Certificate#4810.01

Report No.:
BLC2102003E-A-CP

LM-79-08 Test Report

For

RAB LIGHTING INC.

(Brand Name: RAB LIGHTING)

170 Ludlow Ave. Northvale, NJ, 07647

Outdoor Full-Cutoff Wall-Mounted Area Luminaires

Model name(s): SLIM17FA15ADJ
Remark: N/A

Representative (Tested) Model:
SLIM17FA15ADJ(Tested at 0% CCT Setting)
SLIM17FA15ADJ(Tested at 50% CCT Setting)
SLIM17FA15ADJ(Tested at 100% CCT Setting)

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

Test & Report By:

Sophie Yang

Engineer: Sophie Yang

Review By:

Jason Luo

Manager: Jason Luo

Date: 2021-08-29

This is multiple listing report, the original report No. is BLC2102003E-A

1.1 Product Information:

Organization Name	RAB LIGHTING INC.	
Brand Name	RAB LIGHTING	
Model Number	SLIM17FA15ADJ	
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	120-277 VAC, 50/60 Hz	
Nominal Power	15W	
Rated Initial Lamp Lumen	--	
Declared CCT	3000K,4000K,5000K(Color tunable)	
LED Manufacturer	Bridgelux Inc.	
LED Model	BXEM-30C-12H-6C	
Sample Number	BLC2102003E-A1	
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	2021-02-01
Date of Test	2021-02-02
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 25 ºC ±1 ºC. 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 ºC ±1 ºC. 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.

Certificate#4810.01

2.1 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction BL-QP-033)

Test date	2021-02-02	Test Ambient:	25.2 ℃
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	SLIM17FA15ADJ(Tested at 0% CCT Setting)		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC2102003E-A1	120.0	60	0.119	14.20	0.994	6.23
	277.0	60	0.056	14.24	0.924	12.76
				DLC Pass Criteria	>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method:

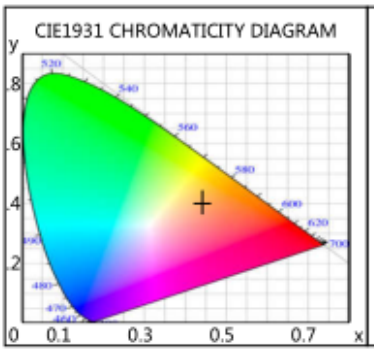
Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
CCT (K)	2931
Duv	-0.0012
Chromaticity (x, y)	x=0.4402 y=0.4022
Chromaticity (u', v')	u(u')=0.2535 v'=0.5211
Color Rendering Index (CRI)	74
R9	-26
Rf	76
Rg	96
Rcs,h1(%)	-15

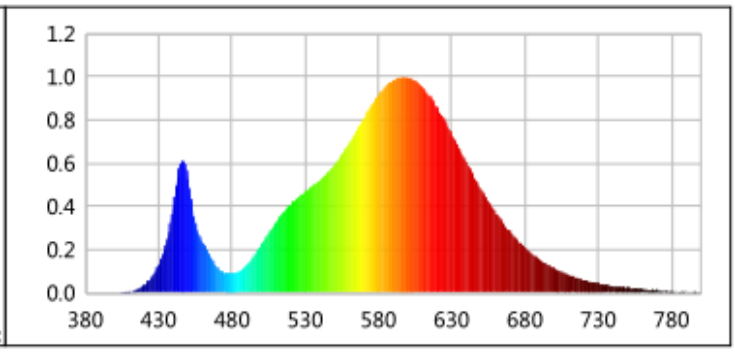
Special Color Rendering Indices			
R1	70	R9	-26
R2	83	R10	63
R3	95	R11	68
R4	71	R12	56
R5	70	R13	73
R6	78	R14	97
R7	77	R15	63
R8	45	--	--
--	--	--	--
--	--	--	--
--	--	--	--

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)	1761.4	1727.5	250-5000(-10%)
Luminous Efficacy (lm/W)	124.04	121.31	Premium: >= 120(-3%)
Most worst Luminous/Highest	121.31		
Zonal lumens in the 0-90º (%)	99.6	--	>=100(-3)
Zonal lumens in the 80-90º(%)	0.5		<=10(+3)
Beam Angle (º)	108.5	--	--
Center Beam Candle Power (cd)	775	--	--

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	0.0145	525	0.4406	16.2493	670	0.2807	10.3524
385	0.0004	0.0162	530	0.4676	17.2452	675	0.2430	8.9624
390	0.0011	0.0397	535	0.4950	18.2562	680	0.2096	7.7299
395	0.0008	0.0283	540	0.5208	19.2075	685	0.1781	6.5680
400	0.0012	0.0432	545	0.5543	20.4440	690	0.1542	5.6888
405	0.0030	0.1104	550	0.5935	21.8882	695	0.1317	4.8573
410	0.0057	0.2108	555	0.6397	23.5937	700	0.1114	4.1087
415	0.0153	0.5654	560	0.6919	25.5207	705	0.0967	3.5667
420	0.0359	1.3224	565	0.7490	27.6263	710	0.0817	3.0134
425	0.0718	2.6493	570	0.8074	29.7787	715	0.0695	2.5617
430	0.1299	4.7917	575	0.8651	31.9068	720	0.0594	2.1919
435	0.2252	8.3073	580	0.9147	33.7352	725	0.0520	1.9175
440	0.4031	14.8687	585	0.9554	35.2383	730	0.0446	1.6441
445	0.6038	22.2713	590	0.9848	36.3234	735	0.0347	1.2794
450	0.5289	19.5063	595	0.9954	36.7131	740	0.0331	1.2205
455	0.3220	11.8770	600	0.9969	36.7689	745	0.0291	1.0722
460	0.2346	8.6513	605	0.9833	36.2669	750	0.0234	0.8645
465	0.1731	6.3833	610	0.9517	35.1020	755	0.0215	0.7932
470	0.1176	4.3388	615	0.9119	33.6322	760	0.0187	0.6901
475	0.0945	3.4854	620	0.8609	31.7513	765	0.0134	0.4950
480	0.0910	3.3570	625	0.8001	29.5106	770	0.0143	0.5287
485	0.0987	3.6394	630	0.7353	27.1184	775	0.0126	0.4643
490	0.1262	4.6550	635	0.6683	24.6502	780	0.0069	0.2562
495	0.1681	6.2003	640	0.6050	22.3143	785	0.0046	0.1684
500	0.2206	8.1370	645	0.5399	19.9127	790	0.0106	0.3923
505	0.2753	10.1554	650	0.4808	17.7347	795	0.0059	0.2167
510	0.3252	11.9944	655	0.4217	15.5546	800	0.0036	0.1317
515	0.3709	13.6780	660	0.3704	13.6630			
520	0.4078	15.0402	665	0.3218	11.8675			

