



Cat# 71575

150 Watts

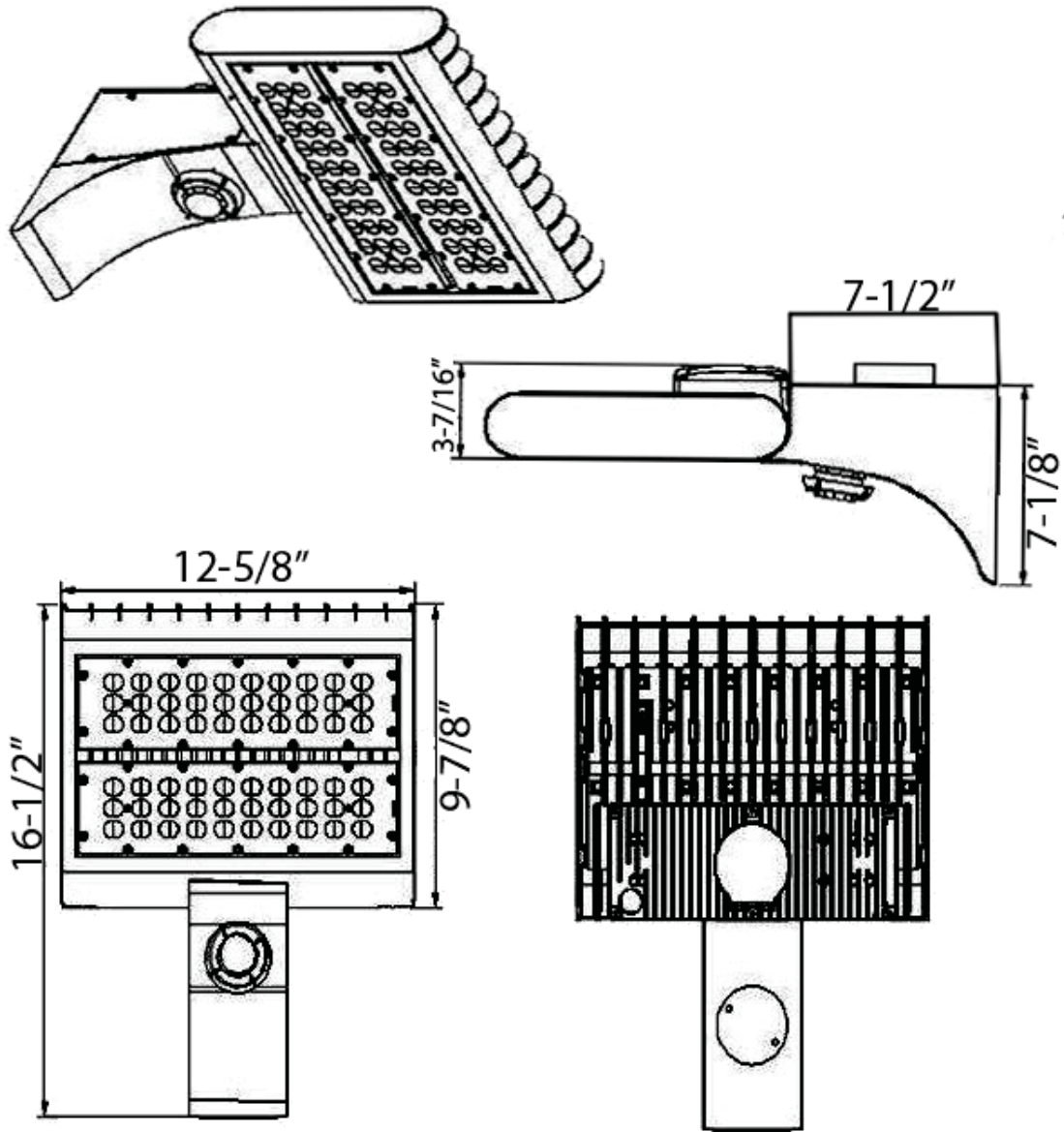
Pole Mount

***Dimmable**



		Model :	71575
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC 50/60HZ	
	Input Current	1.8A Max	
	Input Power	150W	
	Power Factor	PF≥ 0.90	
	Luminance	15,053 LM	
	Luminous Efficiency	105.6 LM/W	
	CRI	>83	
	Beam Angle	120 x 90°	
Main Structure	Aluminium + PC Lens		
LED DRIVER	Output Voltage	36-60VDC	
	Output Current	4.4A	
	Driver Efficiency	88%	
LED	LED Manufacturer	Philips	
	LED Type	3030 LED	
	LED Quantity	120 PCS	
	LED Efficacy	120LM/W	
Color Temperature	5000K		
Photocell	-	Not Included	
LIFESPAN & ENVIRONMENT	Lifespan	50000+ Hrs.	
	Warranty	5 Years	
	IP Rating	IP65 Wet Locations	
	Operating Temperature	-40F to 131F	
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	≤0.5Ω,OK	
	Electromagnetic Compatibility	EN55015, EN61000-2-3, EN61000-3-3, EN61547	
OTHERS	Dimension	Pls refer to attached diamension drawing	
	Q'ty / Carton	1PCS	
	Volume		

Dimensions:





LM-79-08 Test Report

For

Morris Products Inc.

53 Carey Rd
Queensbury, NY 12804

(Brand Name: Morris)

LED FLOOD LIGHT

Model: 71575

Laboratory: Leading Testing Laboratories

NVLAP CODE: 200960-0

Tel: +86-571-5668.0806

www.ledtestlab.com

Report No.: HZ15110041d

The laboratory that conducted the testing detailed in this report has been accredited for SSL by NVLAP.

Test specifications:

Date of Receipt : Nov. 30, 2015

Date of Test : Dec. 03, 2015

Test item : Total Luminous Flux, Luminous Distribution Intensity, Luminous Efficacy, Correlated Color Temperature, Color Rendering Index, Chromaticity Coordinate, Electrical parameters

Reference Standard : IESNA LM-79-2008 Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products

Reviewed by:

Engineer: April Zou
Dec. 07, 2015

Approved by



Manager: Jim Zhang
Dec. 07, 2015

Note: This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Test Summary

Sample Tested: 71575

Luminous Efficacy (Lumens /Watt)	Total Luminous Flux (Lumens)	Power (Watts)	Power Factor
105.6	15053.0	142.55	0.9721
