

LM-79-19 Test Report

For

RAB LIGHTING INC

(Brand Name: RAB)

408 W 14th St, New York, NY, US, 10014

Omnidirectional/Directional Medium Screw-Base Replacement for HID Lamps

Model name(s): HIDFA-35S-E26-8CCT-BYP

Representative (Tested) Model:

HIDFA-35S-E26-8CCT-BYP (Setting at 3000K 35W)
HIDFA-35S-E26-8CCT-BYP (Setting at 4000K 35W)
HIDFA-35S-E26-8CCT-BYP (Setting at 5000K 35W)
HIDFA-35S-E26-8CCT-BYP (Setting at 3000K 26W)
HIDFA-35S-E26-8CCT-BYP (Setting at 4000K 26W)
HIDFA-35S-E26-8CCT-BYP (Setting at 5000K 26W)
HIDFA-35S-E26-8CCT-BYP (Setting at 3000K 18W)
HIDFA-35S-E26-8CCT-BYP (Setting at 4000K 18W)
HIDFA-35S-E26-8CCT-BYP (Setting at 5000K 18W)

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

Test & Report By:



Engineer: Winnie Wu

Date: 2026-03-16

Review By:



Manager: Jason Luo

1.1 Product Information:

Organization Name	RAB LIGHTING INC	
Brand Name	RAB	
Model Number	HIDFA-35S-E26-8CCT-BYP	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Omnidirectional/Directional Medium Screw-Base Replacement for HID Lamps	
Rated Voltage / Frequency	120-277Vac, 50/60 Hz	
Nominal Power	35/26/18W	
Rated Initial Lamp Lumen	--	
Declared CCT	3000K,4000K, 5000K (Color tunable)	
LED Manufacturer	Lumileds Holding B.V.	
LED Model	L128-3080RC35003P1 L128-5080RC35003P1	
Sample Number	UTU2603010E-B1	
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	2026-03-11
Date of Test	2026-03-13
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

<p>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</p>
<p>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: HIDFA-35S-E26-8CCT-BYP:1.109</p>
<p>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.</p>

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

Test date	2026-03-13	Test Ambient:	25.2 °C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 3000K 35W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.285	33.84	0.99	11.24
0E-B1	277.0	60	0.136	33.86	0.897	11.94
DLC Pass Criteria					$\geq 0.9(-3\%)$	$\leq 20(+5)$

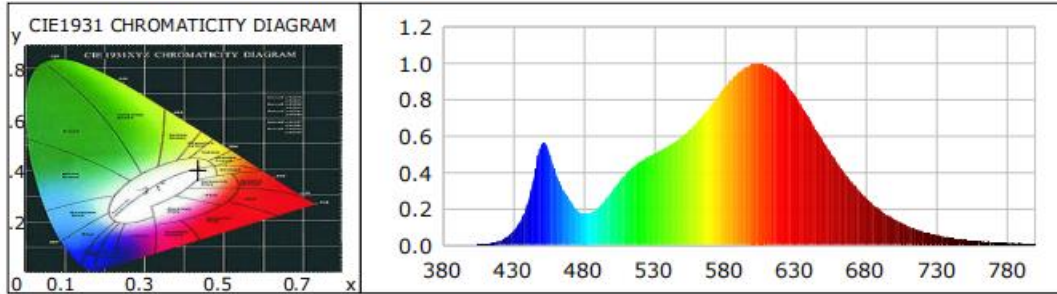
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	5
Frequency (Hz)	60	R2	91	R10	79
CCT (K)	3003	R3	96	R11	79
Duv	-0.0013	R4	80	R12	70
Chromaticity (x, y)	x=0.4348 y=0.4001	R5	81	R13	83
Chromaticity (u', v')	u'=0.2509 v'=0.5195	R6	89	R14	99
Color Rendering Index CRI(Ra)	82	R7	82	R15	73
R9	5	R8	58	--	--
Rf	84	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-12				

Photometric Measurement – Goniophotometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	4768.0	4724.8	$\geq 2000(-10\%)$
Luminous Efficacy (lm/W)	140.9	139.5	Standard $\geq 130(-3\%)$
Most worst Luminous/Highest	139.54		
Beam Angle	280.9	--	$\geq 75^\circ$
Center Beam Candle Power (cd)	205	--	--

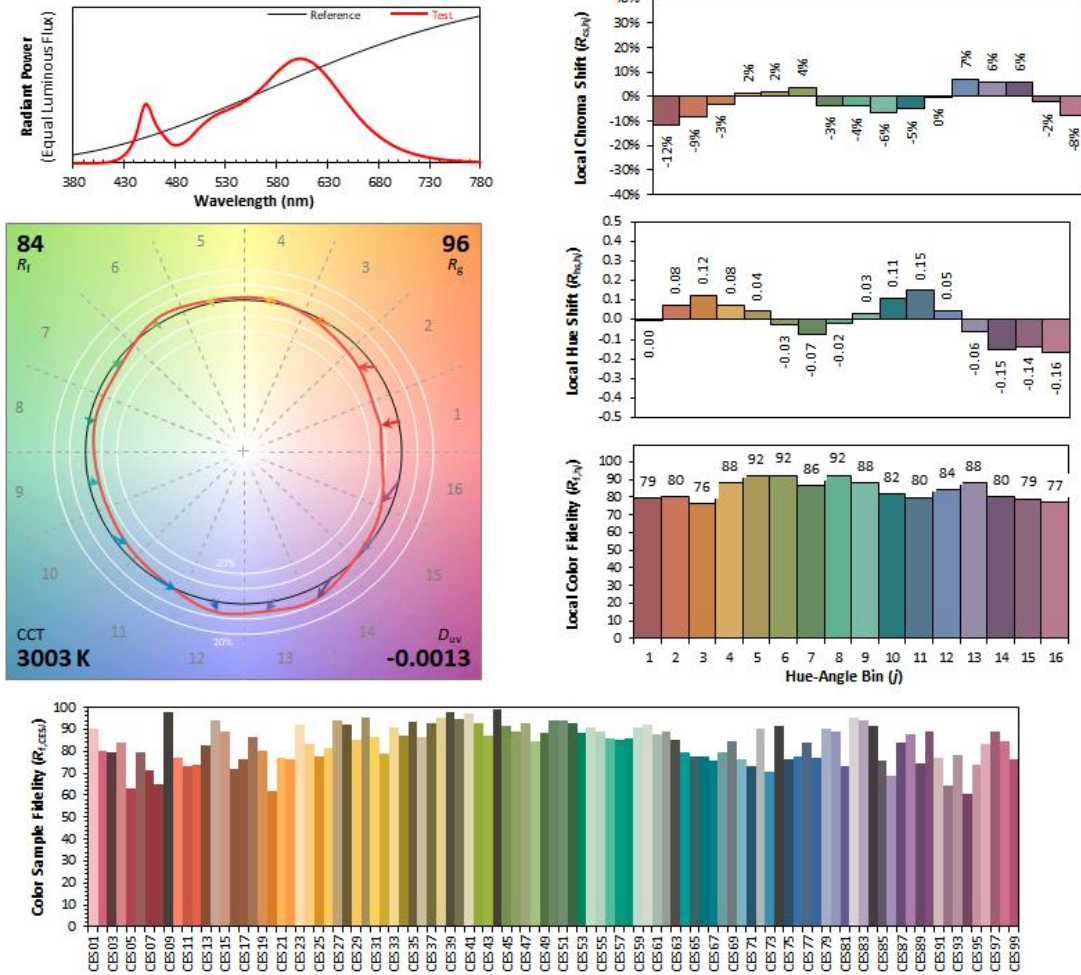
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	0.0515	535	0.4830	47.5769	690	0.3435	33.8345
385	0.0004	0.0350	540	0.5026	49.5073	695	0.2988	29.4296
390	0.0007	0.0692	545	0.5239	51.6056	700	0.2593	25.5441
395	0.0002	0.0202	550	0.5466	53.8431	705	0.2238	22.0418
400	0.0009	0.0933	555	0.5695	56.0976	710	0.1931	19.0228
405	0.0024	0.2374	560	0.5991	59.0147	715	0.1655	16.3004
410	0.0043	0.4197	565	0.6343	62.4837	720	0.1421	13.9947
415	0.0101	0.9913	570	0.6749	66.4787	725	0.1204	11.8576
420	0.0220	2.1679	575	0.7183	70.7582	730	0.1030	10.1503
425	0.0419	4.1237	580	0.7652	75.3708	735	0.0872	8.5915
430	0.0757	7.4553	585	0.8186	80.6343	740	0.0755	7.4399
435	0.1315	12.9487	590	0.8705	85.7433	745	0.0642	6.3239
440	0.2229	21.9612	595	0.9115	89.7903	750	0.0538	5.2963
445	0.3883	38.2488	600	0.9526	93.8311	755	0.0453	4.4658
450	0.5538	54.5495	605	0.9813	96.6605	760	0.0388	3.8234
455	0.5241	51.6294	610	0.9967	98.1833	765	0.0343	3.3801
460	0.3992	39.3222	615	0.9963	98.1383	770	0.0287	2.8254
465	0.3131	30.8408	620	0.9859	97.1190	775	0.0252	2.4850
470	0.2484	24.4732	625	0.9607	94.6370	780	0.0203	1.9994
475	0.1945	19.1584	630	0.9226	90.8827	785	0.0170	1.6716
480	0.1727	17.0079	635	0.8765	86.3394	790	0.0158	1.5556
485	0.1798	17.7131	640	0.8203	80.8071	795	0.0130	1.2764
490	0.2043	20.1270	645	0.7579	74.6514	800	0.0097	0.9574
495	0.2454	24.1742	650	0.6945	68.4086			
500	0.2962	29.1808	655	0.6283	61.8895			
505	0.3470	34.1805	660	0.5655	55.7082			
510	0.3920	38.6166	665	0.5034	49.5870			
515	0.4290	42.2598	670	0.4466	43.9944			
520	0.4584	45.1574	675	0.3929	38.6991			
525	0.4830	47.5769	680	0.3435	33.8345			
530	0.5026	49.5073	685	0.2988	29.4296			

TM30

ANSI/IES TM-30-18 Color Rendition Report



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.	x	0.4348	CIE 13.3-1995 (CRI) R_a 82 R_g 5
	y	0.4001	
	u'	0.2509	
	v'	0.5195	

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

Zonal Lumen Tabulation

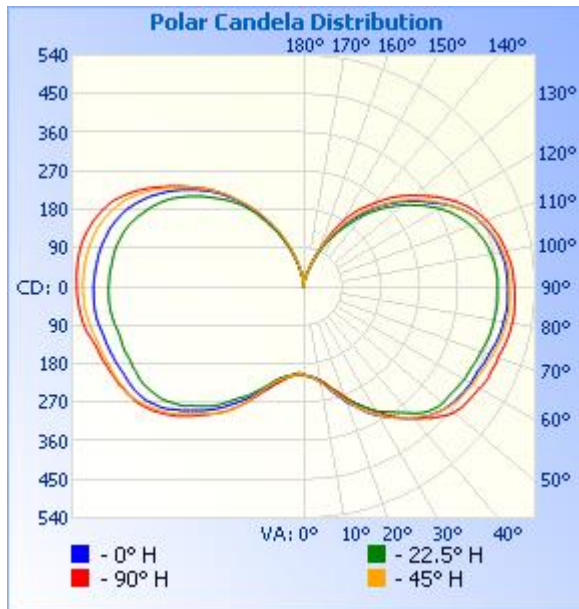
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	225.2	4.7%	4.7%
0-40	448.4	9.4%	9.4%
0-60	1,160.2	24.3%	24.3%
60-90	1,453.2	30.5%	30.5%
70-100	1,516.2	31.8%	31.8%
90-120	1,407.7	29.5%	29.5%
0-90	2,613.3	54.8%	54.8%
90-180	2,155.0	45.2%	45.2%
0-180	4,768.3	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	20.2	0.4%	90-100	512.0	10.7%
10-20	68.2	1.4%	100-110	480.6	10.1%
20-30	136.8	2.9%	110-120	415.1	8.7%
30-40	223.2	4.7%	120-130	321.2	6.7%
40-50	316.7	6.6%	130-140	221.7	4.6%
50-60	395.1	8.3%	140-150	130.2	2.7%
60-70	449.0	9.4%	150-160	57.4	1.2%
70-80	489.7	10.3%	160-170	15.3	0.3%
80-90	514.5	10.8%	170-180	1.5	0%

