01	Test Ambient:	25.2 ° C
Test Orientation	Lighting Downward, light surface parallel to horizontal line	Stabilization Time (min)	90
Model Number	71336		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
140709-28	120.0	60	0.0959	11.38	0.9890	13.13
	277.0	60	0.0460	12.06	0.9464	17.27

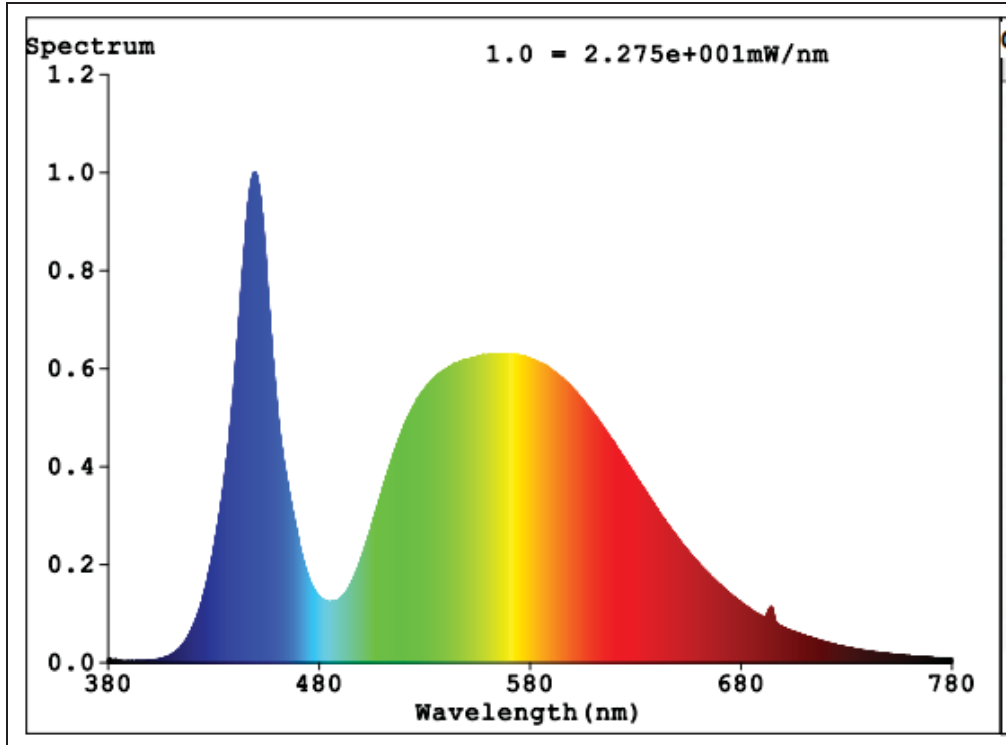
Sphere-Spectroradiometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Color Rendering Index (CRI)	73.7
R9	0
CCT (K)	5010
Chromaticity (x, y)	x=0.3452 y=0.3561
Chromaticity (u', v')	u'=0.2098 v'=0.4869
Duv	0.0022
Total Luminous (lm)	983.77
Luminous Efficacy (lm/W)	86.45

Special Color Rendering Indices			
R1	72	R9	0
R2	78	R10	47
R3	81	R11	71
R4	74	R12	44
R5	72	R13	72
R6	70	R14	89
R7	82	R15	67
R8	60	--	--

Spectral Power Distribution

Spectral Power Distribution:



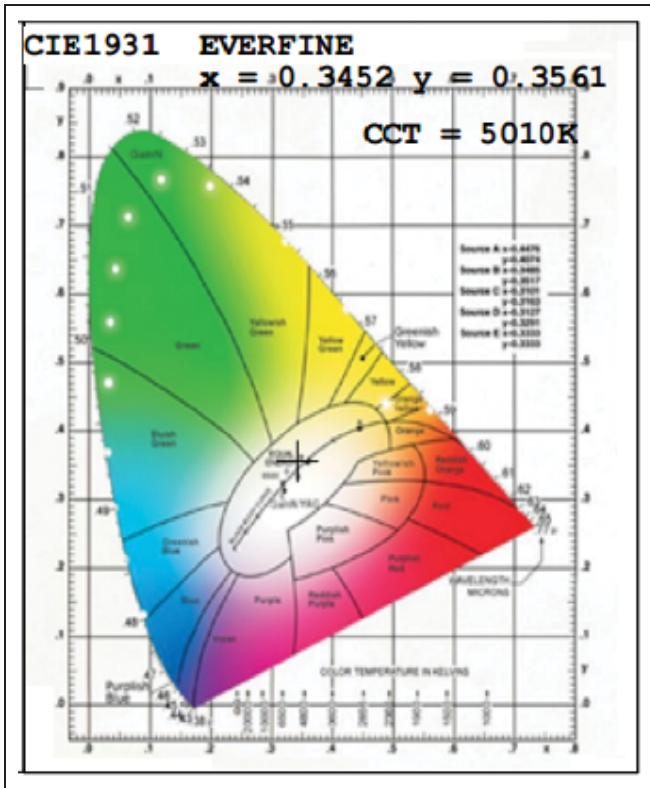
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Chromaticity Diagram



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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

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