



Report No.: BLC1906040E-B

LM-79-08 Test Report

For

Beyond LED Technology

(Brand Name: Beyond LED Technology)

1939 Parker Ct, Stone Mountain, GA 30087, USA

Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires

Model name(s): BLT-SWP01-200BA1-abcdf

Remark: "a" can be any two letters to represent lamp colors; "b" can be "S" or blank for Surge-Protective Device provided or not; "c" can be "R" or blank for PIR Sensor provided or not; "d" can be "P" or blank for Photocontrol provided or not; "f" can be any two digits to represent CCT.

Representative (Tested) Model: BLT-SWP01-200BA1-abcd40
BLT-SWP01-200BA1-abcd57

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

Test & Report By:

Sherry Yang

Engineer: Sherry Yang

Date: July.04, 2019

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-SWP01-200BA1-abcdef	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires	
Rated Voltage / Frequency	100-277Vac, 50/60 Hz	
Nominal Power	200W	
Rated Initial Lamp Lumen	--	
Declared CCT	4000K,4500K,5000K,5700K	
LED Manufacturer	Lumileds Holding B.V.	
LED Model	L128-4080RA35000P1	
Sample Number	BLC1906040E-B1(4000K),B2(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	July. 01, 2019
Date of Test	July. 02, 2019
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 C78.377-2015 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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, 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 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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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 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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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	2019-07-02	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	AST-SWP01-200BA1-abcd40		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC190604	120.0	60	1.6795	200.93	0.997	4.95
0E-B1	277.0	60	0.7547	195.66	0.936	9.71
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method:

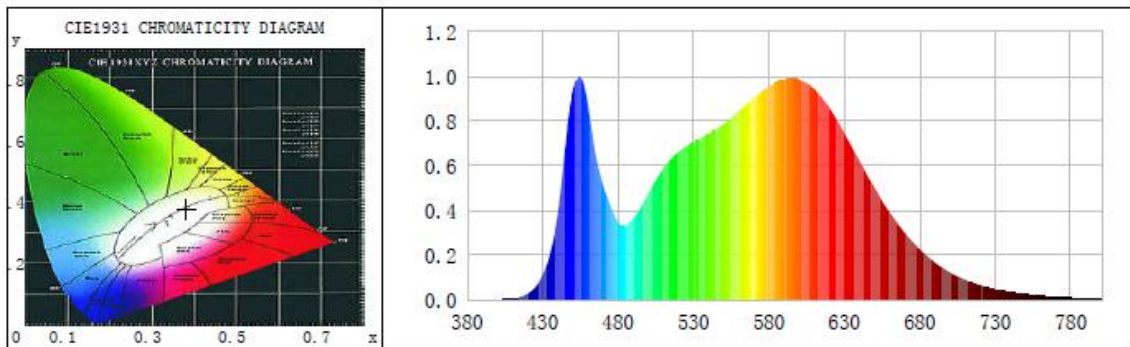
Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	82	R9	10
Frequency (Hz)	60	R2	91	R10	78
CCT (K)	4046	R3	96	R11	80
Duv	0.00100	R4	81	R12	62
Chromaticity (x, y)	x=0.3791 y=0.3781	R5	82	R13	85
Chromaticity (u', v')	u(u')=0.2237 v'(v')=0.5020	R6	87	R14	98
Color Rendering Index (CRI)	83.7	R7	85	R15	76
R9	10	R8	64	--	--

Photometric Measurement – Goniophotometer Method:

Parameter	Result		DLC V4.4 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	25179.5	24553.8	≥10000 (-10%)
0-90° Luminous (lm)	24152.5	23549.1	
Luminous Efficacy (lm/W)	125.31	125.49	Premium: ≥= 120(-3%)
0-90° Luminous Efficacy (lm/W)	120.20	120.36	
Most worst Luminous/Highest	122.20		
Zonal lumens in the 80-90° zone (%) 80-90°/0-90°	3.36	--	≤=10(+3)
Beam Angle (°)	97.2	--	--
Center Beam Candle Power (cd)	9015	--	--