CCT (K)	CRI	Stabilization Time (Light & Power)	
5238	83.5	60	
IES Classification	Longitudinal Classification	NEMA Type for Flood Fixture	
Type II	Very Short	7 H x 7 V	

Table 1: Executive Data Summary

Sample Photo



Figure 1- Overview of the sample

Equipment Under Test (EUT)

Name : LED FLOOD LIGHT
 Model : 71575
 Electrical Ratings : 120~277Vac, 50/60Hz, 150W
 Product Description : 5000K, 2 LED bars, Architectural Flood and Spot Luminaires
 Manufacturer : Morris Products Inc.
 Address : 53 Carey Rd, Queensbury, NY 12804

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TEST RESULTS

Test ambient temperature was 24.3°C.

Sample orientation was light down. Test was conducted without a dimmer in the circuit.

The stabilization time of the sample was 60 minutes, and the total operating time including stabilization was 85 minutes.

Goniophotometer Method

The photometric distance is 30m.

Luminous data was taken at 0.5°vertical intervals and 10°horizontal intervals.

Parameter	Result	
Test Voltage (V)	120.0	277.0
Voltage frequency (Hz)	60	60
Test Current (A)	1.222	0.577
Power Factor	0.9721	0.9113
Test Power (W)	142.55	145.75
THD A%	20.76	21.05
Luminous Efficacy (lm/W)	105.6	
Total Luminous Flux (lm)	15053.0	
Color Rendering Index (CRI)	83.5	
R9	9	
Correlated Color Temperature (CCT) (K)	5238	
Chromaticity (Chroma x, Chroma y)	(0.3390, 0.3517)	
Chromaticity (Chroma u, Chroma v)	(0.2073, 0.3225)	
Chromaticity (Chroma u , Chroma v)	(0.2073, 0.4838)	
Duv	0.0025	
Average Beam Angle (°)	115.4	
Center Beam Candle Power (cd)	5017	
Spacing Criteria	1.15(0°-180°) 1.29 (90°-270°)	
Zonal Lumens in the 0°-60°Zone	78.11%	
Zonal Lumens in the 60°-90°Zone	21.76%	
Zonal Lumens in the 90°-120°Zone	0.05%	
Zonal Lumens in the 120°-180°Zone	0.08%	

Special Color Rendering Indices	
R1	81
R2	89
R3	93
R4	83
R5	82
R6	84
R7	87
R8	68
R9	9
R10	73
R11	82
R12	63
R13	83
R14	96

Table 2: Test data per Goniophotometer Method

Note: According to CIE 1976 (u , v) diagram, $u = 4x/(-2x+12y+3)$, $v = 3y/2 = 9y/(-2x+12y+3)$.

