



Report No.: BLC2101029E-B

LM-79-08 Test Report

For

ASmart LIGHT CO., LTD

(Brand Name: ASmart)

506 N GARFIELD AVE SUITE#210 ALHAMBRA CA 91801

Outdoor Pole/Arm-Mounted Area and Roadway Luminaires

Architectural Flood and Spot Luminaires

Model name(s): AST-SP01B-750WSJT1C1-acdf

Remark: "a" can be any two letters for lamp colors; "c" stands for surge protector, can be S or blank, S stands for surge protector, blank for no surge protector; "d" can be "AM" or "FM" to represent mounting bracket types; "f" can be any digits for CCT.

Representative (Tested) Model:
AST-SP01B-750WSJT1C1-acd30
AST-SP01B-750WSJT1C1-acd57

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

Test & Report By:

Lily Yang

Engineer: Lily Yang

Date: 2021-01-29

Review By:

Jason Luo

Manager: Jason Luo



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1.1 Product Information:

Organization Name	ASmart LIGHT CO., LTD	
Brand Name	ASmart	
Model Number	AST-SP01B-750WSJT1C1-acdf	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Pole/Arm-Mounted Area and Roadway Luminaires Architectural Flood and Spot Luminaires	
Rated Voltage / Frequency	120-347Vac, 50/60 Hz	
Nominal Power	750W	
Rated Initial Lamp Lumen	--	
Declared CCT	3000K, 4000K, 4500K, 5000K, 5700K	
LED Manufacturer	Bridgelux	
LED Model	BXEM-30C-12H-6C	
Sample Number	BLC2101029E-B1(3000K), B3(5700K)	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Photo





1.2 Test Specifications:

Date of Receipt	2020-12-18
Date of Test	2021-01-27
Test item	<ol style="list-style-type: none">1. Total Luminous Flux2. Luminous Distribution Intensity3. Luminous Efficacy4. Correlated Color Temperature5. Color Rendering Index6. Chromaticity Coordinate7. Electrical Parameters
Reference Standard	<ol style="list-style-type: none">1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources4. CIE 15-2004 Technical Report Colorimetry5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	BL-QP-033

1.3 Test Methods

1) Photometric and Light Distribution Measurement – Goniophotometer Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$, 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 or rated 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) Chromaticity Measurement – Sphere-Spectroradiometer Method:

Chromaticity parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$. 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 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral power distribution taken at 5 nm intervals over the range of 380 to 780 nm.

3) Electrical Measurements:

Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Voltage, frequency, current, power, power factor and total harmonic distortion were measured by and read from the power meter.

**2.1 Electrical, Photometric and Chromaticity Measurements***(Refer to Work Instruction BL-QP-033)*

Test date	2021-01-27	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	AST-SP01B-750WSJT1C1-acd30		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC210102	120.0	60	6.220	745.63	0.999	5.85
9E-B1	347.0	60	2.273	720.13	0.913	14.15
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method:

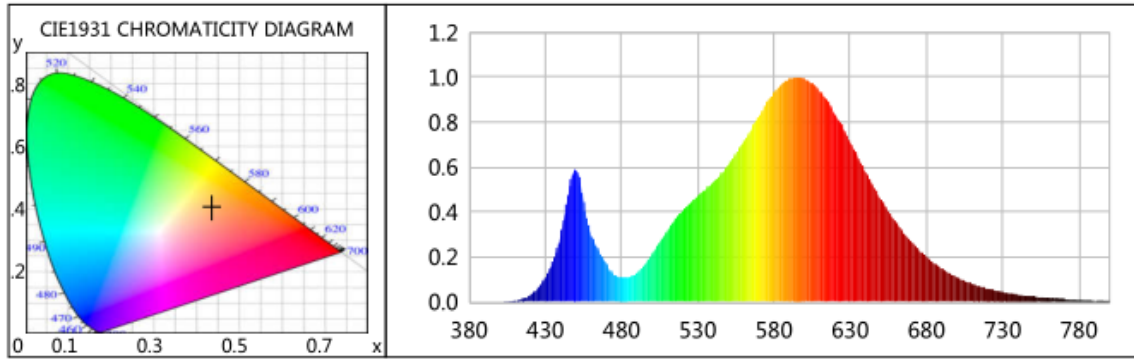
Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	69	R9	-31
Frequency (Hz)	60	R2	83	R10	62
CCT (K)	2991	R3	95	R11	64
Duv	-0.0003	R4	69	R12	53
Chromaticity (x, y)	x=0.4372 y=0.4034	R5	69	R13	72
Chromaticity (u', v')	u(u')=0.2510 v'(v')=0.5212	R6	78	R14	97
Color Rendering Index (CRI)	73	R7	77	R15	61
R9	-31	R8	44	--	--
Rf	76	--	--	--	--
Rg	94	--	--	--	--
Rcs,h1(%)	-16				

Photometric Measurement – Goniophotometer Method:

