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Report No.:
BLC2207025E-B-PL

LM-79-08 Test Report

For

Beyond LED Technology

(Brand Name: Beyond LED Technology)

Outdoor Pole/Arm-Mounted Area and Roadway Luminaires

Architectural Flood and Spot Luminaires

Model name(s): BLT-S-G14B-150WBT3A4-BR10SP5

Remark: “a” can be any two letters for lamp colors; “b” can be “3RP”, “3NP”, “5RP”, “5NP”, “7RP”, “7NP” or blank for photocontrol type provided or not; “c” can be “10SP”, “20SP” or blank for Surge protector type provided or not; “d” can be “DM”, “DP”, “Z”, “ZM”, “ZP” or blank for DC sensor type provided or not; “e” can be “AM”, “DM”, "A&D", “FM” for bracket type; “W” for wattage adjustable; “g” can be any digits for CCT.

Representative (Tested) Model:
BLT-S-G14B-150WBT3A4-BR10SP5
BLT-S-G14B-150WBT3A4-BR10SP5

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

Test & Report By:

Winny Wu

Engineer: Winny Wu

Date: 2022-09-05

Review By:

Jason Luo

Manager: Jason Luo

1.1 Product Information:

Organization Name	Beyond LED Technology	
Brand Name	Beyond LED Technology	
Model Number	BLT-S-G14B-150WBT3A4-BR10SP5	
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	120-277Vac, 50/60 Hz	
Nominal Power	150W(Power adjustable)	
Rated Initial Lamp Lumen	--	
Declared CCT	3000K,3500K, 4000K, 4500K,5000K, 5700K	
LED Manufacturer	Lumileds Holding B.V.	
LED Model	L128-3080RC35003P1 L128-5780RC35003P1	
Sample Number	BLC2207025E-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	2022-07-13
Date of Test	2022-07-15/2022-09-05
Test item	1. Total Luminous Flux 2. Luminous Distribution Intensity 3. Luminous Efficacy 4. Correlated Color Temperature 5. Color Rendering Index 6. Chromaticity Coordinate 7. Electrical Parameters
Reference Standard	1. IES LM-79-2017 Electrical and Photometric Measurements of Solid-State Lighting Products 2. ANSI C78.377-2017 Specifications for the Chromaticity of Solid State Lighting Products 3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources 4. CIE 15-2004 Technical Report Colorimetry 5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source 6. 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° C ± 1° 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.
Goniophotometer far field detector f1'=1.42%, Test distance: 14.14m

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 25º C ± 1º 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.
Self-absorption:
AST-S-G14B-150WBT3A4-abcdeW30:1.021
AST-S-G14B-150WBT3A4-abcdeW57:1.022

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 25º C ± 1º 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	2022-07-15	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	BLT-S-G14B-150WBT3A4-BR10SP5		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC220702 5E-B1	120.0	60	1.255	149.84	0.995	9.49
	277.0	60	0.558	144.96	0.938	10.74
				DLC Pass Criteria	>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method:

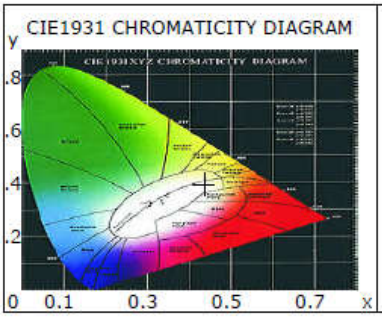
Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
CCT (K)	3006
Duv	-0.0017
Chromaticity (x, y)	x=0.4341 y=0.3990
Chromaticity (u', v')	u(u')=0.2509 v'=0.5189
Color Rendering Index (CRI)	82
R9	5
Rf	84
Rg	97
Rcs,h1(%)	-12

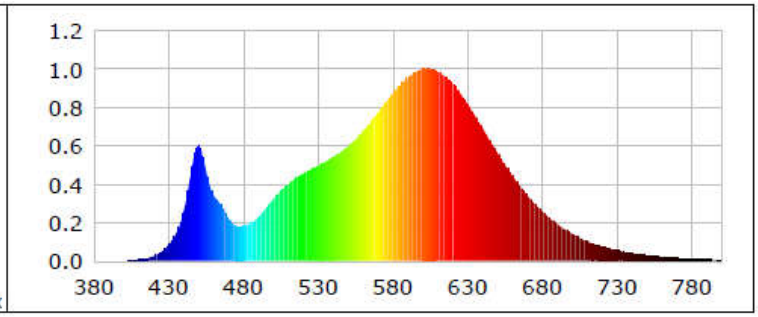
Special Color Rendering Indices			
R1	80	R9	5
R2	91	R10	79
R3	96	R11	80
R4	80	R12	73
R5	81	R13	83
R6	89	R14	98
R7	81	R15	73
R8	57	--	--
--	--	--	--
--	--	--	--

Photometric Measurement – Goniophotometer Method:

Parameter	Result		DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	22802.6	22071.6	>=10000(-10%)
Luminous Efficacy (lm/W)	152.18	152.26	Premium: >= 120(-3%)
Most worst Luminous/Highest	147.3		
Zonal lumens in the 0-90° zone (%)	100	--	Category 1: >=100(-1) Category 2: >=85(-3)
Zonal lumens in the 80-90°zone (%)	1.9	--	<=10(+3)
Beam Angle (°)	147	--	--
Center Beam Candle Power (cd)	6009	--	--

Spectral Power Distribution & Chromaticity Diagram



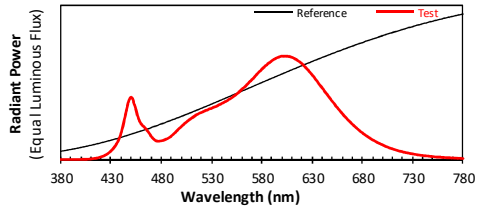


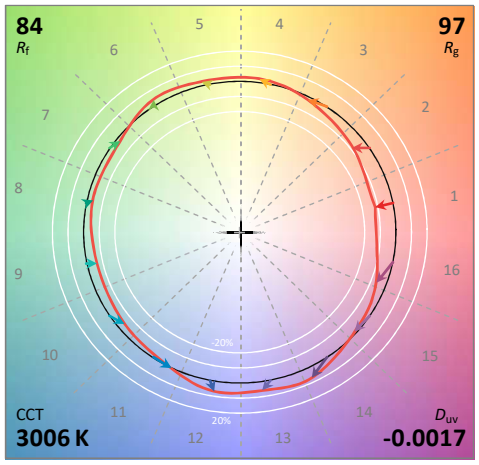
WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0002	0.0705	535	0.4762	192.1735	690	0.3417	137.9042
385	0.0005	0.2209	540	0.4940	199.3809	695	0.2980	120.2761
390	0.0003	0.1370	545	0.5146	207.6902	700	0.2584	104.2986
395	0.0002	0.0909	550	0.5414	218.5018	705	0.2236	90.2252
400	0.0009	0.3678	555	0.5652	228.1175	710	0.1916	77.3215
405	0.0023	0.9430	560	0.5960	240.5248	715	0.1655	66.7843
410	0.0057	2.3137	565	0.6317	254.9387	720	0.1420	57.2927
415	0.0121	4.8937	570	0.6760	272.8004	725	0.1207	48.7263
420	0.0248	10.0132	575	0.7203	290.6909	730	0.1026	41.3961
425	0.0454	18.3293	580	0.7704	310.9061	735	0.0873	35.2184
430	0.0827	33.3665	585	0.8234	332.3027	740	0.0743	29.9815
435	0.1421	57.3431	590	0.8729	352.2801	745	0.0642	25.8979
440	0.2523	101.8365	595	0.9146	369.1011	750	0.0549	22.1367
445	0.4576	184.6812	600	0.9544	385.1824	755	0.0457	18.4335
450	0.6016	242.8091	605	0.9829	396.6618	760	0.0394	15.9014
455	0.4762	192.1790	610	1.0000	403.5755	765	0.0343	13.8510
460	0.3455	139.4435	615	0.9989	403.1115	770	0.0288	11.6420
465	0.2936	118.5086	620	0.9864	398.1036	775	0.0247	9.9555
470	0.2243	90.5364	625	0.9627	388.5343	780	0.0204	8.2146
475	0.1809	73.0248	630	0.9261	373.7682	785	0.0177	7.1491
480	0.1807	72.9286	635	0.8753	353.2614	790	0.0155	6.2425
485	0.1976	79.7579	640	0.8174	329.8643	795	0.0117	4.7310
490	0.2265	91.4136	645	0.7588	306.2263	800	0.0097	3.9118
495	0.2720	109.7860	650	0.6938	279.9863			
500	0.3202	129.2234	655	0.6278	253.3532			
505	0.3616	145.9372	660	0.5638	227.5378			
510	0.3991	161.0598	665	0.5038	203.3394			
515	0.4310	173.9368	670	0.4443	179.3172			
520	0.4542	183.3055	675	0.3911	157.8542			
525	0.4762	192.1735	680	0.3417	137.9042			
530	0.4940	199.3809	685	0.2980	120.2761			

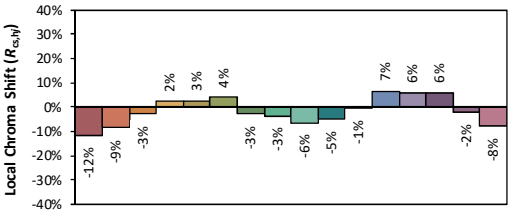
TM30

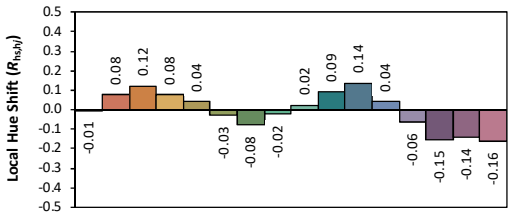
ANSI/IES TM-30-18 Color Rendition Report