Spectral Power Distribution

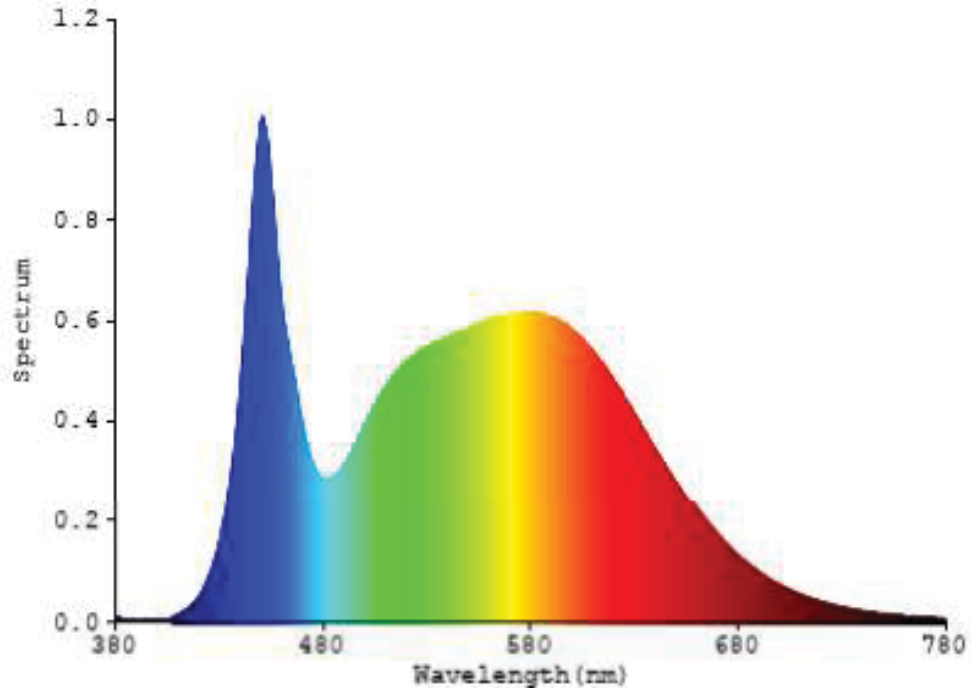


Chart 1: Spectral Power Distribution

IESNA Luminaire Flux Distribution Table

Zone	Lumens	Luminaire %
FL - Front-Low (0-30)	1915.5	12.7
FM - Front-Medium (30-60)	3972.0	26.4
FH - Front-High (60-80)	1523.0	10.1
FVH - Front-Very High (80-90)	141.5	0.9
Total Forward Light	7552.0	50.1

BL - Back-Low (0-30)	1912.1	12.7
BM - Back-Medium (30-60)	3959.3	26.3
BH - Back-High (60-80)	1477.3	9.8
BVH - Back-Very High (80-90)	134.3	0.9
Total Back Light	7483.0	49.7

UL - Uplight-Low (90-100)	1.2	0.0
UH - Uplight-High (100-180)	17.3	0.1
Total Up Light	18.5	0.1