Spectral Power Distribution & Chromaticity Diagram



Zonal Lumen Tabulation

Zonal Lumen Summary

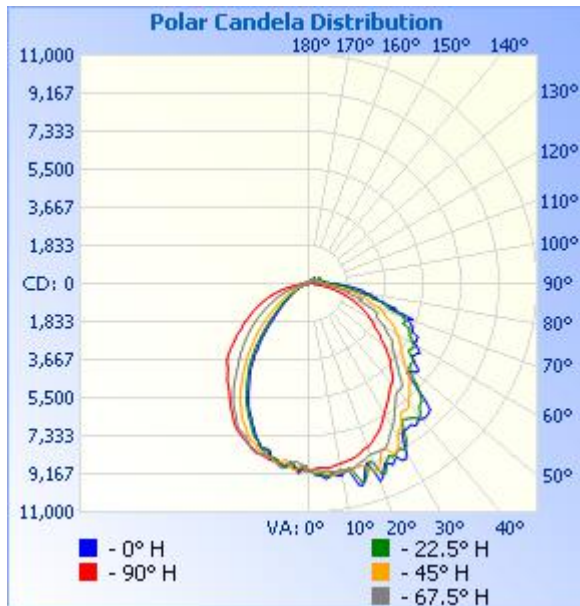
Zone	Lumens	% Lamp	% Luminaire
0-30	7,088.3	28.2%	28.2%
0-40	11,291.4	44.8%	44.8%
0-60	18,766.1	74.5%	74.5%
60-90	5,386.4	21.4%	21.4%
70-100	2,992.0	11.9%	11.9%
90-120	814.4	3.2%	3.2%
0-90	24,152.5	95.9%	95.9%
90-180	1,024.9	4.1%	4.1%
0-180	25,177.4	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	856.3	3.4%	90-100	368.1	1.5%
10-20	2,486.0	9.9%	100-110	268.1	1.1%
20-30	3,745.9	14.9%	110-120	178.2	0.7%
30-40	4,203.1	16.7%	120-130	98.4	0.4%
40-50	4,059.3	16.1%	130-140	66.9	0.3%
50-60	3,415.4	13.6%	140-150	21.5	0.1%
60-70	2,762.5	11.0%	150-160	12.6	0%
70-80	1,813.4	7.2%	160-170	8.2	0%
80-90	810.6	3.2%	170-180	2.8	0%



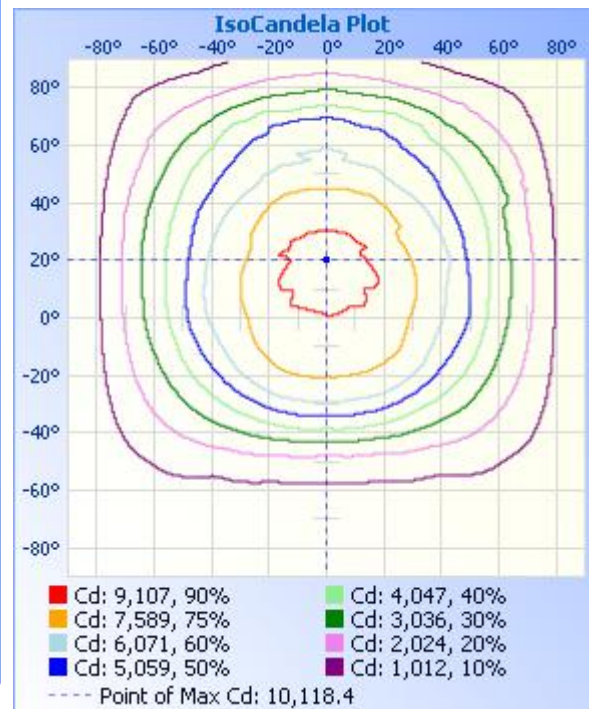
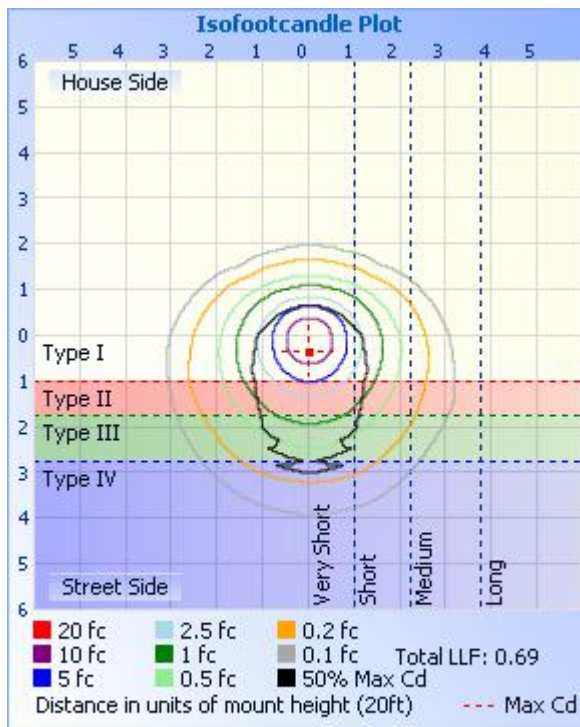
Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width	
17.0ft	31.2 fc	43.2 ft	38.6 ft
34.0ft	7.80 fc	86.5 ft	77.2 ft
51.0ft	3.47 fc	129.7 ft	115.7 ft
68.0ft	1.95 fc	173.0 ft	154.3 ft
85.0ft	1.25 fc	216.2 ft	192.9 ft
102.0ft	0.87 fc	259.5 ft	231.5 ft