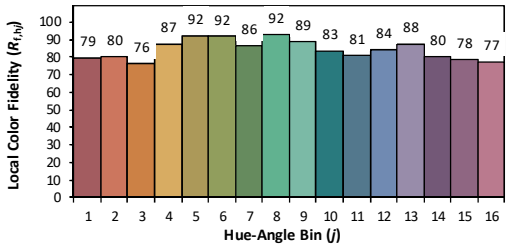
Source:	L128-3080RC35003P1	**Manufacturer:**	Beyond LED Technology
Date:	2022/7/26	**Model:**	BLT-S-G14B-150WBT3A4-BR10SP5

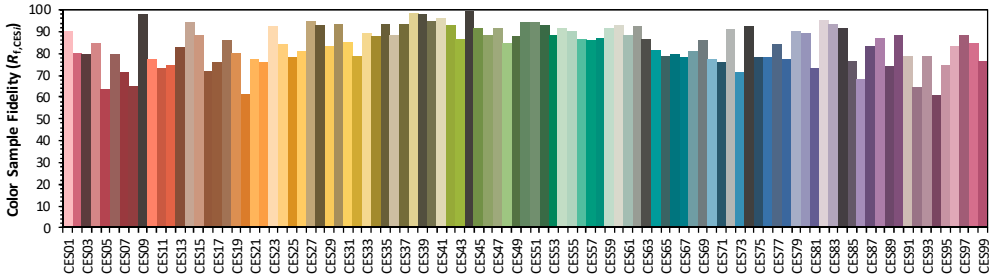












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.4341
y	0.3989
u'	0.2510
v'	0.5189

CIE 13.3-1995 (CRI)

R_a	82
R_9	5

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

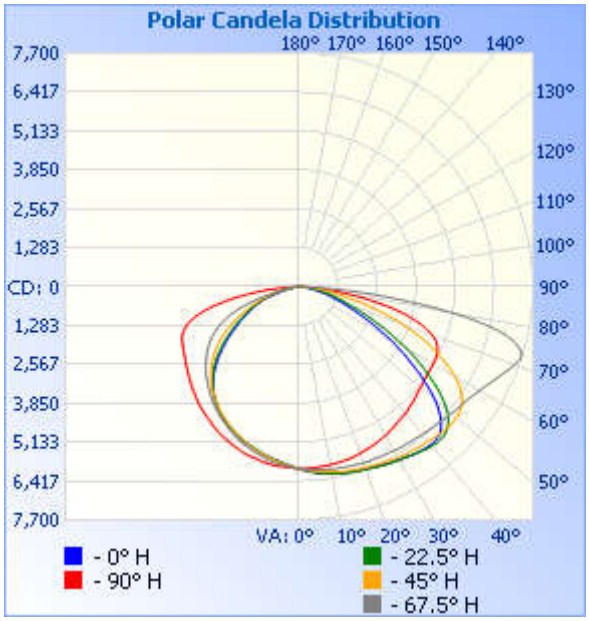
Zonal Lumen Tabulation

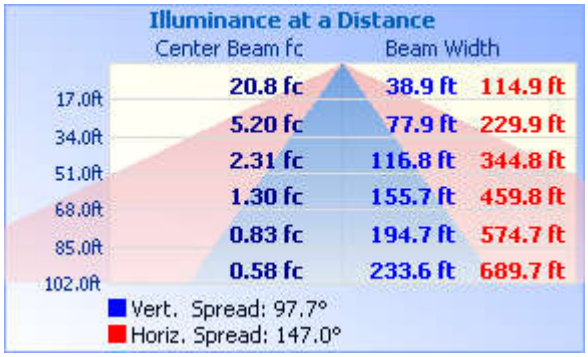
Zone	Lumens	% Lamp	% Luminaire
0-30	4,922.5	21.6%	21.6%
0-40	8,440.3	37%	37%
0-60	16,607.2	72.8%	72.8%
60-90	6,193.9	27.2%	27.2%
70-100	2,791.3	12.2%	12.2%
90-120	0	0%	0%
0-90	22,801.1	100%	100%
90-180	0	0%	0%
0-180	22,801.1	100%	100%