Parameter	Result		DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	347.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	98088.1	97194.7	>=30000(-10%)
Luminous Efficacy (lm/W)	131.55	134.97	Premium: >= 120(-3%)
Most worst Luminous/Highest	130.35		
Zonal lumens in the 0-90 °zone (%)	100	--	Category 1: >=100(-1) Category 2: >=85(-3)
Zonal lumens in the 80-90 °zone (%)	0.6	--	<=10(+3)
Beam Angle (°)	22.4	--	--
Center Beam Candle Power (cd)	310719	--	--



Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0003	0.5551	525	0.4392	903.0555	670	0.2678	550.6430
385	0.0005	0.9626	530	0.4705	967.4538	675	0.2327	478.4307
390	0.0001	0.3001	535	0.5009	1029.8288	680	0.2010	413.2034
395	0.0003	0.6978	540	0.5322	1094.2758	685	0.1730	355.7120
400	0.0010	2.0680	545	0.5660	1163.6756	690	0.1490	306.4014
405	0.0024	4.8354	550	0.6088	1251.6344	695	0.1278	262.6977
410	0.0064	13.1824	555	0.6560	1348.7578	700	0.1098	225.8535
415	0.0149	30.6138	560	0.7108	1461.4875	705	0.0945	194.3695
420	0.0308	63.2626	565	0.7678	1578.6652	710	0.0808	166.1084
425	0.0598	122.9481	570	0.8251	1696.4993	715	0.0699	143.7496
430	0.1070	220.0250	575	0.8814	1812.1650	720	0.0590	121.2551
435	0.1795	369.0216	580	0.9310	1914.1680	725	0.0503	103.3604
440	0.2932	602.8381	585	0.9655	1985.0467	730	0.0436	89.6764
445	0.4775	981.8278	590	0.9922	2040.0807	735	0.0374	76.9638
450	0.5876	1208.2332	595	0.9989	2053.7437	740	0.0322	66.1427
455	0.4485	922.0759	600	0.9944	2044.5678	745	0.0275	56.4496
460	0.2971	610.9420	605	0.9724	1999.2762	750	0.0247	50.7624
465	0.2291	470.9873	610	0.9387	1930.0545	755	0.0202	41.5696
470	0.1664	342.1718	615	0.8938	1837.6987	760	0.0173	35.6040
475	0.1221	251.1191	620	0.8389	1724.7539	765	0.0151	30.9856
480	0.1089	223.9216	625	0.7768	1597.0801	770	0.0138	28.2936
485	0.1116	229.4820	630	0.7109	1461.7261	775	0.0103	21.2764
490	0.1288	264.8072	635	0.6435	1323.0673	780	0.0094	19.2491
495	0.1647	338.6099	640	0.5793	1191.0152	785	0.0084	17.2810
500	0.2131	438.2099	645	0.5158	1060.5404	790	0.0075	15.4928
505	0.2668	548.5608	650	0.4572	939.9734	795	0.0065	13.4648
510	0.3189	655.7254	655	0.4031	828.8526	800	0.0050	10.3651
515	0.3649	750.3228	660	0.3519	723.4616			
520	0.4053	833.2333	665	0.3080	633.2386			

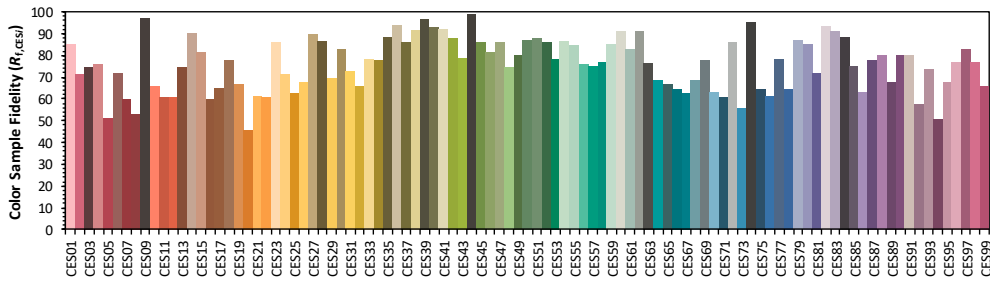
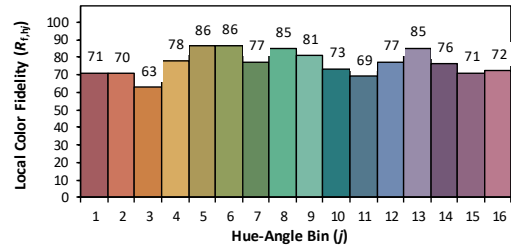
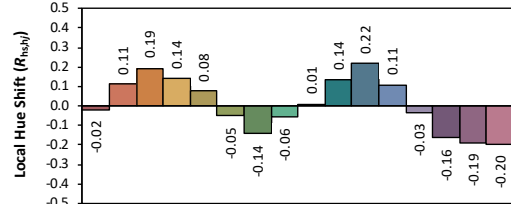
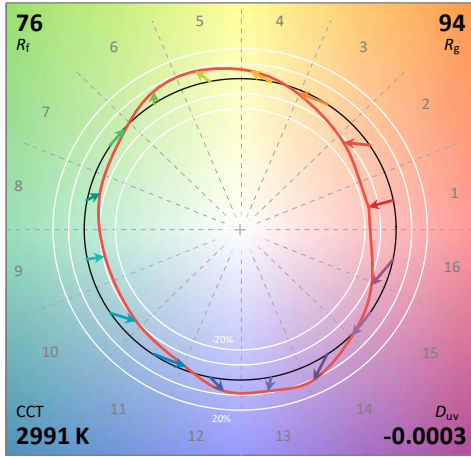
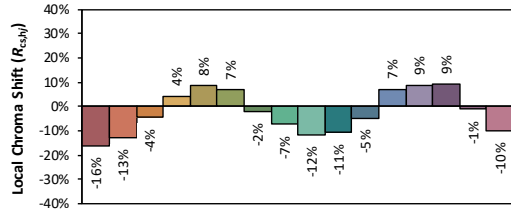
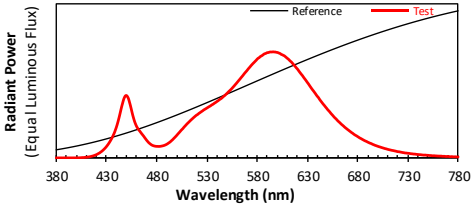


