Certificate#4810.01

Report No.:
BLC2005011E-F-CP

LM-79-08 Test Report

For

Beyond LED Technology

(Brand Name: Beyond LED Technology)

Outdoor Full-Cutoff Wall-Mounted Area Luminaires

Model name(s): BLT-RWP01B-120WF1CYT1SA2-BRA50

The letter "a" can be 2 letters represent lamp colors, "BH = Black, WH=White, BR=Bronze or Customized". The letter "b"can be "P" for Photocontrol or blank for no control function, or "M" for motion sensor, "R "for 12V PIR control, "PM" for photocontrol+motion sensor, "PR" for photocontrol+PIR sensor.. The letter c can be A=represents power adjustable or SA=surge protector and power adjustable are equipped. The letter e can be two digits to represent CCT, 30=3000K, 40=4000K, 50=5000K，57=5700K. The letter f can be "F" for Auxiliary output 12V or empty for no Auxiliary output 12V.

Representative (Tested) Model:
BLT-RWP01B-120WF1CYT1SA2-BRA50

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

Test & Report By:

Grace Li

Engineer: Grace Li

Date: June 18, 2020

Review By:

Jason Luo

Manager: Jason Luo

This report is multiple listed report of BLC2005011E-F, all construction are the same except wattage adjustable.

1.1 Product Information:

Model Number	BLT-RWP01B-120WF1CYT1SA2-BRA50	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Outdoor Full-Cutoff Wall-Mounted Area Luminaires	
Rated Voltage / Frequency	120-277Vac, 50/60 Hz	
Nominal Power	120W (Wattage adjustable)	
Rated Initial Lamp Lumen	--	
Declared CCT	4000K,4500K,5000K,5700K	
LED Manufacturer	Seoul Semiconductor Co., LTD	
LED Model	SAW7C22B-NZ	
Sample Number	BLC2005011E-F1(4000K),F2(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	May 12, 2020
Date of Test	May 13, 2020
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-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products 2. ANSI C78.377-2008 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.

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.

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	2020-05-13	Test Ambient:	25.2 º C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	BLT-RWP01B-120WF1CYT1SA2-BRA50		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC200501	120.0	60	0.9802	117.51	0.999	3.93
1E-F1	277.0	60	0.4347	114.86	0.954	11.45
				DLC Pass Criteria	>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method:

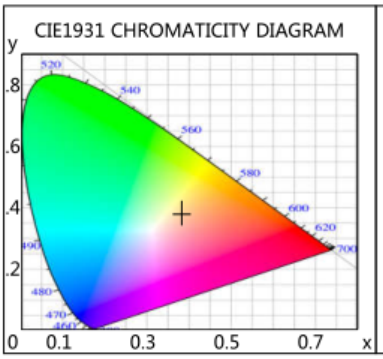
Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
CCT (K)	3921
Duv	0.00046
Chromaticity (x, y)	x=0.3843 y=0.3801
Chromaticity (u', v')	u(u')=0.2263 v'=0.5036
Color Rendering Index (CRI)	73
R9	-36
Rf	76
Rg	93
Rcs,h1(%)	-18

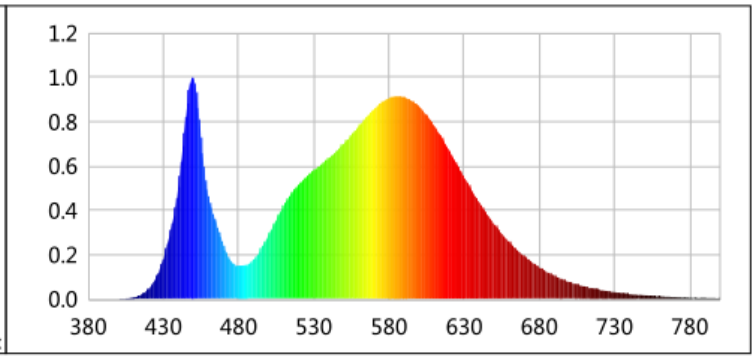
Special Color Rendering Indices			
R1	72	R9	-36
R2	77	R10	45
R3	80	R11	72
R4	75	R12	43
R5	73	R13	72
R6	69	R14	89
R7	81	R15	67
R8	60	--	--

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)	16194.4	15962.4	10000-30000(-10%)
Luminous Efficacy (lm/W)	137.81	138.97	Premium: >= 120(-3%)
Most worst Luminous/Highest	135.84		
Zonal lumens in the 0-90° zone (%)	99	--	>=100(-3)
Zonal lumens in the 80-90°zone (%)	0.3		<=10(+3)
Beam Angle (°)	65.1	--	--
Center Beam Candle Power (cd)	13375	--	--