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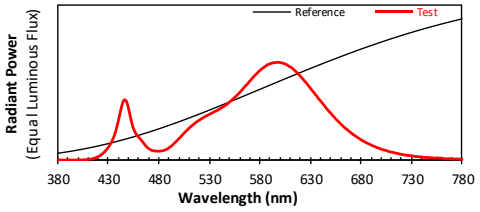
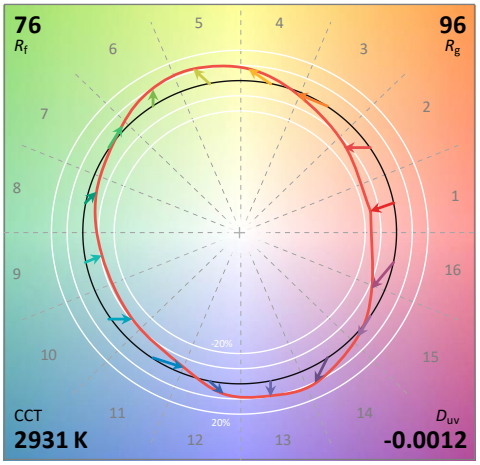
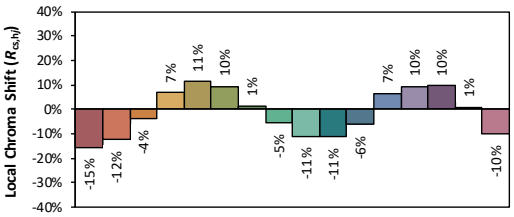
TM30

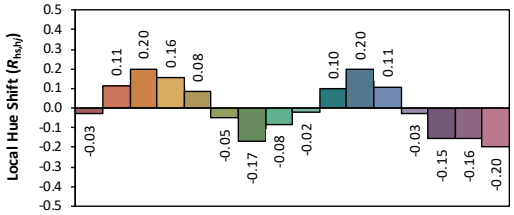
ANSI/IES TM-30-18 Color Rendition Report

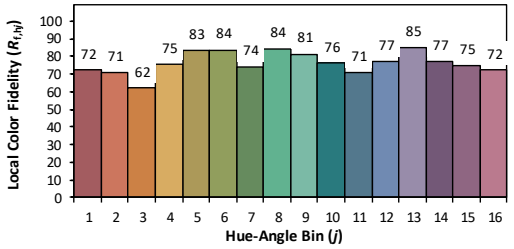
Source:	BXEM-30C-12H-6C	**Manufacturer:**	RAB LIGHTING INC.
Date:	2021/2/2	**Model:**	SLIM17FA15ADJ(Tested at 0% CCT Setting)

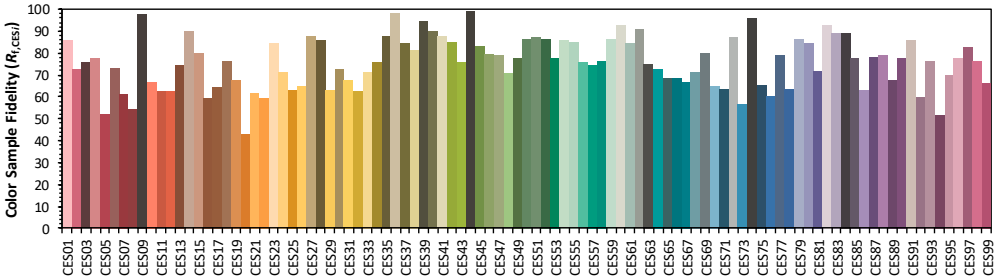












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.4402
y	0.4022
u'	0.2535
v'	0.5211

CIE 13.3-1995 (CRI)

