



Report No.: UTU2502037E-D-

LM-79-08 Test Report

For

RAB Lighting Inc.

(Brand Name:RAB Lighting)

408 W 14th St, New York, NY 10014 United States
Xiao Xiang,15921313292,Gary.Xiao@rablighting.com

Outdoor Full-Cutoff Wall-Mounted Area Luminaires

Model name(s): SLIM17FAFC120[blank,/PIR,/MVS,/LCB,/LCBS,
/LCBS/MVS]

Test & Report By:

Winnie Wu

Engineer: Winnie Wu

Date: 2024-02-12

Review By:

Jason Luo

Manager: Jason Luo

Laboratory: UTEST TECHNICAL LABORATORY CO.LTD A2LA Certificate# 4810.01
Unit 401, No. 309 Xinxin Seven Road, Zengcheng District,
Guangzhou, People' s Republic of China engineer@etk-utest.com

Report Format Number BL-FM-SA-012

1.1 Product Information:

Organization Name	RAB Lighting Inc.	
Brand Name	RAB Lighting	
Model Number	SLIM17FAFC120[blank,/PIR,/MVS,/LCB,/LCBS, /LCBS/MVS]	
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	
Rated Initial Lamp Lumen	--	
Declared CCT	3000K,4000K, 5000K (Color tunable)	
LED Manufacturer	Lumileds Holding B.V.	
LED Model	L128-3080RC35003Z1 L128-5080RC35003Z1	
Sample Number	UTU2502037E-D1	
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	2025-02-20
Date of Test	2025-02-22
Test item	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. IES LM-79-2019 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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, 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. 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 $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$. 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. Use 2m diameter integrated sphere (94-98% coating reflectance) and 4π geometry.

Self-absorption:

AST-FWP01C-120WBT3DA1-abce :1.025

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.

Laboratory: UTEST TECHNICAL LABORATORY CO.LTD A2LA Certificate# 4810.01

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Guangzhou, People's Republic of China engineer@etk-utest.com

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2.1 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction BL-QP-033)

Test date	2025-02-22	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	SLIM17FAFC60 at 3000K	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU250203	120.0	60	1.020	122.19	0.998	5.66
7E-D1	277.0	60	0.465	118.31	0.919	8.01
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

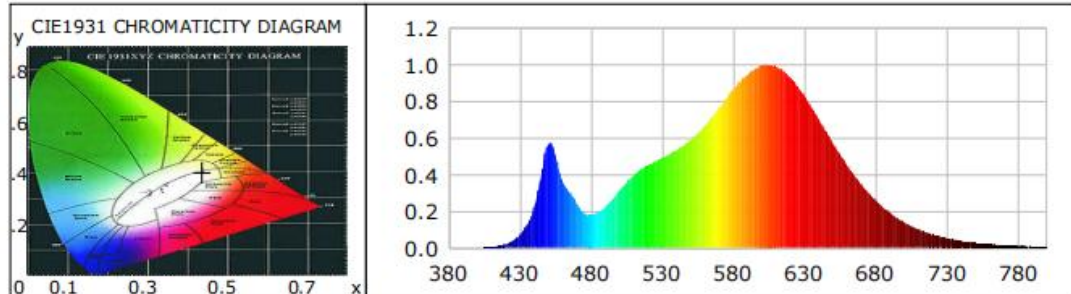
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	6
Frequency (Hz)	60	R2	91	R10	81
CCT (K)	2984	R3	96	R11	80
Duv	-0.0015	R4	80	R12	72
Chromaticity (x, y)	x=0.4359 y=0.4001	R5	82	R13	84
Chromaticity (u', v')	u'=0.2516 v'=0.5196	R6	90	R14	98
Color Rendering Index (CRI)	82	R7	82	R15	75
R9	6	R8	58	--	--
Rf	84	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-12				

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)	17823.0	17430.2	>=300(-10%)
Luminous Efficacy (lm/W)	145.86	147.33	Premium: >= 120(-3%)
Most worst Luminous/Highest	142.65		
Zonal lumens in the 0-90° zone (%)	100	--	>=100(-3%)
Zonal lumens in the 80-90°zone (%)	0.8	--	<=10(+3%)
Beam Angle (°)	109.2	--	--
Center Beam Candle Power (cd)	6228	--	--

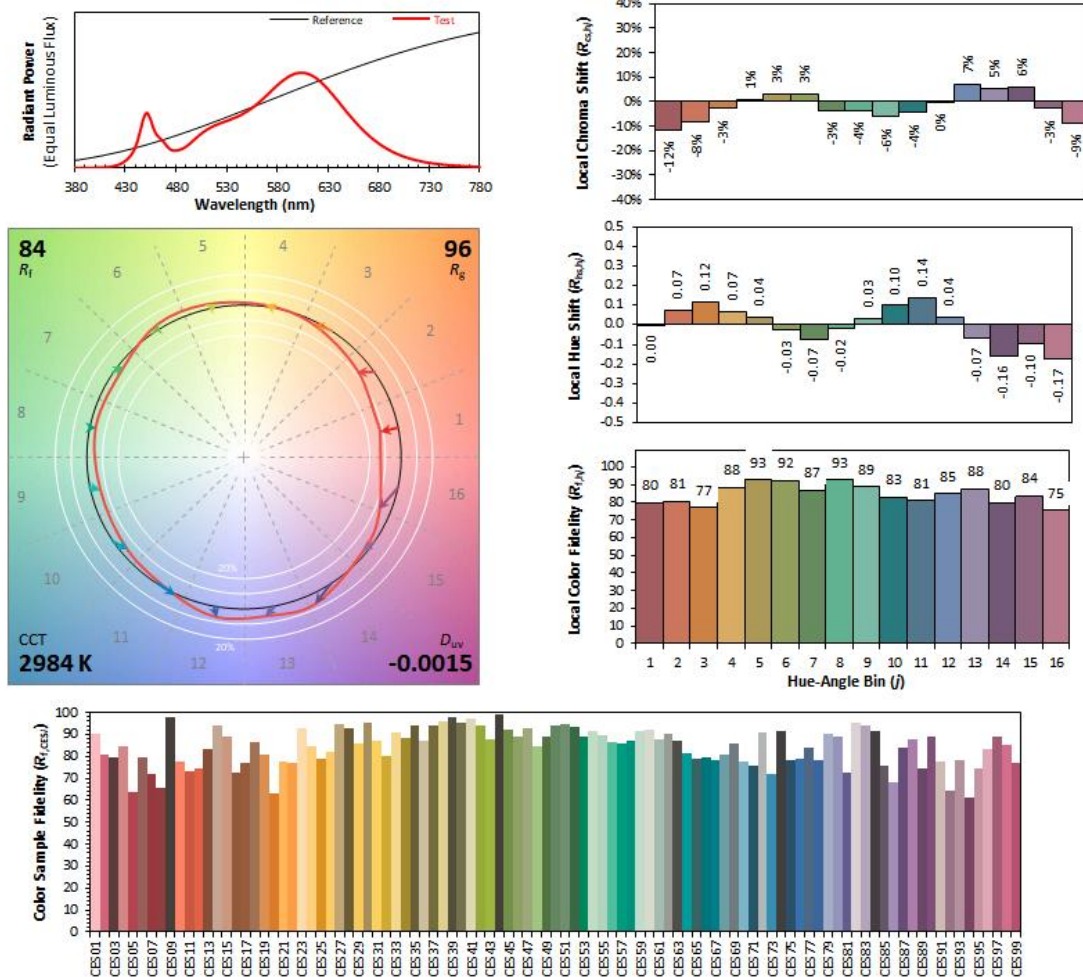
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0007	0.2712	535	0.4736	181.9992	690	0.3440	132.2053
385	0.0007	0.2518	540	0.4918	188.9848	695	0.2979	114.5006
390	0.0007	0.2672	545	0.5125	196.9641	700	0.2583	99.2552
395	0.0003	0.1122	550	0.5348	205.5334	705	0.2220	85.3078
400	0.0009	0.3522	555	0.5603	215.3118	710	0.1907	73.2801
405	0.0019	0.7299	560	0.5905	226.9160	715	0.1626	62.4953
410	0.0045	1.7130	565	0.6270	240.9690	720	0.1395	53.6115
415	0.0104	3.9883	570	0.6690	257.0987	725	0.1188	45.6577
420	0.0211	8.1183	575	0.7172	275.6308	730	0.1012	38.9022
425	0.0404	15.5106	580	0.7649	293.9318	735	0.0860	33.0575
430	0.0732	28.1339	585	0.8179	314.3216	740	0.0732	28.1421
435	0.1271	48.8632	590	0.8662	332.8729	745	0.0626	24.0526
440	0.2216	85.1686	595	0.9097	349.6094	750	0.0525	20.1572
445	0.4014	154.2654	600	0.9507	365.3681	755	0.0447	17.1621
450	0.5687	218.5505	605	0.9768	375.3788	760	0.0385	14.7922
455	0.5042	193.7675	610	0.9939	381.9505	765	0.0327	12.5821
460	0.3622	139.2013	615	0.9985	383.7367	770	0.0272	10.4498
465	0.3029	116.3981	620	0.9902	380.5412	775	0.0239	9.1685
470	0.2418	92.9206	625	0.9646	370.6789	780	0.0198	7.6174
475	0.1899	72.9626	630	0.9300	357.4050	785	0.0169	6.5081
480	0.1807	69.4560	635	0.8823	339.0752	790	0.0133	5.1152
485	0.1950	74.9481	640	0.8269	317.7828	795	0.0115	4.4085
490	0.2236	85.9299	645	0.7655	294.1633	800	0.0097	3.7109
495	0.2666	102.4402	650	0.7009	269.3657			
500	0.3148	120.9781	655	0.6347	243.9018			
505	0.3592	138.0573	660	0.5702	219.1189			
510	0.3977	152.8461	665	0.5080	195.2060			
515	0.4278	164.3957	670	0.4479	172.1374			
520	0.4522	173.7952	675	0.3943	151.5208			
525	0.4736	181.9992	680	0.3440	132.2053			
530	0.4918	188.9848	685	0.2979	114.5006			