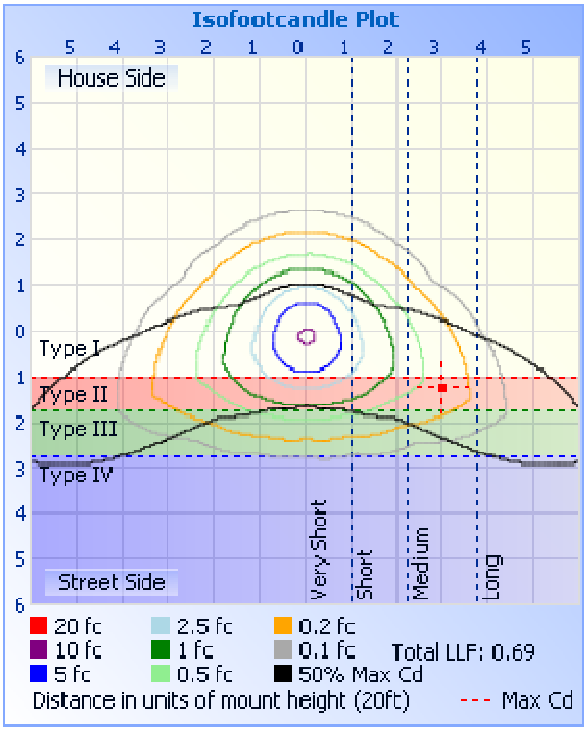
Lumens Per Zone

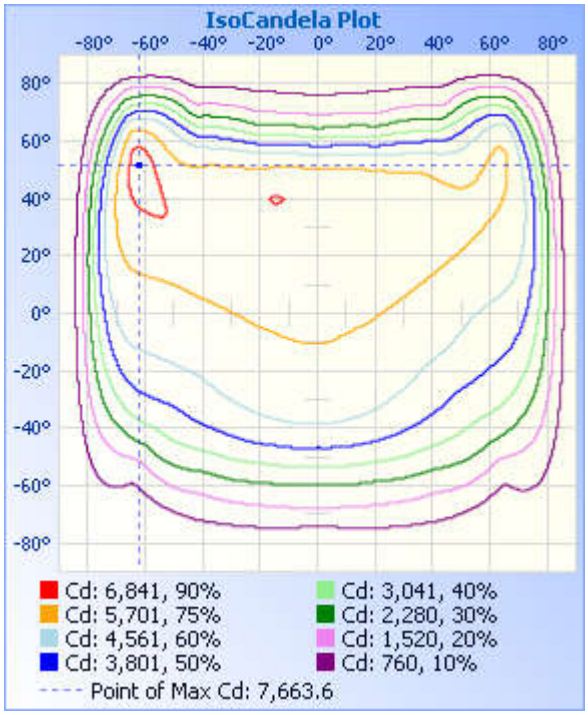
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	571.4	2.5%	90-100	0	0%
10-20	1,675.7	7.3%	100-110	0	0%
20-30	2,675.4	11.7%	110-120	0	0%
30-40	3,517.8	15.4%	120-130	0	0%
40-50	4,095.0	18.0%	130-140	0	0%
50-60	4,071.9	17.9%	140-150	0	0%
60-70	3,402.7	14.9%	150-160	0	0%
70-80	2,233.4	9.8%	160-170	0	0%
80-90	557.8	2.4%	170-180	0	0%

Photometric Data









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	6009	6009	6009	6009	6009	6009	6009	6009	6009	6009	6009	6009	6009	6009	6009	6009	6009
1	6048	6037	6026	6019	6005	6005	5987	5986	5982	5978	5975	5983	5993	6022	6032	6036	6048
2	6076	6065	6052	6037	6008	5986	5967	5955	5947	5952	5946	5959	5982	6032	6044	6066	6076
3	6104	6101	6071	6047	6002	5978	5945	5932	5912	5924	5920	5944	5973	6034	6072	6088	6104
4	6132	6124	6096	6058	6004	5954	5916	5895	5878	5895	5896	5928	5968	6039	6088	6114	6132
5	6160	6151	6109	6066	6000	5940	5897	5872	5853	5859	5867	5910	5963	6042	6099	6143	6160
6	6190	6176	6121	6074	5987	5926	5871	5844	5815	5831	5843	5890	5960	6048	6121	6167	6190
7	6197	6200	6143	6084	5974	5912	5849	5803	5785	5800	5806	5883	5962	6056	6135	6188	6197
8	6208	6225	6169	6092	5975	5894	5822	5779	5764	5773	5781	5857	5953	6053	6146	6200	6208
9	6234	6248	6180	6102	5975	5878	5797	5750	5730	5736	5754	5834	5936	6054	6158	6218	6234
10	6259	6270	6200	6116	5961	5851	5771	5721	5706	5703	5724	5809	5913	6051	6165	6236	6259
11	6269	6284	6216	6128	5956	5832	5740	5692	5676	5681	5689	5781	5914	6053	6175	6255	6269
12	6291	6301	6249	6127	5945	5811	5713	5661	5652	5643	5660	5742	5899	6054	6182	6275	6291
13	6310	6317	6258	6130	5942	5788	5684	5639	5622	5616	5626	5708	5871	6057	6188	6291	6310
14	6328	6333	6277	6140	5934	5759	5654	5613	5589	5583	5602	5677	5852	6055	6203	6304	6328
15	6341	6344	6289	6148	5924	5741	5623	5580	5562	5548	5566	5653	5832	6060	6209	6313	6341
16	6347	6360	6297	6156	5921	5707	5595	5547	5521	5511	5526	5619	5822	6054	6219	6323	6347
17	6362	6376	6311	6161	5905	5680	5558	5518	5487	5483	5498	5583	5804	6056	6236	6328	6362
18	6377	6390	6329	6167	5895	5652	5529	5482	5460	5454	5460	5545	5782	6046	6238	6338	6377
19	6392	6400	6343	6180	5874	5627	5499	5454	5436	5419	5420	5512	5767	6044	6249	6331	6392
20	6394	6417	6352	6188	5856	5595	5466	5422	5402	5388	5378	5481	5734	6037	6263	6345	6394
21	6412	6430	6365	6190	5838	5559	5432	5392	5373	5359	5339	5431	5700	6033	6266	6358	6412
22	6426	6449	6375	6204	5823	5538	5400	5355	5337	5317	5301	5404	5684	6025	6265	6372	6426
23	6446	6477	6394	6196	5804	5504	5369	5323	5303	5286	5266	5364	5655	6025	6276	6392	6446
24	6468	6487	6407	6201	5787	5474	5338	5282	5263	5244	5230	5328	5629	6026	6277	6404	6468
25	6482	6510	6424	6203	5769	5440	5289	5242	5226	5200	5188	5287	5597	6020	6282	6418	6482
26	6513	6528	6442	6219	5749	5396	5253	5209	5184	5152	5145	5246	5574	6012	6285	6432	6513
27	6527	6544	6462	6221	5730	5364	5212	5168	5144	5119	5104	5191	5545	6018	6290	6443	6527
28	6549	6562	6475	6228	5710	5328	5176	5133	5104	5080	5059	5146	5510	6012	6293	6456	6549