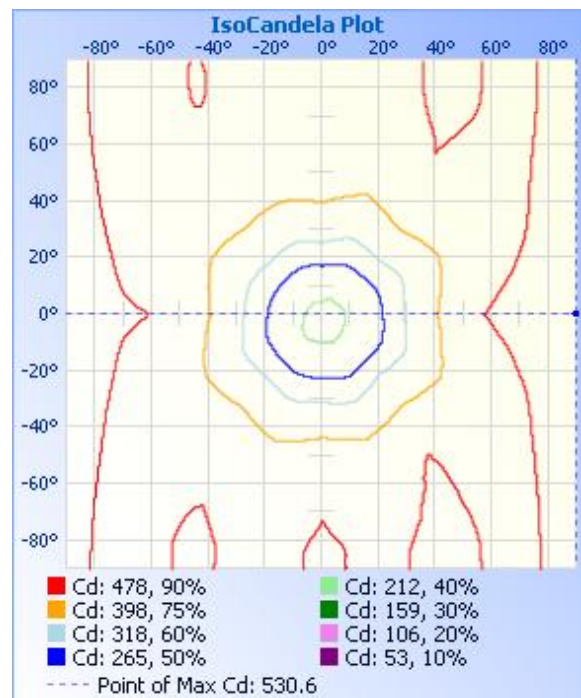
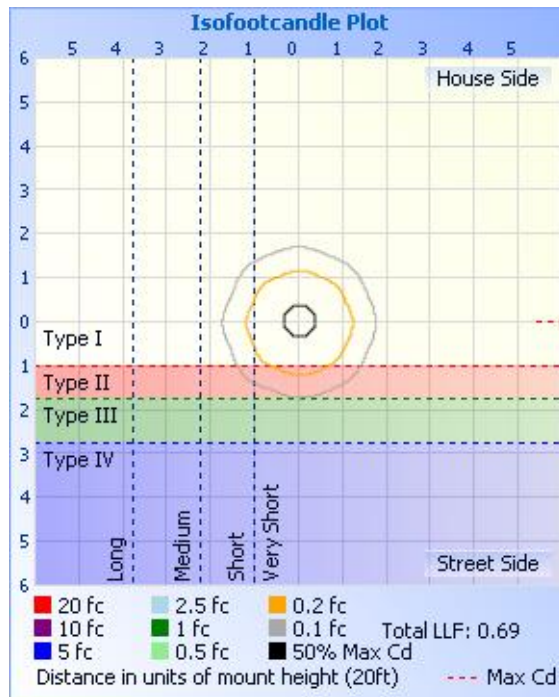
Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width
17.0ft	0.71 fc	15.3 ft
34.0ft	0.18 fc	30.6 ft
51.0ft	0.08 fc	46.0 ft
68.0ft	0.04 fc	61.3 ft
85.0ft	0.03 fc	76.6 ft
102.0ft	0.02 fc	91.9 ft

■ Horiz. Spread: 48.5°



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	205	205	205	205	205	205	205	205	205	205	205	205	205	205	205	205	205
1	207	207	207	206	206	206	205	204	204	204	204	204	205	205	206	206	207
2	209	208	208	207	207	207	205	204	202	202	203	204	205	206	207	206	209
3	210	209	209	208	208	208	206	204	202	201	203	205	206	207	208	207	210
4	211	210	210	209	209	209	206	205	203	202	205	206	207	208	209	208	211
5	213	212	212	211	210	209	207	206	205	204	207	209	208	209	211	209	213
6	214	214	214	214	212	210	208	207	207	206	209	210	209	210	212	211	214
7	216	217	217	215	214	211	208	209	208	207	210	211	210	211	214	214	216
8	219	220	220	217	216	213	209	210	209	208	211	212	212	213	216	216	219
9	222	223	223	220	219	215	211	211	210	210	212	213	214	216	219	219	222
10	226	227	226	224	222	218	213	212	212	211	213	214	216	218	222	222	226
11	230	230	231	228	225	221	216	215	214	213	215	215	219	221	224	226	230
12	234	234	235	233	229	224	219	217	216	215	217	217	222	224	228	230	234
13	240	238	240	238	233	228	223	220	219	217	221	220	225	228	232	234	240
14	246	242	245	242	238	231	227	224	222	220	223	223	229	232	236	239	246
15	252	248	251	247	243	235	231	227	226	223	227	226	233	236	241	243	252
16	258	254	255	252	249	240	235	232	230	226	231	230	236	241	246	249	258
17	263	258	261	257	253	246	239	236	236	230	235	235	241	245	252	254	263
18	270	264	268	262	258	250	245	241	241	235	240	239	247	250	257	258	270
19	278	270	275	268	263	254	251	246	247	240	245	244	252	255	263	263	278
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21	291	283	287	280	277	265	265	256	257	250	256	255	263	265	275	275	291
22	296	288	293	286	284	272	272	262	261	256	263	260	270	270	282	281	296
23	302	293	300	291	291	278	278	268	268	261	271	265	277	276	290	286	302
24	308	298	307	296	297	283	284	274	275	266	279	271	284	282	297	291	308
25	315	304	314	302	304	288	290	280	282	272	289	278	291	286	303	295	315
26	322	310	320	307	310	293	297	285	288	279	297	284	299	291	309	301	322
27	329	317	327	315	316	298	305	291	294	285	305	289	307	296	317	306	329

28	336	323	333	321	322	303	312	296	300	290	313	294	314	302	325	312	336
29	341	329	339	328	328	309	319	302	306	295	321	300	321	307	333	318	341
30	347	335	345	334	335	315	326	307	313	300	329	306	329	314	339	324	347
31	352	339	351	339	342	320	332	313	319	306	336	313	336	319	345	330	352
32	357	344	357	345	350	326	338	319	325	312	343	320	343	327	350	335	357
33	363	348	363	349	357	331	344	325	333	320	351	327	349	333	356	339	363
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39	394	379	393	378	395	361	382	357	372	359	383	360	387	366	395	368	394
40	400	385	398	383	401	366	388	362	378	365	389	365	394	371	400	375	400
41	406	392	403	387	407	372	393	366	383	370	395	370	400	375	406	380	406
42	410	398	408	392	414	377	398	372	389	375	401	375	406	380	413	385	410
43	414	402	413	398	420	383	404	377	395	380	407	381	412	387	418	390	414
44	418	407	419	402	427	388	409	382	402	387	414	387	420	392	424	395	418
45	422	411	424	406	433	394	414	387	408	393	420	391	426	395	430	399	422
46	425	414	426	409	437	401	421	392	413	399	426	396	431	400	434	403	425
47	429	417	429	412	443	406	426	398	419	403	432	401	437	406	439	406	429
48	432	420	432	414	448	410	431	404	427	407	437	404	442	410	443	409	432
49	435	422	436	417	454	413	435	408	432	411	442	407	447	414	447	410	435
50	437	423	439	418	457	415	438	409	436	416	446	410	452	416	451	413	437
51	439	423	442	418	459	418	441	411	441	420	451	413	457	419	455	414	439
52	440	424	444	420	463	419	444	413	444	423	456	415	461	421	459	415	440
53	442	425	445	420	465	420	448	414	449	426	461	418	465	423	461	416	442
54	444	426	447	421	466	421	450	417	452	428	465	420	469	424	464	416	444
55	446	427	449	422	467	423	453	418	455	430	468	421	472	425	467	416	446
56	446	428	450	422	468	423	455	419	457	432	471	423	475	427	468	416	446
57	447	429	450	423	470	425	457	420	459	434	474	423	477	427	470	417	447
58	448	430	453	424	471	426	458	422	461	436	477	423	479	428	470	417	448
59	449	432	454	425	472	428	461	423	463	438	479	424	481	428	471	418	449

60	450	433	456	427	474	429	462	423	464	439	480	424	483	429	472	418	450
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66	456	437	463	429	480	435	468	428	469	440	488	430	492	434	479	419	456
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69	459	440	467	432	483	436	472	432	473	442	491	432	497	434	483	420	459
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76	471	449	477	440	491	446	483	436	480	445	500	434	509	440	500	424	471
77	472	450	479	440	492	447	484	438	482	447	501	435	513	442	503	426	472
78	472	451	479	442	493	448	486	439	483	448	504	436	516	444	504	426	472
79	473	451	480	442	494	448	487	440	486	450	505	437	518	445	506	426	473
80	474	451	481	442	494	450	488	441	487	451	507	437	520	446	507	427	474
81	474	452	482	443	495	450	489	442	488	452	508	438	522	447	508	428	474
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83	477	453	482	444	495	452	492	444	490	454	511	439	525	447	510	428	477
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91	476	453	480	445	491	451	491	445	490	455	516	438	529	445	512	427	476

92	476	453	481	444	491	450	491	445	489	454	515	437	530	444	512	427	476
93	475	452	480	444	490	450	491	445	489	454	514	436	531	444	512	427	475
94	474	452	479	444	489	449	490	444	488	453	514	436	530	444	512	427	474
95	474	451	479	443	488	448	489	444	487	453	514	435	531	443	511	426	474
96	474	450	478	443	487	447	488	443	486	451	513	434	530	443	511	425	474
97	472	449	477	442	485	446	487	442	485	451	512	434	530	441	510	424	472
98	471	447	475	441	484	445	485	442	485	450	512	432	530	441	508	423	471
99	469	445	474	439	482	445	485	441	484	450	511	431	529	439	507	421	469
100	467	444	472	438	480	443	483	440	483	449	510	430	529	438	505	420	467
101	466	442	470	437	478	442	482	439	482	448	509	429	528	437	503	417	466
102	464	440	467	435	476	440	481	437	480	447	507	427	526	435	501	415	464
103	461	438	465	434	474	439	479	435	478	446	505	426	524	433	499	413	461
104	459	435	462	432	472	436	477	433	476	444	504	423	522	432	497	411	459
105	457	433	460	430	469	434	475	431	475	442	502	421	520	429	494	409	457
106	453	429	457	428	466	432	473	429	473	440	500	418	518	426	490	405	453
107	451	426	453	425	463	429	470	427	471	438	497	416	515	423	486	403	451
108	448	423	449	422	460	427	467	424	468	436	494	414	512	420	483	400	448
109	444	420	446	419	457	425	464	422	466	434	491	411	509	416	479	396	444
110	440	416	441	415	454	422	461	419	463	430	488	407	505	412	475	393	440
111	437	412	437	412	449	418	458	415	459	427	484	404	502	408	470	389	437
112	433	407	431	408	445	414	454	412	456	424	480	400	497	404	464	386	433
113	428	403	427	405	440	410	451	408	453	420	476	396	493	400	458	382	428
114	423	398	421	401	436	407	447	405	449	415	472	393	489	395	452	378	423
115	417	393	416	397	431	401	443	400	444	411	467	388	483	391	445	374	417
116	411	389	410	393	427	397	439	396	439	407	462	384	476	387	438	370	411
117	404	384	404	388	420	393	434	392	434	403	456	379	469	382	431	365	404
118	398	377	398	383	414	388	429	387	429	399	450	374	463	376	424	359	398
119	391	371	391	379	408	382	422	381	424	395	444	369	456	371	416	354	391
120	383	365	385	373	402	377	416	376	418	390	437	364	448	366	409	348	383
121	375	359	378	368	396	371	409	371	412	385	430	358	440	360	401	343	375
122	368	352	372	362	388	365	403	365	406	379	423	351	432	354	394	337	368
123	360	345	365	356	381	358	395	359	400	374	415	345	424	347	386	331	360