TM30

ANSI/IES TM-30-18 Color Rendition Report



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

x 0.4359
 y 0.4001
 z' 0.2516
 v' 0.5196

CIE 13.3-1995
(CRI)
 R_a 82
 R_g 6

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



Zonal Lumen Tabulation

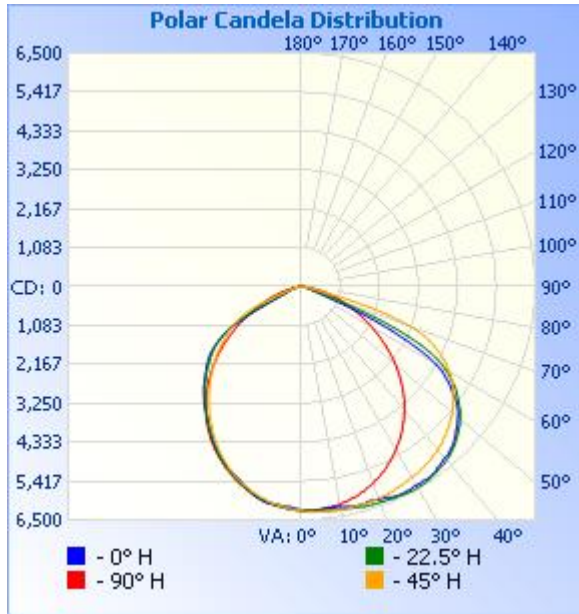
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	4,907.0	27.5%	27.5%
0-40	8,133.7	45.6%	45.6%
0-60	14,805.0	83.1%	83.1%
60-90	3,016.0	16.9%	16.9%
70-100	883.7	5%	5%
90-120	0	0%	0%
0-90	17,821.0	100%	100%
90-180	0	0%	0%
0-180	17,821.0	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	590.0	3.3%	90-100	0	0%
10-20	1,700.6	9.5%	100-110	0	0%
20-30	2,616.4	14.7%	110-120	0	0%
30-40	3,226.7	18.1%	120-130	0	0%
40-50	3,453.7	19.4%	130-140	0	0%
50-60	3,217.6	18.1%	140-150	0	0%
60-70	2,132.3	12.0%	150-160	0	0%
70-80	746.1	4.2%	160-170	0	0%
80-90	137.5	0.8%	170-180	0	0%

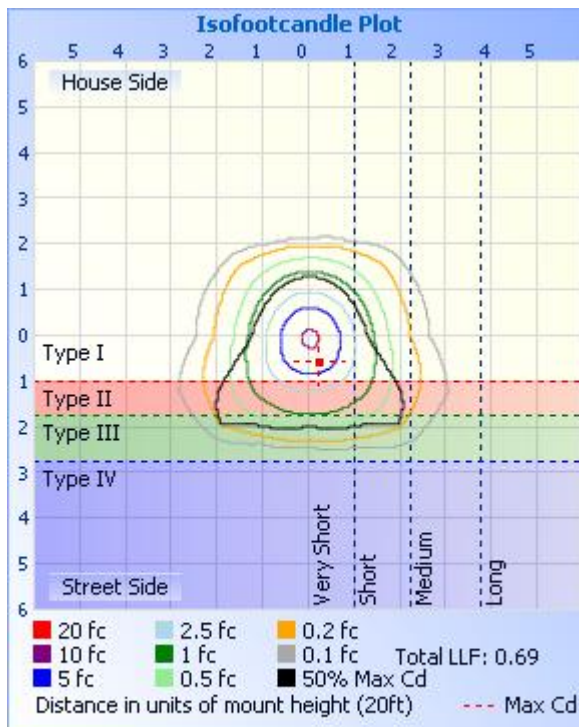
Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width	
17.0ft	21.6 fc	53.4 ft	45.5 ft
34.0ft	5.39 fc	106.9 ft	91.1 ft
51.0ft	2.39 fc	160.3 ft	136.6 ft
68.0ft	1.35 fc	213.7 ft	182.1 ft
85.0ft	0.86 fc	267.1 ft	227.6 ft
102.0ft	0.60 fc	320.6 ft	273.2 ft

■ Vert. Spread: 115.1°
■ Horiz. Spread: 106.5°



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	6228	6228	6228	6228	6228	6228	6228	6228	6228	6228	6228	6228	6228	6228	6228	6228	6228
1	6245	6250	6259	6244	6222	6238	6209	6205	6193	6234	6231	6231	6223	6233	6216	6214	6245
2	6226	6237	6256	6261	6237	6219	6198	6222	6181	6220	6208	6200	6198	6243	6239	6220	6226
3	6246	6253	6264	6244	6223	6227	6195	6206	6142	6194	6189	6211	6203	6222	6237	6230	6246
4	6228	6261	6282	6263	6233	6211	6162	6177	6147	6192	6178	6180	6172	6236	6247	6215	6228
5	6226	6258	6275	6252	6226	6190	6162	6167	6128	6157	6140	6156	6168	6225	6257	6239	6226
6	6216	6281	6297	6255	6202	6182	6139	6128	6110	6145	6134	6147	6147	6216	6241	6239	6216
7	6191	6272	6299	6261	6205	6148	6103	6117	6126	6123	6098	6100	6117	6224	6257	6253	6191
8	6219	6290	6294	6234	6178	6149	6090	6074	6097	6084	6070	6091	6109	6189	6249	6258	6219
9	6214	6300	6310	6240	6170	6119	6045	6031	6099	6068	6046	6052	6071	6196	6251	6246	6214
10	6223	6287	6297	6226	6156	6090	6032	6012	6069	6024	5996	6018	6056	6166	6250	6266	6223
11	6252	6309	6310	6215	6115	6069	5990	5968	6030	6004	5976	5994	6024	6150	6221	6258	6252
12	6260	6308	6304	6205	6108	6019	5940	5947	6007	5966	5923	5943	5979	6138	6230	6267	6260
13	6295	6326	6295	6174	6065	6007	5913	5908	5940	5918	5888	5914	5956	6091	6214	6275	6295
14	6288	6346	6306	6171	6053	5966	5853	5866	5891	5895	5852	5865	5901	6080	6209	6259	6288
15	6293	6342	6285	6143	6024	5919	5831	5841	5827	5840	5793	5811	5866	6046	6207	6283	6293
16	6295	6377	6295	6119	5973	5893	5783	5780	5759	5798	5765	5779	5822	6012	6180	6285	6295
17	6263	6371	6296	6101	5955	5828	5732	5748	5703	5756	5702	5710	5764	5993	6191	6286	6263
18	6267	6382	6276	6055	5902	5799	5689	5700	5626	5696	5650	5678	5729	5941	6178	6294	6267
19	6280	6393	6285	6045	5864	5746	5629	5636	5590	5661	5604	5611	5670	5917	6162	6273	6280
20	6300	6383	6266	6004	5827	5685	5595	5597	5547	5590	5534	5548	5617	5869	6161	6290	6300
21	6318	6406	6270	5974	5762	5647	5534	5521	5492	5546	5493	5497	5565	5828	6127	6277	6318
22	6324	6402	6263	5943	5731	5575	5470	5479	5463	5486	5429	5424	5495	5794	6125	6282	6324
23	6379	6419	6236	5887	5668	5532	5429	5413	5394	5409	5356	5377	5452	5733	6103	6303	6379
24	6398	6436	6237	5862	5622	5466	5348	5335	5347	5363	5297	5306	5383	5704	6074	6289	6398
25	6407	6419	6203	5813	5571	5399	5305	5278	5298	5290	5216	5228	5325	5649	6058	6313	6407
26	6420	6450	6199	5768	5494	5342	5237	5200	5234	5219	5167	5170	5264	5594	6018	6309	6420
27	6400	6451	6188	5730	5446	5261	5159	5148	5176	5154	5080	5087	5189	5553	6012	6313	6400
28	6416	6463	6159	5668	5378	5209	5106	5081	5092	5071	5006	5028	5138	5486	5994	6319	6416