R_a	74
R_9	-26

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

Zonal Lumen Tabulation

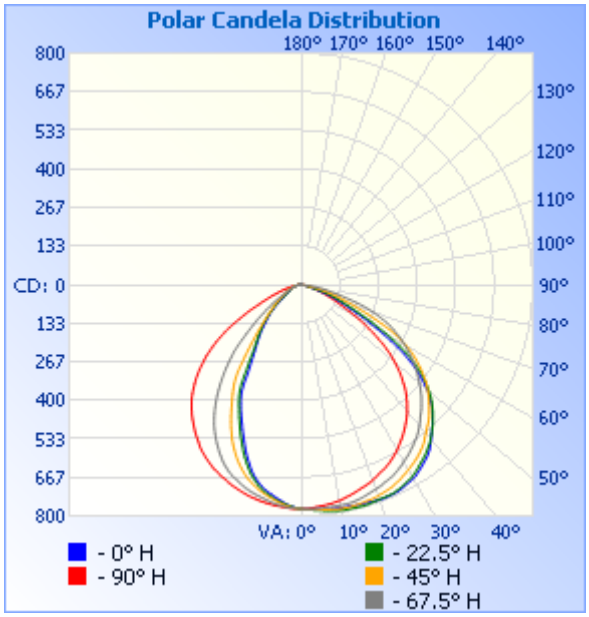
Zonal Lumen Summary

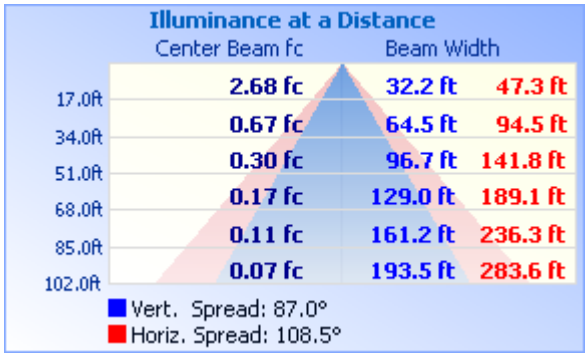
Zone	Lumens	% Lamp	% Luminaire
0-30	588.1	33.4%	33.4%
0-40	935.6	53.1%	53.1%
0-60	1,532.7	87%	87%
60-90	221.1	12.6%	12.6%
70-100	67.9	3.9%	3.9%
90-120	2.5	0.1%	0.1%
0-90	1,753.8	99.6%	99.6%
90-180	7.4	0.4%	0.4%
0-180	1,761.2	100%	100%

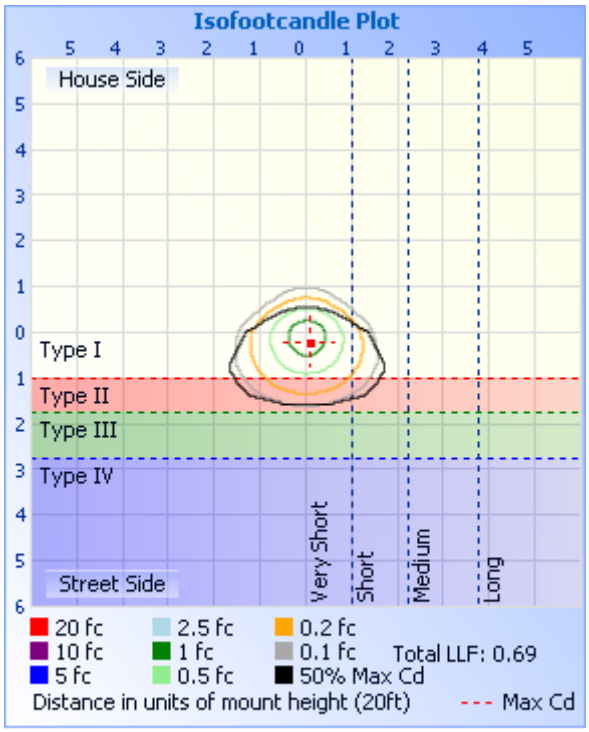
Lumens Per Zone

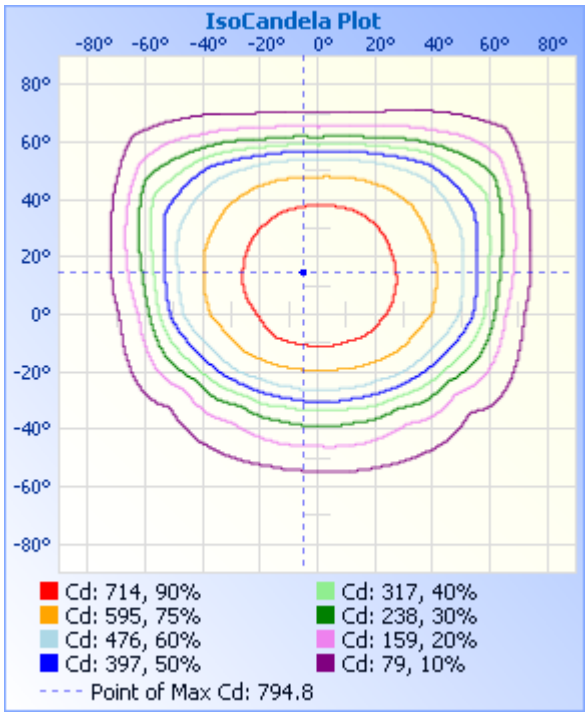
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	73.1	4.2%	90-100	1.0	0.1%
10-20	208.1	11.8%	100-110	0.7	0%
20-30	306.9	17.4%	110-120	0.8	0%
30-40	347.5	19.7%	120-130	1.0	0.1%
40-50	331.8	18.8%	130-140	1.1	0.1%
50-60	265.2	15.1%	140-150	1.1	0.1%
60-70	154.2	8.8%	150-160	1.0	0.1%
70-80	58.0	3.3%	160-170	0.6	0%
80-90	8.9	0.5%	170-180	0.2	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	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775
1	776	778	777	777	776	775	773	773	773	773	775	774	775	776	776	778	776
2	777	778	778	777	774	773	770	769	769	770	772	773	775	776	777	778	777
3	778	780	778	777	773	772	767	765	765	766	769	772	774	775	777	779	778
4	779	782	779	777	770	769	763	760	760	762	765	770	772	775	777	780	779
5	780	783	781	777	769	768	758	754	752	757	760	767	771	775	778	782	780
6	782	785	782	776	767	766	754	748	746	752	756	765	769	775	778	783	782
7	782	787	784	775	765	763	750	743	739	747	750	762	768	776	778	784	782
8	783	789	784	775	763	760	745	736	732	740	745	759	766	776	779	784	783
9	783	791	786	774	761	757	740	730	726	734	740	754	764	776	780	785	783
10	784	792	786	775	758	754	735	722	719	727	734	750	763	776	781	786	784
11	784	794	786	774	755	750	729	715	711	719	728	746	760	776	780	787	784
12	784	793	787	774	751	745	723	706	701	710	721	743	757	774	781	788	784
13	785	793	786	773	748	741	715	697	690	699	713	739	755	772	781	789	785
14	786	794	785	771	744	737	707	686	678	687	706	734	752	770	780	789	786
15	786	794	784	769	740	731	698	673	663	674	698	730	748	768	779	789	786
16	787	**795**	783	766	735	724	689	658	646	660	689	725	745	766	777	789	787
17	788	794	781	762	732	718	678	641	629	644	679	718	741	763	776	789	788
18	789	792	781	759	728	711	665	625	612	629	668	712	737	761	774	789	789
19	790	791	779	755	725	703	652	609	594	613	656	707	733	758	772	789	790
20	791	790	777	752	720	695	639	590	575	593	643	700	729	755	771	790	791
21	792	790	774	749	715	687	625	573	558	576	630	693	723	753	769	789	792
22	791	789	772	746	708	678	610	554	540	559	616	685	720	750	767	788	791
23	791	789	769	741	704	668	594	536	523	541	601	676	715	747	764	786	791
24	790	788	767	738	699	659	575	519	507	524	586	666	710	743	762	786	790
25	789	785	763	735	694	647	558	502	491	507	568	655	706	738	760	784	789
26	786	782	758	730	689	635	540	486	475	489	551	644	700	733	757	781	786
27	783	778	754	725	683	622	522	468	460	474	534	631	693	727	754	778	783
28	780	774	749	720	676	609	504	453	443	458	516	620	688	722	748	775	780
29	777	770	744	714	669	595	484	437	422	442	497	608	681	718	744	771	777