124	352	338	358	349	375	352	388	353	393	369	408	339	415	341	378	324	352
125	346	331	351	343	367	346	381	347	387	362	400	333	407	334	370	318	346
126	339	324	344	336	360	339	373	340	380	355	391	327	398	328	362	311	339
127	331	317	337	329	352	333	365	334	374	349	383	321	390	321	354	304	331
128	325	310	331	322	345	326	358	328	367	343	375	315	381	313	347	298	325
129	317	302	323	315	338	318	351	321	359	336	367	308	373	306	340	290	317
130	310	295	315	308	332	311	344	315	352	329	360	302	364	299	331	283	310
131	303	288	308	301	325	304	337	308	345	322	352	295	355	291	324	277	303
132	295	280	300	295	318	297	330	302	338	315	345	289	347	285	316	270	295
133	288	272	292	288	310	289	322	295	330	307	337	282	340	279	308	263	288
134	280	265	283	281	302	282	315	288	323	300	330	276	331	273	299	257	280
135	272	257	275	274	295	275	309	282	316	293	321	270	324	268	289	250	272
136	263	249	267	267	287	268	301	276	309	286	313	263	315	261	281	243	263
137	255	241	259	260	278	261	295	269	301	280	306	258	307	255	272	236	255
138	247	234	252	253	269	254	288	264	292	273	297	252	298	249	263	229	247
139	239	226	244	245	261	247	280	257	284	266	289	246	289	243	254	221	239
140	230	217	236	237	254	239	272	250	275	259	280	239	280	236	246	213	230
141	222	209	229	230	245	232	264	244	267	252	271	232	271	229	236	204	222
142	213	199	221	221	238	224	257	236	259	245	262	226	261	220	227	195	213
143	204	190	212	211	230	216	249	229	249	238	253	218	250	212	218	187	204
144	196	181	204	203	224	207	240	220	241	230	245	210	240	204	209	178	196
145	187	173	194	193	216	198	233	211	233	221	236	202	230	196	200	170	187
146	178	165	185	183	208	189	225	202	225	212	227	195	221	188	192	163	178
147	169	157	175	175	199	180	216	193	216	203	218	186	211	179	182	156	169
148	160	150	167	166	189	171	208	185	207	194	209	177	202	172	172	149	160
149	152	142	159	157	179	163	198	176	199	185	201	169	192	164	163	142	152
150	144	135	150	149	169	156	189	168	190	176	191	162	184	157	154	136	144
151	136	127	141	142	159	148	180	160	179	166	182	154	175	150	146	129	136
152	127	118	133	134	147	141	171	153	171	158	173	147	165	144	137	121	127
153	117	111	124	125	136	133	162	147	162	150	164	140	157	136	130	114	117
154	109	103	115	116	126	124	150	139	154	143	156	133	147	128	121	106	109
155	100	95	106	107	116	116	140	131	146	136	148	126	138	119	113	98	100

156	93	88	98	99	105	108	129	123	138	129	140	119	129	111	105	93	93
157	84	81	89	92	96	100	118	114	130	120	131	112	119	103	97	86	84
158	77	74	82	84	87	93	108	106	121	112	123	104	111	96	89	80	77
159	69	67	74	78	78	86	98	99	113	104	114	97	102	89	82	72	69
160	62	61	65	70	72	80	90	92	104	96	104	90	93	83	75	66	62
161	56	54	58	63	65	72	83	85	96	89	96	83	85	76	67	60	56
162	49	48	52	57	59	66	76	79	88	83	89	77	77	69	60	55	49
163	44	43	47	51	53	60	69	72	81	76	81	70	70	63	54	49	44
164	39	38	41	45	48	54	63	65	74	69	73	64	64	58	48	44	39
165	34	34	35	40	43	48	56	59	66	63	66	58	57	52	43	39	34
166	29	29	31	35	38	44	51	53	59	57	59	53	50	46	38	34	29
167	26	26	27	30	34	39	46	48	53	50	53	48	45	41	33	29	26
168	22	22	24	26	30	35	41	43	46	45	46	43	39	36	29	25	22
169	19	20	20	23	27	30	36	38	40	40	40	39	35	31	26	22	19
170	17	17	18	20	24	27	32	33	35	36	35	34	30	27	23	19	17
171	15	15	16	17	21	23	28	29	30	31	31	30	27	23	20	17	15
172	12	12	13	15	19	20	24	26	27	28	27	26	21	19	18	14	12
173	10	10	11	13	16	17	21	22	23	25	23	23	18	17	15	12	10
174	5	7	9	11	13	15	18	19	20	22	20	18	14	13	10	5	5
175	3	4	6	7	10	12	14	16	17	19	17	14	11	11	7	5	3
176	1	1	1	2	5	7	11	11	14	14	14	9	6	6	3	1	1
177	1	1	1	1	1	1	4	8	7	10	7	6	4	1	1	1	1
178	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
179	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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

Test date	2026-03-13	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 4000K 35W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.275	32.64	0.99	11.4
0E-B1	277.0	60	0.131	32.65	0.897	12.1
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

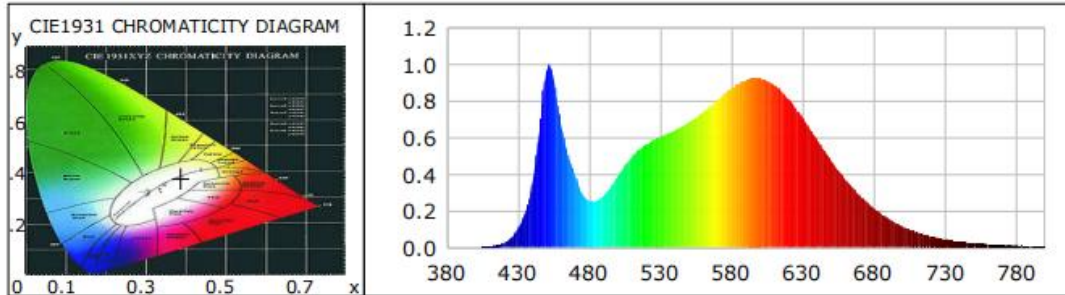
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	83	R9	11
Frequency (Hz)	60	R2	91	R10	79
CCT (K)	3801	R3	96	R11	81
Duv	-0.0027	R4	82	R12	64
Chromaticity (x, y)	x=0.3874 y=0.3753	R5	83	R13	85
Chromaticity (u', v')	u'=0.2303 v'=0.502	R6	87	R14	98
Color Rendering Index CRI(Ra)	84	R7	85	R15	77
R9	11	R8	64	--	--
Rf	84	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-12				

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	5039.6	5002.6	>=2000(-10%)
Luminous Efficacy (lm/W)	154.4	153.2	Standard>=130(-3%)
Most worst Luminous/Highest Watts	153.22		

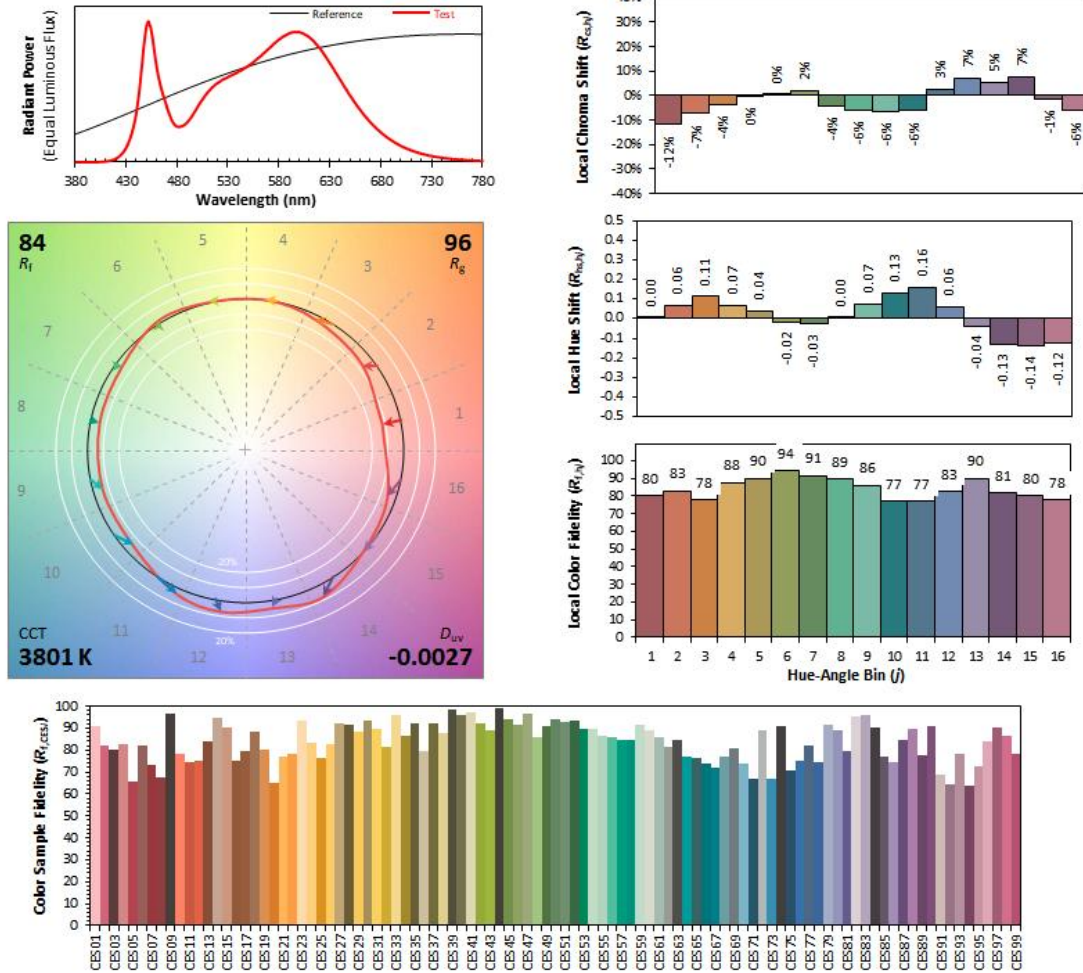
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0001	0.0117	535	0.5879	58.5291	690	0.2830	28.1785
385	0.0006	0.0627	540	0.6042	60.1539	695	0.2464	24.5286
390	0.0008	0.0813	545	0.6223	61.9545	700	0.2132	21.2291
395	0.0005	0.0479	550	0.6413	63.8449	705	0.1831	18.2326
400	0.0011	0.1092	555	0.6614	65.8482	710	0.1584	15.7680
405	0.0018	0.1772	560	0.6842	68.1200	715	0.1350	13.4451
410	0.0047	0.4684	565	0.7098	70.6638	720	0.1157	11.5153
415	0.0116	1.1570	570	0.7415	73.8192	725	0.0985	9.8064
420	0.0251	2.5022	575	0.7739	77.0451	730	0.0837	8.3379
425	0.0518	5.1580	580	0.8055	80.1982	735	0.0711	7.0753
430	0.1014	10.0921	585	0.8409	83.7235	740	0.0607	6.0432
435	0.1914	19.0525	590	0.8709	86.7035	745	0.0516	5.1358
440	0.3471	34.5618	595	0.8950	89.1032	750	0.0443	4.4147
445	0.6450	64.2145	600	0.9158	91.1807	755	0.0374	3.7201
450	0.9639	95.9620	605	0.9253	92.1193	760	0.0325	3.2324
455	0.9246	92.0522	610	0.9241	92.0069	765	0.0284	2.8301
460	0.6792	67.6222	615	0.9104	90.6399	770	0.0242	2.4108
465	0.5129	51.0644	620	0.8883	88.4421	775	0.0212	2.1095
470	0.3939	39.2135	625	0.8541	85.0370	780	0.0169	1.6847
475	0.2963	29.4967	630	0.8112	80.7621	785	0.0140	1.3961
480	0.2525	25.1379	635	0.7612	75.7882	790	0.0128	1.2747
485	0.2562	25.5037	640	0.7055	70.2408	795	0.0102	1.0158
490	0.2825	28.1248	645	0.6478	64.4969	800	0.0090	0.9005
495	0.3306	32.9189	650	0.5893	58.6656			
500	0.3892	38.7478	655	0.5296	52.7256			
505	0.4445	44.2502	660	0.4734	47.1319			
510	0.4950	49.2827	665	0.4211	41.9225			
515	0.5339	53.1536	670	0.3709	36.9255			
520	0.5620	55.9519	675	0.3251	32.3667			
525	0.5879	58.5291	680	0.2830	28.1785			
530	0.6042	60.1539	685	0.2464	24.5286			