29	6388	6479	6162	5632	5315	5137	5011	5001	5031	5012	4939	4947	5063	5447	5960	6294	6388
30	6383	6458	6135	5579	5251	5058	4954	4934	4963	4931	4851	4848	4993	5389	5955	6303	6383
31	6397	6471	6123	5522	5166	4995	4876	4849	4860	4859	4786	4779	4930	5318	5915	6291	6397
32	6379	6453	6113	5479	5109	4899	4791	4785	4785	4784	4702	4684	4835	5274	5900	6269	6379
33	6398	6437	6077	5406	5038	4835	4721	4712	4704	4697	4610	4609	4775	5196	5872	6275	6398
34	6393	6433	6071	5358	4953	4750	4626	4626	4640	4640	4534	4526	4685	5141	5840	6244	6393
35	6370	6395	6038	5300	4885	4659	4564	4561	4573	4559	4440	4417	4600	5081	5830	6239	6370
36	6353	6388	6022	5231	4786	4584	4479	4476	4485	4484	4371	4337	4522	4996	5789	6217	6353
37	6298	6358	6002	5182	4717	4476	4387	4409	4425	4409	4280	4236	4417	4946	5778	6188	6298
38	6286	6343	5959	5107	4631	4401	4308	4339	4348	4323	4186	4152	4342	4867	5753	6180	6286
39	6245	6327	5946	5049	4536	4310	4212	4251	4283	4262	4107	4057	4245	4807	5707	6129	6245
40	6208	6288	5906	4989	4456	4210	4141	4187	4225	4181	4011	3944	4158	4739	5694	6104	6208
41	6215	6267	5875	4908	4355	4128	4053	4103	4135	4106	3938	3857	4064	4652	5639	6078	6215
42	6161	6218	5848	4848	4274	4023	3964	4034	4073	4038	3846	3746	3950	4581	5611	6033	6161
43	6126	6170	5789	4766	4168	3929	3879	3958	3998	3948	3749	3656	3863	4494	5572	6004	6126
44	6088	6135	5764	4699	4069	3832	3788	3869	3927	3887	3669	3547	3760	4419	5507	5941	6088
45	6018	6068	5717	4627	3979	3729	3712	3803	3837	3806	3571	3437	3649	4344	5475	5896	6018
46	5964	6025	5667	4535	3864	3637	3628	3717	3744	3724	3500	3342	3543	4246	5418	5849	5964
47	5879	5960	5630	4474	3761	3514	3525	3645	3675	3641	3409	3228	3431	4182	5378	5787	5879
48	5824	5895	5570	4381	3658	3419	3448	3565	3594	3553	3307	3129	3328	4093	5333	5738	5824
49	5754	5844	5532	4312	3542	3312	3353	3473	3523	3483	3230	3014	3211	4012	5264	5661	5754
50	5678	5759	5473	4236	3436	3202	3277	3402	3453	3384	3133	2904	3086	3932	5229	5606	5678
51	5616	5687	5405	4141	3317	3105	3189	3316	3365	3306	3055	2809	2975	3827	5165	5530	5616
52	5523	5603	5360	4075	3199	2980	3089	3242	3297	3228	2956	2696	2850	3754	5113	5435	5523
53	5424	5492	5284	3988	3086	2885	3008	3158	3208	3138	2868	2598	2744	3661	5063	5362	5424
54	5285	5404	5233	3906	2963	2774	2911	3060	3117	3059	2777	2484	2626	3578	4985	5244	5285
55	5129	5290	5158	3826	2858	2665	2829	2979	3005	2964	2680	2376	2496	3497	4926	5143	5129
56	5013	5197	5085	3726	2723	2555	2730	2879	2881	2854	2595	2277	2387	3389	4845	5033	5013
57	4871	5078	5018	3653	2618	2442	2636	2784	2752	2741	2502	2169	2263	3308	4767	4902	4871
58	4716	4925	4924	3563	2504	2339	2555	2660	2591	2606	2413	2073	2151	3210	4687	4783	4716
59	4560	4795	4851	3483	2383	2235	2457	2529	2408	2472	2327	1964	2033	3124	4586	4623	4560

60	4319	4633	4762	3403	2273	2120	2374	2387	2194	2308	2224	1853	1913	3035	4501	4458	4319
61	4043	4468	4647	3295	2153	2018	2276	2233	1916	2108	2139	1759	1796	2929	4393	4283	4043
62	3644	4253	4550	3218	2034	1908	2174	2036	1598	1876	2021	1657	1683	2847	4280	4051	3644
63	3236	3996	4427	3127	1926	1817	2082	1806	1246	1580	1911	1572	1574	2757	4148	3777	3236
64	2790	3675	4300	3040	1812	1713	1967	1515	968	1272	1789	1484	1473	2674	4003	3363	2790
65	2319	3288	4170	2960	1711	1608	1857	1214	752	956	1654	1393	1381	2589	3882	2959	2319
66	1820	2830	4027	2871	1596	1523	1716	938	608	737	1498	1317	1289	2496	3723	2530	1820
67	1295	2366	3881	2792	1498	1431	1580	728	526	588	1322	1226	1194	2420	3557	2041	1295
68	830	1820	3690	2699	1402	1351	1444	578	475	500	1100	1141	1099	2334	3354	1497	830
69	561	1305	3470	2628	1301	1257	1246	485	440	446	868	1057	1012	2254	3050	987	561
70	427	882	3203	2544	1207	1177	1032	439	414	404	648	977	931	2173	2726	659	427
71	368	572	2875	2453	1116	1097	816	399	386	373	511	891	848	2094	2343	459	368
72	322	430	2494	2382	1033	1011	625	368	354	340	413	814	769	2016	1911	371	322
73	294	363	2044	2304	947	933	492	340	326	309	357	736	685	1935	1388	328	294
74	260	323	1514	2228	854	849	401	309	307	290	311	659	613	1861	950	291	260
75	236	283	1058	2142	784	770	350	282	279	265	275	572	541	1776	622	259	236
76	210	253	698	2051	702	698	306	258	272	245	245	489	470	1686	409	231	210
77	184	227	453	1966	628	616	269	240	247	222	215	396	397	1585	318	204	184
78	162	199	339	1871	553	532	235	220	224	203	188	301	338	1470	264	176	162
79	142	175	280	1751	471	453	206	200	206	184	167	234	285	1327	219	149	142
80	112	149	238	1624	404	358	184	175	186	164	142	180	232	1144	181	128	112
81	97	124	199	1432	341	271	162	163	167	142	130	142	182	914	151	101	97
82	80	100	165	1215	281	210	138	149	148	123	106	110	132	684	120	87	80
83	64	87	133	938	225	163	123	124	132	106	89	86	101	462	95	69	64
84	44	51	105	690	175	126	98	104	97	82	61	52	70	286	66	50	44
85	31	43	83	462	138	97	84	78	75	51	35	41	49	143	40	33	31
86	26	30	58	263	98	72	59	60	52	38	27	29	26	54	26	24	26
87	25	23	38	136	65	59	49	37	33	26	23	19	16	25	18	16	25
88	18	23	21	62	33	36	35	26	23	17	16	16	12	23	23	19	18
89	19	19	22	22	19	29	18	22	15	10	14	8	12	22	17	18	19
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report No.: UTU2502037E-D-

91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report No.: UTU2502037E-D-

122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report No.: UTU2502037E-D-

153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	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)	2568.5	14.4	14.4
FM (30-60)	5809.9	32.6	32.6
FH (60-80)	1940.2	10.9	10.9
FVH (80-90)	91.5	0.5	0.5
BL (0-30)	2338.6	13.1	13.1
BM (30-60)	4090.1	22.9	22.9
BH (60-80)	938.3	5.3	5.3
BVH (80-90)	46.0	0.3	0.3
UL (90-100)	0.0	0.0	0.0
UH (100-180)	0.0	0.0	0.0
Total	17823.1	100.0	100.0
BUG Rating	B3-U0-G2		

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

Test date	2025-02-22	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	SLIM17FAFC120 at 4000K	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU250203	120.0	60	0.976	116.92	0.998	6.04
7E-D1	277.0	60	0.451	114.09	0.913	8.21
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

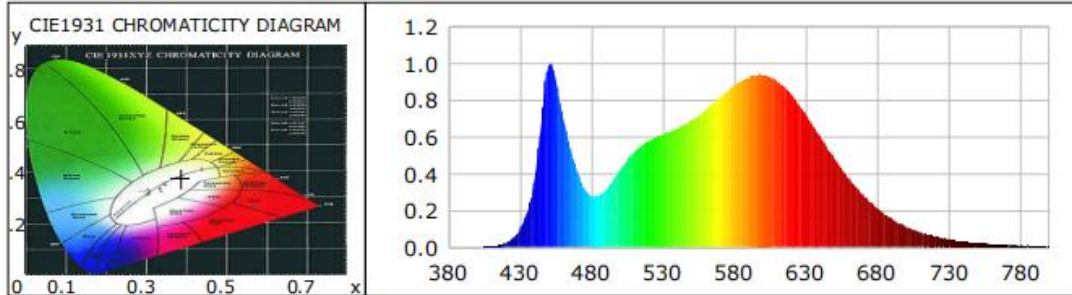
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	84	R9	14
Frequency (Hz)	60	R2	92	R10	81
CCT (K)	3847	R3	96	R11	82
Duv	-0.0028	R4	83	R12	66
Chromaticity (x, y)	x=0.3853 y=0.3738	R5	84	R13	86
Chromaticity (u', v')	u'=0.2295 v'=0.501	R6	88	R14	98
Color Rendering Index (CRI)	85	R7	85	R15	78
R9	14	R8	65	--	--
Rf	84	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-11				

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)	19133.7	19089.9	>=300(-10%)
Luminous Efficacy (lm/W)	163.65	167.32	Premium: >= 120(-3%)
Most worst Luminous/Highest Watts	163.27		
Zonal lumens in the 0-90° zone (%)	100	--	>=100(-3%)
Zonal lumens in the 80-90°zone (%)	0.8	--	<=10(+3%)
Beam Angle (°)	109.4	--	--
Center Beam Candle Power (cd)	6641	--	--