30	773	766	739	707	661	580	467	418	394	425	479	595	674	712	739	765	773
31	770	760	734	701	653	566	450	392	359	401	463	581	668	706	736	761	770
32	763	754	729	696	644	550	434	357	335	371	446	567	660	700	729	757	763
33	757	747	723	689	636	534	417	332	313	342	430	551	650	693	724	752	757
34	751	740	718	682	627	517	399	310	295	319	414	535	642	687	719	746	751
35	744	735	712	675	618	499	373	290	279	298	394	518	633	680	713	739	744
36	737	728	705	668	609	478	343	274	265	279	372	501	624	673	707	733	737
37	730	720	697	661	599	459	317	258	253	264	343	483	614	665	701	725	730
38	720	712	690	653	591	440	293	246	242	250	315	463	605	657	694	717	720
39	709	705	679	644	580	420	270	234	230	239	290	445	596	649	687	708	709
40	698	695	670	635	570	401	249	223	219	228	268	426	586	640	679	699	698
41	686	686	661	625	558	379	232	212	208	217	248	406	576	631	671	690	686
42	675	675	653	614	546	361	215	203	196	206	230	387	565	621	662	681	675
43	664	666	644	606	533	342	201	193	184	198	213	366	555	613	653	671	664
44	653	655	636	597	521	319	186	182	174	188	197	348	543	603	644	660	653
45	641	643	625	587	507	288	174	170	164	175	184	329	530	592	632	649	641
46	629	632	615	577	491	265	163	159	155	164	172	305	517	582	621	638	629
47	616	620	604	567	476	244	153	148	148	154	160	278	503	572	612	625	616
48	601	607	593	556	460	225	145	137	138	144	150	255	490	562	602	613	601
49	586	594	582	545	444	207	135	127	126	134	140	235	474	551	591	599	586
50	571	578	571	533	426	188	127	118	114	125	132	217	459	540	580	585	571
51	550	560	559	522	408	171	119	111	103	117	123	198	443	527	569	569	550
52	528	544	546	510	390	156	111	101	93	109	116	180	425	517	557	552	528
53	507	526	533	500	369	141	103	91	84	99	109	163	410	506	544	534	507
54	483	505	517	488	348	128	96	82	79	90	101	148	391	495	532	514	483
55	457	481	503	475	324	115	89	75	74	81	94	134	373	483	517	493	457
56	428	457	487	462	301	103	83	69	69	74	88	120	354	470	504	470	428
57	397	430	471	450	279	92	75	64	66	68	83	109	333	458	488	441	397
58	365	401	454	437	256	82	70	61	60	64	76	98	311	446	472	414	365
59	332	369	436	424	236	73	65	58	55	61	71	88	290	433	453	385	332
60	302	338	416	410	215	66	61	56	52	57	66	78	266	421	435	354	302
61	272	305	393	398	190	60	58	54	49	56	62	70	244	407	415	321	272

62	242	276	370	384	171	55	54	50	47	52	57	63	222	394	391	289	242
63	214	245	342	369	155	50	51	47	45	49	54	57	202	380	366	261	214
64	190	216	310	354	140	46	48	44	43	46	51	52	181	366	337	230	190
65	171	196	281	339	125	42	46	41	41	43	49	48	160	353	307	207	171
66	154	174	253	324	113	39	44	39	39	40	46	44	145	339	276	187	154
67	139	157	224	305	102	36	41	37	37	38	43	41	131	323	248	166	139
68	124	140	201	287	92	34	38	35	35	36	41	37	119	306	221	150	124
69	109	125	180	268	82	31	36	34	34	34	38	35	106	289	199	134	109
70	95	111	160	248	73	29	34	32	32	33	36	32	95	270	178	119	95
71	69	97	143	225	66	28	32	30	31	30	34	30	85	249	160	106	69
72	56	78	127	201	58	26	30	29	29	29	32	28	76	228	143	93	56
73	45	58	112	175	51	24	28	27	28	28	30	27	68	202	128	67	45
74	34	45	98	154	45	22	26	25	26	26	28	24	59	178	113	54	34
75	30	34	84	135	39	20	24	24	24	25	26	23	52	157	100	40	30
76	25	30	66	117	34	18	22	22	23	23	24	21	46	138	86	33	25
77	22	25	45	102	29	16	20	20	22	21	22	19	40	120	68	28	22
78	12	20	33	87	24	15	19	19	19	20	21	18	34	105	48	24	12
79	5	9	26	75	20	13	17	16	18	18	19	16	30	91	34	19	5
80	2	3	21	61	17	12	15	15	16	17	17	14	24	78	27	6	2
81	1	2	14	49	13	10	14	13	15	14	15	13	20	64	22	3	1
82	2	2	5	38	10	8	12	11	13	13	14	11	17	53	17	2	2
83	1	1	3	22	7	8	10	10	12	11	12	10	14	42	7	1	1
84	2	1	3	15	5	5	9	9	10	10	11	8	11	29	4	1	2
85	2	2	2	10	4	5	7	8	8	9	9	7	8	17	3	1	2
86	2	1	1	5	2	4	6	7	7	7	8	6	6	12	3	2	2
87	1	1	2	2	1	3	4	5	6	6	7	4	4	7	2	2	1
88	1	1	2	2	0	2	3	3	5	5	5	4	2	4	2	1	1
89	1	1	1	2	0	1	2	3	4	4	4	3	2	2	1	1	1
90	1	1	2	2	0	1	2	3	3	3	3	2	0	1	2	1	1
91	1	1	1	2	0	0	2	2	2	2	2	2	0	1	1	1	1
92	1	1	1	2	0	0	1	2	2	2	2	1	0	1	1	1	1
93	1	1	2	1	0	0	1	1	2	2	1	1	0	0	1	1	1