29	6562	6583	6502	6231	5687	5290	5140	5095	5058	5037	5006	5105	5483	6004	6295	6471	6562
30	6586	6606	6506	6247	5669	5256	5098	5051	5015	4992	4963	5063	5452	5998	6302	6477	6586
31	6606	6616	6519	6256	5642	5219	5052	5002	4965	4947	4920	5018	5416	5996	6313	6495	6606
32	6630	6635	6536	6268	5616	5175	5010	4958	4913	4899	4872	4971	5382	5992	6316	6516	6630
33	6660	6664	6553	6276	5596	5135	4964	4912	4861	4840	4823	4923	5339	5992	6326	6527	6660
34	6683	6690	6551	6278	5579	5090	4918	4849	4812	4790	4762	4876	5297	5986	6324	6541	6683
35	6704	6709	6568	6283	5550	5051	4870	4797	4744	4732	4708	4832	5274	5983	6328	6575	6704
36	6727	6740	6594	6302	5530	5007	4816	4737	4685	4664	4659	4783	5232	5981	6329	6599	6727
37	6743	6762	6606	6308	5502	4967	4770	4678	4616	4610	4612	4732	5202	5980	6336	6615	6743
38	6765	6796	6622	6310	5483	4920	4718	4615	4552	4543	4554	4674	5174	5973	6336	6630	6765
39	6781	6821	6637	6331	5465	4876	4663	4551	4487	4480	4500	4621	5130	5971	6358	6646	6781
40	6792	6832	6639	6345	5447	4830	4607	4484	4408	4410	4444	4569	5098	5953	6353	6660	6792
41	6781	6853	6665	6350	5428	4785	4540	4413	4333	4332	4382	4516	5065	5958	6359	6680	6781
42	6761	6867	6685	6376	5392	4726	4477	4337	4242	4254	4318	4464	5021	5956	6362	6696	6761
43	6736	6866	6697	6384	5378	4682	4417	4258	4138	4172	4250	4410	4987	5962	6363	6689	6736
44	6688	6849	6717	6401	5344	4635	4352	4165	4044	4094	4172	4358	4944	5958	6376	6671	6688
45	6607	6821	6728	6423	5327	4579	4281	4074	3952	4003	4099	4308	4906	5964	6369	6640	6607
46	6501	6770	6741	6437	5308	4531	4215	3979	3841	3910	4028	4251	4875	5958	6363	6592	6501
47	6375	6697	6749	6452	5276	4477	4138	3878	3733	3813	3953	4196	4826	5962	6370	6521	6375
48	6225	6608	6763	6490	5239	4427	4062	3775	3621	3711	3881	4126	4796	5973	6356	6424	6225
49	6049	6503	6752	6507	5224	4378	3983	3661	3515	3607	3793	4071	4756	5968	6357	6292	6049
50	5860	6361	6738	6522	5203	4318	3883	3544	3381	3483	3714	4010	4722	5970	6352	6152	5860
51	5630	6197	6737	6551	5193	4265	3789	3426	3262	3367	3629	3956	4684	5972	6333	5992	5630
52	5400	5989	6710	6571	5177	4202	3696	3310	3139	3253	3539	3883	4643	5971	6292	5831	5400
53	5146	5791	6672	6600	5160	4150	3599	3178	3019	3132	3428	3822	4604	5974	6252	5613	5146
54	4922	5562	6620	6620	5135	4084	3497	3056	2899	3012	3335	3761	4571	5974	6201	5401	4922
55	4645	5324	6553	6648	5136	4008	3381	2932	2768	2887	3233	3691	4536	5989	6119	5172	4645
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57	4172	4828	6357	6719	5104	3864	3147	2676	2536	2651	3000	3545	4468	5993	5925	4712	4172
58	3890	4592	6231	6761	5106	3789	3023	2556	2420	2527	2884	3468	4437	6004	5799	4465	3890
59	3655	4353	6096	6803	5101	3706	2886	2434	2316	2397	2768	3393	4404	6017	5648	4229	3655