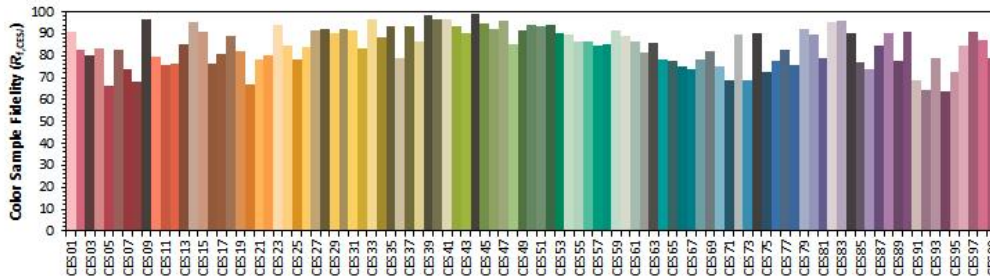
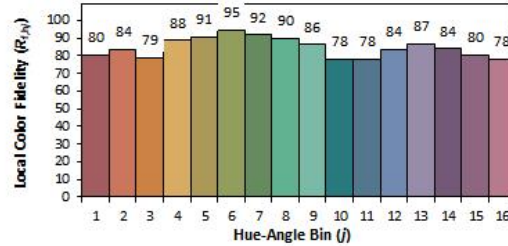
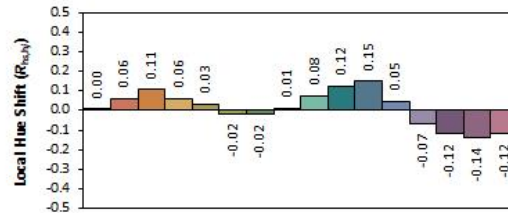
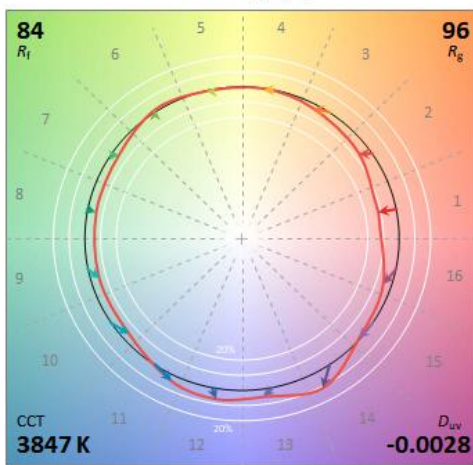
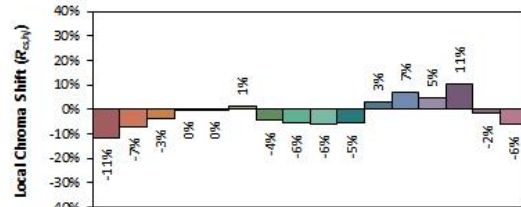
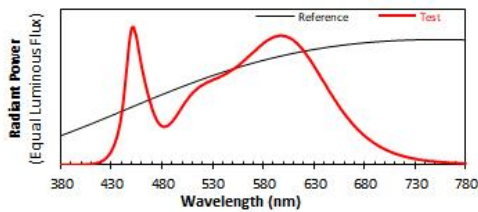
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0011	0.4199	535	0.5986	236.0072	690	0.2821	111.2377
385	0.0001	0.0399	540	0.6140	242.1002	695	0.2449	96.5425
390	0.0004	0.1691	545	0.6301	248.4405	700	0.2105	83.0077
395	0.0001	0.0579	550	0.6479	255.4503	705	0.1818	71.6995
400	0.0010	0.3844	555	0.6669	262.9658	710	0.1545	60.9238
405	0.0020	0.7774	560	0.6913	272.5793	715	0.1323	52.1699
410	0.0042	1.6576	565	0.7176	282.9547	720	0.1115	43.9819
415	0.0104	4.1064	570	0.7491	295.3784	725	0.0955	37.6511
420	0.0233	9.1987	575	0.7844	309.2616	730	0.0811	31.9841
425	0.0488	19.2456	580	0.8155	321.5327	735	0.0691	27.2257
430	0.0986	38.8578	585	0.8497	335.0426	740	0.0586	23.1102
435	0.1896	74.7468	590	0.8815	347.5564	745	0.0500	19.7099
440	0.3598	141.8745	595	0.9070	357.6113	750	0.0426	16.8111
445	0.6911	272.4788	600	0.9262	365.1954	755	0.0353	13.9320
450	0.9894	390.1044	605	0.9364	369.2229	760	0.0302	11.9171
455	0.9154	360.9403	610	0.9375	369.6471	765	0.0253	9.9773
460	0.7095	279.7599	615	0.9255	364.9111	770	0.0219	8.6302
465	0.5459	215.2570	620	0.9030	356.0303	775	0.0192	7.5508
470	0.4121	162.4767	625	0.8695	342.8139	780	0.0164	6.4499
475	0.3207	126.4285	630	0.8273	326.1799	785	0.0132	5.2139
480	0.2789	109.9521	635	0.7762	306.0524	790	0.0109	4.3119
485	0.2808	110.7239	640	0.7182	283.1829	795	0.0094	3.6924
490	0.3116	122.8647	645	0.6603	260.3639	800	0.0086	3.3982
495	0.3631	143.1561	650	0.5984	235.9506			
500	0.4209	165.9719	655	0.5364	211.4855			
505	0.4740	186.8981	660	0.4781	188.5117			
510	0.5193	204.7602	665	0.4235	166.9683			
515	0.5539	218.4150	670	0.3723	146.7876			
520	0.5781	227.9439	675	0.3258	128.4629			
525	0.5986	236.0072	680	0.2821	111.2377			
530	0.6140	242.1002	685	0.2449	96.5425			

TM30

ANSI/IES TM-30-18 Color Rendition Report



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

x 0.3853
y 0.3738
u' 0.2295
v' 0.5010

CIE 13.3-1995 (CRI)	
R _a	85
R _g	14

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

Zonal Lumen Tabulation

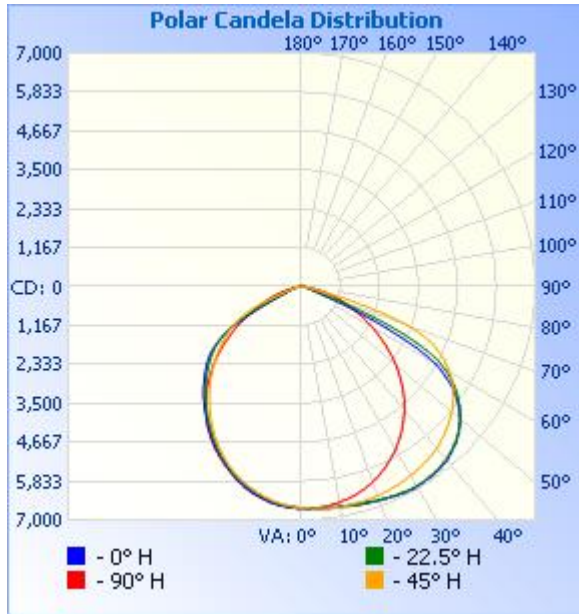
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	5,245.5	27.4%	27.4%
0-40	8,707.9	45.5%	45.5%
0-60	15,890.6	83.1%	83.1%
60-90	3,240.9	16.9%	16.9%
70-100	954.6	5%	5%
90-120	0	0%	0%
0-90	19,131.5	100%	100%
90-180	0	0%	0%
0-180	19,131.5	100%	100%

Lumens Per Zone

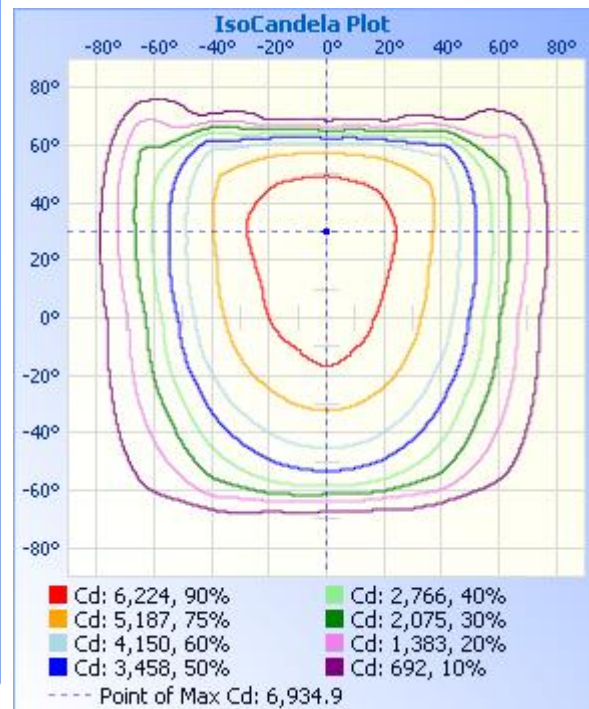
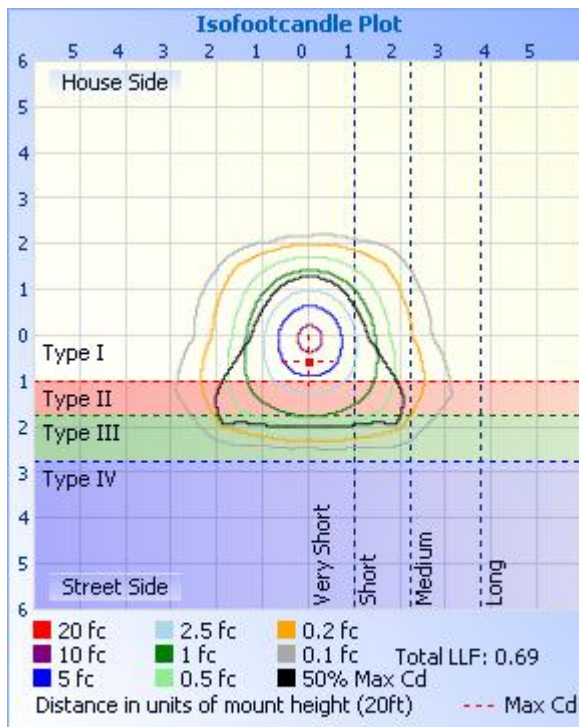
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	629.8	3.3%	90-100	0	0%
10-20	1,816.8	9.5%	100-110	0	0%
20-30	2,799.0	14.6%	110-120	0	0%
30-40	3,462.5	18.1%	120-130	0	0%
40-50	3,715.8	19.4%	130-140	0	0%
50-60	3,466.8	18.1%	140-150	0	0%
60-70	2,286.3	12.0%	150-160	0	0%
70-80	805.9	4.2%	160-170	0	0%
80-90	148.7	0.8%	170-180	0	0%