94	1	2	1	1	0	0	0	1	1	2	1	1	0	0	1	1	1
95	1	1	1	1	0	0	1	1	2	2	1	1	0	0	1	1	1
96	1	1	1	1	0	0	1	0	1	1	1	1	0	0	1	1	1
97	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	1
98	1	1	1	1	0	0	0	1	1	1	1	1	0	0	1	1	1
99	1	1	1	1	0	0	1	1	1	1	1	1	0	1	1	1	1
100	1	1	1	1	0	0	0	0	1	1	2	1	0	0	1	0	1
101	1	1	1	1	0	0	0	1	1	1	1	1	0	0	1	1	1
102	1	1	1	1	0	0	0	0	0	1	1	1	0	0	0	1	1
103	1	1	1	1	0	0	1	1	0	1	1	1	0	0	1	0	1
104	1	1	1	1	0	0	0	0	0	1	1	1	0	0	0	0	1
105	0	0	1	1	0	0	1	1	1	2	1	2	0	0	0	0	0
106	1	0	1	1	0	0	1	0	1	1	1	1	0	0	1	1	1
107	1	1	1	1	0	0	1	1	1	0	1	1	0	0	0	0	1
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109	0	1	1	1	0	0	1	1	1	1	1	1	0	0	0	0	0
110	1	0	1	1	0	0	1	1	1	1	1	2	0	0	0	0	1
111	0	1	1	1	0	0	1	1	1	1	1	2	0	0	0	1	0
112	1	1	1	1	0	0	1	1	1	1	1	1	0	0	1	1	1
113	1	1	1	1	0	0	1	1	1	1	1	2	0	0	1	0	1
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116	1	1	1	1	0	1	2	1	1	1	1	1	0	0	1	1	1
117	1	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	1
118	1	1	1	1	0	1	1	2	1	1	2	2	0	0	1	1	1
119	1	1	1	1	0	1	1	2	1	1	1	2	0	0	0	0	1
120	1	1	1	2	0	0	1	1	1	2	2	2	0	0	0	1	1
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122	1	1	1	1	0	1	1	2	2	2	1	2	0	0	1	1	1
123	1	1	1	1	0	0	2	2	2	1	2	2	0	0	1	1	1
124	1	1	1	1	0	1	2	2	2	2	2	2	0	0	1	1	1
125	1	1	1	2	0	0	2	1	2	2	2	2	0	0	0	1	1

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130	1	1	1	2	0	1	2	2	2	2	2	2	0	0	1	1	1
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133	1	1	1	2	0	1	2	2	2	1	2	2	0	1	1	1	1
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135	1	1	2	2	0	1	2	2	2	2	2	2	0	1	1	1	1
136	1	2	1	2	0	1	2	2	2	2	2	2	1	1	1	0	1
137	1	2	2	2	0	1	2	2	2	2	2	2	0	1	1	1	1
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140	2	2	2	2	0	1	2	2	2	2	2	3	0	1	1	1	2
141	2	1	2	2	0	1	2	2	2	2	2	2	0	1	1	1	2
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157	2	3	2	2	0	2	2	2	2	2	2	3	1	1	2	2	2

158	2	3	2	3	1	2	2	3	2	2	3	3	1	2	2	2	2
159	3	2	3	3	0	2	2	2	3	3	3	3	1	2	2	2	3
160	3	2	2	3	0	2	2	3	2	2	3	3	1	2	2	2	3
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166	3	2	3	3	1	1	2	3	2	3	3	3	1	2	3	2	3
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170	3	3	3	3	1	2	2	3	3	3	3	3	2	2	2	2	3
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175	3	2	3	3	1	2	3	3	3	3	3	3	2	2	2	2	3
176	3	3	3	3	1	2	2	3	3	2	3	3	2	2	2	3	3
177	3	3	3	3	1	2	2	3	3	3	3	3	2	2	3	3	3
178	3	2	3	2	1	2	3	3	2	3	3	3	2	2	2	2	3
179	3	3	3	3	1	2	2	2	2	3	3	3	2	2	2	3	3
180	2	2	3	3	1	2	2	2	3	2	2	3	2	2	2	3	2

BUG

Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	321.4	18.2	18.2
FM (30-60)	663.0	37.6	37.6
FH (60-80)	169.2	9.6	9.6
FVH (80-90)	4.6	0.3	0.3
BL (0-30)	266.7	15.1	15.1
BM (30-60)	281.7	16.0	16.0
BH (60-80)	42.9	2.4	2.4
BVH (80-90)	4.3	0.2	0.2
UL (90-100)	1.0	0.1	0.1
UH (100-180)	6.4	0.4	0.4
Total	1761.2	99.9	100.0
BUG Rating	**B1-U1-G0**		

Certificate#4810.01

2.2 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction BL-QP-033)