TM30

ANSI/IES TM-30-18 Color Rendition Report



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

x 0.3874
 y 0.3753
 u' 0.2303
 v' 0.5020

CIE 13.3-1995 (CRI)	
R_a	84
R_g	11

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

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

Test date	2026-03-13	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 5000K 35W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.284	33.75	0.991	11.43
0E-B1	277.0	60	0.136	33.81	0.896	12.03
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

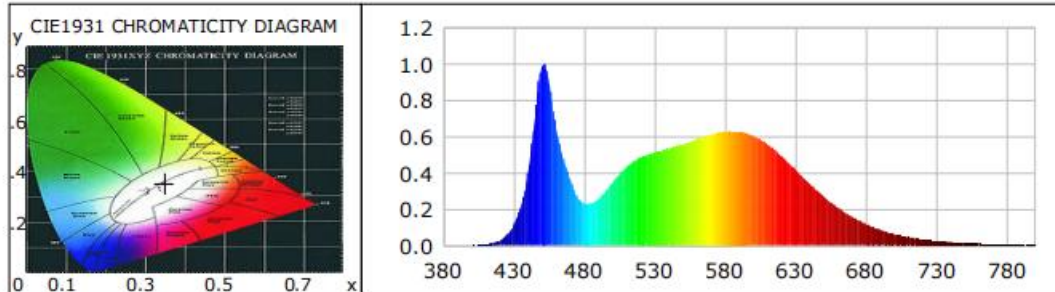
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	80	R9	1
Frequency (Hz)	60	R2	88	R10	71
CCT (K)	4921	R3	93	R11	79
Duv	0.0009	R4	80	R12	55
Chromaticity (x, y)	x=0.3475 y=0.3553	R5	80	R13	82
Chromaticity (u', v')	u'=0.2116 v'=0.4868	R6	82	R14	97
Color Rendering Index CRI(Ra)	82	R7	86	R15	74
R9	1	R8	65	--	--
Rf	82	--	--	--	--
Rg	95	--	--	--	--
Rcs,h1(%)	-13				

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	5048.7	5018.8	>=2000(-10%)
Luminous Efficacy (lm/W)	149.6	148.4	Standard>=130(-3%)
Most worst Luminous/Highest Watts	148.44		

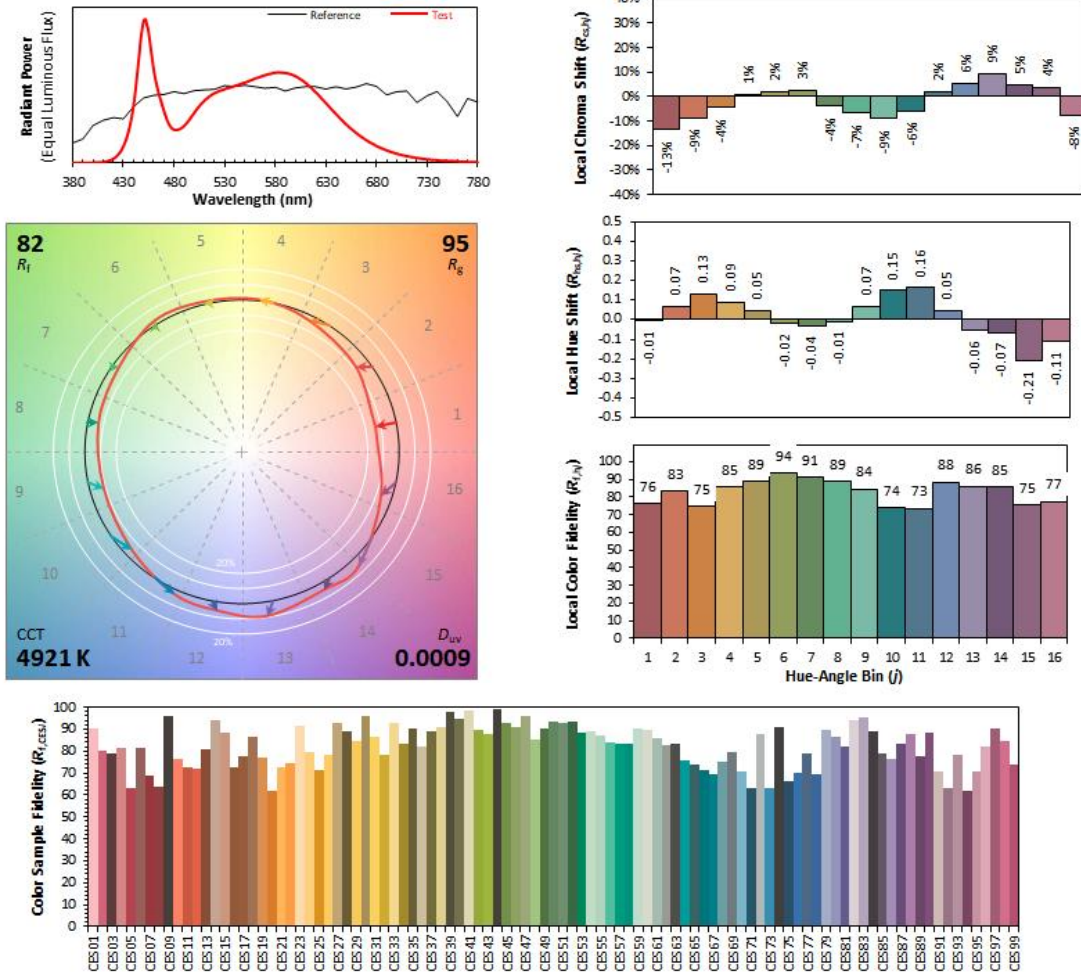
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0002	0.0244	535	0.5016	66.4984	690	0.1575	20.8817
385	0.0006	0.0824	540	0.5122	67.9050	695	0.1366	18.1132
390	0.0004	0.0530	545	0.5234	69.3868	700	0.1169	15.4936
395	0.0007	0.0889	550	0.5353	70.9625	705	0.1005	13.3231
400	0.0014	0.1841	555	0.5465	72.4569	710	0.0866	11.4783
405	0.0024	0.3199	560	0.5588	74.0761	715	0.0740	9.8122
410	0.0051	0.6778	565	0.5726	75.9129	720	0.0632	8.3728
415	0.0123	1.6250	570	0.5877	77.9134	725	0.0537	7.1179
420	0.0274	3.6369	575	0.5993	79.4488	730	0.0460	6.1022
425	0.0579	7.6774	580	0.6106	80.9527	735	0.0380	5.0441
430	0.1142	15.1455	585	0.6215	82.3891	740	0.0333	4.4143
435	0.2175	28.8292	590	0.6291	83.4046	745	0.0287	3.8014
440	0.3970	52.6353	595	0.6291	83.4026	750	0.0241	3.1940
445	0.7134	94.5791	600	0.6261	83.0016	755	0.0196	2.6041
450	0.9896	131.1922	605	0.6185	81.9967	760	0.0178	2.3565
455	0.9030	119.7148	610	0.6048	80.1755	765	0.0156	2.0698
460	0.6472	85.8066	615	0.5824	77.2111	770	0.0134	1.7808
465	0.4823	63.9352	620	0.5572	73.8742	775	0.0108	1.4345
470	0.3621	48.0109	625	0.5278	69.9671	780	0.0097	1.2853
475	0.2686	35.6137	630	0.4922	65.2562	785	0.0083	1.1016
480	0.2307	30.5803	635	0.4551	60.3349	790	0.0067	0.8919
485	0.2328	30.8692	640	0.4156	55.1019	795	0.0054	0.7123
490	0.2569	34.0516	645	0.3766	49.9288	800	0.0036	0.4727
495	0.2991	39.6502	650	0.3400	45.0791			
500	0.3480	46.1393	655	0.3030	40.1751			
505	0.3943	52.2673	660	0.2682	35.5583			
510	0.4332	57.4256	665	0.2368	31.3983			
515	0.4637	61.4769	670	0.2080	27.5799			
520	0.4846	64.2431	675	0.1809	23.9860			
525	0.5016	66.4984	680	0.1575	20.8817			
530	0.5122	67.9050	685	0.1366	18.1132			

TM30

ANSI/IES TM-30-18 Color Rendition Report



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

x 0.3475
 y 0.3553
 u' 0.2116
 v' 0.4868

CIE 13.3-1995 (CRI)	
R_a	82
R_g	1

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

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

Test date	2026-03-13	Test Ambient:	25.2 °C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 3000K 26W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.215	25.54	0.988	6.1
0E-B1	277.0	60	0.104	25.55	0.886	8.2
DLC Pass Criteria					$\geq 0.9(-3\%)$	$\leq 20(+5)$

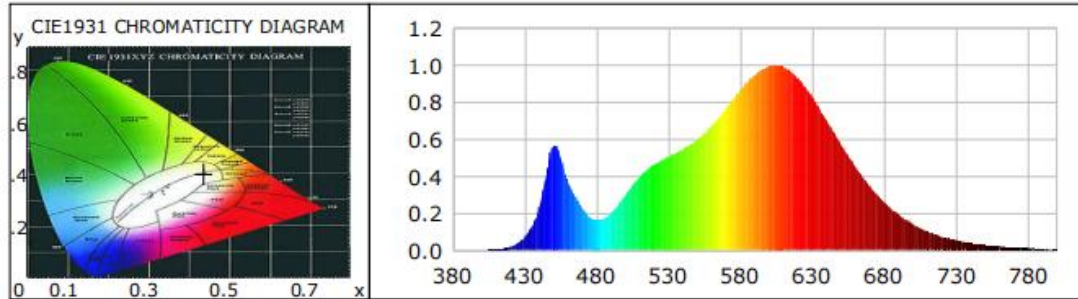
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	5
Frequency (Hz)	60	R2	91	R10	78
CCT (K)	2993	R3	96	R11	80
Duv	-0.0009	R4	80	R12	70
Chromaticity (x, y)	x=0.4361 y=0.4015	R5	81	R13	83
Chromaticity (u', v')	u'=0.2511 v'=0.5202	R6	88	R14	99
Color Rendering Index CRI(Ra)	82	R7	82	R15	73
R9	5	R8	58	--	--
Rf	84	--	--	--	--
Rg	97	--	--	--	--
Rcs,h1(%)	-12				

Photometric Measurement – Goniophotometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	3682.4	3647.8	$\geq 2000(-10\%)$
Luminous Efficacy (lm/W)	144.18	142.77	Standard $\geq 130(-3\%)$
Most worst Luminous/Highest	142.77		
Beam Angle	283.3	--	$\geq 75^\circ$
Center Beam Candle Power (cd)	161	--	--