60	3418	4099	5918	6861	5099	3618	2756	2320	2208	2280	2641	3308	4384	6032	5502	3959	3418
61	3162	3817	5737	6907	5083	3522	2630	2208	2095	2177	2525	3212	4353	6028	5298	3720	3162
62	2944	3559	5534	6969	5080	3422	2501	2094	2002	2075	2390	3121	4329	6051	5118	3470	2944
63	2703	3319	5336	7030	5070	3302	2351	1989	1908	1964	2269	3027	4304	6068	4916	3223	2703
64	2476	3077	5101	7096	5043	3184	2217	1890	1813	1866	2143	2919	4266	6085	4712	2996	2476
65	2258	2819	4879	7161	5017	3058	2083	1791	1712	1766	2023	2817	4249	6107	4478	2762	2258
66	2070	2603	4658	7233	4986	2913	1952	1698	1624	1673	1899	2681	4220	6126	4262	2539	2070
67	1895	2382	4394	7306	4933	2760	1829	1596	1536	1586	1773	2556	4177	6154	4028	2327	1895
68	1737	2167	4154	7396	4869	2571	1703	1509	1446	1491	1651	2414	4137	6177	3794	2134	1737
69	1579	1981	3880	7469	4779	2375	1582	1418	1348	1405	1544	2245	4070	6190	3539	1935	1579
70	1447	1804	3631	7540	4663	2153	1465	1333	1252	1319	1439	2065	4009	6213	3316	1770	1447
71	1330	1653	3358	7601	4515	1930	1355	1228	1136	1234	1325	1873	3912	6223	3063	1614	1330
72	1216	1508	3071	7658	4350	1694	1224	1132	1001	1128	1219	1669	3820	6223	2829	1473	1216
73	1114	1378	2797	**7664**	4154	1443	1123	1019	862	1020	1123	1469	3689	6215	2594	1351	1114
74	1013	1254	2507	7585	3920	1229	1023	914	722	920	1025	1250	3529	6175	2338	1230	1013
75	904	1144	2244	7433	3683	1033	914	792	592	809	924	1064	3358	6097	2086	1128	904
76	801	1028	1959	7225	3422	862	820	671	491	689	831	899	3163	5969	1865	1019	801
77	683	927	1712	6924	3127	721	709	555	411	584	735	758	2948	5764	1644	919	683
78	588	836	1513	6509	2781	591	610	452	342	476	636	624	2706	5511	1440	821	588
79	510	735	1328	5998	2454	490	515	357	294	395	533	526	2454	5192	1266	738	510
80	445	648	1149	5357	2139	406	417	290	243	318	448	440	2162	4782	1098	643	445
81	385	545	985	4609	1835	329	340	221	178	246	365	368	1899	4201	956	548	385
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86	138	173	293	1301	391	69	26	14	11	15	42	100	566	1315	316	183	138
87	99	115	180	764	183	40	11	10	11	16	23	64	340	825	204	125	99
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180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BUG Rating

Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	2618.2	11.5	11.5
FM (30-60)	6948.6	30.5	30.5
FH (60-80)	3765.9	16.5	16.5
FVH (80-90)	447.2	2.0	2.0
BL (0-30)	2304.3	10.1	10.1
BM (30-60)	4738.1	20.8	20.8
BH (60-80)	1869.8	8.2	8.2
BVH (80-90)	110.5	0.5	0.5
UL (90-100)	0.0	0.0	0.0
UH (100-180)	0.0	0.0	0.0
Total	22802.6	100.1	100.0

BUG Rating **B3-U0-G3**

2.2 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction BL-QP-033)

Test date	2022-09-05	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	BLT-S-G14B-150WBT3A4-BR10SP5		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC220702 5E-B2	120.0	60	1.261	150.54	0.995	9.75
	277.0	60	0.583	151.75	0.939	10.62
				DLC Pass Criteria	>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
CCT (K)	5587
Duv	0.0018
Chromaticity (x, y)	x=0.3305 y=0.3428
Chromaticity (u', v')	u(u')=0.2049 v'=0.4781
Color Rendering Index (CRI)	82
R9	7
Rf	82
Rg	96
Rcs,h1(%)	-13