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	0.1107	525	0.5526	179.1535	670	0.1940	62.8896
385	0.0002	0.0583	530	0.5815	188.5330	675	0.1678	54.3853
390	0.0005	0.1493	535	0.6094	197.5529	680	0.1450	47.0223
395	0.0006	0.1870	540	0.6383	206.9487	685	0.1247	40.4224
400	0.0011	0.3561	545	0.6674	216.3812	690	0.1076	34.8706
405	0.0026	0.8415	550	0.7028	227.8465	695	0.0919	29.7798
410	0.0080	2.5988	555	0.7408	240.1646	700	0.0786	25.4718
415	0.0205	6.6390	560	0.7819	253.5083	705	0.0678	21.9722
420	0.0450	14.5741	565	0.8214	266.3103	710	0.0581	18.8225
425	0.0948	30.7445	570	0.8557	277.4336	715	0.0495	16.0365
430	0.1820	58.9991	575	0.8872	287.6346	720	0.0430	13.9516
435	0.3133	101.5700	580	0.9077	294.2690	725	0.0362	11.7404
440	0.5060	164.0468	585	0.9138	296.2549	730	0.0314	10.1724
445	0.8255	267.6268	590	0.9134	296.1312	735	0.0262	8.5022
450	1.0000	324.2026	595	0.8966	290.6849	740	0.0231	7.4737
455	0.7341	237.9973	600	0.8700	282.0436	745	0.0208	6.7504
460	0.4635	150.2759	605	0.8316	269.5912	750	0.0172	5.5699
465	0.3507	113.6841	610	0.7827	253.7470	755	0.0146	4.7474
470	0.2438	79.0491	615	0.7303	236.7604	760	0.0126	4.0948
475	0.1730	56.0783	620	0.6718	217.7854	765	0.0107	3.4589
480	0.1515	49.1070	625	0.6108	198.0356	770	0.0094	3.0599
485	0.1544	50.0571	630	0.5502	178.3853	775	0.0069	2.2278
490	0.1773	57.4662	635	0.4923	159.6141	780	0.0058	1.8942
495	0.2277	73.8188	640	0.4386	142.1872	785	0.0052	1.6978
500	0.2921	94.6983	645	0.3859	125.1239	790	0.0063	2.0449
505	0.3576	115.9205	650	0.3397	110.1435	795	0.0037	1.2128
510	0.4219	136.7860	655	0.2962	96.0345	800	0.0041	1.3412
515	0.4750	153.9827	660	0.2582	83.6999			
520	0.5178	167.8872	665	0.2236	72.4758			

TM30

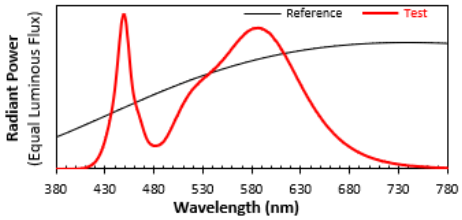
ANSI/IES TM-30-18 Color Rendition Report