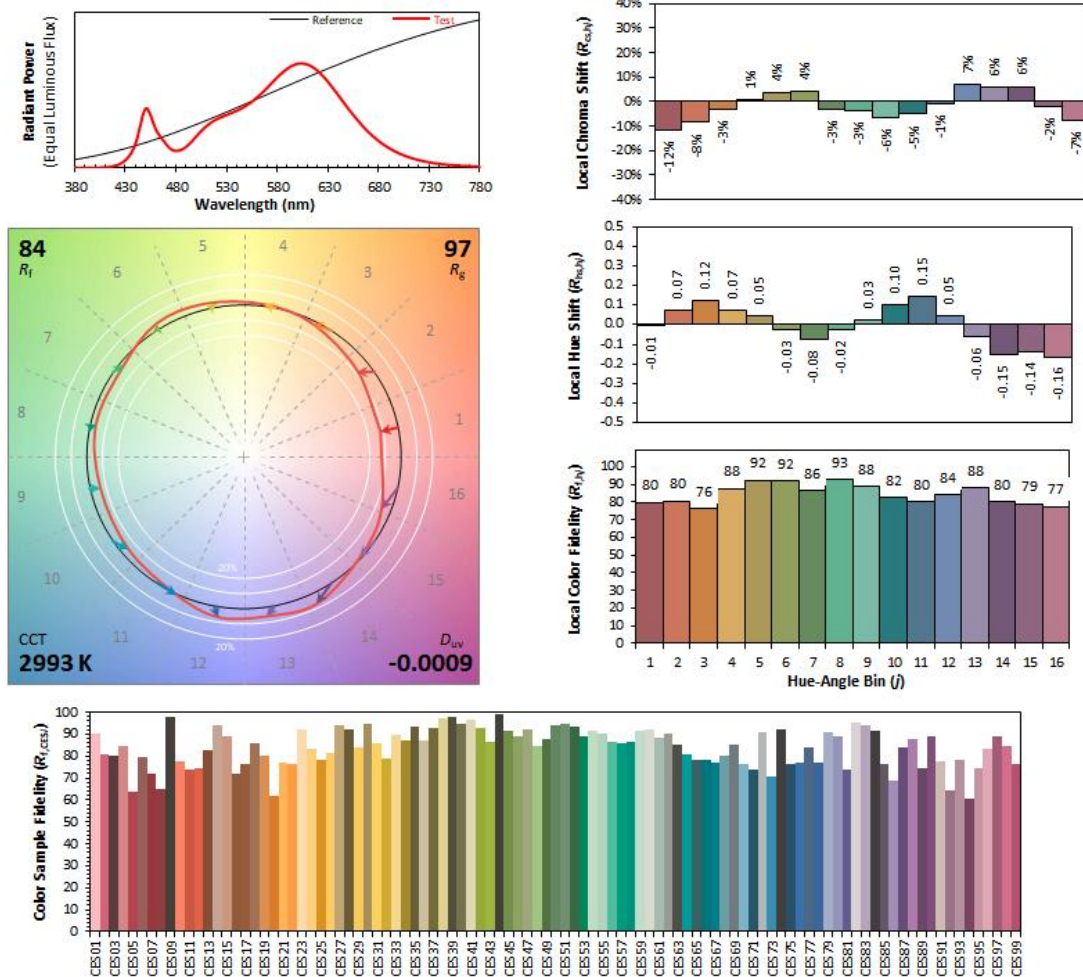
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	0.0381	535	0.4865	36.2339	690	0.3433	25.5700
385	0.0002	0.0141	540	0.5048	37.5998	695	0.2981	22.2061
390	0.0008	0.0608	545	0.5251	39.1091	700	0.2579	19.2083
395	0.0009	0.0704	550	0.5461	40.6722	705	0.2221	16.5398
400	0.0006	0.0477	555	0.5705	42.4941	710	0.1915	14.2618
405	0.0018	0.1340	560	0.6008	44.7453	715	0.1640	12.2139
410	0.0036	0.2673	565	0.6335	47.1857	720	0.1396	10.3995
415	0.0088	0.6557	570	0.6738	50.1834	725	0.1188	8.8448
420	0.0190	1.4169	575	0.7172	53.4200	730	0.1006	7.4950
425	0.0384	2.8620	580	0.7635	56.8684	735	0.0856	6.3782
430	0.0720	5.3646	585	0.8171	60.8569	740	0.0733	5.4626
435	0.1304	9.7118	590	0.8662	64.5140	745	0.0626	4.6618
440	0.2311	17.2141	595	0.9097	67.7548	750	0.0531	3.9575
445	0.4154	30.9412	600	0.9501	70.7632	755	0.0436	3.2487
450	0.5665	42.1930	605	0.9797	72.9692	760	0.0382	2.8452
455	0.4992	37.1806	610	0.9960	74.1847	765	0.0335	2.4955
460	0.3684	27.4397	615	0.9970	74.2555	770	0.0270	2.0137
465	0.2910	21.6705	620	0.9911	73.8150	775	0.0238	1.7751
470	0.2281	16.9913	625	0.9663	71.9685	780	0.0198	1.4717
475	0.1783	13.2826	630	0.9288	69.1801	785	0.0166	1.2337
480	0.1616	12.0365	635	0.8816	65.6647	790	0.0143	1.0685
485	0.1712	12.7540	640	0.8246	61.4133	795	0.0129	0.9579
490	0.2014	15.0036	645	0.7631	56.8351	800	0.0086	0.6402
495	0.2461	18.3275	650	0.6991	52.0726			
500	0.2998	22.3326	655	0.6333	47.1679			
505	0.3514	26.1698	660	0.5687	42.3595			
510	0.3972	29.5825	665	0.5069	37.7512			
515	0.4345	32.3591	670	0.4485	33.4011			
520	0.4635	34.5183	675	0.3917	29.1707			
525	0.4865	36.2339	680	0.3433	25.5700			
530	0.5048	37.5998	685	0.2981	22.2061			

TM30

ANSI/IES TM-30-18 Color Rendition Report



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.	x	0.4361	CIE 13.3-1995 (CRI)
	y	0.4015	
	u'	0.2511	
	v'	0.5202	
		R_a	82
		R_g	5

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

Zonal Lumen Tabulation

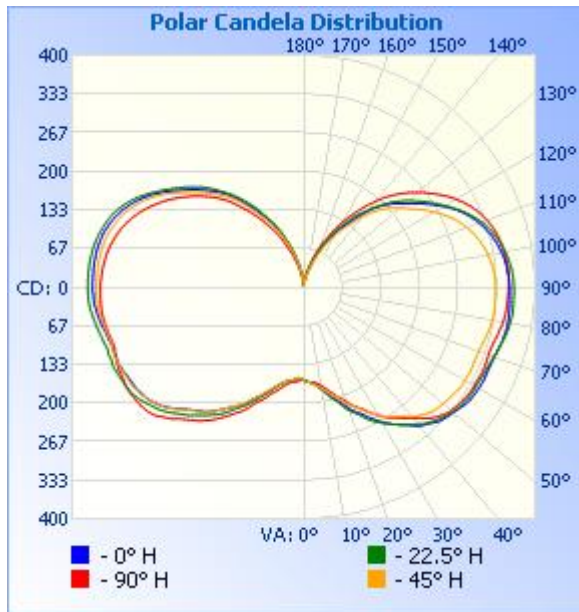
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	176.8	4.8%	4.8%
0-40	351.4	9.5%	9.5%
0-60	903.5	24.5%	24.5%
60-90	1,118.0	30.4%	30.4%
70-100	1,165.8	31.7%	31.7%
90-120	1,083.9	29.4%	29.4%
0-90	2,021.4	54.9%	54.9%
90-180	1,661.2	45.1%	45.1%
0-180	3,682.7	100%	100%

Lumens Per Zone

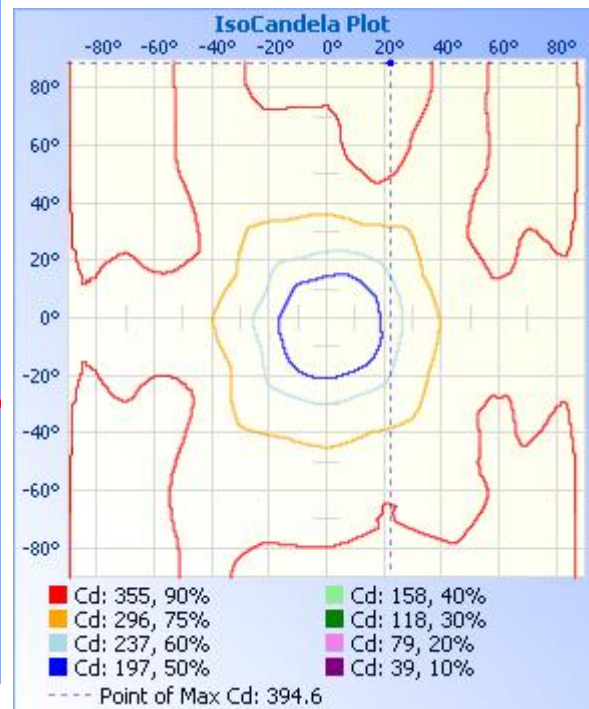
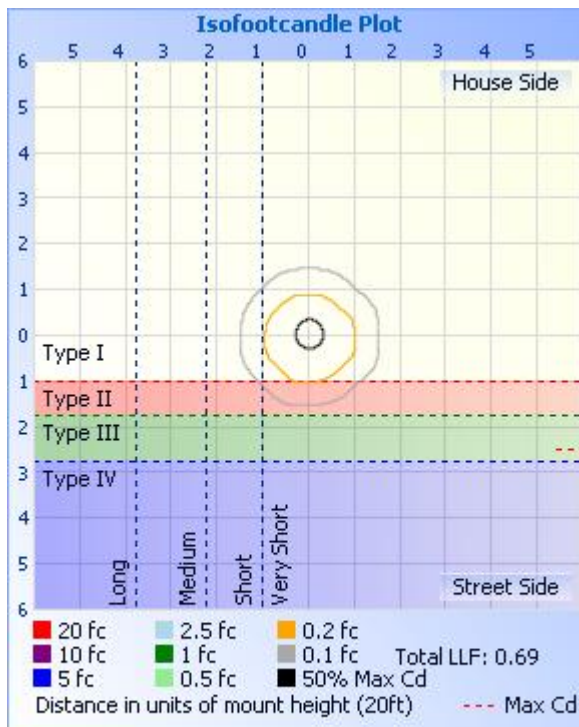
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	15.9	0.4%	90-100	394.8	10.7%
10-20	53.6	1.5%	100-110	370.5	10.1%
20-30	107.3	2.9%	110-120	318.6	8.7%
30-40	174.7	4.7%	120-130	245.7	6.7%
40-50	245.4	6.7%	130-140	171.8	4.7%
50-60	306.7	8.3%	140-150	100.9	2.7%
60-70	347.0	9.4%	150-160	45.1	1.2%
70-80	375.2	10.2%	160-170	12.5	0.3%
80-90	395.8	10.7%	170-180	1.3	0%

Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width
17.0ft	0.56 fc	
34.0ft	0.14 fc	
51.0ft	0.06 fc	
68.0ft	0.03 fc	
85.0ft	0.02 fc	
102.0ft	0.02 fc	