Special Color Rendering Indices			
R1	81	R9	7
R2	86	R10	67
R3	89	R11	82
R4	83	R12	59
R5	82	R13	82
R6	81	R14	94
R7	87	R15	76
R8	69	--	--
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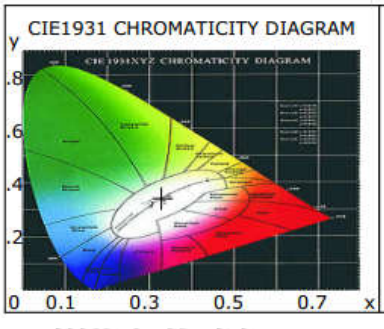
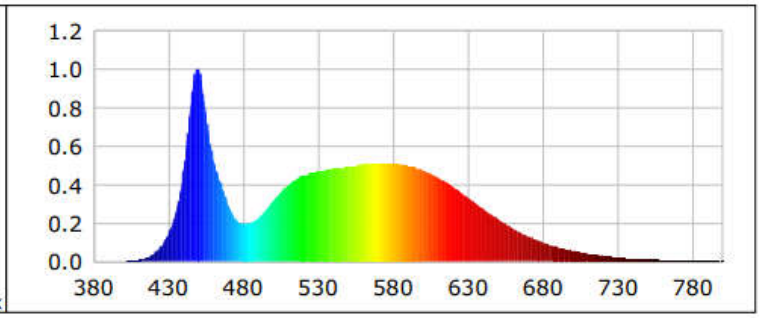
Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	24507.9	23915.8	>=10000(-10%)
Luminous Efficacy (lm/W)	162.80	164.07	Premium: >= 120(-3%)
Most worst Luminous/Highest Watts	158.87		

Spectral Power Distribution & Chromaticity Diagram



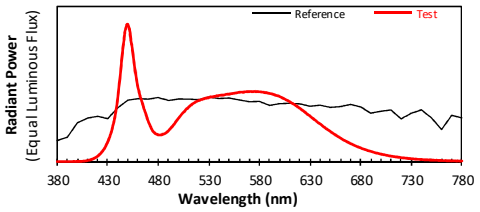


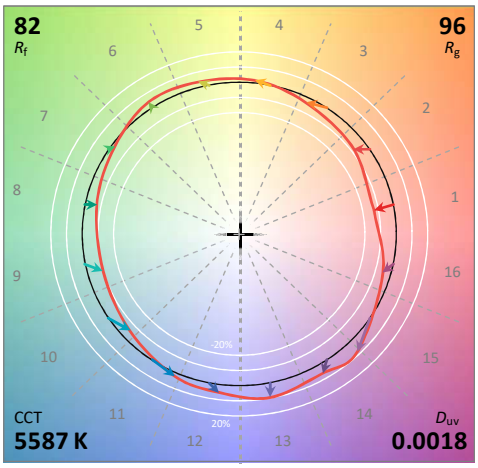
WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0004	0.2722	535	0.4589	299.2121	690	0.1317	85.8944
385	0.0002	0.1546	540	0.4662	303.9856	695	0.1150	75.0061
390	0.0006	0.3661	545	0.4747	309.5298	700	0.0997	65.0233
395	0.0005	0.3080	550	0.4823	314.4988	705	0.0863	56.2674
400	0.0007	0.4403	555	0.4860	316.9141	710	0.0746	48.6694
405	0.0028	1.8413	560	0.4921	320.8661	715	0.0638	41.6045
410	0.0076	4.9610	565	0.4984	324.9898	720	0.0551	35.9091
415	0.0188	12.2884	570	0.5051	329.3446	725	0.0472	30.7685
420	0.0395	25.7313	575	0.5085	331.5870	730	0.0397	25.8780
425	0.0773	50.4298	580	0.5104	332.7926	735	0.0344	22.4181
430	0.1432	93.3887	585	0.5119	333.7896	740	0.0286	18.6455
435	0.2563	167.1424	590	0.5095	332.2396	745	0.0250	16.2711
440	0.4715	307.4362	595	0.5035	328.3290	750	0.0209	13.6412
445	0.8264	538.8616	600	0.4973	324.2569	755	0.0180	11.7452
450	0.9999	651.9397	605	0.4871	317.5967	760	0.0159	10.3821
455	0.7810	509.2507	610	0.4743	309.2395	765	0.0135	8.7970
460	0.5373	350.3208	615	0.4564	297.5951	770	0.0110	7.1916
465	0.4073	265.6047	620	0.4363	284.4884	775	0.0100	6.5339
470	0.2945	191.9978	625	0.4132	269.4526	780	0.0083	5.4187
475	0.2191	142.8573	630	0.3883	253.1682	785	0.0066	4.3016
480	0.1955	127.4463	635	0.3594	234.3204	790	0.0065	4.2333
485	0.2005	130.7124	640	0.3314	216.1030	795	0.0042	2.7272
490	0.2249	146.6637	645	0.3027	197.4021	800	0.0045	2.9064
495	0.2675	174.3949	650	0.2738	178.5467			
500	0.3164	206.3112	655	0.2456	160.1188			
505	0.3597	234.5243	660	0.2207	143.9152			
510	0.3986	259.9123	665	0.1948	126.9982			
515	0.4257	277.5985	670	0.1716	111.8988			
520	0.4447	289.9411	675	0.1512	98.5614			
525	0.4589	299.2121	680	0.1317	85.8944			
530	0.4662	303.9856	685	0.1150	75.0061			