■ Vert. Spread: 103.7°
■ Horiz. Spread: 97.2°





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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	9015	9015	9015	9015	9015	9015	9015	9015	9015	9015	9015	9015	9015	9015	9015	9015	9015
1	9024	9035	8986	8972	8965	8880	8790	8746	8751	8780	8828	8942	9017	9039	9026	9031	9024
2	9213	9200	9104	8947	8926	8720	8669	8824	8896	8808	8701	8795	8989	9012	9109	9229	9213
3	9230	9162	9094	8996	8896	8620	8798	9035	9144	9063	8826	8659	8959	9028	9204	9213	9230
4	9293	9198	9095	9052	8884	8604	8962	8933	8871	8991	8990	8588	8910	9052	9162	9300	9293
5	9427	9265	9132	9056	8901	8710	8968	8640	8676	8706	8979	8648	8858	9064	9198	9344	9427
6	9383	9359	9168	9072	8931	8830	8713	8541	8761	8595	8686	8772	8834	9064	9167	9459	9383
7	9204	9128	9306	9138	8909	8926	8570	8758	8937	8792	8591	8890	8821	9051	9263	9230	9204
8	9299	9132	9258	9155	8852	8968	8569	8830	8922	8857	8591	8969	8817	9088	9334	9154	9299
9	9379	9210	9122	9115	8828	8939	8733	8752	8772	8750	8683	8929	8797	9135	9155	9237	9379
10	9365	9279	9121	9123	8805	8858	8833	8633	8642	8627	8775	8801	8770	9125	9066	9280	9365
11	9216	9185	9180	9149	8785	8740	8772	8542	8590	8547	8742	8612	8716	9118	9142	9252	9216
12	9208	9103	9198	9189	8750	8594	8618	8541	8658	8537	8592	8574	8688	9135	9203	9106	9208
13	9509	9158	9238	9185	8714	8543	8569	8542	8271	8532	8562	8485	8662	9145	9227	9094	9509
14	9977	9515	9178	9123	8695	8490	8546	8273	8260	8192	8494	8479	8601	9177	9242	9294	9977
15	10082	9845	9101	9036	8664	8504	8438	8214	8332	8182	8423	8493	8542	9142	9183	9741	10082
16	9786	9888	9133	8971	8579	8511	8365	8306	8244	8252	8438	8518	8542	9046	9120	9818	9786
17	9293	9633	9195	8927	8531	8506	8350	8213	8036	8147	8357	8552	8490	8963	9131	9686	9293
18	9077	9252	9373	8879	8429	8437	8262	7998	7938	7929	8173	8520	8408	8900	9201	9336	9077
19	9477	9036	9545	8784	8388	8372	8127	7920	7769	7874	8091	8430	8341	8832	9365	9039	9477
20	10118	9242	9551	8742	8368	8311	8058	7798	7593	7732	8043	8299	8272	8770	9525	9050	10118
21	9995	9779	9478	8738	8293	8228	8006	7632	7399	7576	7976	8136	8215	8743	9522	9449	9995
22	9662	9856	9218	8755	8200	8093	7905	7448	7264	7360	7853	8012	8140	8681	9432	9799	9662
23	9382	9594	8892	8748	8088	7953	7734	7258	7041	7211	7647	7915	8071	8612	9199	9621	9382
24	9485	9313	8737	8749	7981	7805	7524	7130	6914	7051	7509	7845	7989	8541	8851	9379	9485
25	9625	9144	8797	8735	7906	7670	7365	6920	6759	6899	7402	7800	7913	8542	8661	9136	9625
26	9427	9270	9009	8628	7802	7562	7247	6801	6584	6709	7272	7731	7838	8542	8692	9122	9427
27	9395	9269	9200	8489	7678	7476	7137	6619	6358	6558	7098	7591	7742	8542	8907	9254	9395
28	9638	9103	9125	8301	7549	7362	6996	6457	6159	6389	6896	7405	7616	8507	9096	9175	9638
29	9654	9073	8890	8155	7406	7190	6800	6247	5966	6181	6720	7235	7473	8423	9082	9019	9654