Test date	2021-02-02	Test Ambient:	25.2 ºC
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	SLIM17FA15ADJ(Tested at 50% CCT Setting)		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC2102003E-A1	120.0	60	0.117	13.98	0.994	6.42
	277.0	60	0.055	14.05	0.923	12.40
				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)	3951
Duv	0.0021
Chromaticity (x, y)	x=0.3842 y=0.3837
Chromaticity (u', v')	u(u')=0.2248 v'=0.5052
Color Rendering Index (CRI)	74
R9	-40
Rf	75
Rg	93
Rcs,h1(%)	-18

Special Color Rendering Indices			
R1	68	R9	-40
R2	80	R10	53
R3	90	R11	68
R4	71	R12	46
R5	69	R13	70
R6	72	R14	94
R7	80	R15	60
R8	48	--	--
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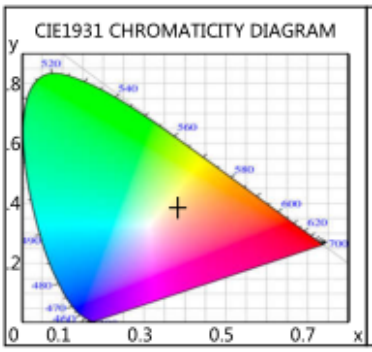
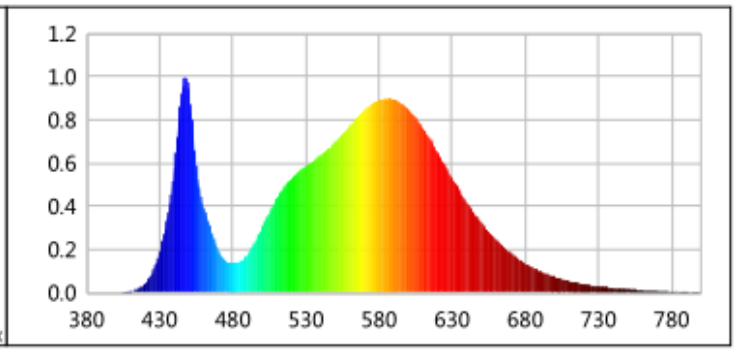
Photometric Measurement –Sphere-Spectroradiometer Method:

Parameter	Result		DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	1904.4	1888.2	250-5000(-10%)
Luminous Efficacy (lm/W)	136.22	134.39	Premium: >= 120(-3%)
Most worst Luminous/Highest	134.39		

Spectral Power Distribution & Chromaticity Diagram



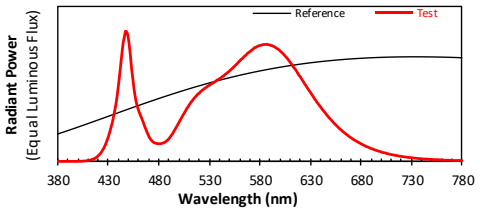


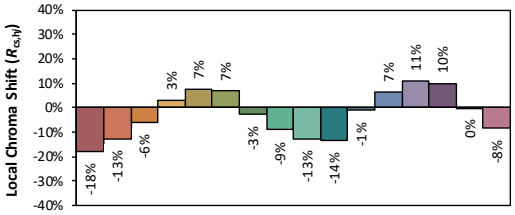
WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0001	0.0058	525	0.5593	22.0074	670	0.1828	7.1910
385	0.0004	0.0143	530	0.5851	23.0203	675	0.1582	6.2264
390	0.0008	0.0315	535	0.6101	24.0070	680	0.1356	5.3354
395	0.0007	0.0259	540	0.6362	25.0336	685	0.1158	4.5578
400	0.0008	0.0326	545	0.6647	26.1524	690	0.1000	3.9331
405	0.0026	0.1029	550	0.6965	27.4063	695	0.0855	3.3641
410	0.0066	0.2596	555	0.7327	28.8282	700	0.0731	2.8767
415	0.0179	0.7034	560	0.7727	30.4029	705	0.0627	2.4676
420	0.0425	1.6733	565	0.8105	31.8905	710	0.0524	2.0614
425	0.0942	3.7055	570	0.8433	33.1817	715	0.0453	1.7817
430	0.1882	7.4041	575	0.8765	34.4863	720	0.0389	1.5318
435	0.3369	13.2562	580	0.8922	35.1029	725	0.0333	1.3111
440	0.5807	22.8479	585	0.8994	35.3868	730	0.0288	1.1328
445	0.9238	36.3471	590	0.8961	35.2566	735	0.0240	0.9441
450	0.9408	37.0181	595	0.8788	34.5785	740	0.0211	0.8290
455	0.5892	23.1841	600	0.8504	33.4591	745	0.0192	0.7542
460	0.3924	15.4395	605	0.8111	31.9143	750	0.0161	0.6347
465	0.2923	11.5019	610	0.7628	30.0141	755	0.0135	0.5331
470	0.1952	7.6815	615	0.7089	27.8910	760	0.0120	0.4708
475	0.1459	5.7426	620	0.6508	25.6048	765	0.0088	0.3471
480	0.1364	5.3650	625	0.5894	23.1920	770	0.0087	0.3417
485	0.1441	5.6686	630	0.5321	20.9357	775	0.0072	0.2848
490	0.1748	6.8758	635	0.4727	18.5998	780	0.0050	0.1961
495	0.2324	9.1433	640	0.4195	16.5076	785	0.0033	0.1293
500	0.3006	11.8272	645	0.3699	14.5532	790	0.0043	0.1705
505	0.3691	14.5208	650	0.3237	12.7345	795	0.0035	0.1368
510	0.4346	17.0984	655	0.2816	11.0782	800	0.0031	0.1228
515	0.4861	19.1269	660	0.2449	9.6344			
520	0.5249	20.6546	665	0.2125	8.3601			