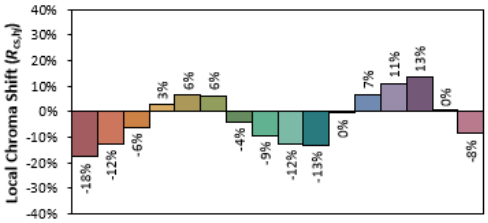
Source: SAW7C22B-NZ

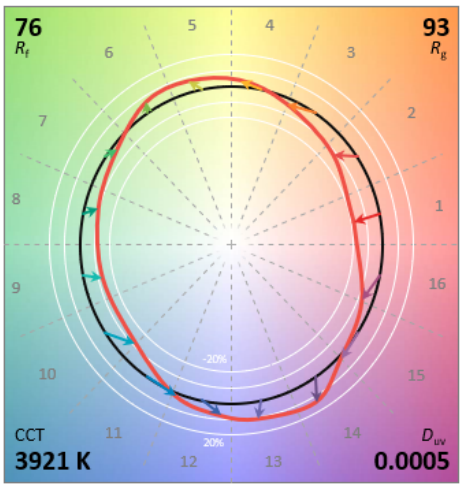
Manufacturer: Beyond LED Technology

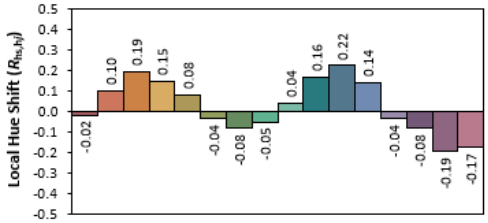
Date: 2020/5/13

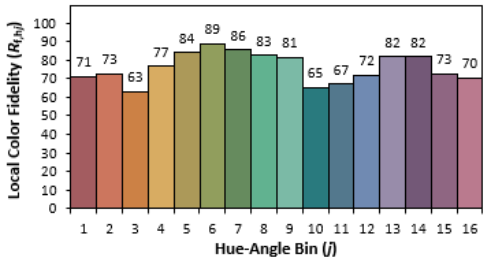
Model: BLT-RWP01B-120WF1CYT1SA2-BRA50

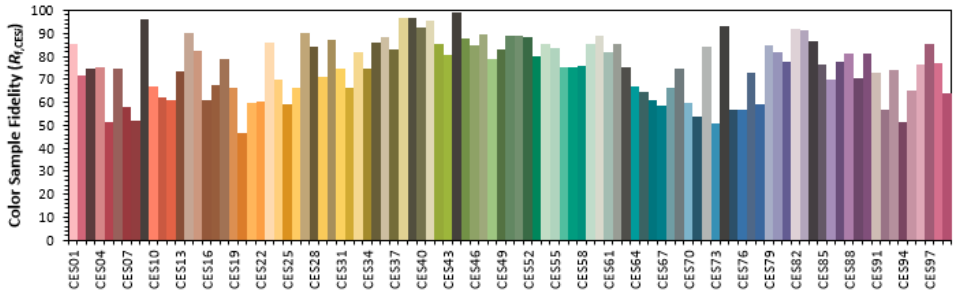












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3843
y	0.3801
u'	0.2263
v'	0.5036

CIE 13.3-1995 (CRI)

R_a	73
R_9	-36

Zonal Lumen Tabulation

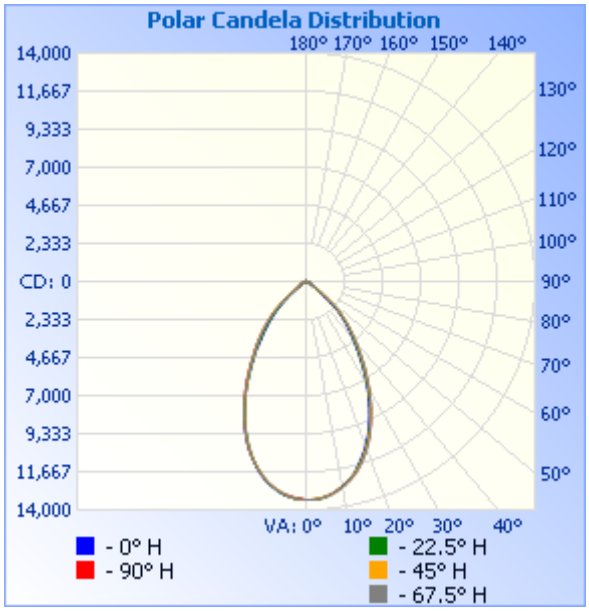
Zonal Lumen Summary

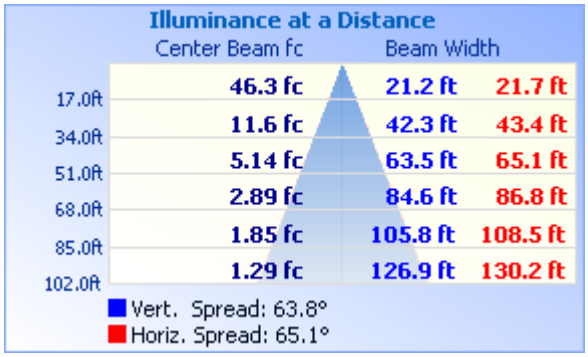
Zone	Lumens	% Lamp	% Luminaire
0-30	8,715.7	53.8%	53.8%
0-40	12,349.3	76.3%	76.3%
0-60	15,517.8	95.8%	95.8%
60-90	508.6	3.1%	3.1%
70-100	236.7	1.5%	1.5%
90-120	74.5	0.5%	0.5%
0-90	16,026.4	99%	99%
90-180	164.7	1%	1%
0-180	16,191.1	100%	100%