Photometric Data



	Center Beam fc	Beam Width	
17.0ft	23.0 fc	54.2 ft	45.8 ft
34.0ft	5.74 fc	108.3 ft	91.7 ft
51.0ft	2.55 fc	162.5 ft	137.5 ft
68.0ft	1.44 fc	216.7 ft	183.3 ft
85.0ft	0.92 fc	270.8 ft	229.2 ft
102.0ft	0.64 fc	325.0 ft	275.0 ft

■ Vert. Spread: 115.8°
■ Horiz. Spread: 106.9°





Report No.: UTU2502037E-D-

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	6641	6641	6641	6641	6641	6641	6641	6641	6641	6641	6641	6641	6641	6641	6641	6641	6641
1	6661	6626	6652	6665	6644	6637	6609	6634	6656	6624	6613	6649	6641	6636	6638	6658	6661
2	6667	6651	6655	6659	6661	6618	6616	6633	6634	6608	6615	6629	6617	6651	6652	6637	6667
3	6656	6646	6680	6670	6638	6628	6595	6605	6638	6607	6580	6606	6621	6630	6668	6659	6656
4	6677	6660	6667	6683	6654	6606	6570	6611	6626	6575	6572	6605	6592	6642	6646	6659	6677
5	6668	6681	6690	6659	6642	6597	6569	6589	6604	6581	6556	6565	6581	6638	6670	6671	6668
6	6689	6671	6700	6679	6626	6585	6522	6562	6601	6547	6514	6569	6565	6616	6664	6693	6689
7	6697	6698	6693	6661	6629	6547	6521	6548	6565	6517	6509	6532	6526	6625	6668	6674	6697
8	6676	6697	6715	6658	6592	6549	6485	6501	6548	6490	6467	6498	6523	6594	6673	6688	6676
9	6702	6702	6697	6662	6590	6514	6445	6485	6513	6441	6436	6481	6487	6592	6646	6688	6702
10	6683	6721	6713	6627	6573	6492	6428	6442	6470	6433	6403	6431	6463	6572	6662	6683	6683
11	6699	6707	6714	6633	6534	6466	6367	6400	6452	6383	6344	6413	6440	6539	6644	6702	6699
12	6710	6737	6691	6604	6529	6417	6347	6374	6403	6343	6324	6371	6389	6532	6643	6684	6710
13	6709	6739	6705	6591	6485	6402	6300	6315	6378	6317	6267	6313	6367	6487	6638	6705	6709
14	6742	6754	6687	6581	6471	6354	6247	6299	6342	6253	6229	6281	6310	6473	6610	6706	6742
15	6734	6777	6695	6540	6437	6315	6218	6241	6288	6233	6187	6217	6267	6449	6616	6705	6734
16	6741	6769	6701	6532	6387	6272	6159	6190	6250	6174	6128	6191	6226	6396	6591	6728	6741
17	6760	6799	6675	6496	6371	6213	6121	6154	6181	6120	6091	6131	6160	6383	6590	6713	6760
18	6763	6799	6691	6468	6311	6180	6064	6086	6138	6084	6023	6062	6133	6325	6588	6733	6763
19	6806	6802	6670	6446	6278	6119	6005	6049	6081	6018	5977	6018	6069	6299	6554	6731	6806
20	6802	6826	6674	6395	6234	6067	5967	5988	6005	5980	5924	5938	6008	6266	6558	6723	6802
21	6822	6813	6672	6377	6175	6022	5892	5926	5961	5912	5846	5893	5957	6202	6525	6740	6822
22	6842	6846	6640	6330	6141	5942	5846	5882	5889	5841	5804	5824	5884	6174	6514	6729	6842
23	6842	6852	6653	6287	6067	5899	5775	5799	5818	5785	5716	5748	5844	6114	6506	6749	6842
24	6881	6856	6624	6253	6028	5824	5700	5752	5749	5706	5651	5696	5771	6076	6468	6752	6881
25	6883	6871	6616	6189	5966	5765	5655	5669	5664	5657	5585	5603	5703	6032	6462	6748	6883
26	6901	6866	6610	6162	5892	5697	5574	5597	5622	5574	5500	5548	5648	5964	6434	6762	6901
27	6922	6891	6577	6105	5840	5613	5509	5537	5547	5495	5437	5471	5565	5929	6408	6751	6922
28	6909	6903	6581	6052	5761	5560	5435	5448	5483	5435	5351	5380	5516	5861	6394	6764	6909



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29	6935	6895	6550	6019	5704	5478	5355	5390	5418	5341	5273	5305	5432	5810	6356	6770	6935
30	6916	6911	6538	5946	5638	5402	5291	5300	5328	5280	5201	5208	5360	5759	6347	6749	6916
31	6916	6889	6530	5907	5553	5332	5198	5216	5265	5201	5108	5140	5291	5678	6324	6766	6916
32	6916	6896	6490	5849	5491	5231	5130	5150	5174	5108	5031	5047	5198	5634	6284	6742	6916
33	6892	6888	6491	5780	5400	5166	5042	5056	5102	5039	4939	4949	5132	5558	6267	6740	6892
34	6913	6861	6459	5739	5324	5074	4948	4993	5037	4952	4855	4871	5040	5495	6228	6731	6913
35	6894	6869	6436	5662	5245	4988	4876	4903	4938	4889	4772	4752	4948	5432	6218	6692	6894
36	6873	6836	6428	5609	5142	4903	4779	4819	4871	4806	4670	4671	4861	5345	6195	6695	6873
37	6865	6828	6385	5553	5073	4790	4700	4749	4782	4712	4593	4574	4755	5292	6155	6662	6865
38	6827	6805	6377	5474	4973	4713	4604	4653	4705	4646	4488	4467	4679	5214	6142	6646	6827
39	6817	6767	6341	5420	4884	4612	4507	4594	4632	4550	4400	4365	4577	5139	6091	6626	6817
40	6795	6759	6310	5340	4805	4511	4430	4498	4541	4487	4313	4252	4477	5071	6073	6573	6795
41	6743	6704	6289	5279	4688	4421	4328	4412	4481	4398	4211	4157	4387	4979	6037	6560	6743
42	6710	6673	6227	5208	4603	4306	4242	4335	4391	4309	4130	4050	4262	4908	5979	6510	6710
43	6642	6640	6207	5120	4495	4210	4144	4242	4320	4236	4026	3938	4167	4819	5952	6470	6642
44	6620	6573	6158	5056	4390	4099	4049	4167	4238	4141	3936	3829	4057	4736	5891	6432	6620
45	6573	6543	6113	4970	4288	3994	3967	4079	4142	4071	3847	3714	3935	4654	5855	6356	6573
46	6494	6474	6076	4895	4163	3892	3867	3993	4069	3985	3747	3609	3826	4556	5809	6325	6494
47	6449	6421	6012	4827	4055	3762	3781	3921	3980	3888	3659	3495	3700	4481	5743	6270	6449
48	6358	6361	5978	4731	3939	3660	3680	3821	3900	3813	3553	3373	3589	4393	5714	6210	6358
49	6290	6269	5926	4666	3822	3541	3583	3741	3818	3716	3463	3257	3467	4300	5651	6147	6290
50	6214	6210	5863	4577	3712	3425	3496	3656	3725	3633	3377	3138	3333	4219	5604	6064	6214
51	6098	6115	5818	4485	3582	3304	3398	3565	3652	3543	3272	3034	3214	4108	5552	5992	6098
52	6004	6033	5746	4408	3470	3185	3303	3488	3559	3451	3182	2922	3081	4027	5479	5899	6004
53	5879	5943	5698	4312	3333	3080	3208	3388	3462	3370	3083	2804	2968	3934	5435	5800	5879
54	5759	5813	5630	4237	3208	2963	3107	3307	3350	3265	2983	2686	2837	3834	5359	5713	5759
55	5620	5721	5552	4133	3095	2845	3021	3197	3219	3171	2895	2570	2699	3753	5288	5571	5620
56	5465	5591	5486	4051	2962	2727	2910	3096	3096	3040	2783	2466	2584	3637	5220	5463	5465
57	5309	5462	5390	3966	2835	2606	2821	2987	2941	2911	2698	2354	2450	3549	5121	5325	5309
58	5093	5311	5322	3867	2710	2498	2723	2855	2779	2773	2597	2242	2328	3451	5052	5176	5093
59	4898	5140	5229	3790	2584	2380	2625	2710	2577	2612	2502	2126	2188	3350	4948	5024	4898