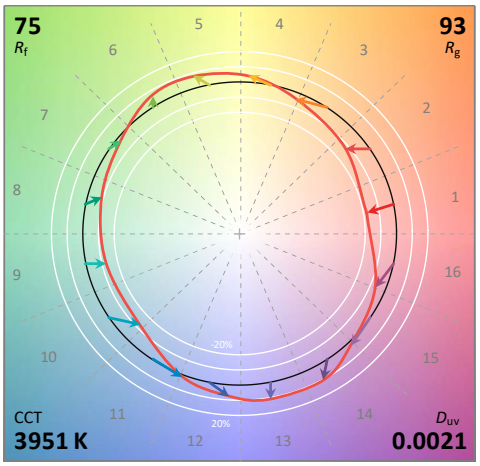
TM30

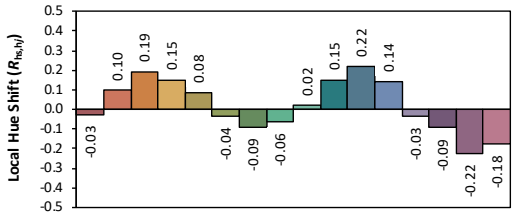
ANSI/IES TM-30-18 Color Rendition Report

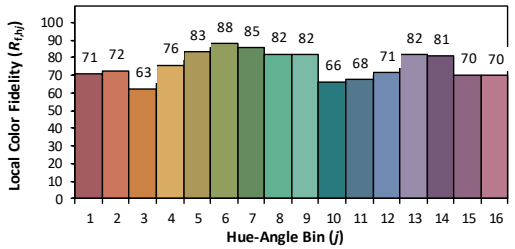
Source:	BXEM-30C-12H-6C	**Manufacturer:**	RAB LIGHTING INC.
Date:	2021/2/2	**Model:**	SLIM17FA15ADJ(Tested at 50% CCT Setting)

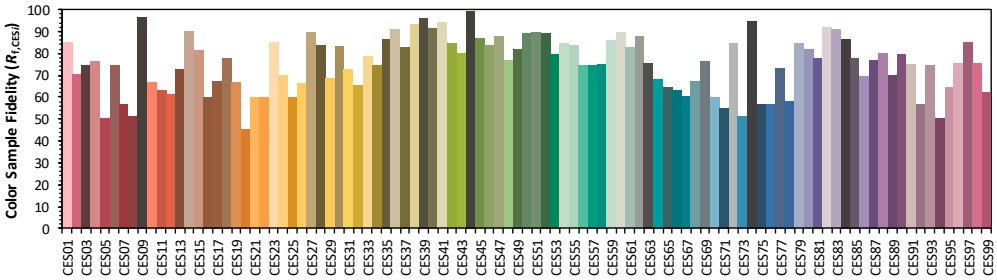












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3842
y	0.3837
u'	0.2248
v'	0.5052

CIE 13.3-1995 (CRI)

R_a	72
R_9	-40

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

Certificate#4810.01

2.3 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction BL-QP-033)

Test date	2021-02-02	Test Ambient:	25.2 ºC
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	SLIM17FA15ADJ(Tested at 100% CCT Setting)		

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
BLC2102003E-A1	120.0	60	0.119	14.21	0.995	6.56
	277.0	60	0.055	14.12	0.923	13.04
				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)	4940
Duv	-0.0002
Chromaticity (x, y)	x=0.3468 y=0.3525
Chromaticity (u', v')	u(u')=0.2122 v'=0.4853
Color Rendering Index (CRI)	74
R9	-27
Rf	74
Rg	96
Rcs,h1(%)	-17

Special Color Rendering Indices			
R1	71	R9	-27
R2	78	R10	49
R3	84	R11	72
R4	74	R12	45
R5	72	R13	72
R6	71	R14	91
R7	81	R15	65
R8	57	--	--
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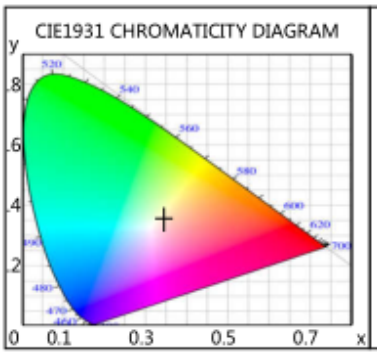
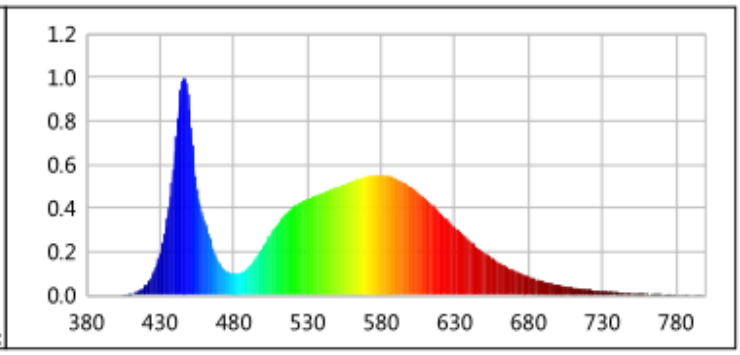
Photometric Measurement –Sphere-Spectroradiometer Method:

Parameter	Result		DLC V5.1 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	1852.1	1809.9	250-5000(-10%)
Luminous Efficacy (lm/W)	130.34	128.18	Premium: >= 120(-3%)
Most worst Luminous/Highest	127.37		