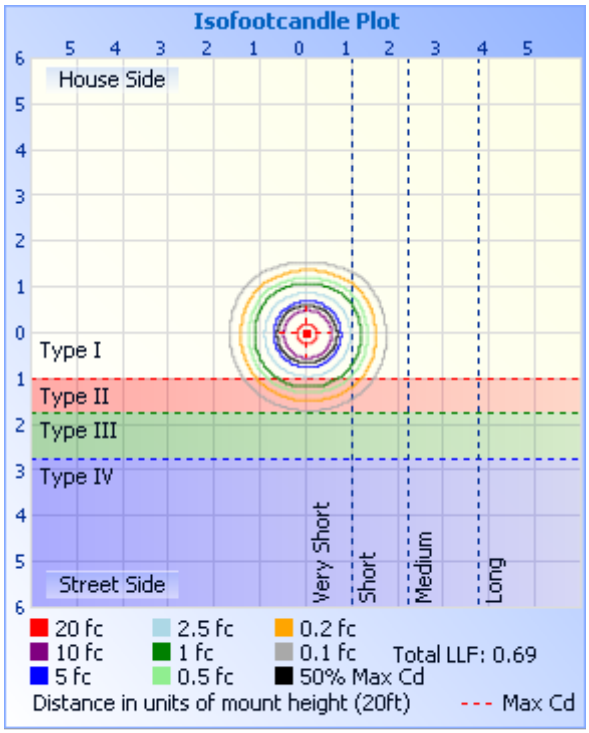
Lumens Per Zone

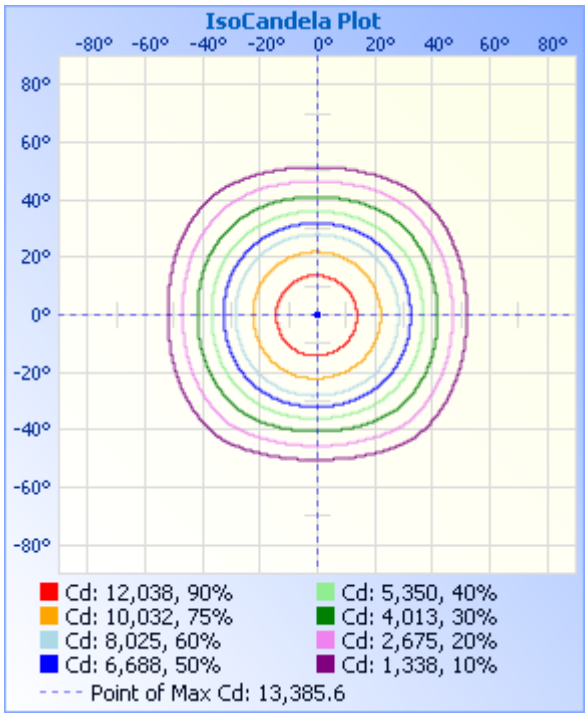
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	1,244.6	7.7%	90-100	28.3	0.2%
10-20	3,308.4	20.4%	100-110	25.6	0.2%
20-30	4,162.7	25.7%	110-120	20.6	0.1%
30-40	3,633.6	22.4%	120-130	19.2	0.1%
40-50	2,397.2	14.8%	130-140	19.4	0.1%
50-60	771.2	4.8%	140-150	19.3	0.1%
60-70	300.2	1.9%	150-160	16.7	0.1%
70-80	156.8	1.0%	160-170	11.5	0.1%
80-90	51.7	0.3%	170-180	4.1	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	13375	13375	13375	13375	13375	13375	13375	13375	13375	13375	13375	13375	13375	13375	13375	13375	13375
1	13367	13383	13365	13375	13383	13370	13368	13379	13364	13363	13366	13351	13319	13370	13376	13362	13367
2	13361	13378	13340	13371	**13386**	13361	13353	13361	13343	13338	13346	13326	13276	13330	13336	13342	13361
3	13333	13347	13307	13347	13349	13357	13332	13348	13307	13309	13296	13282	13244	13281	13312	13307	13333
4	13292	13307	13272	13310	13298	13311	13295	13292	13263	13261	13235	13228	13193	13226	13259	13252	13292
5	13265	13260	13239	13254	13233	13254	13245	13247	13196	13195	13165	13155	13134	13145	13181	13206	13265
6	13184	13192	13184	13183	13157	13200	13190	13163	13130	13107	13078	13066	13072	13055	13094	13125	13184
7	13115	13107	13112	13095	13081	13118	13099	13065	13027	13004	12967	12977	12971	12950	12991	13028	13115
8	13004	13014	13022	13003	12964	13029	12987	12975	12905	12903	12868	12878	12876	12862	12882	12942	13004
9	12887	12885	12903	12914	12854	12912	12892	12861	12787	12778	12756	12760	12754	12739	12768	12802	12887
10	12741	12764	12791	12810	12743	12791	12772	12742	12670	12632	12624	12630	12627	12609	12642	12684	12741
11	12601	12633	12635	12683	12626	12658	12632	12594	12537	12478	12474	12476	12469	12459	12478	12529	12601
12	12445	12482	12489	12528	12508	12536	12479	12444	12359	12329	12309	12298	12300	12317	12328	12349	12445
13	12293	12314	12328	12377	12375	12375	12314	12284	12179	12138	12111	12120	12107	12146	12162	12176	12293
14	12112	12132	12149	12199	12203	12179	12138	12089	11957	11924	11916	11936	11919	11952	11978	11973	12112
15	11895	11911	11966	12020	12012	11973	11934	11878	11759	11738	11701	11731	11725	11738	11783	11776	11895
16	11657	11712	11768	11820	11774	11757	11735	11662	11508	11496	11484	11521	11506	11525	11560	11584	11657
17	11420	11488	11533	11612	11550	11545	11499	11407	11274	11243	11255	11270	11304	11294	11302	11353	11420
18	11169	11256	11296	11387	11315	11303	11244	11172	11033	11000	11014	11031	11076	11057	11039	11115	11169
19	10921	11025	11044	11133	11070	11035	10984	10915	10777	10701	10735	10774	10819	10806	10797	10828	10921
20	10661	10737	10785	10879	10805	10766	10733	10653	10507	10427	10472	10502	10544	10514	10534	10578	10661
21	10376	10458	10525	10611	10564	10489	10462	10381	10220	10137	10179	10212	10225	10235	10273	10297	10376
22	10096	10186	10220	10333	10271	10210	10158	10094	9929	9839	9884	9883	9934	9936	9989	10005	10096
23	9804	9890	9927	10013	9966	9898	9857	9749	9609	9537	9570	9579	9640	9632	9667	9720	9804
24	9483	9582	9628	9708	9673	9581	9523	9432	9279	9231	9219	9269	9318	9325	9351	9415	9483
25	9168	9264	9320	9394	9360	9263	9202	9114	8931	8882	8935	8979	8993	9012	9030	9064	9168
26	8828	8911	9007	9067	9013	8911	8866	8783	8585	8567	8595	8652	8699	8674	8735	8771	8828
27	8499	8597	8688	8765	8699	8603	8555	8437	8249	8236	8269	8293	8326	8352	8395	8428	8499
28	8157	8265	8356	8440	8358	8269	8229	8112	7916	7897	7942	7967	8004	8025	8063	8097	8157
29	7834	7923	8000	8073	8032	7925	7844	7768	7568	7567	7571	7637	7696	7703	7705	7734	7834