60	4641	4980	5124	3681	2466	2265	2537	2553	2346	2441	2400	2012	2060	3257	4853	4829	4641
61	4298	4771	5021	3595	2335	2148	2434	2385	2073	2225	2275	1917	1945	3143	4737	4609	4298
62	3894	4541	4893	3509	2208	2037	2328	2184	1713	1977	2167	1801	1822	3055	4600	4348	3894
63	3355	4215	4783	3407	2089	1937	2221	1939	1404	1684	2042	1705	1705	2960	4486	4012	3355
64	2846	3815	4631	3317	1969	1827	2099	1651	1126	1370	1904	1609	1593	2866	4324	3560	2846
65	2322	3374	4481	3229	1860	1719	1978	1354	914	1076	1759	1520	1491	2769	4184	3071	2322
66	1794	2871	4333	3144	1736	1620	1829	1076	765	866	1583	1427	1391	2673	4025	2579	1794
67	1299	2354	4141	3056	1630	1523	1689	868	671	718	1395	1337	1294	2591	3820	2046	1299
68	856	1763	3942	2959	1516	1436	1538	706	575	623	1161	1233	1192	2500	3598	1516	856
69	610	1279	3668	2878	1416	1334	1363	611	497	531	910	1147	1095	2405	3258	1040	610
70	483	885	3334	2787	1313	1247	1123	527	450	459	724	1058	1003	2326	2882	715	483
71	413	606	2938	2706	1217	1161	900	454	417	415	584	969	919	2242	2451	529	413
72	375	472	2480	2625	1131	1069	715	407	387	383	486	877	822	2163	1978	433	375
73	338	409	1960	2528	1030	976	581	375	358	344	411	794	743	2082	1503	376	338
74	308	365	1471	2448	941	896	470	339	325	311	345	706	661	1988	1020	332	308
75	272	322	1040	2358	853	813	400	312	310	291	304	614	585	1904	698	297	272
76	247	291	715	2265	763	735	336	284	284	268	265	521	509	1800	490	263	247
77	218	258	484	2158	672	652	297	259	269	242	240	422	428	1699	366	237	218
78	184	231	384	2040	594	569	260	242	241	226	205	330	370	1558	302	206	184
79	160	197	317	1911	515	480	233	220	218	202	180	263	302	1405	257	180	160
80	140	169	270	1740	434	385	197	192	197	174	154	199	246	1221	215	152	140
81	111	147	229	1508	369	299	177	173	180	155	132	157	192	993	176	124	111
82	95	116	188	1261	303	232	150	153	154	131	113	121	146	741	142	96	95
83	75	93	155	981	244	177	130	134	133	113	91	88	109	523	104	73	75
84	53	71	125	726	186	138	109	108	99	81	74	70	74	337	77	56	53
85	39	52	94	476	138	105	88	90	65	61	51	46	39	185	48	38	39
86	28	35	54	297	102	75	66	60	52	42	35	22	28	57	30	24	28
87	24	25	39	168	62	55	46	43	32	22	22	22	18	26	25	26	24
88	20	19	22	62	37	30	32	24	18	17	13	14	12	25	22	14	20
89	16	20	19	31	27	24	19	20	18	18	15	17	15	22	18	20	16
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178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	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)	2744.1	14.3	14.3
FM (30-60)	6254.5	32.7	32.7
FH (60-80)	2073.1	10.8	10.8
FVH (80-90)	99.6	0.5	0.5
BL (0-30)	2501.5	13.1	13.1
BM (30-60)	4392.7	23.0	23.0
BH (60-80)	1019.1	5.3	5.3
BVH (80-90)	49.1	0.3	0.3
UL (90-100)	0.0	0.0	0.0
UH (100-180)	0.0	0.0	0.0
Total	19133.7	100.0	100.0
BUG Rating	B4-U0-G3		

2.3 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction BL-QP-033)

Test date	2025-02-22	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	SLIM17FAFC120 at 5000K	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU250203	120.0	60	1.007	120.65	0.998	5.88
7E-D1	277.0	60	0.463	117.62	0.918	7.98
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

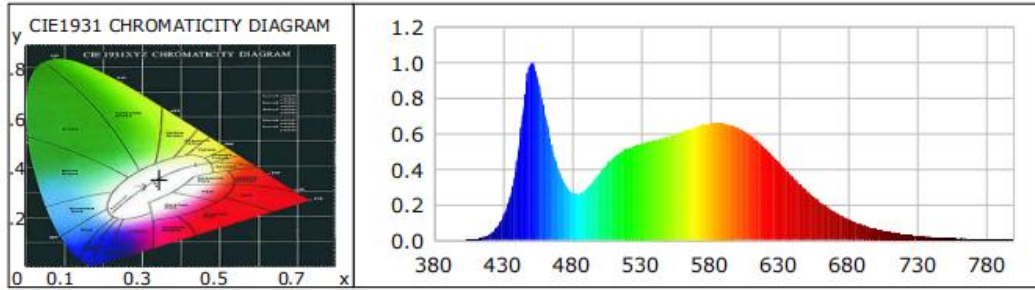
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	1
Frequency (Hz)	60	R2	89	R10	73
CCT (K)	5020	R3	93	R11	81
Duv	0.0009	R4	82	R12	62
Chromaticity (x, y)	x=0.3447 y=0.353	R5	82	R13	83
Chromaticity (u', v')	u'=0.2106 v'=0.4853	R6	84	R14	97
Color Rendering Index (CRI)	83	R7	85	R15	75
R9	1	R8	64	--	--
Rf	83	--	--	--	--
Rg	95	--	--	--	--
Rcs,h1(%)	-13				

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)	18569.9	18479.7	>=300(-10%)
Luminous Efficacy (lm/W)	153.92	157.11	Premium: >= 120(-3%)
Most worst Luminous/Highest Watts	153.17		
Zonal lumens in the 0-90° zone (%)	100	--	>=100(-3%)
Zonal lumens in the 80-90°zone (%)	0.8	--	<=10(+3%)
Beam Angle (°)	109.6	--	--
Center Beam Candle Power (cd)	6409	--	--

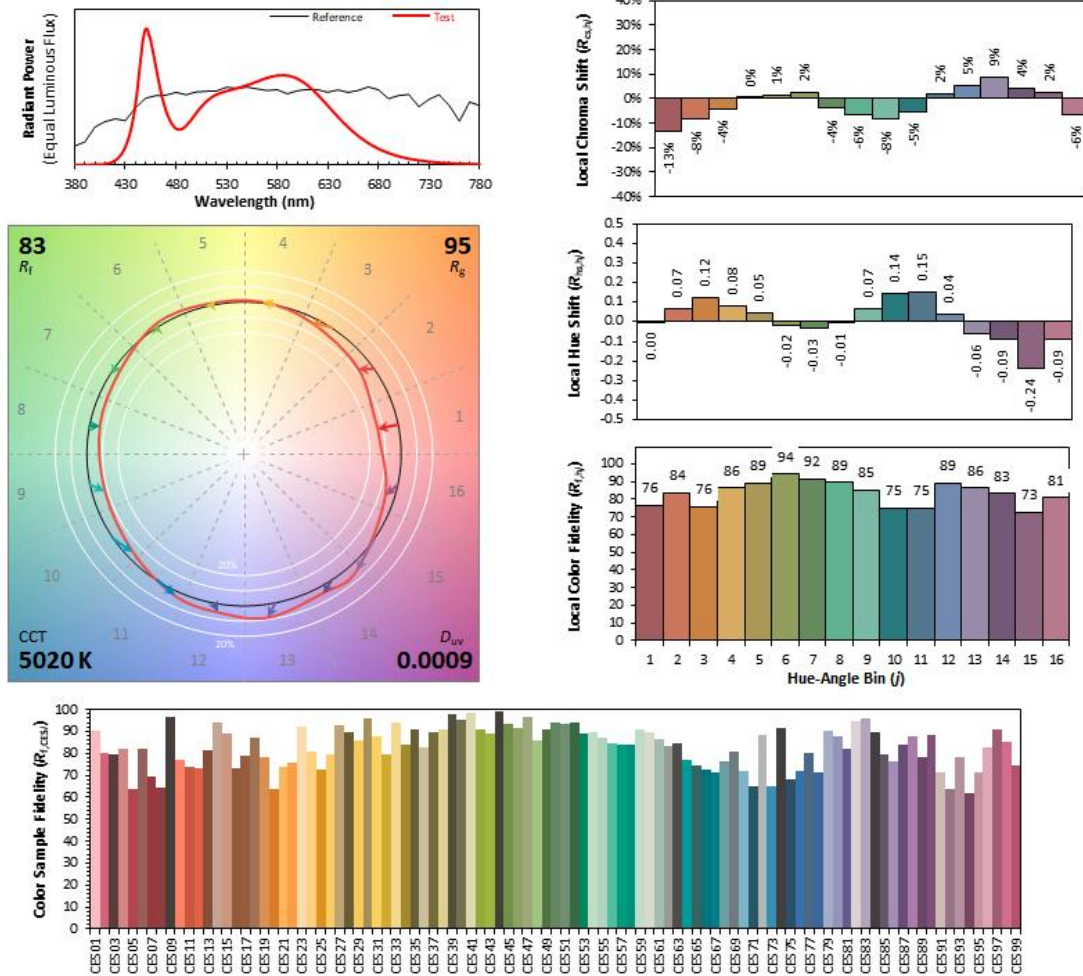
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0012	0.5840	535	0.5302	259.8108	690	0.1598	78.3033
385	0.0003	0.1519	540	0.5430	266.0468	695	0.1380	67.6049
390	0.0005	0.2390	545	0.5523	270.6000	700	0.1186	58.0951
395	0.0011	0.5472	550	0.5627	275.6981	705	0.1025	50.2062
400	0.0009	0.4377	555	0.5732	280.8419	710	0.0869	42.5630
405	0.0023	1.1300	560	0.5842	286.2462	715	0.0739	36.2289
410	0.0063	3.1024	565	0.5983	293.1765	720	0.0632	30.9834
415	0.0144	7.0486	570	0.6120	299.8711	725	0.0535	26.1985
420	0.0326	15.9885	575	0.6270	307.2148	730	0.0457	22.4085
425	0.0674	33.0150	580	0.6384	312.8362	735	0.0394	19.2819
430	0.1321	64.7470	585	0.6498	318.4133	740	0.0334	16.3853
435	0.2462	120.6191	590	0.6579	322.3713	745	0.0280	13.6976
440	0.4460	218.5400	595	0.6576	322.2058	750	0.0233	11.4142
445	0.7732	378.8639	600	0.6562	321.5428	755	0.0202	9.9215
450	0.9985	489.2435	605	0.6476	317.3176	760	0.0170	8.3274
455	0.9145	448.1109	610	0.6331	310.2326	765	0.0147	7.1955
460	0.7248	355.1240	615	0.6115	299.6519	770	0.0130	6.3876
465	0.5390	264.0894	620	0.5850	286.6499	775	0.0104	5.0834
470	0.4000	195.9939	625	0.5525	270.7253	780	0.0091	4.4625
475	0.3133	153.5389	630	0.5149	252.2733	785	0.0077	3.7601
480	0.2672	130.9320	635	0.4760	233.2374	790	0.0075	3.6527
485	0.2615	128.1150	640	0.4334	212.3504	795	0.0047	2.3222
490	0.2878	141.0072	645	0.3928	192.4922	800	0.0056	2.7217
495	0.3311	162.2494	650	0.3533	173.1093			
500	0.3806	186.5130	655	0.3139	153.8074			
505	0.4273	209.3647	660	0.2773	135.8762			
510	0.4658	228.2213	665	0.2428	118.9496			
515	0.4956	242.8477	670	0.2130	104.3770			
520	0.5156	252.6599	675	0.1843	90.3301			
525	0.5302	259.8108	680	0.1598	78.3033			
530	0.5430	266.0468	685	0.1380	67.6049			