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30	9421	9222	8590	8035	7271	6991	6583	6036	5751	5961	6596	7104	7322	8264	8863	9038	9421
31	8890	9107	8370	7918	7143	6798	6406	5849	5539	5779	6419	6973	7180	8056	8568	9086	8890
32	8471	8868	8259	7753	7042	6649	6205	5656	5381	5581	6212	6841	7059	7866	8270	8883	8471
33	8403	8454	8178	7584	6920	6526	6014	5452	5173	5378	5991	6662	6914	7673	8089	8588	8403
34	8452	8073	7993	7416	6822	6388	5814	5232	5011	5182	5769	6473	6774	7533	7982	8212	8452
35	8414	7972	7742	7245	6704	6233	5602	5033	4782	4995	5568	6300	6640	7383	7851	7930	8414
36	8402	8051	7627	7098	6594	6058	5394	4846	4512	4827	5364	6126	6499	7246	7678	7895	8402
37	8565	8110	7645	6960	6475	5925	5176	4628	4319	4577	5131	5930	6378	7065	7485	7981	8565
38	8508	8203	7689	6835	6378	5785	4973	4432	3992	4361	4945	5730	6260	6865	7456	8079	8508
39	8404	8351	7634	6752	6294	5624	4786	4215	3807	4116	4775	5529	6189	6705	7520	8192	8404
40	8491	8338	7507	6737	6247	5456	4620	3975	3565	3932	4584	5343	6087	6576	7504	8268	8491
41	8565	8190	7352	6736	6176	5240	4406	3736	3329	3633	4361	5163	5965	6456	7382	8174	8565
42	8534	7973	7250	6702	6057	5041	4210	3482	3095	3433	4155	5035	5833	6371	7238	8001	8534
43	8498	7906	7128	6598	5893	4896	4044	3282	2871	3201	3944	4880	5704	6314	7131	7797	8498
44	8427	7847	6984	6403	5735	4744	3841	3083	2611	3020	3743	4735	5615	6226	6991	7720	8427
45	7964	7614	6870	6182	5603	4575	3650	2868	2410	2804	3580	4578	5529	6197	6829	7567	7964
46	7322	7370	6786	5998	5482	4428	3471	2665	2245	2609	3429	4414	5461	6171	6637	7315	7322
47	6730	7119	6667	5872	5365	4260	3302	2476	2075	2414	3227	4259	5366	6039	6463	7119	6730
48	6401	6767	6455	5701	5207	4108	3135	2303	1923	2229	3046	4103	5234	5840	6332	6849	6401
49	6433	6485	6198	5548	4987	3988	2950	2121	1764	2061	2855	3957	5072	5663	6215	6547	6433
50	6624	6326	5998	5421	4853	3818	2779	1962	1636	1891	2699	3813	4920	5422	6009	6340	6624
51	6755	6287	5914	5283	4707	3659	2621	1796	1533	1771	2512	3658	4746	5221	5829	6209	6755
52	6706	6251	5793	5161	4504	3527	2469	1667	1424	1625	2345	3524	4565	5123	5711	6176	6706
53	6441	6266	5631	5040	4328	3409	2295	1551	1325	1512	2205	3358	4421	5081	5622	6098	6441
54	6237	6203	5515	4967	4289	3267	2149	1429	1217	1394	2051	3252	4321	4968	5453	6106	6237
55	6087	5981	5461	4922	4120	3117	2001	1328	1140	1290	1898	3082	4112	4803	5303	6005	6087
56	6179	5838	5381	4834	3916	2961	1868	1227	1071	1197	1766	2932	3916	4601	5218	5783	6179
57	6182	5800	5231	4613	3788	2829	1726	1146	1009	1117	1643	2798	3798	4474	5176	5682	6182
58	6305	5892	5156	4459	3704	2693	1594	1059	950	1024	1511	2643	3686	4420	5128	5695	6305
59	6184	5926	5089	4323	3576	2560	1464	967	886	942	1407	2527	3563	4427	5034	5723	6184
60	5997	5823	4949	4222	3459	2421	1346	889	829	874	1289	2391	3410	4303	4967	5708	5997
61	5826	5677	4791	4140	3344	2311	1250	825	773	810	1175	2258	3271	4176	4746	5622	5826