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
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1	162	162	162	162	161	160	160	159	159	159	159	160	161	161	162	162	162
2	163	163	163	164	163	161	161	159	158	157	158	159	161	162	163	163	163
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168	19	18	18	19	26	30	31	34	41	42	39	40	30	27	23	19	19
169	16	15	16	17	23	27	28	30	36	37	35	35	26	23	20	16	16
170	14	13	15	15	20	24	25	27	32	33	31	31	22	20	17	15	14
171	11	12	13	14	18	21	22	24	28	28	28	27	18	19	13	14	11
172	10	11	11	12	16	19	20	22	25	25	25	23	16	17	11	12	10
173	8	9	9	11	14	17	18	20	22	21	22	20	15	13	10	10	8
174	7	6	7	9	13	14	16	17	19	18	19	18	12	9	8	7	7
175	3	3	4	7	10	12	13	14	17	16	16	16	7	6	6	4	3
176	3	3	3	3	8	8	10	12	13	14	13	12	3	4	3	3	3
177	3	3	3	3	3	5	7	7	9	9	9	6	3	3	3	3	3
178	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
179	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
180	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

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

Test date	2026-03-13	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 4000K 26W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.210	24.95	0.988	6.13
0E-B1	277.0	60	0.101	24.91	0.886	8.17
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

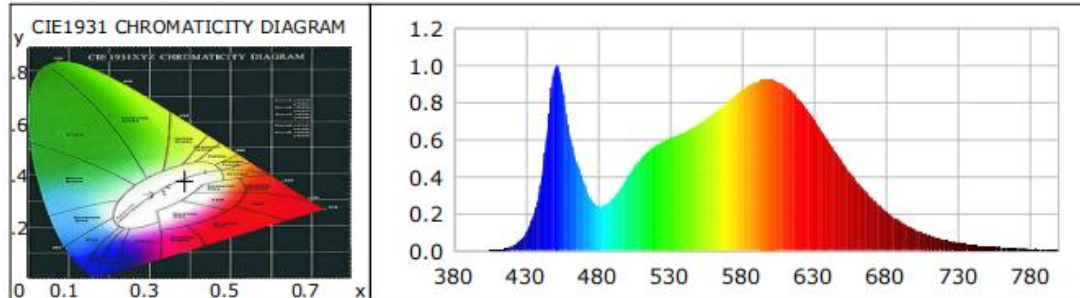
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	83	R9	11
Frequency (Hz)	60	R2	91	R10	78
CCT (K)	3787	R3	95	R11	82
Duv	-0.0024	R4	82	R12	64
Chromaticity (x, y)	x=0.3884 y=0.3764	R5	83	R13	85
Chromaticity (u', v')	u'=0.2305 v'=0.5026	R6	87	R14	98
Color Rendering Index CRI(Ra)	84	R7	85	R15	77
R9	11	R8	64	--	--
Rf	84	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-12				

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	3933.2	3896.7	>=2000(-10%)
Luminous Efficacy (lm/W)	157.64	156.43	Standard>=130(-3%)
Most worst Luminous/Highest Watts	156.18		

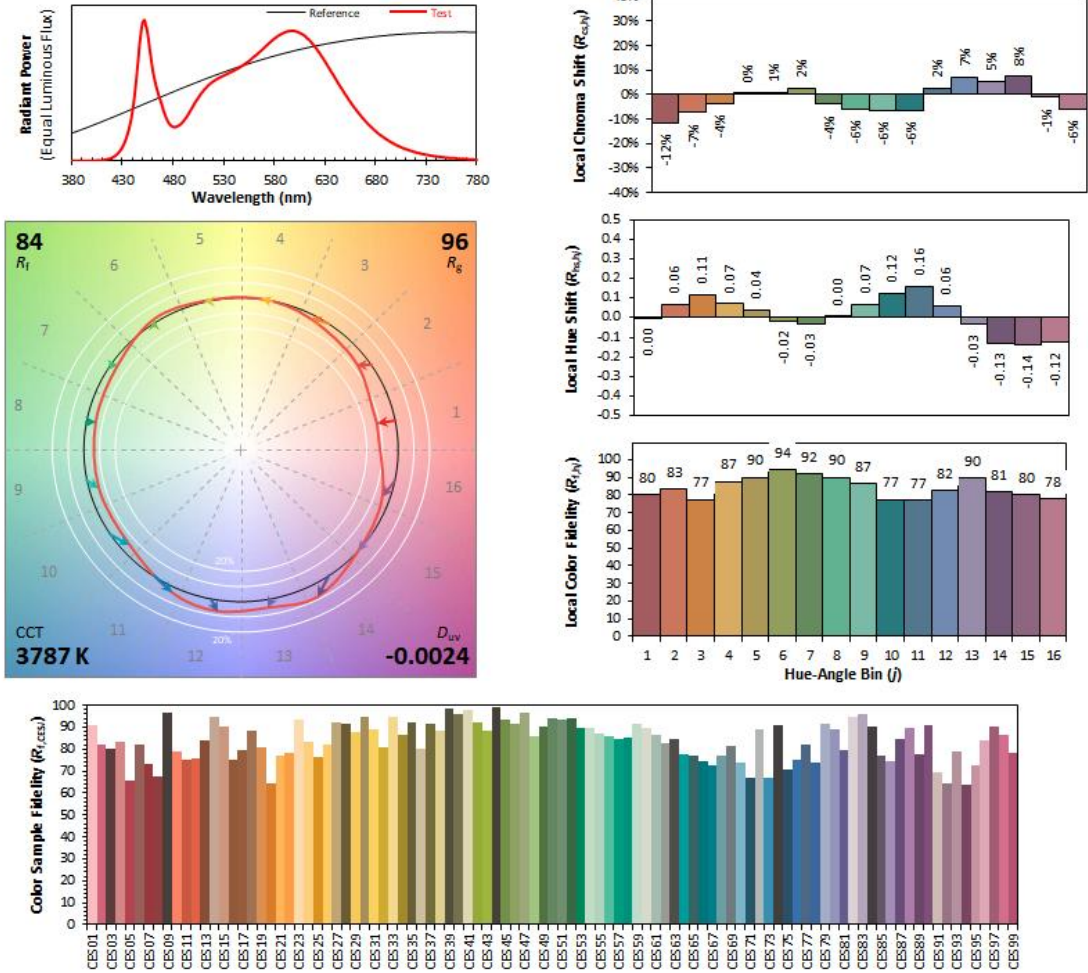
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0001	0.0115	535	0.5887	45.3642	690	0.2830	21.8092
385	0.0008	0.0578	540	0.6051	46.6224	695	0.2463	18.9812
390	0.0005	0.0393	545	0.6233	48.0279	700	0.2111	16.2627
395	0.0004	0.0307	550	0.6411	49.3951	705	0.1822	14.0355
400	0.0012	0.0912	555	0.6602	50.8732	710	0.1565	12.0595
405	0.0021	0.1612	560	0.6837	52.6841	715	0.1334	10.2786
410	0.0042	0.3201	565	0.7095	54.6702	720	0.1128	8.6880
415	0.0100	0.7693	570	0.7406	57.0691	725	0.0972	7.4917
420	0.0227	1.7487	575	0.7721	59.4935	730	0.0834	6.4278
425	0.0483	3.7219	580	0.8039	61.9447	735	0.0697	5.3673
430	0.0975	7.5109	585	0.8385	64.6124	740	0.0602	4.6379
435	0.1885	14.5280	590	0.8698	67.0200	745	0.0515	3.9662
440	0.3538	27.2649	595	0.8938	68.8692	750	0.0433	3.3369
445	0.6759	52.0838	600	0.9129	70.3445	755	0.0356	2.7429
450	0.9856	75.9420	605	0.9231	71.1283	760	0.0312	2.4010
455	0.9007	69.4033	610	0.9250	71.2727	765	0.0283	2.1811
460	0.6444	49.6515	615	0.9111	70.2035	770	0.0234	1.8005
465	0.4877	37.5821	620	0.8904	68.6064	775	0.0199	1.5371
470	0.3717	28.6408	625	0.8578	66.0929	780	0.0166	1.2792
475	0.2782	21.4349	630	0.8142	62.7358	785	0.0131	1.0065
480	0.2412	18.5864	635	0.7641	58.8765	790	0.0125	0.9599
485	0.2482	19.1251	640	0.7087	54.6080	795	0.0096	0.7361
490	0.2797	21.5502	645	0.6503	50.1099	800	0.0068	0.5239
495	0.3307	25.4793	650	0.5899	45.4532			
500	0.3914	30.1578	655	0.5308	40.9001			
505	0.4483	34.5441	660	0.4732	36.4624			
510	0.4990	38.4522	665	0.4210	32.4381			
515	0.5376	41.4227	670	0.3701	28.5203			
520	0.5662	43.6285	675	0.3249	25.0351			
525	0.5887	45.3642	680	0.2830	21.8092			
530	0.6051	46.6224	685	0.2463	18.9812			

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ANSI/IES TM-30-18 Color Rendition Report



Notes:

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

x 0.3884
 y 0.3764
 u' 0.2305
 v' 0.5026

CIE 13.3-1995 (CRI)	
R_a	84
R_g	11

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

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

Test date	2026-03-13	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 5000K 26W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.216	25.54	0.987	6.03
0E-B1	277.0	60	0.105	25.64	0.885	8.02
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

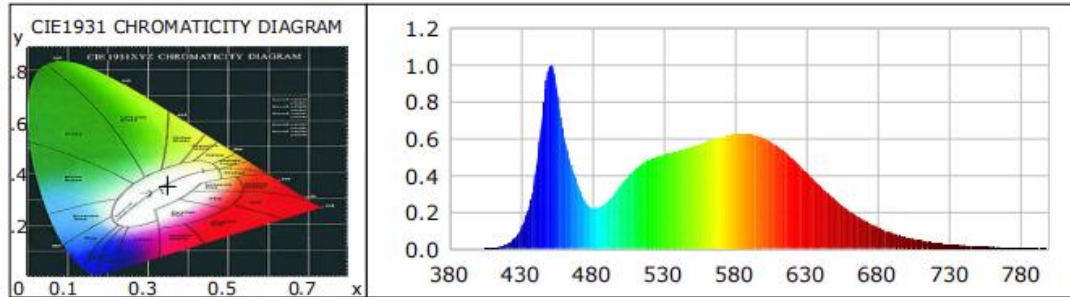
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	80	R9	1
Frequency (Hz)	60	R2	88	R10	71
CCT (K)	4898	R3	93	R11	79
Duv	0.0011	R4	80	R12	55
Chromaticity (x, y)	x=0.3483 y=0.3563	R5	80	R13	82
Chromaticity (u', v')	u'=0.2118 v'=0.4874	R6	82	R14	96
Color Rendering Index CRI(Ra)	82	R7	86	R15	74
R9	1	R8	64	--	--
Rf	82	--	--	--	--
Rg	95	--	--	--	--
Rcs,h1(%)	-13				

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	3926.4	3909.6	>=2000(-10%)
Luminous Efficacy (lm/W)	153.74	152.48	Standard>=130(-3%)
Most worst Luminous/Highest Watts	152.48		