TM30

ANSI/IES TM-30-18 Color Rendition Report



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

x 0.3447
 y 0.3530
 u' 0.2106
 v' 0.4853

CIE 13.3-1995
(CRI)
 R_a 83
 R_g 1

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

Zonal Lumen Tabulation

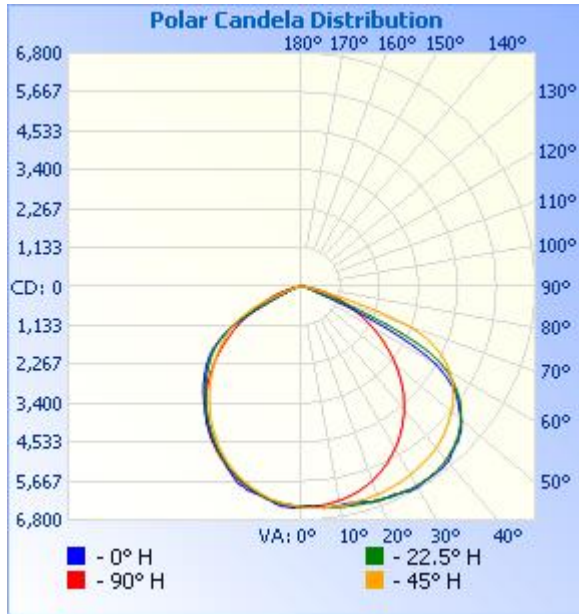
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	5,072.8	27.3%	27.3%
0-40	8,430.7	45.4%	45.4%
0-60	15,411.4	83%	83%
60-90	3,156.4	17%	17%
70-100	931.4	5%	5%
90-120	0	0%	0%
0-90	18,567.8	100%	100%
90-180	0	0%	0%
0-180	18,567.8	100%	100%

Lumens Per Zone

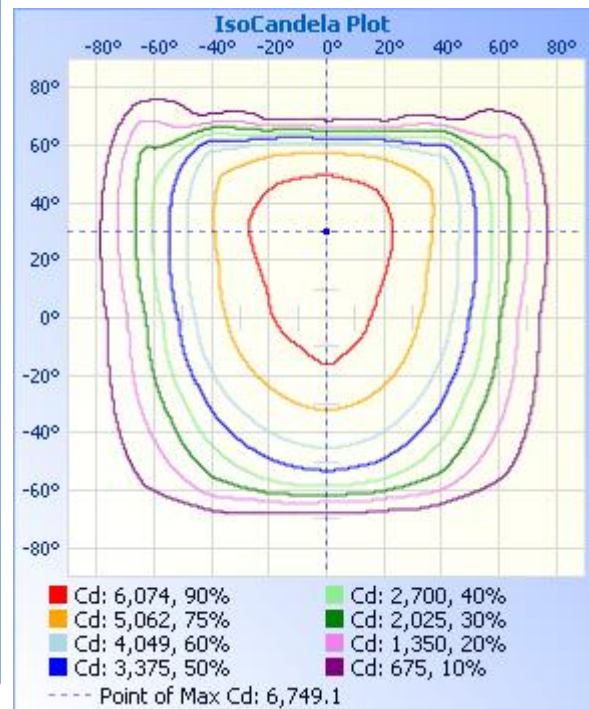
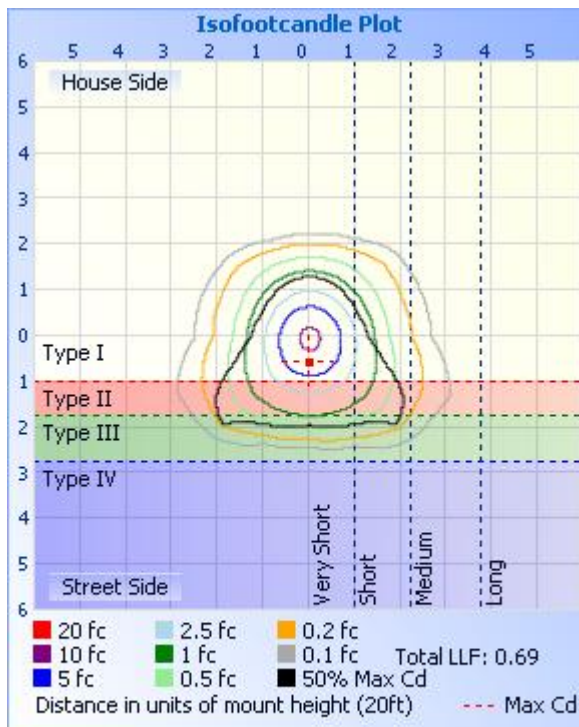
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	608.2	3.3%	90-100	0	0%
10-20	1,756.0	9.5%	100-110	0	0%
20-30	2,708.6	14.6%	110-120	0	0%
30-40	3,357.9	18.1%	120-130	0	0%
40-50	3,609.5	19.4%	130-140	0	0%
50-60	3,371.3	18.2%	140-150	0	0%
60-70	2,225.0	12.0%	150-160	0	0%
70-80	786.8	4.2%	160-170	0	0%
80-90	144.6	0.8%	170-180	0	0%

Photometric Data



	Illuminance at a Distance	
	Center Beam fc	Beam Width
17.0ft	22.2 fc	53.8 ft 45.8 ft
34.0ft	5.54 fc	107.7 ft 91.6 ft
51.0ft	2.46 fc	161.5 ft 137.4 ft
68.0ft	1.39 fc	215.4 ft 183.1 ft
85.0ft	0.89 fc	269.2 ft 228.9 ft
102.0ft	0.62 fc	323.0 ft 274.7 ft

■ Vert. Spread: 115.5°
■ Horiz. Spread: 106.8°



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	6409	6409	6409	6409	6409	6409	6409	6409	6409	6409	6409	6409	6409	6409	6409	6409	6409
1	6386	6431	6433	6392	6413	6378	6401	6405	6410	6406	6405	6389	6390	6400	6429	6416	6386
2	6406	6420	6451	6418	6402	6397	6386	6374	6444	6403	6375	6371	6398	6407	6420	6433	6406
3	6415	6446	6439	6411	6420	6381	6361	6386	6440	6375	6375	6371	6369	6415	6439	6419	6415
4	6412	6454	6462	6414	6401	6362	6364	6367	6421	6386	6356	6340	6364	6388	6442	6448	6412
5	6456	6459	6459	6424	6401	6362	6334	6353	6430	6364	6325	6341	6352	6401	6431	6449	6456
6	6470	6489	6477	6403	6400	6333	6317	6350	6388	6342	6319	6311	6317	6385	6453	6459	6470
7	6495	6475	6488	6421	6370	6333	6295	6312	6357	6329	6275	6291	6312	6381	6433	6463	6495
8	6488	6503	6471	6404	6368	6310	6255	6308	6310	6276	6263	6273	6277	6374	6441	6447	6488
9	6477	6502	6492	6396	6338	6280	6239	6273	6257	6261	6229	6228	6268	6342	6438	6464	6477
10	6485	6508	6481	6394	6329	6270	6199	6234	6232	6216	6182	6217	6243	6341	6422	6454	6485
11	6450	6528	6487	6365	6317	6224	6165	6207	6186	6177	6161	6175	6196	6310	6435	6464	6450
12	6454	6520	6488	6366	6276	6212	6133	6150	6168	6151	6107	6138	6179	6286	6412	6475	6454
13	6471	6547	6466	6340	6266	6172	6077	6134	6160	6092	6068	6107	6131	6273	6416	6464	6471
14	6487	6548	6477	6321	6228	6129	6051	6082	6136	6074	6023	6048	6097	6226	6407	6486	6487
15	6504	6557	6462	6308	6205	6102	5998	6025	6135	6026	5969	6025	6057	6212	6379	6480	6504
16	6501	6582	6466	6269	6177	6043	5958	5991	6064	5980	5942	5961	5998	6171	6384	6488	6501
17	6555	6572	6473	6256	6127	6016	5916	5929	6046	5948	5880	5910	5970	6146	6356	6505	6555
18	6607	6595	6443	6229	6104	5968	5852	5899	6016	5878	5841	5864	5908	6117	6354	6492	6607
19	6602	6598	6459	6195	6056	5907	5819	5849	5937	5849	5786	5798	5864	6059	6344	6513	6602
20	6627	6608	6442	6174	6014	5867	5755	5788	5868	5788	5718	5753	5818	6037	6314	6512	6627
21	6625	6629	6444	6123	5972	5795	5700	5748	5792	5727	5676	5684	5750	5990	6315	6512	6625
22	6632	6629	6440	6098	5913	5755	5651	5679	5723	5681	5603	5621	5710	5948	6281	6534	6632
23	6637	6656	6413	6053	5877	5694	5573	5640	5640	5601	5547	5564	5636	5915	6280	6513	6637
24	6625	6667	6421	6013	5814	5618	5528	5575	5539	5552	5481	5480	5587	5852	6267	6535	6625
25	6664	6658	6397	5977	5762	5573	5449	5506	5483	5483	5399	5437	5530	5827	6233	6533	6664
26	6668	6680	6386	5921	5713	5496	5388	5445	5407	5413	5345	5357	5461	5771	6230	6526	6668
27	6701	6672	6389	5886	5629	5443	5327	5358	5363	5356	5264	5284	5406	5722	6196	6548	6701
28	6736	6695	6352	5841	5579	5365	5245	5304	5306	5269	5196	5215	5325	5683	6183	6533	6736