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62	5884	5619	4731	3924	3264	2178	1140	765	715	760	1084	2120	3161	4021	4546	5485	5884
63	5841	5452	4680	3777	3143	2061	1038	709	659	701	1002	2000	3035	3898	4472	5324	5841
64	5859	5430	4509	3654	2999	1928	946	663	603	654	909	1880	2899	3702	4385	5168	5859
65	5528	5348	4373	3602	2871	1829	862	614	547	599	818	1764	2768	3486	4302	5202	5528
66	5497	5319	4166	3609	2752	1699	785	560	496	547	749	1643	2656	3289	4237	5217	5497
67	5409	4945	4043	3513	2574	1587	717	504	453	495	688	1528	2551	3176	4036	4924	5409
68	5351	4959	3884	3394	2445	1456	652	458	421	446	633	1407	2422	3094	3820	4702	5351
69	5243	5038	3893	3095	2319	1351	607	418	385	407	578	1295	2301	3158	3676	4809	5243
70	5073	4843	3756	2851	2189	1236	547	385	347	370	527	1193	2158	3294	3582	4740	5073
71	5331	4895	3634	2703	2025	1143	498	346	306	338	478	1096	2036	2943	3595	4675	5331
72	4796	4366	3285	2566	1897	1030	449	306	272	300	438	990	1926	2516	3459	4397	4796
73	4101	3980	3106	2641	1777	934	407	275	241	270	389	892	1780	2345	3059	3911	4101
74	4381	3957	3038	2666	1641	843	364	247	215	237	352	803	1677	2227	2917	3898	4381
75	3898	3718	2888	2174	1520	756	325	215	181	214	315	734	1551	2201	2851	3542	3898
76	3711	3559	2673	2039	1397	689	279	185	161	186	282	670	1418	2351	2673	3484	3711
77	3353	3175	2543	1932	1268	619	254	166	141	161	249	606	1290	1946	2516	3153	3353
78	3345	3102	2396	1997	1137	556	220	145	118	141	216	536	1148	1722	2363	2979	3345
79	3070	2786	2273	1708	1002	496	192	120	101	117	190	478	1023	1654	2135	2806	3070
80	3058	2572	1956	1549	873	441	164	100	87	100	163	424	885	1638	2071	2521	3058
81	2710	2337	1847	1503	746	385	138	78	78	82	141	374	759	1413	1784	2262	2710
82	2703	2250	1648	1320	622	339	121	66	64	65	116	326	642	1294	1649	2138	2703
83	2555	2103	1426	1230	517	294	98	57	51	43	99	286	533	1188	1549	2008	2555
84	2374	1946	1314	1130	417	252	80	31	24	35	78	244	445	1064	1311	1863	2374
85	2117	1805	1213	1021	350	226	69	17	17	7	66	214	380	989	1185	1699	2117
86	1967	1681	1108	918	304	196	55	13	11	15	47	192	324	888	1088	1588	1967
87	1735	1522	1013	826	268	175	51	17	13	14	41	172	278	797	998	1458	1735
88	1543	1385	933	743	240	165	44	19	18	11	40	159	249	709	910	1329	1543
89	1408	1281	861	671	235	150	35	17	16	13	41	150	234	641	834	1228	1408
90	1244	1153	804	613	242	145	37	16	16	14	32	143	228	580	769	1116	1244
91	1095	1042	743	566	246	138	30	18	17	16	33	126	235	525	714	1033	1095
92	985	957	700	525	242	131	38	21	15	13	34	125	234	487	670	946	985
93	876	857	664	499	240	125	40	16	17	16	28	118	229	456	642	868	876