BUG (Back, Up, Glare) Rating	B3-U2-G3
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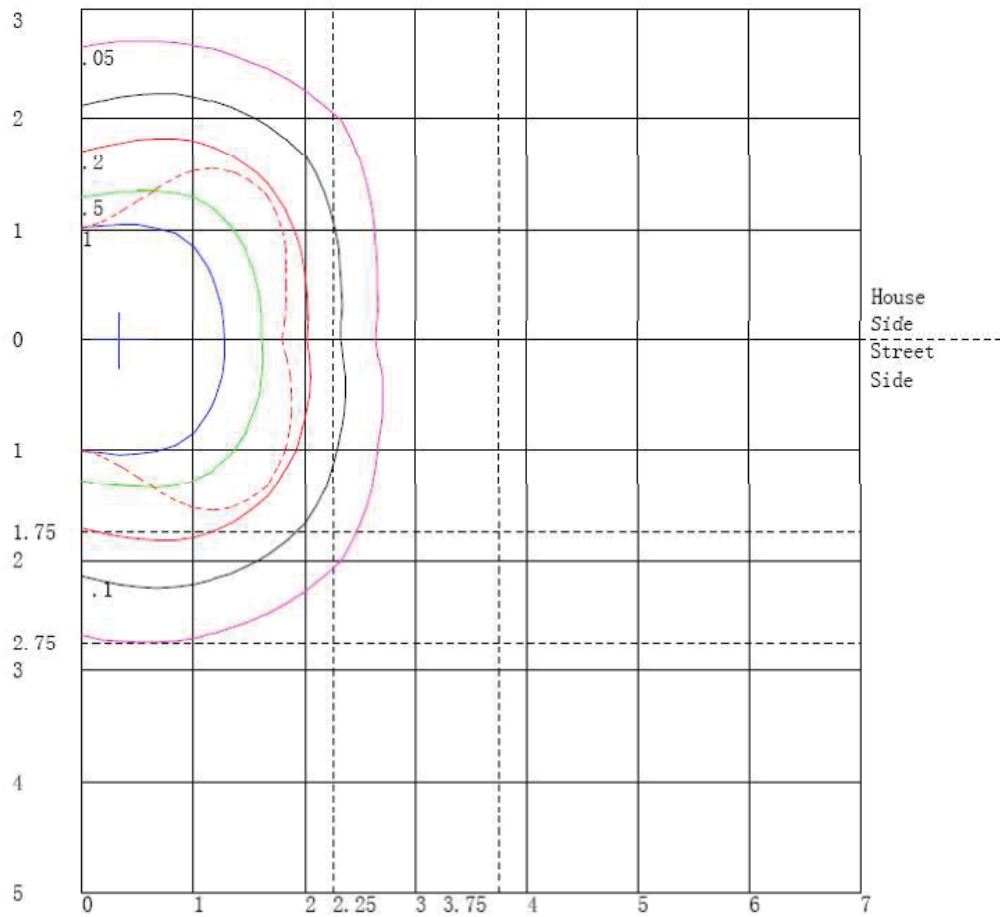
Table 3: Flux Distribution Data

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	7483.0	0	7483.0
Street Side	7552.0	0	7552.0

Table 4: Flux Distribution Table

Note: The Flux in this table might be a little different from the total flux in Table 2 due to rounding.

Isoillumance Plots of Horizontal Illuminance



Distance In Units Of Mounting Height
 Values Based On 30 Foot Mounting Height
 1/2 Maximum Candela Trace Shown As Dashed Curve
 (+) = Maximum Candela Point

Chart 2: Illuminance Plot (Footcandles)

Luminous Intensity Distribution Plots

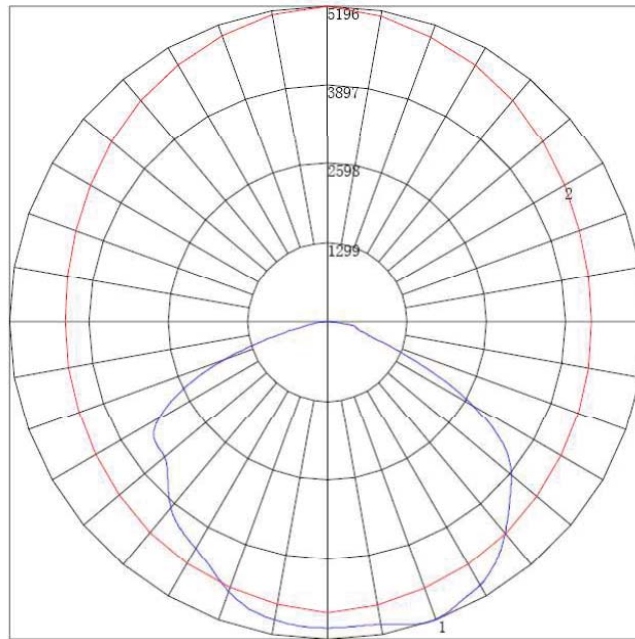


Chart 3: Maximum Plane and Cone Plots of Candela

Maximum Candela = 5195.72 Located At Horizontal Angle = 90, Vertical Angle = 18.5

1 - Vertical Plane Through Horizontal Angles (90-270) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (18.5) (Through Max. Cd.)