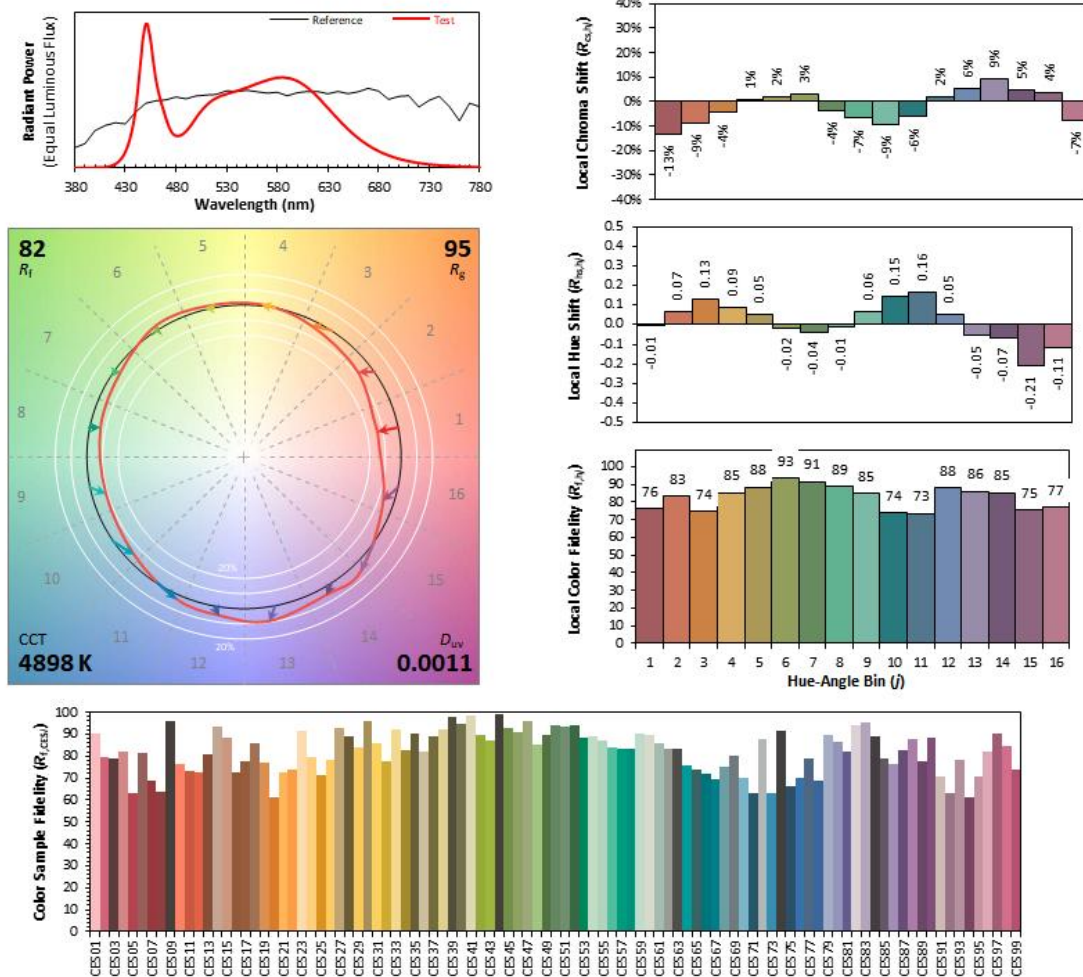
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0004	0.0409	535	0.5011	51.2510	690	0.1562	15.9780
385	0.0005	0.0554	540	0.5115	52.3082	695	0.1349	13.7991
390	0.0008	0.0857	545	0.5227	53.4608	700	0.1163	11.8981
395	0.0006	0.0581	550	0.5343	54.6433	705	0.1000	10.2230
400	0.0007	0.0744	555	0.5449	55.7232	710	0.0862	8.8108
405	0.0021	0.2184	560	0.5568	56.9394	715	0.0733	7.4967
410	0.0047	0.4779	565	0.5709	58.3867	720	0.0619	6.3339
415	0.0112	1.1442	570	0.5841	59.7349	725	0.0536	5.4816
420	0.0254	2.5975	575	0.5969	61.0456	730	0.0460	4.7057
425	0.0547	5.5973	580	0.6068	62.0572	735	0.0382	3.9054
430	0.1111	11.3620	585	0.6180	63.2030	740	0.0339	3.4703
435	0.2157	22.0643	590	0.6255	63.9676	745	0.0277	2.8310
440	0.4029	41.1993	595	0.6262	64.0418	750	0.0244	2.4964
445	0.7348	75.1512	600	0.6238	63.7909	755	0.0194	1.9879
450	0.9968	101.9386	605	0.6154	62.9342	760	0.0174	1.7826
455	0.8776	89.7541	610	0.6022	61.5875	765	0.0157	1.6006
460	0.6189	63.2913	615	0.5809	59.4089	770	0.0128	1.3121
465	0.4618	47.2245	620	0.5552	56.7818	775	0.0114	1.1677
470	0.3436	35.1354	625	0.5265	53.8444	780	0.0098	1.0012
475	0.2546	26.0426	630	0.4916	50.2729	785	0.0078	0.7949
480	0.2219	22.6976	635	0.4539	46.4246	790	0.0074	0.7544
485	0.2269	23.2041	640	0.4157	42.5152	795	0.0053	0.5399
490	0.2538	25.9512	645	0.3765	38.5089	800	0.0046	0.4751
495	0.2975	30.4240	650	0.3385	34.6158			
500	0.3484	35.6253	655	0.3019	30.8720			
505	0.3944	40.3301	660	0.2664	27.2490			
510	0.4340	44.3819	665	0.2355	24.0892			
515	0.4636	47.4152	670	0.2063	21.0981			
520	0.4849	49.5939	675	0.1791	18.3131			
525	0.5011	51.2510	680	0.1562	15.9780			
530	0.5115	52.3082	685	0.1349	13.7991			

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ANSI/IES TM-30-18 Color Rendition Report



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.	x	0.3483	CIE 13.3-1995 (CRI) R_a 82 R_9 1
	y	0.3563	
	z'	0.2118	
	v'	0.4874	

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

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

Test date	2026-03-13	Test Ambient:	25.2 °C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 3000K 18W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.147	17.3	0.98	7.4
0E-B1	277.0	60	0.071	17.3	0.879	13.2
DLC Pass Criteria					$\geq 0.9(-3\%)$	$\leq 20(+5)$

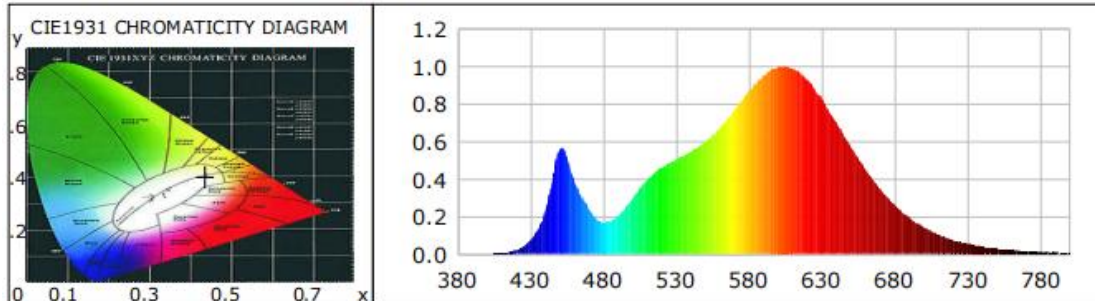
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	81	R9	5
Frequency (Hz)	60	R2	91	R10	79
CCT (K)	2999	R3	96	R11	80
Duv	-0.0012	R4	80	R12	70
Chromaticity (x, y)	x=0.4353 y=0.4006	R5	81	R13	83
Chromaticity (u', v')	u'=0.251 v'=0.5198	R6	89	R14	99
Color Rendering Index CRI(Ra)	82	R7	82	R15	73
R9	5	R8	58	--	--
Rf	84	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-12				

Photometric Measurement – Goniophotometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	2522.0	2504.9	$\geq 2000(-10\%)$
Luminous Efficacy (lm/W)	145.78	144.79	Standard $\geq 130(-3\%)$
Most worst Luminous/Highest	144.79		
Beam Angle	283.3	--	$\geq 75^\circ$
Center Beam Candle Power (cd)	110	--	--

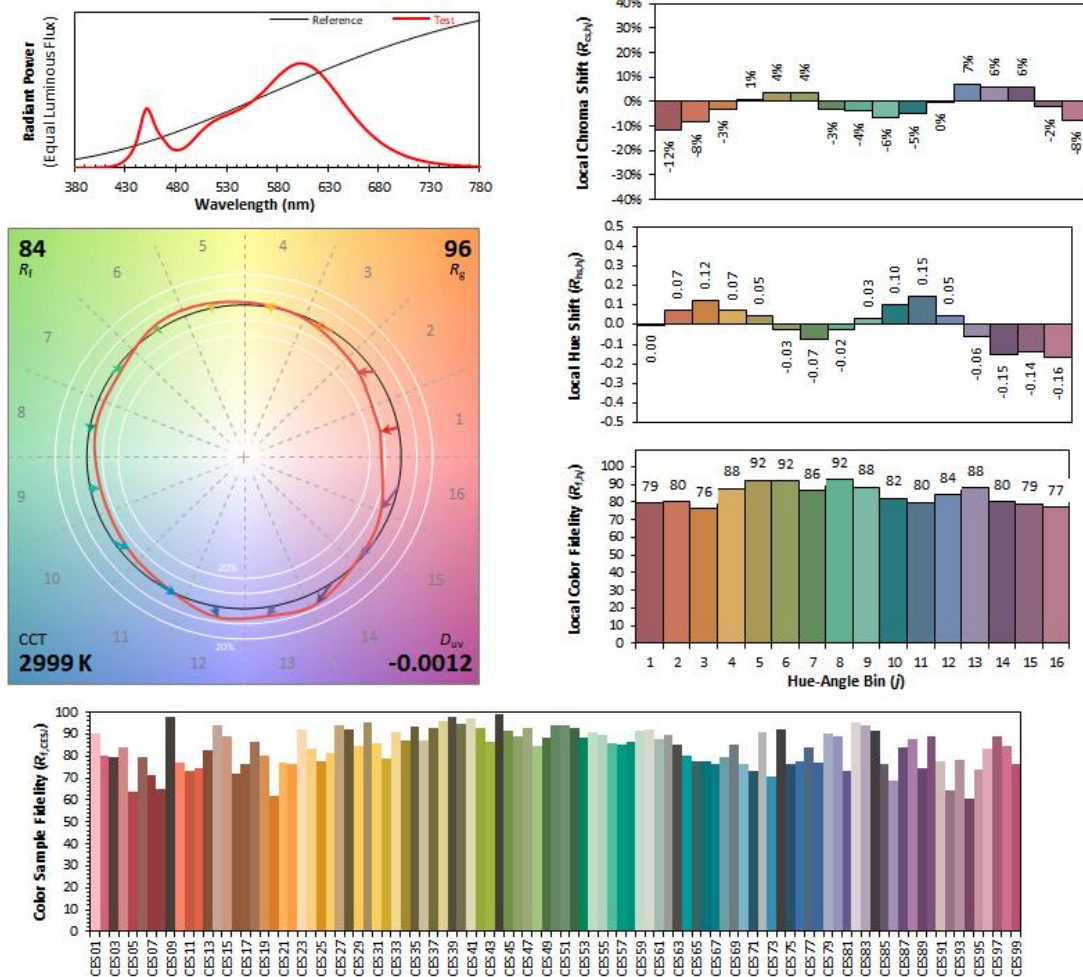
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	0.0241	535	0.4851	24.3261	690	0.3444	17.2721
385	0.0003	0.0175	540	0.5039	25.2666	695	0.2999	15.0404
390	0.0006	0.0311	545	0.5252	26.3383	700	0.2586	12.9689
395	0.0012	0.0599	550	0.5477	27.4657	705	0.2231	11.1856
400	0.0011	0.0572	555	0.5708	28.6217	710	0.1920	9.6262
405	0.0020	0.0982	560	0.6003	30.1043	715	0.1646	8.2527
410	0.0043	0.2148	565	0.6346	31.8207	720	0.1414	7.0911
415	0.0097	0.4852	570	0.6753	33.8618	725	0.1202	6.0289
420	0.0212	1.0626	575	0.7192	36.0639	730	0.1018	5.1043
425	0.0408	2.0480	580	0.7669	38.4578	735	0.0872	4.3745
430	0.0749	3.7546	585	0.8195	41.0959	740	0.0739	3.7063
435	0.1311	6.5743	590	0.8683	43.5415	745	0.0632	3.1669
440	0.2267	11.3667	595	0.9122	45.7414	750	0.0536	2.6875
445	0.3978	19.9493	600	0.9521	47.7416	755	0.0445	2.2309
450	0.5594	28.0512	605	0.9819	49.2354	760	0.0386	1.9373
455	0.5159	25.8715	610	0.9988	50.0862	765	0.0342	1.7172
460	0.3888	19.4942	615	0.9989	50.0897	770	0.0286	1.4317
465	0.3056	15.3226	620	0.9893	49.6108	775	0.0251	1.2590
470	0.2408	12.0740	625	0.9637	48.3243	780	0.0206	1.0327
475	0.1883	9.4403	630	0.9277	46.5180	785	0.0175	0.8774
480	0.1682	8.4346	635	0.8785	44.0537	790	0.0153	0.7690
485	0.1762	8.8363	640	0.8216	41.1980	795	0.0113	0.5657
490	0.2028	10.1679	645	0.7600	38.1115	800	0.0099	0.4975
495	0.2464	12.3555	650	0.6976	34.9819			
500	0.2981	14.9462	655	0.6304	31.6099			
505	0.3489	17.4976	660	0.5668	28.4222			
510	0.3940	19.7571	665	0.5051	25.3280			
515	0.4321	21.6653	670	0.4479	22.4610			
520	0.4616	23.1470	675	0.3946	19.7850			
525	0.4851	24.3261	680	0.3444	17.2721			
530	0.5039	25.2666	685	0.2999	15.0404			