TM30

ANSI/IES TM-30-18 Color Rendition Report

Source: BXEM-30C-12H-6C
Date: 2021/1/27

Manufacturer: AS MART LIGHT CO., LTD
Model: AST-SP01B-750WSJT1C1-acd30



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4372
 y 0.4034
 u' 0.2510
 v' 0.5212

CIE 13.3-1995 (CRI)
 R_a 73
 R_g -31

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.



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Zonal Lumen Tabulation

Zonal Lumen Summary

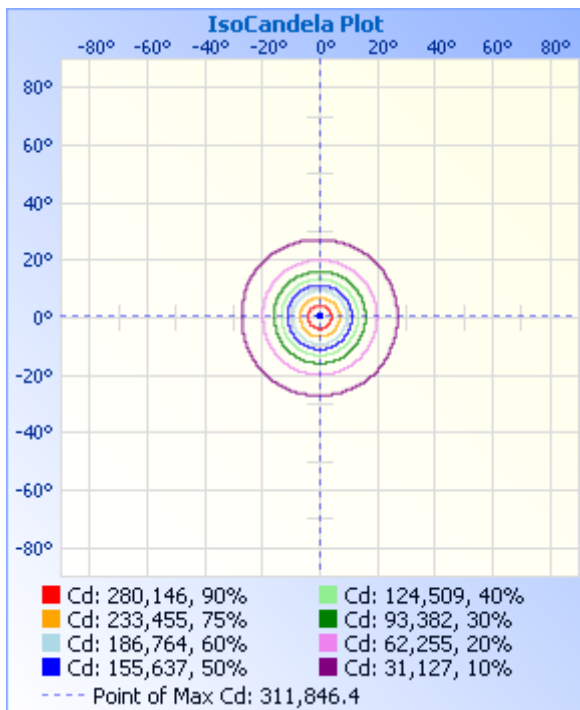
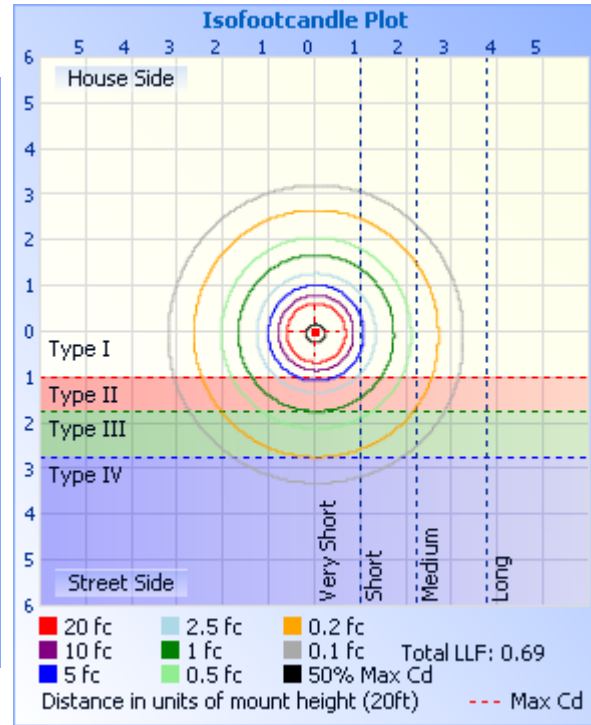
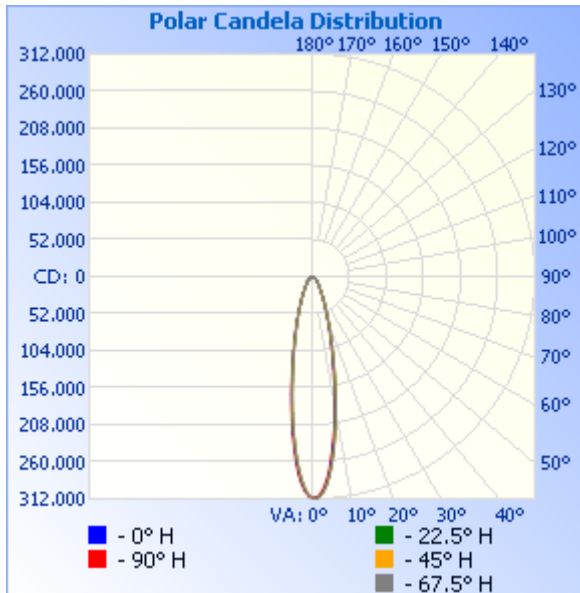
Zone	Lumens	% Lamp	% Luminaire
0-30	68,827.8	70.2%	70.2%
0-40	79,411.6	81%	81%
0-60	91,858.8	93.6%	93.7%
60-90	6,157.5	6.3%	6.3%
70-100	2,690.8	2.7%	2.7%
90-120	0	0%	0%
0-90	98,016.3	99.9%	100%
90-180	0	0%	0%
0-180	98,016.3	99.9%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	22,309.8	22.8%	90-100	0	0%
10-20	28,858.4	29.4%	100-110	0	0%
20-30	17,659.6	18.0%	110-120	0	0%
30-40	10,583.8	10.8%	120-130	0	0%
40-50	7,340.1	7.5%	130-140	0	0%
50-60	5,107.1	5.2%	140-150	0	0%
60-70	3,466.7	3.5%	150-160	0	0%
70-80	2,084.4	2.1%	160-170	0	0%
80-90	606.4	0.6%	170-180	0	0%



Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width	
17.0ft	1,075.2 fc	6.7 ft	6.7 ft
34.0ft	268.8 fc	13.4 ft	13.5 ft
51.0ft	119.5 fc	20.1 ft	20.2 ft
68.0ft	67.2 fc	26.9 ft	26.9 ft
85.0ft	43.0 fc	33.6 ft	33.6 ft
102.0ft	29.9 fc	40.3 ft	40.4 ft

■ Vert. Spread: 22.3°
■ Horiz. Spread: 22.4°



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	310719	310719	310719	310719	310719	310719	310719	310719	310719	310719	310719	310719	310719	310719	310719	310719	310719
1	311273	311715	311846	311545	309903	309118	308305	307020	306445	306045	305933	305540	307796	308353	309660	310383	311273
2	307951	308728	309239	308695	305373	304037	302343	299892	298557	297625	296347	296834	301071	302254	304758	306266	307951
3	300927	302123	302254	302325	297492	295565	293028	289381	287225	285845	284195	284784	290673	292562	295208	298592	300927
4	290453	292131	292396	292644	286358	282555	279147	275859	272996	271200	269206	269998	277178	279559	282949	287407	290453
5	276893	279085	279552	280086	272394	267803	263749	259857	256485	252761	252288	253101	261287	264009	267954	271668	276893
6	259281	263565	264297	263506	254683	251308	246782	242548	237103	234972	234480	235282	242131	246864	251074	255073	259281
7	241574	244591	247379	246601	237106	233512	228743	222564	218816	216716	214243	215128	223858	226923	233122	237293	241574
8	222800	225800	228886	228099	218519	214879	208268	204090	200393	198263	195865	196592	204829	207955	214250	218414	222800
9	203858	206765	209803	209055	199858	196306	189826	185898	182288	180176	177800	178462	186121	189241	193676	199548	203858
10	185590	188427	189484	190607	181498	176352	171968	168340	164919	161263	160618	161185	168497	171526	175770	181458	185590
11	167971	170916	171690	172782	163934	159106	155095	151745	147077	145148	144467	144951	151837	154736	158683	163994	167971
12	150190	154239	155180	154476	146176	143308	139650	136666	132348	130611	129878	130308	135257	139408	143091	146281	150190
13	135272	137642	140109	139508	131644	129153	125889	121931	119294	117706	117054	116070	121801	124226	127472	131916	135272
14	121401	123850	125832	125311	118389	116243	112088	109763	107449	106034	104243	104399	109169	111451	114381	118421	121401
15	108942	110993	112906	112327	106399	104460	101868	98780	96685	95413	93829	93912	97868	100016	102759	106050	108942
16	98056	99701	101575	101001	95780	93146	90883	89051	87203	85096	84528	84523	88026	90016	92532	95351	98056
17	88210	89912	90740	91198	86166	83736	81963	80340	77918	76872	76354	76372	79582	81309	83311	85959	88210
18	79559	81235	81779	81571	77012	75760	74010	71931	70476	69563	69056	68336	71914	73246	75150	76998	79559
19	71158	73234	73700	73535	69579	68548	66995	65153	63885	63019	61982	61843	64862	66155	68001	69452	71158
20	64445	66196	66639	66440	63075	62120	60182	59163	58016	56685	56232	56143	58037	59251	60906	62741	64445
21	58361	59327	60414	60185	57060	56248	54542	53638	52594	51408	50971	50842	52564	53762	55065	56751	58361
22	52911	53881	54399	54674	51841	50638	49572	48801	47866	46761	46354	46205	47740	48849	49935	51543	52911
23	48103	49071	49409	49326	46582	45980	45012	44347	43078	42453	42064	41953	43130	44311	45441	46517	48103
24	43720	44573	44888	44749	42414	41864	41069	40069	39276	38721	38364	37810	39550	40323	41257	42198	43720
25	39418	40502	40889	41060	38740	38232	37494	36653	35900	35388	34711	34527	35910	36395	37468	38681	39418
26	35940	36851	37278	37059	35469	34713	34054	33587	32874	32136	31765	31555	32692	33178	34108	35177	35940
27	32787	33572	34087	34093	32197	31790	31211	30811	29842	29467	29131	28860	29754	30262	31130	32017	32787
28	30025	30693	31242	31203	29547	29190	28656	28298	27398	27035	26721	26504	27178	27715	28468	29255	30025
29	27404	28160	28506	28420	27158	26810	26315	25798	25189	24854	24576	24114	25051	25463	25946	26681	27404
30	25223	25945	26293	26220	24997	24692	24243	23777	23238	22923	22458	22226	22963	23305	23955	24640	25223
31	23184	23757	24189	24074	23077	22849	22245	21958	21462	21216	20801	20560	21110	21589	21956	22625	23184
32	21522	22002	22267	22307	21377	21006	20628	20388	19956	19509	19301	19078	19544	19907	20400	20961	21522
33	19888	20336	20591	20520	19698	19478	19133	18919	18362	18134	17916	17710	18059	18385	18844	19324	19888
34	18409	18866	19165	19057	18333	18124	17778	17639	17119	16908	16748	16397	16701	17058	17443	17909	18409
35	17146	17545	17719	17785	17042	16897	16544	16332	15991	15811	15648	15354	15663	15899	16229	16676	17146
36	16005	16312	16517	16586	15931	15811	15418	15301	15012	14842	14596	14447	14640	14886	15169	15571	16005
37	15046	15289	15485	15503	14934	14732	14485	14378	14141	13887	13802	13655	13743	13941	14217	14587	15046
38	14053	14368	14508	14555	13937	13921	13667	13543	13270	13155	13075	12951	13000	13164	13459	13718	14053
39	13317	13541	13693	13763	13215	13124	12896	12768	12608	12505	12430	12193	12285	12500	12708	13017	13317
40	12635	12857	12940	13025	12479	12413	12232	12128	11994	11855	11813	11617	11696	11877	12031	12323	12635
41	12021	12180	12267	12281	11830	11770	11608	11508	11386	11286	11202	11049	11107	11307	11501	11717	12021
42	11372	11611	11616	11624	11207	11167	10965	10928	10819	10683	10631	10534	10545	10738	10904	11097	11372
43	10873	10974	11079	11055	10612	10604	10381	10403	10278	10141	10163	10040	10010	10228	10408	10571	10873
44	10305	10452	10509	10473	10070	10067	9912	9810	9752	9612	9606	9437	9481	9719	9865	10080	10305
45	9758	9897	9966	10020	9595	9558	9348	9352	9279	9179	9111	9011	9073	9216	9409	9561	9758
46	9238	9409	9430	9498	9073	9082	8872	8880	8799	8650	8601	8517	8571	8733	8946	9049	9238