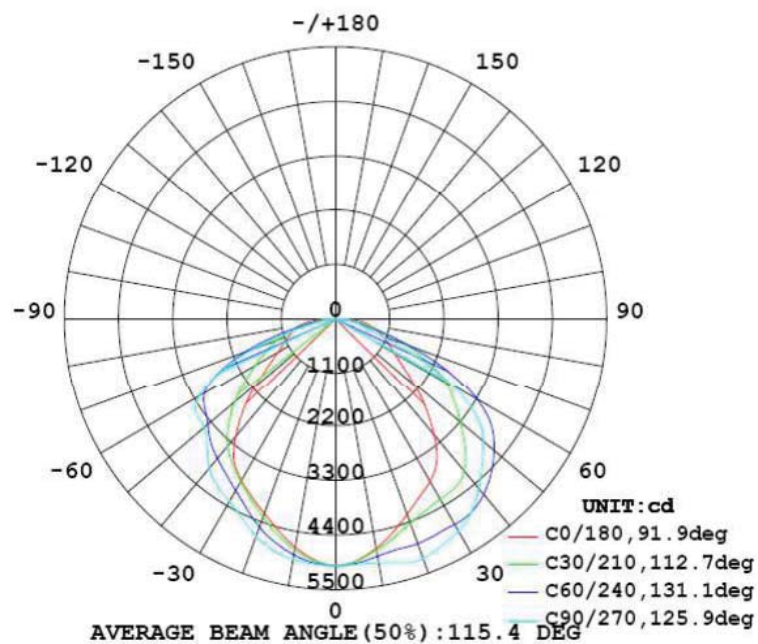


Chart 4: Polar Candela Distribution

Luminous Intensity Data

Table--1

UNIT: cd

C (DEG) y (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017
5	4933	4936	4940	4944	4959	4971	4984	4998	5006	5012	5006	4989	4981	4963	4951	4936	4929	4923	4919
10	4744	4745	4758	4781	4812	4853	4903	4955	5000	5038	5020	4964	4911	4853	4805	4765	4738	4727	4719
15	4498	4510	4547	4601	4677	4763	4853	4957	5060	5131	5085	4977	4868	4764	4674	4589	4523	4486	4472
20	4243	4265	4326	4432	4579	4736	4869	4981	5104	5190	5126	5004	4881	4737	4579	4427	4314	4252	4224
25	4018	4057	4153	4316	4512	4694	4843	4930	5025	5091	5037	4959	4880	4725	4536	4337	4169	4063	4014
30	3837	3895	4036	4250	4484	4694	4835	4904	4955	4997	4965	4936	4883	4749	4537	4271	4037	3885	3819
35	3580	3670	3902	4215	4513	4714	4807	4826	4817	4806	4801	4826	4831	4765	4552	4209	3881	3674	3581
40	3111	3258	3608	4069	4461	4654	4676	4635	4573	4524	4543	4604	4668	4669	4475	4062	3612	3290	3145
45	2585	2786	3189	3719	4221	4473	4462	4379	4284	4213	4243	4326	4424	4472	4244	3728	3207	2825	2635
50	2084	2324	2761	3307	3868	4198	4199	4109	4006	3926	3971	4052	4141	4205	3900	3330	2777	2341	2113
55	1664	1916	2360	2932	3507	3870	3860	3811	3666	3501	3533	3724	3796	3861	3520	2940	2361	1910	1665
60	1379	1616	2035	2568	3057	3324	3308	3183	2987	2750	2884	3074	3252	3300	3062	2553	2011	1586	1349
65	1191	1394	1718	2079	2401	2581	2518	2302	2077	1794	1954	2191	2468	2557	2384	2053	1685	1348	1147
70	1032	1163	1336	1499	1693	1818	1602	1327	1112	895	996	1229	1546	1795	1655	1453	1281	1116	1006
75	870	916	951	972	1049	1052	796	649	594	546	571	615	758	1042	1014	921	895	893	883
80	691	681	629	550	504	491	417	415	459	473	457	401	404	475	490	521	604	683	712
85	459	438	340	245	184	182	204	286	285	194	243	279	198	174	183	244	356	458	485