29	6734	6705	6348	5781	5507	5284	5185	5225	5232	5204	5125	5128	5265	5609	6167	6555	6734
30	6749	6682	6327	5748	5442	5228	5103	5137	5180	5125	5025	5064	5201	5564	6121	6555	6749
31	6730	6705	6306	5684	5388	5138	5029	5067	5110	5043	4964	4968	5121	5498	6116	6545	6730
32	6709	6684	6296	5644	5305	5077	4958	4980	5038	4978	4879	4886	5053	5434	6080	6557	6709
33	6712	6688	6259	5594	5231	4990	4869	4921	4967	4889	4802	4806	4966	5383	6059	6528	6712
34	6691	6689	6253	5521	5149	4906	4806	4842	4891	4828	4719	4707	4891	5306	6045	6523	6691
35	6695	6660	6230	5480	5072	4834	4708	4760	4829	4751	4619	4631	4813	5256	6002	6520	6695
36	6689	6675	6207	5409	5003	4734	4625	4685	4733	4665	4543	4538	4714	5196	5996	6477	6689
37	6686	6636	6198	5363	4900	4660	4548	4597	4651	4594	4444	4428	4642	5112	5963	6481	6686
38	6685	6622	6159	5305	4828	4560	4454	4530	4568	4500	4366	4342	4538	5055	5935	6448	6685
39	6656	6600	6146	5228	4743	4462	4372	4449	4476	4433	4282	4232	4448	4981	5910	6433	6656
40	6643	6551	6119	5181	4647	4376	4277	4362	4417	4351	4176	4146	4359	4914	5868	6414	6643
41	6593	6539	6074	5107	4560	4270	4191	4293	4332	4265	4097	4042	4251	4837	5844	6363	6593
42	6525	6486	6053	5040	4453	4183	4106	4190	4263	4189	3999	3925	4168	4753	5797	6344	6525
43	6487	6457	6004	4981	4367	4086	4010	4120	4195	4095	3917	3830	4044	4687	5757	6285	6487
44	6438	6424	5972	4893	4264	3970	3928	4040	4106	4021	3818	3720	3944	4597	5723	6250	6438
45	6422	6359	5929	4832	4152	3877	3828	3948	4042	3936	3723	3614	3840	4518	5668	6210	6422
46	6362	6326	5872	4747	4054	3759	3739	3873	3955	3852	3642	3501	3722	4439	5631	6148	6362
47	6299	6256	5845	4679	3939	3662	3657	3781	3871	3782	3544	3387	3609	4344	5584	6118	6299
48	6252	6195	5784	4610	3829	3549	3557	3711	3793	3687	3456	3281	3484	4272	5534	6049	6252
49	6155	6133	5742	4521	3714	3423	3470	3628	3701	3612	3358	3161	3371	4167	5500	5995	6155
50	6081	6043	5695	4452	3594	3320	3374	3537	3629	3525	3265	3050	3256	4089	5431	5925	6081
51	5958	5977	5631	4355	3492	3199	3288	3461	3531	3437	3183	2938	3131	4006	5395	5834	5958
52	5832	5888	5594	4280	3365	3097	3200	3369	3449	3360	3088	2828	3007	3904	5338	5769	5832
53	5740	5798	5520	4205	3256	2974	3101	3288	3354	3253	2995	2724	2882	3829	5275	5661	5740
54	5624	5709	5469	4109	3123	2858	3006	3197	3239	3170	2897	2608	2763	3731	5226	5569	5624
55	5512	5573	5402	4029	3001	2752	2911	3090	3127	3064	2796	2499	2646	3636	5140	5465	5512
56	5364	5467	5319	3939	2890	2637	2817	2998	2985	2951	2714	2391	2507	3547	5083	5322	5364
57	5170	5329	5259	3855	2763	2522	2723	2879	2847	2825	2617	2279	2390	3444	5003	5205	5170
58	4983	5188	5164	3774	2640	2409	2625	2765	2693	2680	2525	2177	2264	3363	4915	5048	4983
59	4751	5050	5077	3675	2518	2296	2543	2637	2512	2539	2424	2065	2146	3251	4836	4885	4751

60	4508	4858	4985	3598	2392	2193	2448	2467	2308	2369	2320	1956	2022	3158	4713	4707	4508
61	4153	4655	4872	3499	2281	2082	2352	2311	2027	2180	2221	1853	1888	3068	4619	4472	4153
62	3727	4410	4775	3408	2157	1973	2252	2134	1737	1932	2092	1750	1782	2967	4502	4222	3727
63	3244	4116	4649	3324	2033	1865	2139	1894	1455	1657	1978	1653	1672	2885	4370	3853	3244
64	2715	3685	4515	3220	1919	1762	2032	1622	1198	1380	1848	1553	1568	2781	4235	3429	2715
65	2137	3207	4375	3147	1807	1669	1908	1353	977	1133	1698	1466	1469	2694	4078	2937	2137
66	1647	2702	4203	3059	1702	1560	1776	1107	829	929	1551	1376	1353	2614	3928	2410	1647
67	1196	2170	4037	2970	1593	1473	1642	909	727	775	1371	1281	1262	2516	3735	1897	1196
68	841	1671	3825	2887	1487	1382	1483	758	617	668	1136	1189	1163	2439	3489	1386	841
69	602	1202	3563	2789	1381	1293	1325	654	499	564	927	1104	1063	2347	3163	991	602
70	487	849	3233	2719	1284	1200	1119	553	448	464	749	1019	973	2268	2775	706	487
71	428	619	2779	2631	1184	1109	888	455	414	407	605	936	890	2191	2341	520	428
72	387	491	2329	2550	1095	1030	721	401	379	374	503	854	809	2108	1879	434	387
73	349	420	1843	2474	1005	945	595	369	345	342	414	767	727	2026	1385	385	349
74	312	373	1396	2375	911	859	497	330	320	310	345	684	644	1940	1003	343	312
75	285	330	988	2294	822	782	407	303	299	284	296	605	566	1854	699	300	285
76	254	300	700	2197	731	702	338	278	274	260	262	517	489	1750	482	270	254
77	222	265	516	2097	656	627	292	254	257	237	227	418	425	1643	378	244	222
78	196	238	388	1978	580	548	255	232	231	214	203	329	351	1523	314	215	196
79	166	210	333	1839	500	460	225	212	213	195	172	259	296	1366	263	185	166
80	138	179	279	1670	420	378	193	192	191	169	149	198	236	1178	222	158	138
81	115	152	239	1434	352	294	172	164	173	152	123	150	183	947	182	128	115
82	90	122	199	1194	287	236	146	146	140	130	102	110	138	727	149	96	90
83	81	100	160	949	235	182	122	128	123	101	81	86	100	529	115	79	81
84	58	71	123	710	178	132	97	104	92	82	61	58	71	341	76	53	58
85	40	57	96	495	138	102	80	81	69	56	44	41	26	185	53	37	40
86	15	34	68	311	97	73	61	58	45	34	25	27	18	63	30	26	15
87	15	27	33	182	64	53	39	39	24	22	16	16	15	27	24	23	15
88	19	19	18	67	39	34	30	24	16	17	14	16	16	15	20	15	19
89	21	13	15	24	22	23	20	20	16	0	13	13	10	20	26	17	21
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Report No.: UTU2502037E-D-

91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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)	2652.8	14.3	14.3
FM (30-60)	6080.3	32.7	32.7
FH (60-80)	2011.1	10.8	10.8
FVH (80-90)	98.1	0.5	0.5
BL (0-30)	2420.1	13.0	13.0
BM (30-60)	4260.3	22.9	22.9
BH (60-80)	1000.6	5.4	5.4
BVH (80-90)	46.5	0.3	0.3
UL (90-100)	0.0	0.0	0.0
UH (100-180)	0.0	0.0	0.0
Total	18569.8	99.9	100.0
BUG Rating	B3-U0-G3		

3. Test Equipment

Equipment Name	Model No.	Serial No.	Calibration Date
Goniophotometric System	GPM-3000	DYHXF120001	2024-01-09
AC Power Source	CHP-500C	DYBWD010159	2024-01-08
Standard Lamp*	24V/150W	DYJYR040040	2024-01-17
Standard Lamp**	24V/100W	DYBWR030014	2024-01-17
Digital Power Meter	WT500	DYDWQ20010	2024-01-08
Integral Sphere (2M)	2M	DYJCE120067	2024-01-09
Digital Power Meter	WT500	DYDWQ200006	2024-01-08
Optical Color and Electrical Measurement System	CMS-3000S	DYJCE120067	2024-01-09

* Reference standard lamp (150W incandescent directional lamp) calibrated by Guangzhou Institute of Measurement and Testing Technology.

** Reference standard lamp (100W incandescent omni-directional lamp) calibrated by Guangzhou Institute of Measurement and Testing Technology.

Expand Uncertainty:

Photometric Measurement (Sphere): 2.02%, k=2

Chromaticity Measurement(Sphere):24.8K, k=2

Photometric Measurement(Goniophotometer):2.88%, k=2

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