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Certificate#4810.01

47	8847	8955	8988	8963	8591	8559	8416	8402	8333	8197	8187	8117	8089	8331	8510	8590	8847
48	8367	8474	8534	8517	8136	8144	7994	8011	7888	7810	7766	7711	7761	7882	8068	8186	8367
49	7915	8034	8052	8137	7735	7768	7598	7593	7489	7418	7386	7278	7367	7520	7605	7755	7915
50	7523	7628	7699	7704	7340	7373	7209	7203	7138	7072	7020	6919	6972	7138	7216	7378	7523
51	7158	7255	7325	7244	6972	6944	6860	6859	6767	6652	6687	6628	6644	6770	6894	7014	7158
52	6780	6876	6959	6905	6657	6636	6525	6549	6449	6354	6382	6269	6283	6428	6565	6657	6780
53	6476	6544	6612	6580	6310	6287	6197	6192	6071	6056	6049	5937	5995	6133	6230	6354	6476
54	6152	6300	6300	6228	5962	5972	5908	5882	5814	5785	5764	5660	5734	5838	5922	6023	6152
55	5821	5914	5920	5924	5694	5711	5593	5633	5551	5514	5485	5375	5400	5556	5613	5801	5821
56	5524	5690	5689	5639	5393	5409	5298	5356	5274	5196	5227	5125	5139	5262	5365	5511	5524
57	5281	5345	5404	5362	5092	5127	5050	5073	5031	5020	4997	4854	4978	5027	5090	5228	5281
58	5024	5101	5166	5091	4911	4880	4802	4824	4747	4735	4759	4644	4697	4786	4855	4993	5024
59	4761	4898	4888	4840	4650	4658	4614	4629	4525	4512	4501	4461	4449	4551	4627	4703	4761
60	4491	4640	4644	4624	4409	4437	4352	4386	4288	4322	4291	4204	4235	4343	4406	4548	4491
61	4315	4437	4453	4394	4242	4189	4158	4218	4113	4098	4128	4028	4088	4142	4191	4312	4315
62	4119	4207	4229	4143	3961	3975	3957	4002	3917	3915	3958	3839	3867	3908	4004	4076	4119
63	3944	4031	4033	4001	3814	3827	3729	3834	3748	3773	3686	3608	3687	3767	3789	3908	3944
64	3748	3827	3856	3798	3606	3640	3588	3638	3586	3590	3544	3493	3513	3559	3662	3726	3748
65	3593	3638	3680	3656	3499	3465	3434	3456	3410	3421	3394	3283	3366	3405	3454	3571	3593
66	3424	3509	3530	3453	3305	3331	3279	3281	3235	3231	3225	3175	3205	3264	3313	3463	3424
67	3269	3360	3340	3324	3125	3083	3098	3146	3032	3089	3089	2992	3058	3050	3159	3254	3269
68	3079	3204	3164	3121	2964	2983	2904	2978	2877	2913	2899	2884	2870	2909	2971	3079	3079
69	2938	3008	3007	2965	2803	2795	2763	2830	2762	2804	2783	2722	2717	2768	2850	2985	2938
70	2830	2845	2919	2816	2636	2661	2555	2661	2593	2608	2614	2566	2589	2627	2662	2783	2830
71	2640	2716	2736	2647	2489	2507	2468	2567	2465	2479	2485	2451	2462	2473	2542	2682	2640
72	2492	2594	2573	2505	2369	2366	2354	2378	2316	2344	2363	2288	2322	2359	2428	2520	2492
73	2377	2432	2458	2376	2188	2165	2173	2237	2195	2181	2213	2146	2188	2272	2273	2358	2377
74	2181	2249	2329	2193	2047	2098	2039	2062	2046	2019	2084	2045	1987	2051	2099	2196	2181