30	7486	7586	7672	7747	7695	7594	7521	7420	7216	7190	7236	7319	7350	7381	7375	7396	7486
31	7145	7216	7325	7419	7378	7240	7176	7076	6869	6852	6911	6995	7053	7031	7048	7064	7145
32	6795	6879	6987	7094	7025	6918	6856	6703	6488	6528	6596	6648	6714	6710	6721	6730	6795
33	6451	6547	6654	6771	6702	6597	6524	6365	6154	6195	6284	6330	6382	6404	6396	6407	6451
34	6117	6222	6361	6455	6386	6297	6213	6038	5833	5873	5951	6025	6059	6095	6082	6076	6117
35	5766	5915	6008	6118	6063	5991	5872	5720	5522	5560	5649	5724	5748	5779	5781	5747	5766
36	5462	5598	5711	5809	5756	5661	5578	5413	5213	5240	5371	5443	5457	5490	5495	5440	5462
37	5170	5286	5416	5533	5431	5360	5297	5091	4844	4961	5104	5152	5192	5213	5218	5148	5170
38	4866	4987	5126	5232	5141	5078	5012	4805	4485	4671	4856	4893	4935	4938	4928	4885	4866
39	4592	4694	4852	4940	4862	4798	4719	4496	4224	4377	4583	4641	4656	4673	4671	4609	4592
40	4327	4448	4578	4654	4592	4538	4464	4184	3965	4114	4340	4394	4395	4423	4428	4362	4327
41	4095	4206	4347	4417	4324	4281	4217	3943	3677	3836	4102	4140	4140	4164	4199	4105	4095
42	3855	3972	4109	4172	4069	4007	3980	3695	3442	3590	3876	3891	3882	3918	3972	3892	3855
43	3639	3755	3871	3917	3800	3767	3751	3404	3174	3312	3643	3617	3613	3661	3738	3660	3639
44	3416	3510	3646	3681	3558	3522	3495	3174	2946	3049	3388	3368	3376	3423	3501	3426	3416
45	3183	3274	3436	3425	3319	3250	3258	2868	2720	2768	3145	3104	3123	3151	3231	3185	3183
46	2927	3044	3186	3175	3076	3002	3009	2568	2387	2500	2900	2856	2871	2884	2993	2937	2927
47	2668	2810	2947	2931	2787	2740	2747	2293	2138	2241	2635	2569	2608	2627	2732	2698	2668
48	2347	2559	2693	2680	2523	2486	2476	2013	1849	1965	2372	2309	2332	2376	2486	2442	2347
49	2016	2302	2454	2402	2249	2228	2175	1749	1565	1719	2063	2034	2068	2119	2208	2155	2016
50	1721	1993	2172	2147	1986	1946	1918	1516	1302	1455	1805	1767	1757	1832	1933	1870	1721
51	1450	1702	1910	1860	1684	1686	1665	1260	1054	1214	1544	1474	1486	1555	1655	1565	1450
52	1234	1417	1648	1596	1422	1441	1426	1019	883	993	1299	1225	1208	1285	1405	1282	1234
53	1047	1158	1398	1371	1179	1203	1198	820	746	801	1046	997	975	1047	1146	1057	1047
54	879	948	1148	1141	984	998	972	671	624	653	859	819	800	848	920	854	879
55	738	788	954	942	812	817	808	561	514	542	721	685	662	701	756	697	738
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57	530	563	678	676	582	601	587	417	385	419	540	528	508	524	548	517	530
58	470	504	595	598	525	539	533	385	349	389	490	484	479	480	493	463	470
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60	409	433	481	493	456	450	437	328	298	332	419	428	423	421	427	403	409
61	387	404	444	454	426	415	412	309	258	304	402	401	402	399	400	384	387