90	0.99	0.97	1.02	1.11	1.23	1.33	1.40	1.50	1.53	0.99	1.39	0.72	0.76	0.73	5.55	0.58	1.03	0.75	1.45
95	1.17	1.18	1.29	1.45	1.58	1.69	1.74	1.75	1.72	0.62	0.60	0.59	0.59	0.63	0.56	0.52	0.47	0.45	0.46
100	4.57	3.90	2.52	1.90	2.01	2.08	2.12	2.12	2.12	0.83	0.80	0.77	0.79	0.82	0.81	0.77	0.69	0.60	0.58
105	15.3	13.3	5.18	2.23	2.25	2.26	2.28	2.27	2.32	1.03	0.99	0.94	0.93	0.93	0.92	0.88	0.79	0.73	0.75
110	16.3	13.7	4.62	2.38	2.30	2.23	2.20	2.20	2.25	1.26	1.22	1.15	1.13	1.10	1.07	1.02	0.94	0.89	0.92
115	15.3	12.7	4.17	2.38	2.23	2.12	2.08	2.09	2.14	1.54	1.48	1.38	1.35	1.31	1.27	1.18	1.14	1.10	1.15
120	14.7	11.6	4.03	2.33	2.17	2.05	2.01	2.06	2.13	1.83	1.77	1.67	1.63	1.57	1.52	1.45	1.34	1.37	1.42
125	14.6	10.9	4.36	2.34	2.20	2.04	2.02	2.08	2.17	2.14	2.09	1.98	1.91	1.86	1.80	1.71	1.59	1.69	1.89
130	16.7	11.3	4.91	2.55	2.38	2.23	2.24	2.26	2.33	2.30	2.30	2.26	2.22	2.09	2.04	2.00	2.07	2.18	2.22
135	18.0	11.7	5.20	2.88	2.70	2.63	2.52	2.56	2.59	2.49	2.53	2.47	2.42	2.33	2.27	2.25	2.50	2.48	2.51
140	16.2	10.6	5.20	3.31	3.01	2.88	2.77	2.81	2.83	2.57	2.61	2.58	2.55	2.53	2.52	2.52	2.69	2.74	2.72
145	13.2	9.42	5.25	3.77	3.35	3.12	3.10	3.04	3.03	2.71	2.77	2.79	2.76	2.73	2.83	2.82	2.90	3.00	2.91
150	10.7	8.64	5.82	3.95	3.53	3.52	3.43	3.32	3.28	2.83	2.94	3.00	3.03	3.00	2.91	3.21	4.70	4.34	3.67
155	4.34	4.37	4.12	3.93	3.98	3.83	3.67	3.51	3.42	2.94	3.09	3.10	3.23	3.20	3.23	3.03	3.02	3.02	2.97
160	6.77	6.73	5.99	4.96	4.34	4.05	3.96	3.83	3.71	3.10	3.25	3.28	3.36	3.44	3.54	3.93	4.72	5.38	5.51
165	5.11	5.13	5.04	4.72	4.35	4.28	4.19	4.02	3.86	3.24	3.42	3.53	3.61	3.73	3.82	4.00	4.27	4.45	4.48
170	4.40	4.34	4.41	4.43	4.44	4.52	4.43	4.28	4.06	3.46	3.54	3.64	3.75	3.82	3.69	3.60	3.61	3.78	3.77
175	4.27	4.24	4.41	4.32	4.38	4.49	4.46	4.32	4.23	3.96	4.01	4.02	4.07	4.14	4.02	3.87	3.82	3.79	3.64
180	3.98	4.05	3.98	4.03	4.11	4.20	4.13	4.04	4.00	3.94	4.01	4.01	4.13	4.18	4.16	4.13	3.94	3.94	3.96