75	2087	2080	2145	2085	1947	1930	1898	1934	1952	1917	1955	1848	1873	1930	2012	2055	2087
76	1925	1978	1976	1950	1726	1803	1750	1772	1776	1768	1752	1720	1706	1830	1864	1934	1925
77	1810	1849	1833	1808	1592	1689	1589	1664	1655	1639	1656	1618	1552	1656	1710	1772	1810
78	1655	1660	1718	1659	1432	1475	1469	1496	1533	1477	1460	1496	1392	1521	1596	1637	1655
79	1546	1517	1561	1577	1331	1320	1308	1395	1371	1328	1358	1334	1285	1387	1449	1462	1546
80	1391	1382	1419	1401	1178	1260	1207	1152	1209	1185	1174	1205	1124	1260	1288	1327	1391
81	1256	1226	1242	1212	1057	992	1019	1038	1094	1030	1059	1036	970	1086	1133	1199	1256
82	1087	1091	1100	1076	816	925	885	896	912	881	869	894	870	952	1006	1011	1087
83	918	928	930	955	716	731	751	741	790	759	760	745	696	804	832	889	918
84	797	840	760	853	575	623	590	633	621	596	570	501	575	597	651	728	797
85	621	610	611	636	455	489	483	499	446	495	502	487	395	496	516	593	621
86	486	481	591	494	294	335	355	310	297	345	346	338	268	395	429	451	486
87	385	359	380	366	147	201	248	290	216	217	224	217	161	282	322	357	385
88	277	291	258	264	80	121	87	121	95	163	170	149	67	154	181	236	277
89	149	169	183	176	0	67	0	0	81	0	68	0	0	0	74	121	149
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Laboratory: Belling Test Laboratory Co., LTD A2LA Certificate# 4810.01
Unit 401, No. 309 Xinxin Seven Road, Zengcheng District,
Guangzhou, People' s Republic of China. info@bellingtest.com

Report Format Number BL-FM-SA-012



Report No.: BLC2101029E-B

Certificate#4810.01

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Report No.: BLC2101029E-B

Certificate#4810.01

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180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report No.: BLC2101029E-B

BUG

Lum. Classification System (LCS)

<u>LCS Zone</u>	<u>Lumens</u>	<u>%Lamp</u>	<u>%Lum</u>
FL (0-30)	35715.4	36.4	36.4
FM (30-60)	11773.5	12.0	12.0
FH (60-80)	2846.7	2.9	2.9
FVH(80-90)	332.8	0.3	0.3
BL (0-30)	33177.6	33.8	33.8
BM (30-60)	11264.5	11.5	11.5
BH (60-80)	2704.0	2.8	2.8
BVH(80-90)	273.6	0.3	0.3
UL (90-100)	0.0	0.0	0.0
UH (100-180)	0.0	0.0	0.0
Total	98088.1	100.0	100.0
BUG Rating	B5-U0-G3		

**2.2 Electrical, Photometric and Chromaticity Measurements***(Refer to Work Instruction BL-QP-033)*

Test date	2021-01-27	Test Ambient:	25.2 °C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	AST-SP01B-750WSJT1C1-acd57		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC210102	120.0	60	6.213	744.03	0.998	5.71
9E-B3	347.0	60	2.270	719.02	0.913	14.27
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method:

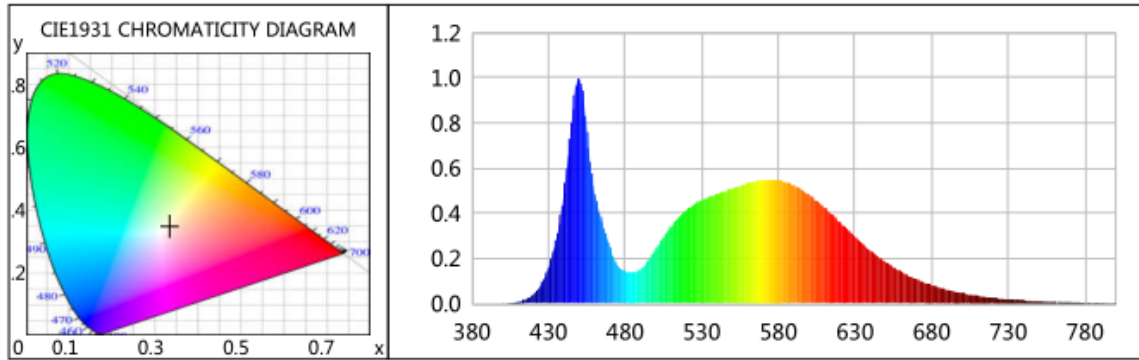
Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	72	R9	-27
Frequency (Hz)	60	R2	80	R10	53
CCT (K)	5349	R3	86	R11	72
Duv	0.0016	R4	75	R12	48
Chromaticity (x, y)	x=0.3361 y=0.3473	R5	73	R13	74
Chromaticity (u', v')	u(u')=0.2070 v'(v')=0.4812	R6	73	R14	92
Color Rendering Index (CRI)	75	R7	82	R15	67
R9	-27	R8	58	--	--
Rf	76	--	--	--	--
Rg	94	--	--	--	--
Rcs,h1(%)	-17	--	--	--	--

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	347.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	100667.3	96485.3	>=30000(-10%)
Luminous Efficacy (lm/W)	135.30	134.19	Premium: >= 120(-3%)
Most worst Luminous/Highest Watts	129.68		



Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	1.3898	525	0.4390	1348.8428	670	0.1083	332.8290
385	0.0004	1.2498	530	0.4581	1407.5233	675	0.0947	291.0921
390	0.0010	2.9260	535	0.4734	1454.3990	680	0.0811	249.3102
395	0.0006	1.9835	540	0.4869	1496.0225	685	0.0712	218.7173
400	0.0015	4.4763	545	0.4974	1528.1863	690	0.0617	189.7057
405	0.0029	8.8902	550	0.5090	1563.9194	695	0.0535	164.3244
410	0.0074	22.7242	555	0.5217	1602.8613	700	0.0460	141.3329
415	0.0188	57.7670	560	0.5338	1640.0283	705	0.0391	120.1663
420	0.0412	126.5877	565	0.5410	1662.1466	710	0.0346	106.2255
425	0.0837	257.2566	570	0.5472	1681.3858	715	0.0297	91.2976
430	0.1602	492.2638	575	0.5490	1686.9650	720	0.0256	78.6095
435	0.2839	872.2993	580	0.5477	1682.9503	725	0.0215	66.0605
440	0.4833	1484.9763	585	0.5379	1652.7309	730	0.0193	59.3796
445	0.8050	2473.4803	590	0.5244	1611.3422	735	0.0167	51.4622
450	1.0000	3072.5478	595	0.5057	1553.7338	740	0.0147	45.0920
455	0.7636	2346.2838	600	0.4844	1488.4460	745	0.0131	40.0984
460	0.4909	1508.2660	605	0.4561	1401.3826	750	0.0109	33.5494
465	0.3618	1111.6763	610	0.4275	1313.3724	755	0.0101	31.0528
470	0.2492	765.6102	615	0.3953	1214.4665	760	0.0090	27.6584
475	0.1712	526.1227	620	0.3622	1112.7893	765	0.0072	22.2034
480	0.1427	438.3321	625	0.3289	1010.6025	770	0.0066	20.2332
485	0.1379	423.6160	630	0.2958	908.8046	775	0.0058	17.9021
490	0.1522	467.7630	635	0.2655	815.8662	780	0.0052	15.9752
495	0.1882	578.3548	640	0.2360	725.0227	785	0.0035	10.7478
500	0.2387	733.4007	645	0.2085	640.4737	790	0.0027	8.3850
505	0.2917	896.1744	650	0.1850	568.3159	795	0.0021	6.4671
510	0.3406	1046.4337	655	0.1621	497.9183	800	0.0039	12.0793
515	0.3816	1172.3388	660	0.1412	433.8799			
520	0.4146	1273.8808	665	0.1245	382.6538			