62	367	381	416	424	402	392	387	282	230	279	374	379	384	374	379	361	367
63	340	360	394	398	386	365	361	254	195	249	355	357	366	352	365	342	340
64	322	338	369	373	369	342	340	225	167	229	330	337	352	331	344	324	322
65	308	312	349	351	348	325	319	196	138	202	315	318	335	318	322	306	308
66	291	296	336	334	329	303	295	169	116	181	296	303	320	299	308	287	291
67	275	281	316	312	316	291	276	151	99	151	275	289	303	284	295	270	275
68	260	261	303	296	302	271	251	128	89	134	258	279	287	271	283	252	260
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71	225	217	247	256	264	232	169	101	71	101	164	230	246	227	229	209	225
72	206	210	230	239	246	213	142	92	71	95	145	215	237	215	211	199	206
73	197	191	213	224	231	198	128	89	68	85	124	198	220	202	197	183	197
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77	134	143	158	172	163	146	80	60	48	66	78	145	156	155	143	134	134
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179	40	46	48	45	35	32	42	43	41	47	50	50	38	44	45	40	40
180	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43

BUG

Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	4376.3	27.0	27.0
FM (30-60)	3495.5	21.6	21.6
FH (60-80)	258.1	1.6	1.6
FVH (80-90)	32.2	0.2	0.2
BL (0-30)	4340.6	26.8	26.8
BM (30-60)	3308.8	20.4	20.4
BH (60-80)	198.8	1.2	1.2
BVH (80-90)	19.4	0.1	0.1
UL (90-100)	28.3	0.2	0.2
UH (100-180)	136.5	0.8	0.8
Total	16194.5	99.9	100.0
BUG Rating	**B4-U3-G1**		

2.2 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction BL-QP-033)

Test date	2020-05-13	Test Ambient:	25.2 º C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	BLT-RWP01B-120WF1CYT1SA2-BRA50		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC200501 1E-F2	120.0	60	0.9975	119.58	0.999	4.05
	277.0	60	0.4405	116.88	0.958	11.52
				DLC Pass Criteria	>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method:

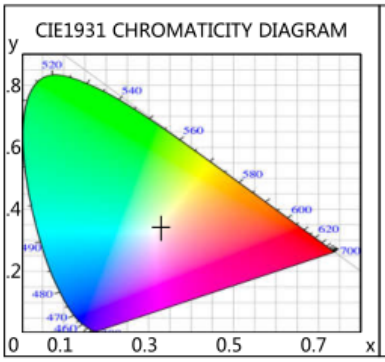
Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
CCT (K)	5749
Duv	0.00026
Chromaticity (x, y)	x=0.3270 y=0.3368
Chromaticity (u', v')	u(u')=0.2048 v'=0.4745
Color Rendering Index (CRI)	73
R9	-26
Rf	73
Rg	95
Rcs,h1(%)	-18