Table 5: Luminous Intensity Data

Table--2 UNIT: cd

C (DEG) y (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017	5017		
5	4925	4933	4943	4956	4970	4981	4991	4996	5005	5004	4994	4987	4976	4967	4956	4947	4939		
10	4731	4749	4770	4799	4836	4873	4916	4948	4965	4948	4916	4882	4847	4819	4794	4773	4756		
15	4482	4510	4548	4599	4658	4715	4777	4834	4882	4843	4775	4721	4672	4627	4581	4542	4518		
20	4230	4252	4297	4365	4447	4514	4577	4645	4715	4658	4590	4539	4478	4404	4337	4286	4258		
25	4013	4028	4062	4114	4187	4266	4343	4411	4481	4432	4368	4322	4244	4164	4095	4049	4024		
30	3814	3825	3846	3885	3952	4049	4158	4241	4299	4257	4197	4110	4010	3934	3873	3846	3837		
35	3578	3602	3639	3685	3757	3875	4011	4103	4171	4126	4066	3946	3814	3724	3676	3631	3589		
40	3164	3275	3408	3508	3608	3731	3846	3912	3983	3955	3908	3795	3662	3547	3424	3262	3134		
45	2649	2809	3063	3324	3499	3579	3616	3628	3685	3685	3689	3630	3540	3329	3042	2770	2604		
50	2127	2331	2671	3059	3353	3383	3412	3442	3475	3477	3459	3425	3376	3046	2634	2290	2092		
55	1667	1869	2262	2743	3136	3235	3265	3418	3441	3464	3388	3243	3132	2730	2235	1852	1661		
60	1329	1491	1876	2425	2900	3069	3176	3156	3180	3268	3262	3092	2885	2409	1866	1497	1347		
65	1116	1224	1562	2094	2522	2641	2635	2576	2600	2703	2756	2704	2530	2077	1555	1240	1147		
70	978	1031	1256	1617	1911	1946	1861	1731	1772	1907	2026	2050	1972	1644	1251	1026	985		
75	857	832	896	1067	1224	1128	979	816	843	946	1120	1260	1328	1129	916	821	830		
80	689	612	552	565	623	522	393	320	343	368	454	595	689	611	587	607	658		
85	470	377	273	227	204	151	136	108	127	142	159	177	234	258	292	370	437		
90	1.10	0.83	0.56	0.76	0.76	0.65	0.68	0.36	1.16	1.12	1.11	1.18	1.23	1.24	1.19	1.11	1.04		
95	0.49	0.53	0.55	0.56	0.59	0.55	0.54	0.51	1.33	1.38	1.49	1.60	1.72	1.67	1.60	1.45	1.27		
100	0.67	0.77	0.82	0.83	0.81	0.77	0.75	0.73	1.78	1.85	1.97	2.07	2.15	2.23	2.20	3.09	4.61		
105	0.82	0.91	0.96	0.98	0.98	0.98	0.97	0.97	2.16	2.20	2.28	2.35	2.42	2.56	2.64	6.28	14.2		
110	1.00	1.11	1.15	1.18	1.20	1.22	1.25	1.27	2.22	2.26	2.33	2.37	2.42	2.58	2.77	5.79	14.5		
115	1.25	1.35	1.39	1.43	1.50	1.54	1.58	1.62	2.17	2.21	2.23	2.22	2.27	2.47	2.72	5.36	13.5		
120	1.53	1.61	1.64	1.71	1.85	1.87	1.91	1.94	2.21	2.22	2.19	2.15	2.14	2.32	2.58	5.18	12.6		
125	1.86	1.92	1.93	2.03	2.17	2.22	2.23	2.32	2.27	2.29	2.27	2.17	2.18	2.32	2.57	5.48	12.3		
130	2.38	2.40	2.21	2.32	2.41	2.53	2.48	2.56	2.50	2.52	2.47	2.46	2.39	2.54	2.79	5.93	13.3		
135	2.71	2.76	2.46	2.51	2.64	2.71	2.74	2.81	2.82	2.88	2.84	2.87	2.83	2.94	3.25	6.30	13.8		
140	2.78	2.87	2.67	2.68	2.77	2.76	2.87	2.95	3.10	3.20	3.19	3.17	3.24	3.35	3.87	6.37	12.5		
145	2.97	3.03	2.94	3.02	2.91	2.94	3.07	3.12	3.37	3.46	3.51	3.52	3.51	3.70	4.31	6.45	10.8		
150	4.39	5.31	3.18	3.09	3.23	3.17	3.19	3.21	3.62	3.67	3.76	3.82	3.80	3.81	4.59	6.74	9.35		
155	3.06	3.10	3.31	3.54	3.40	3.39	3.31	3.31	3.75	3.81	3.92	4.09	4.19	4.21	4.03	4.25	4.35		
160	5.27	4.57	4.09	3.82	3.60	3.46	3.42	3.42	3.93	3.96	4.03	4.15	4.27	4.50	4.80	5.41	6.18		
165	3.43	3.44	3.00	3.24	3.24	3.33	3.34	3.47	3.57	3.70	3.77	4.11	4.20	4.33	4.43	4.04	4.20		
170	3.65	3.83	3.87	3.84	3.72	3.60	3.54	3.53	3.96	3.97	4.08	4.22	4.37	4.53	4.53	4.41	4.29		
175	3.83	3.96	4.08	4.11	4.09	4.04	4.00	3.99	4.08	4.07	4.16	4.24	4.37	4.42	4.49	4.37	4.32		
180	3.85	3.84	3.95	4.06	3.97	3.88	3.90	3.86	3.92	3.91	3.99	4.02	4.11	4.15	4.15	4.09	4.00		