Spectral Power Distribution & Chromaticity Diagram



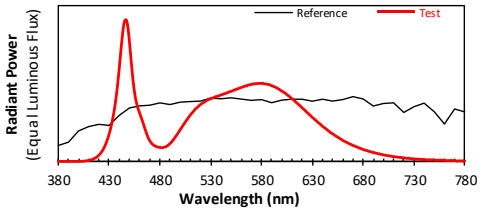


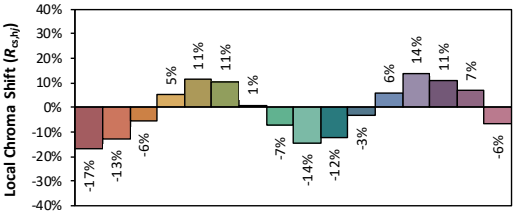
WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0001	0.0062	525	0.4258	24.3159	670	0.1136	6.4846
385	0.0004	0.0240	530	0.4438	25.3436	675	0.0988	5.6431
390	0.0003	0.0166	535	0.4584	26.1773	680	0.0848	4.8445
395	0.0007	0.0392	540	0.4698	26.8284	685	0.0729	4.1650
400	0.0010	0.0570	545	0.4820	27.5225	690	0.0633	3.6146
405	0.0023	0.1321	550	0.4953	28.2843	695	0.0544	3.1079
410	0.0069	0.3922	555	0.5097	29.1072	700	0.0466	2.6589
415	0.0192	1.0988	560	0.5222	29.8204	705	0.0400	2.2851
420	0.0453	2.5880	565	0.5328	30.4273	710	0.0338	1.9287
425	0.0963	5.5006	570	0.5434	31.0309	715	0.0290	1.6585
430	0.1924	10.9881	575	0.5495	31.3761	720	0.0255	1.4536
435	0.3578	20.4296	580	0.5513	31.4826	725	0.0224	1.2782
440	0.6562	37.4723	585	0.5465	31.2092	730	0.0187	1.0695
445	0.9837	56.1712	590	0.5358	30.5981	735	0.0147	0.8382
450	0.8499	48.5339	595	0.5195	29.6646	740	0.0139	0.7951
455	0.4923	28.1133	600	0.4975	28.4116	745	0.0129	0.7338
460	0.3430	19.5855	605	0.4721	26.9613	750	0.0114	0.6484
465	0.2380	13.5904	610	0.4428	25.2882	755	0.0094	0.5360
470	0.1476	8.4258	615	0.4122	23.5388	760	0.0078	0.4427
475	0.1103	6.2970	620	0.3796	21.6786	765	0.0068	0.3911
480	0.0994	5.6784	625	0.3454	19.7212	770	0.0078	0.4426
485	0.1019	5.8182	630	0.3115	17.7891	775	0.0043	0.2444
490	0.1270	7.2500	635	0.2809	16.0399	780	0.0037	0.2108
495	0.1713	9.7793	640	0.2487	14.2035	785	0.0015	0.0859
500	0.2248	12.8360	645	0.2212	12.6302	790	0.0043	0.2465
505	0.2788	15.9212	650	0.1955	11.1611	795	0.0024	0.1349
510	0.3286	18.7638	655	0.1717	9.8049	800	0.0015	0.0839
515	0.3711	21.1934	660	0.1484	8.4750			
520	0.4031	23.0165	665	0.1314	7.5048			

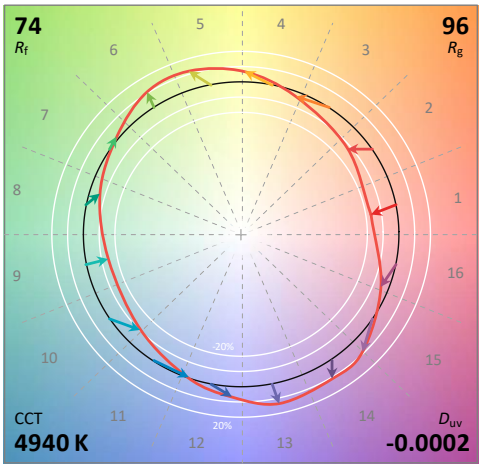
TM30

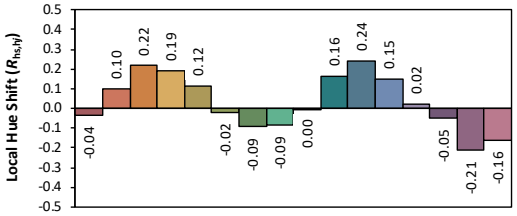
ANSI/IES TM-30-18 Color Rendition Report

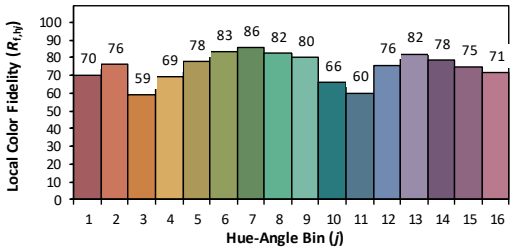
Source:	BXEM-30C-12H-6C	**Manufacturer:**	RAB LIGHTING INC.
Date:	2021/2/2	**Model:**	SLIM17FA15ADJ(Tested at 100% CCT Setting)

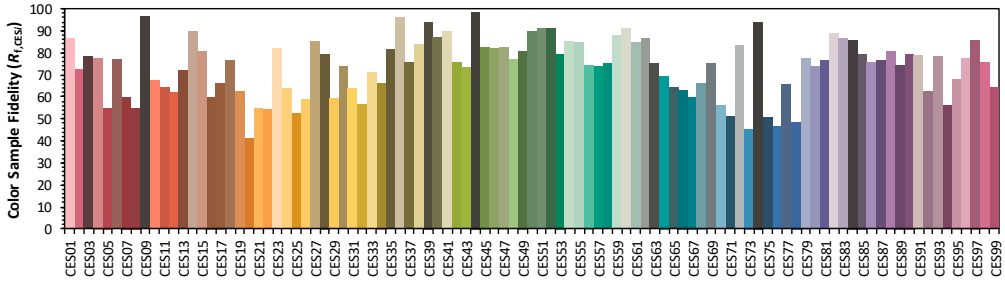












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.3468
y	0.3525
u'	0.2122
v'	0.4853

CIE 13.3-1995 (CRI)

R_a	74
R_9	-27

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

3. Test Equipment

Equipment Name	Model No.	Serial No.	Next Calibration Date
Goniophotometeric System	GPM-3000	DYHXF120001	2022-01-18
AC Power Source	CHP-500	DYBWD010159	2022-01-25
Total Luminous Flux Standard Lamp	24V/150W	DYJYR040040	2022-01-24
Digital Power Meter	WT500	DYDWQ20010	2022-01-25
Integral Sphere (2M)	2M	DYJCE120067	2022-01-18
Digital Power Meter	WT500	DYDWQ20006	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 ********