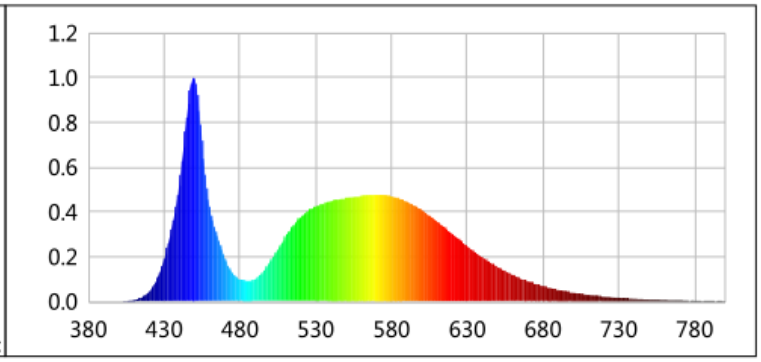
Special Color Rendering Indices			
R1	72	R9	-26
R2	77	R10	45
R3	80	R11	72
R4	75	R12	43
R5	73	R13	72
R6	69	R14	89
R7	81	R15	67
R8	60	--	--

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)	16859.6	16618.1	10000-30000(-10%)
Luminous Efficacy (lm/W)	140.99	142.18	Premium: >= 120(-3%)
Most worst Luminous/Highest Watts	138.97		

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	0.2018	525	0.4058	218.8348	670	0.0915	49.3394
385	0.0004	0.1989	530	0.4255	229.4391	675	0.0788	42.4891
390	0.0004	0.2109	535	0.4390	236.7331	680	0.0696	37.5313
395	0.0009	0.4652	540	0.4494	242.3303	685	0.0600	32.3622
400	0.0008	0.4333	545	0.4547	245.2075	690	0.0520	28.0454
405	0.0024	1.2952	550	0.4624	249.3532	695	0.0453	24.4060
410	0.0066	3.5593	555	0.4673	251.9754	700	0.0390	21.0330
415	0.0181	9.7704	560	0.4718	254.3935	705	0.0344	18.5622
420	0.0435	23.4779	565	0.4759	256.6073	710	0.0291	15.6980
425	0.0947	51.0520	570	0.4771	257.2527	715	0.0251	13.5394
430	0.1885	101.6686	575	0.4759	256.6313	720	0.0220	11.8442
435	0.3274	176.5468	580	0.4704	253.6644	725	0.0188	10.1244
440	0.5221	281.5158	585	0.4599	247.9814	730	0.0164	8.8651
445	0.8290	446.9877	590	0.4469	240.9569	735	0.0138	7.4168
450	1.0000	539.2203	595	0.4305	232.1264	740	0.0119	6.4284
455	0.7175	386.8723	600	0.4095	220.7945	745	0.0110	5.9226
460	0.4231	228.1684	605	0.3839	207.0178	750	0.0090	4.8310
465	0.2974	160.3561	610	0.3584	193.2509	755	0.0081	4.3435
470	0.1958	105.5919	615	0.3308	178.3480	760	0.0070	3.7477
475	0.1278	68.9032	620	0.3031	163.4471	765	0.0065	3.4942
480	0.1004	54.1596	625	0.2753	148.4689	770	0.0053	2.8806
485	0.0927	49.9745	630	0.2465	132.9423	775	0.0044	2.3669
490	0.1005	54.1863	635	0.2215	119.4138	780	0.0033	1.7840
495	0.1305	70.3831	640	0.1977	106.6021	785	0.0023	1.2543
500	0.1775	95.7118	645	0.1751	94.4042	790	0.0026	1.4234
505	0.2317	124.9176	650	0.1546	83.3380	795	0.0031	1.6734
510	0.2890	155.8180	655	0.1361	73.3835	800	0.0030	1.6305
515	0.3382	182.3470	660	0.1194	64.3632			
520	0.3766	203.0717	665	0.1049	56.5904			

TM30

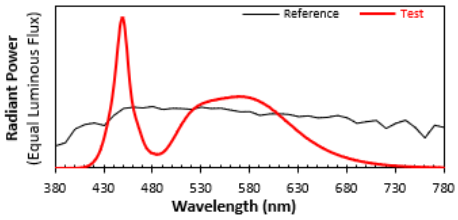
ANSI/IES TM-30-18 Color Rendition Report