Table 6: Luminous Intensity Data

EQUIPMENT LIST

Test Equipment	Model	Equipment No.	Calibration Date	Calibration Due date
Goniophotometer system	GO-R5000	HZTE011-01	Jul. 17, 2015	Jul. 16, 2016
Digital Power Meter	PF2010A	HZTE028-01	Jul. 17, 2015	Jul. 16, 2016
AC Power Supply	PCR 500L	HZTE001-08	Jul. 17, 2015	Jul. 16, 2016
DC Power Supply	WY12010	HZTE004-03	Jul. 17, 2015	Jul. 16, 2016
Temperature Meter	TES1310	HZTE017-01	Jul. 17, 2015	Jul. 16, 2016
Standard Source	D908	HZTE012-01	Jul. 23, 2015	Jul. 22, 2016
Standard source	SCL-1400	HZTE012-02	Oct. 21, 2015	Oct. 20, 2016

Table 7: Test Equipment List

TEST METHODS

Seasoning of SSL Product

For the purpose of rating new SSL products, SSL products shall be tested with no seasoning. Therefore, no seasoning was performed.

Goniophotometer Method

Photometric and Electrical Measurements

An EVERFINE Type C Model GO-R5000 Goniophotometer was used to measure the intensity at each angle of distribution for each sample. The photometric distance is 2.475m for near-field measurement or 30m for far-field measurement. Bandwidth of spectroradiometer is 380nm-780nm.

Ambient temperature was measured at the same height of the sample mounted on the Goniophotometer equipment. Each SSL unit was operated on the client provided driver at the rated input voltage in its designated orientation.

The stabilization time typically ranges from 30 min (small integrated LED lamps) to 2 or more hours for large SSL luminaires). It can be judged that stability is reached when the variation (maximum - minimum) of at least 3 readings of the light output and electrical power over a period of 30 min, taken 15 minutes apart, is less than 0.5 %.

Electrical measurements including voltage, current, and power were measured using the Everfine Digital Power Meter.

Some graphics were created with Photometric Plus software.

The standard reference of the Goniophotometer system is halogen incandescent lamp, the intensity distribution type is omni-directional, and is traceable to the National Institute of Metrology P.R. China.

The uncertainty of goniophotometer system reported in this document is expanded uncertainty is 1.8% with a coverage factor k=2.

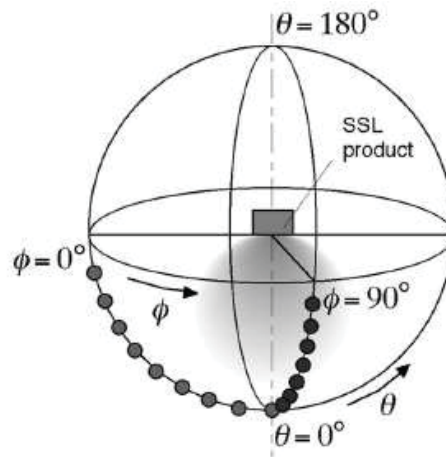
Color Characteristics Measurements

The color characteristics of SSL products include chromaticity coordinates, correlated color temperature, and color rendering index. These characteristics of SSL products may be spatially non-uniform, and thus, in order that they can be specified accurately, the color quantities shall be measured as values that are spatially average, weighted to intensity, over the angular range where light is intentionally emitted from the SSL product. The color characteristics measurements are using gonio-spectroradiometer.

Color Spatial Uniformity

The characteristics of SSL products may be spatially non-uniform, the chromaticity coordinate shall be measured at two vertical planes ($C=0^\circ/180^\circ$ and $C=90^\circ/270^\circ$) and at 10° or less intervals for vertical angle until the light output dropped to below 10% of the peak intensity. The averaged weighted chromaticity coordinate was calculated from these points. The data was then analyzed to check for delta color differences of the u' , v' chromaticity coordinates. The spatial non-uniformity of chromaticity, $\Delta u'v'$, is determined as the maximum deviation (distance on the CIE (u' , v') diagram) among all measured points from the spatially averaged chromaticity coordinate.

The geometry for the chromaticity measurement using gonio-spectroradiometer is shown as following.



*** End of Report ***

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