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94	785	805	637	475	234	116	30	16	17	17	25	105	231	436	617	805	785
95	729	771	620	462	229	112	32	19	16	12	26	103	222	430	588	768	729
96	704	742	603	456	230	105	29	23	18	16	24	96	220	426	568	740	704
97	680	721	582	450	222	101	20	19	17	16	21	94	213	428	553	712	680
98	654	694	566	453	221	95	28	18	17	14	22	83	213	428	536	694	654
99	635	675	548	452	211	88	27	20	20	15	21	84	206	429	523	674	635
100	621	659	536	450	207	81	22	21	19	17	19	74	203	425	515	666	621
101	611	648	528	444	198	76	23	19	20	20	15	70	192	419	512	648	611
102	605	639	521	432	185	70	20	22	19	17	19	65	186	410	503	639	605
103	601	630	513	423	172	60	22	22	19	17	22	58	178	404	495	626	601
104	607	625	505	408	159	55	20	18	20	16	18	60	165	376	490	616	607
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108	595	594	475	319	120	31	19	21	20	20	17	34	129	286	456	580	595
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113	607	549	398	199	80	29	22	24	22	17	19	24	87	175	384	539	607
114	601	541	378	176	68	24	18	23	22	18	15	23	77	154	368	529	601
115	586	524	357	159	58	25	19	21	23	17	20	26	67	138	349	515	586
116	562	504	334	143	55	21	20	22	21	20	18	23	66	123	326	493	562
117	533	475	311	125	53	15	21	23	23	16	20	19	56	112	300	470	533
118	501	446	289	108	45	20	14	12	20	21	22	21	52	98	283	442	501
119	456	420	271	100	40	16	21	24	22	20	15	22	48	89	265	413	456
120	431	403	263	87	36	20	24	20	24	21	22	22	38	75	251	393	431
121	393	382	251	73	34	19	21	21	22	16	21	20	38	65	237	375	393
122	354	368	240	60	28	18	21	23	24	18	21	22	35	59	222	360	354
123	318	355	226	54	27	16	22	23	23	21	23	19	33	51	217	347	318
124	294	340	228	49	22	20	23	23	16	18	19	21	30	49	218	337	294
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129	310	360	222	33	13	19	24	24	24	21	22	21	22	31	198	336	310
130	343	363	220	33	11	18	24	28	20	19	22	20	15	30	185	331	343
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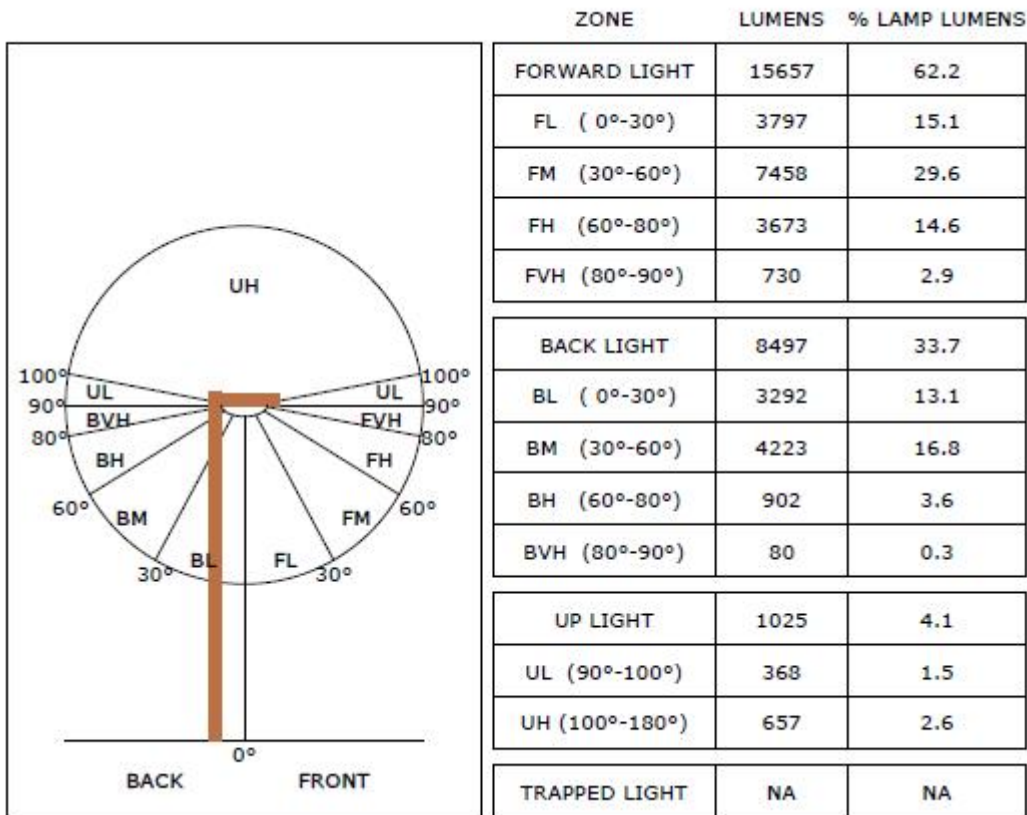
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179	26	30	24	29	19	23	29	33	30	30	32	23	24	32	34	34	26
180	25	30	24	28	19	25	36	33	36	27	32	32	27	28	32	33	25