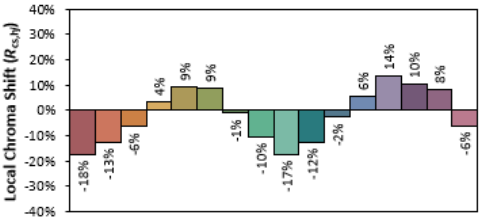
Source: SAW7C22B-NZ

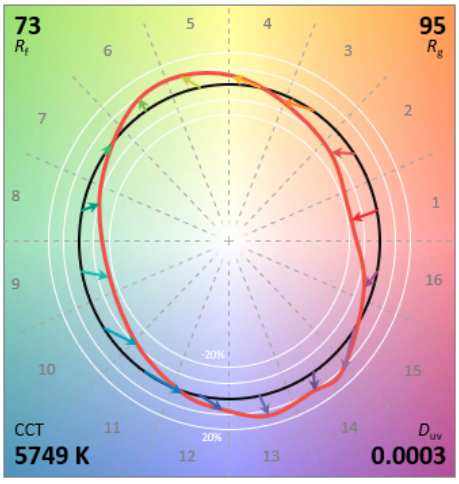
Manufacturer: Beyond LED Technology

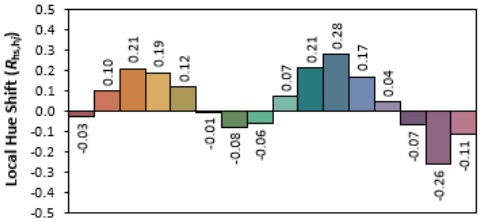
Date: 2020/5/13

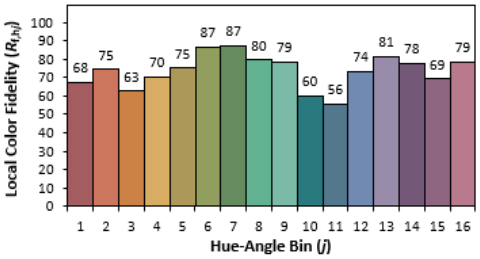
Model: BLT-RWP01B-120WF1CYT1SA2-BRA50

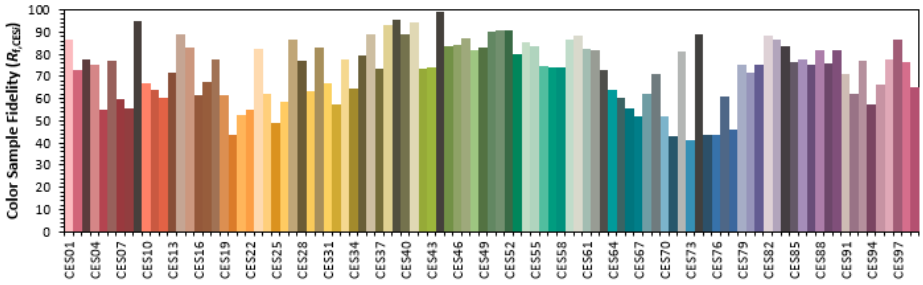












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3270
y	0.3368
u'	0.2048
v'	0.4745

CIE 13.3-1995 (CRI)

R_a	73
R_9	-26

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 (4500K, 5000K):

Model Number	Luminous Flux (lm)	Power (W)	Efficacy (lm/W)
BLT-RWP01B-120WF1CYT1SA2-BRA50	16194.4	117.51	137.81
BLT-RWP01B-120WF1CYT1SA2-BRA51	16360.7	118.55	138.01
BLT-RWP01B-120WF1CYT1SA2-BRA52	16527.0	118.55	139.42
BLT-RWP01B-120WF1CYT1SA2-BRA53	16859.6	119.58	140.99

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

16360.7 = (16859.6 -16194.4) / 4 + 16194.4

16527.0 = (16859.6 -16194.4) / 4 + 16360.7

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

118.55 = (119.58 + 117.51) / 2

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

138.01 = 16360.7 / 118.55

139.42 = 16527.0 / 118.55

3. Test Equipment

Equipment Name	Model No.	Serial No.	Next Calibration Date
Goniophotometeric System	GPM-3000	DYHXF120001	2021-01-13
AC Power Source	CHP-500C	N/A	2021-01-12
Total Luminous Flux Standard Lamp	24V/150W	DYJYR040040	2021-01-20
Digital Power Meter	WT500	DYDWQ200006	2021-01-12
Integral Sphere (2M)	2M	DYJCE120067	2021-01-13
Digital Power Meter	WT500	DYDWQ200006	2021-01-12
Optical Color and Electrical Measurement System	CMS-3000S	DYJCE120067	2021-01-13
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 ********