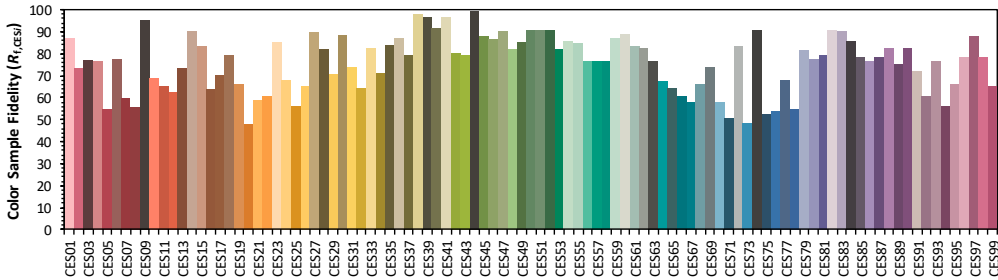
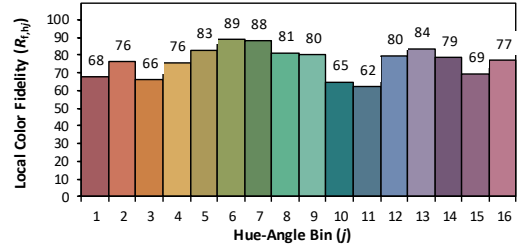
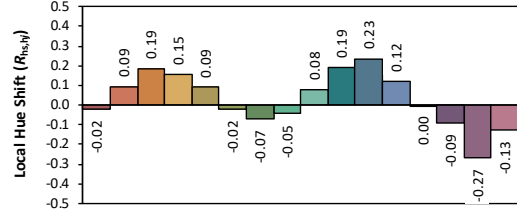
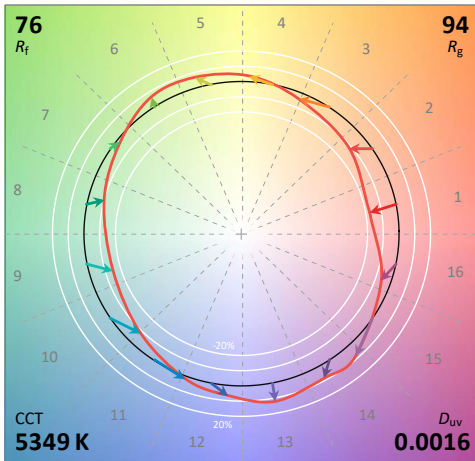
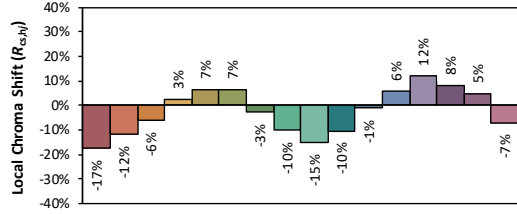
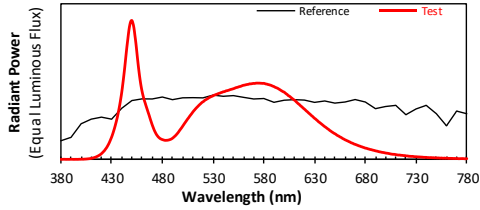


TM30

ANSI/IES TM-30-18 Color Rendition Report

Source: BXEM-30C-12H-6C
Date: 2021/1/27

Manufacturer: ASHART LIGHT CO., LTD
Model: AST-SP01B-750SJT1C1-acd57



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.3361
y 0.3473
u' 0.2070
v' 0.4812

CIE 13.3-1995 (CRI)
Ra 75
Rg -27

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.



Certificate#4810.01

Report No.: BLC2101029E-B

Calculated Efficacy Data for family models:

Model Number	Luminous Flux (lm)	Power (W)	Efficacy (lm/W)
AST-SP01B-750WSJT1C1-acd30	98088.1	745.63	131.55
AST-SP01B-750WSJT1C1-acd40	98732.9	744.83	132.56
AST-SP01B-750WSJT1C1-acd45	99377.7	744.83	133.42
AST-SP01B-750WSJT1C1-acd50	99861.3	744.83	134.07
AST-SP01B-750WSJT1C1-acd57	100667.3	744.03	135.30

*1: This value is calculated and the calculation formula is as below:

$$98732.9 = (100667.3 - 98088.1) / 4 + 98088.1$$

$$99377.7 = (100667.3 - 98088.1) / 4 + 98732.9$$

$$99861.3 = (100667.3 - 98088.1) / 4 + 99377.7$$

*2: This value is calculated and the calculation formula is as below:

$$744.83 = (744.03 + 745.63) / 2$$

*3: This value is calculated and the calculation formula is as below:

$$132.56 = 98732.9 / 744.83$$

$$133.42 = 99377.7 / 744.83$$

$$134.07 = 99861.3 / 744.83$$



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3. Test Equipment

Equipment Name	Model No.	Serial No.	Next Calibration Date
Goniophotometric System	GPM-3000	DYHXF120001	2021-02-26
AC Power Source	CHP-500C	N/A	2021-03-29
Total Luminous Flux Standard Lamp	24V/150W	DYJYR040040	2021-03-01
Digital Power Meter	WT500	DYDWQ200006	2021-03-29
Integral Sphere (2M)	2M	DYJCE120067	2021-02-26
Digital Power Meter	WT500	DYDWQ200006	2021-03-29
Optical Color and Electrical Measurement System	CMS-3000S	DYJCE120067	2021-02-26

Expand Uncertainty:
Photometric Measurement (Sphere): 2.08%, k=2
Chromaticity Measurement(Sphere):25.6K, k=2
Photometric Measurement(Goniophotometer):2.645%, k=2

***** END OF REPORT *****