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

Test date	2019-07-02	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	AST-SWP01-200BA1-abcd57		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC190604	120.0	60	1.6828	201.13	0.996	4.98
0E-B2	277.0	60	0.7514	195.87	0.941	9.84
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	80	R9	2
Frequency (Hz)	60	R2	86	R10	68
CCT (K)	5664	R3	90	R11	82
Duv	0.00212	R4	83	R12	58
Chromaticity (x, y)	x=0.3288 y=0.3420	R5	81	R13	82
Chromaticity (u', v')	u(u')=0.2040 v'(v')=0.4774	R6	81	R14	95
Color Rendering Index (CRI)	82	R7	87	R15	75
R9	2	R8	67	--	--

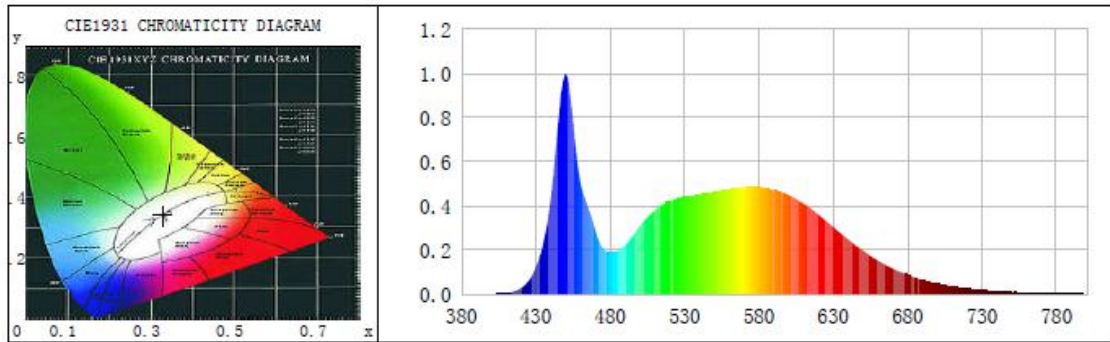
Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V4.4 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	25792.9	25194.8	≥10000 (-10%)
Luminous Efficacy (lm/W)	128.24	128.63	Premium: >= 120(-3%)
Most worst Luminous/Highest Watts	125.27		



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Spectral Power Distribution & Chromaticity Diagram





Calculated Efficacy Data for family models (4500K, 5000K):

Model Number	Luminous Flux (lm)	Power (W)	Efficacy (lm/W)
AST-SWP01-200BA1-abcd40	25179.5	200.93	125.31
AST-SWP01-200BA1-abcd45	25332.9	201.03	126.02
AST-SWP01-200BA1-abcd50	25486.2	201.03	126.78
AST-SWP01-200BA1-abcd57	25792.9	201.13	128.24

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

$$25332.9 = (25792.9 - 25179.5) / 4 + 25179.5$$

$$25486.2 = (25792.9 - 25179.5) / 4 + 25332.9$$

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

$$201.03 = (200.93 + 201.13) / 2$$

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

$$126.02 = 25332.9 / 201.03$$

$$126.78 = 25486.2 / 201.03$$



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3. Test Equipment

Equipment Name	Model No.	Serial No.	Next Calibration Date
Goniophotometric System	GPM-3000	DYHXF120001	2020-01-14
AC Power Source	CHP-500C	N/A	2020-01-13
Total Luminous Flux Standard Lamp	24V/150W	DYJYR040040	2020-01-21
Digital Power Meter	WT500	DYDWQ200006	2020-01-13
Integral Sphere (2M)	2M	DYJCE120067	2020-01-14
Digital Power Meter	WT500	DYDWQ200006	2020-01-13
Optical Color and Electrical Measurement System	CMS-3000S	DYJCE120067	2020-01-14

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 *****