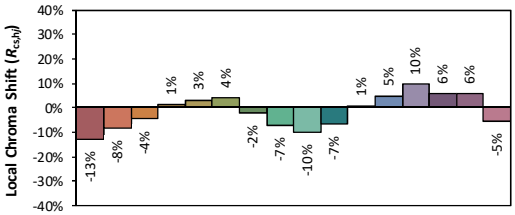
TM30

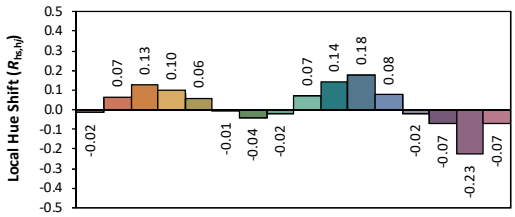
ANSI/IES TM-30-18 Color Rendition Report

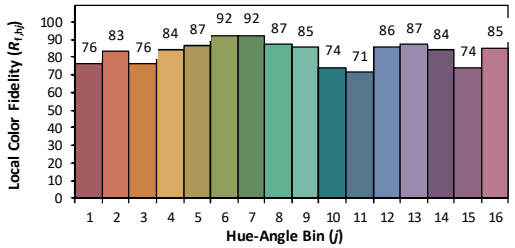
Source:	L128-5780RC35003P1	**Manufacturer:**	Beyond LED Technology
Date:	2022/9/5	**Model:**	BLT-S-G14B-150WBT3A4-BR10SP5

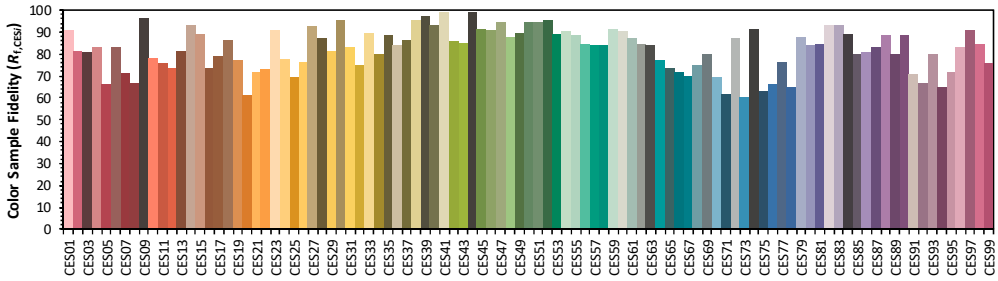












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3305
y	0.3428
u'	0.2049
v'	0.4781

CIE 13.3-1995 (CRI)

R_a	82
R_9	7

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

Calculated Efficacy Data for family models:

Model Number	Luminous Flux (lm)	Power (W)	Efficacy (lm/W)
BLT-S-G14B-150WBT3A4-BR10SP5	22802.7	149.84	152.18
BLT-S-G14B-150WBT3A4-BR10SP5	23141.7	149.92	154.36
BLT-S-G14B-150WBT3A4-BR10SP5	24085.2	150.26	160.29
BLT-S-G14B-150WBT3A4-BR10SP5	24153.7	149.54	161.52
BLT-S-G14B-150WBT3A4-BR10SP5	24367.3	150.23	162.2
BLT-S-G14B-150WBT3A4-BR10SP5	24507.9	150.54	162.8

3. Test Equipment

Equipment Name	Model No.	Serial No.	Calibration Date
Goniophotometeric System	GPM-3000	DYHXF120001	2022-01-18
AC Power Source	CHP-500C	DYBWD010159	2022-01-25
Total Luminous Flux Standard Lamp	24V/150W	DYJYR040040	2022-01-25
Digital Power Meter	WT500	DYDWQ20010	2022-01-25
Integral Sphere (2M)	2M	DYJCE120067	2022-01-18
Digital Power Meter	WT500	DYDWQ200006	2022-01-25
Optical Color and Electrical Measurement System	CMS-3000S	DYJCE120067	2022-01-18
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 ********