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ANSI/IES TM-30-18 Color Rendition Report



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

x 0.4353
 y 0.4006
 u' 0.2510
 v' 0.5198

CIE 13.3-1995 (CRI)	
R_a	82
R_g	5

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

Zonal Lumen Tabulation

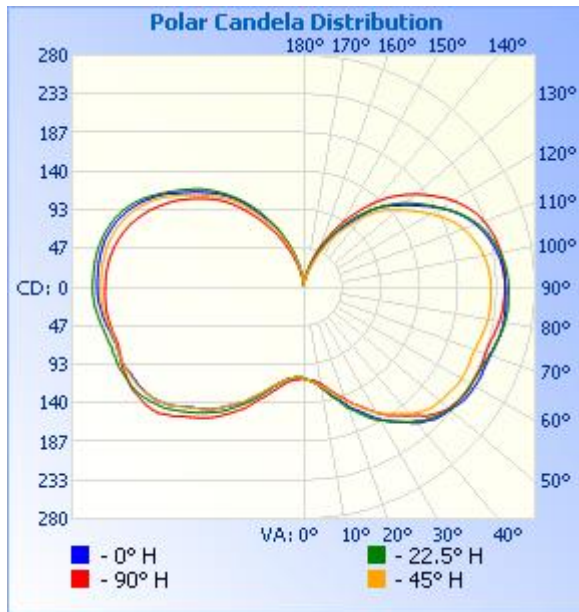
Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	121.3	4.8%	4.8%
0-40	241.1	9.6%	9.6%
0-60	619.6	24.6%	24.6%
60-90	765.6	30.4%	30.4%
70-100	798.2	31.6%	31.6%
90-120	742.1	29.4%	29.4%
0-90	1,385.1	54.9%	54.9%
90-180	1,137.1	45.1%	45.1%
0-180	2,522.2	100%	100%

Lumens Per Zone

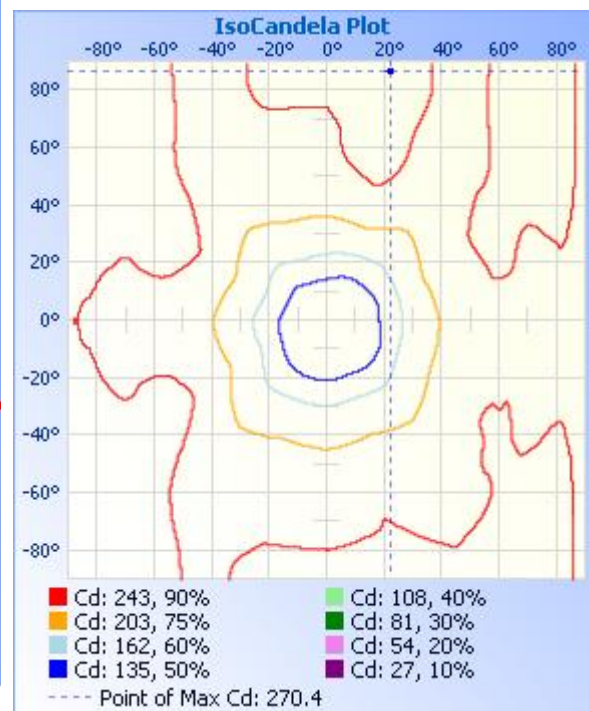
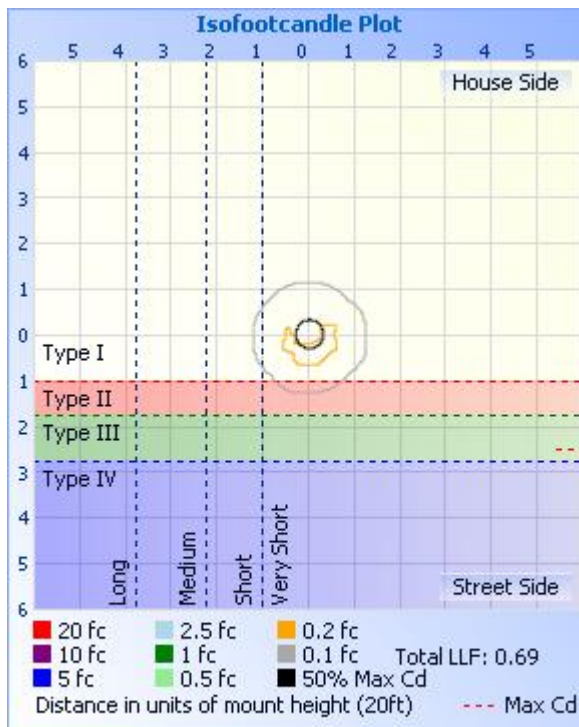
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	10.9	0.4%	90-100	270.3	10.7%
10-20	36.8	1.5%	100-110	253.7	10.1%
20-30	73.6	2.9%	110-120	218.2	8.6%
30-40	119.8	4.8%	120-130	168.1	6.7%
40-50	168.3	6.7%	130-140	117.5	4.7%
50-60	210.2	8.3%	140-150	69.1	2.7%
60-70	237.7	9.4%	150-160	30.9	1.2%
70-80	256.9	10.2%	160-170	8.5	0.3%
80-90	271.0	10.7%	170-180	0.9	0%

Photometric Data



Illuminance at a Distance

	Center Beam fc	Beam Width
17.0ft	0.38 fc	
34.0ft	0.10 fc	
51.0ft	0.04 fc	
68.0ft	0.02 fc	
85.0ft	0.02 fc	
102.0ft	0.01 fc	



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	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110
1	111	111	111	111	111	110	110	110	110	109	109	109	111	111	111	111	111
2	112	112	112	112	112	111	110	109	109	108	108	109	111	111	112	112	112
3	113	113	113	113	112	111	110	110	108	108	108	109	111	112	112	113	113
4	113	113	114	113	113	112	111	110	108	108	108	110	112	112	112	113	113
5	114	114	114	114	113	112	112	111	109	109	109	110	113	113	113	114	114
6	115	115	116	115	114	113	112	112	110	110	110	111	113	113	113	115	115
7	117	117	117	116	114	114	113	112	111	111	111	112	114	114	114	116	117
8	118	118	118	117	115	115	113	113	112	112	112	113	114	116	115	117	118
9	121	121	120	118	117	116	114	114	113	113	113	114	116	117	117	119	121
10	123	123	122	120	118	117	115	115	113	113	113	115	117	118	119	121	123
11	125	126	124	123	120	119	117	116	114	114	114	115	119	119	121	123	125
12	127	129	126	125	122	121	119	117	116	116	116	117	121	121	123	124	127
13	130	131	128	128	125	123	121	118	117	118	117	118	123	123	125	127	130
14	133	135	130	131	127	125	123	120	119	120	119	120	125	125	127	129	133
15	136	137	132	135	130	128	125	122	121	122	121	122	128	127	129	132	136
16	139	140	135	138	133	131	127	124	123	124	123	124	130	130	132	134	139
17	142	143	137	141	136	134	129	126	125	127	125	126	133	132	135	136	142
18	144	147	140	144	138	137	131	128	128	130	127	129	136	135	138	139	144
19	148	151	143	148	140	140	134	131	131	132	130	132	139	137	140	143	148
20	151	155	146	152	143	144	137	134	133	136	132	135	142	140	142	146	151
21	155	157	149	155	147	147	139	136	136	139	135	138	144	143	146	150	155
22	158	160	151	158	150	152	141	139	139	142	139	141	147	147	149	153	158
23	161	163	154	161	153	155	144	142	142	145	141	145	151	151	152	156	161
24	163	167	156	165	155	159	147	145	144	148	144	150	155	154	155	160	163
25	167	170	159	169	158	162	149	149	148	152	147	155	159	158	158	164	167
26	170	174	162	173	161	166	152	152	151	155	151	160	163	162	161	167	170
27	174	177	166	176	165	170	154	155	155	158	154	164	166	167	164	172	174
28	177	180	169	180	168	174	156	158	158	161	158	168	168	172	167	177	177
29	181	183	172	183	171	177	159	161	160	164	160	172	172	177	171	182	181

30	184	186	175	186	175	181	161	165	163	168	162	176	175	183	174	186	184
31	188	188	178	189	178	184	164	168	166	171	165	180	179	188	177	190	188
32	190	191	180	193	181	188	167	171	169	175	168	184	182	192	180	193	190
33	193	193	182	196	184	191	169	174	172	178	172	187	186	195	183	197	193
34	196	196	184	200	186	194	172	177	175	182	175	191	189	198	185	200	196
35	199	198	187	203	189	198	175	181	178	184	179	193	192	200	187	204	199
36	201	201	189	206	192	201	177	183	182	187	182	196	195	203	189	208	201
37	204	203	191	209	194	204	179	187	185	190	185	198	198	206	192	212	204
38	207	207	193	212	197	206	181	189	187	192	188	201	200	209	194	215	207
39	211	209	197	216	200	209	183	192	189	195	190	203	203	211	197	219	211
40	214	211	200	219	202	211	186	195	192	198	192	206	205	214	199	223	214
41	216	214	202	223	206	214	188	198	194	201	194	209	208	217	202	226	216
42	218	217	204	226	208	216	190	200	196	204	197	211	211	220	206	230	218
43	220	218	206	229	213	219	193	202	198	206	199	214	213	223	209	233	220
44	222	220	208	231	216	223	195	205	201	209	202	216	217	227	212	234	222
45	225	222	210	235	218	226	198	209	204	211	205	218	221	228	214	236	225
46	226	224	212	238	221	230	201	211	207	214	208	221	223	230	215	238	226
47	228	225	213	240	223	232	204	213	210	217	211	223	226	232	217	240	228
48	229	227	213	242	225	234	206	215	214	220	214	225	229	234	218	242	229
49	230	229	214	244	227	236	208	217	216	223	217	227	232	236	220	243	230
50	231	230	214	245	228	239	210	220	219	225	219	229	234	237	221	245	231
51	232	231	216	247	229	241	211	223	221	226	221	231	235	238	223	247	232
52	233	232	216	249	230	244	213	225	223	228	223	233	236	240	223	248	233
53	235	232	217	250	231	246	215	227	225	230	225	235	238	241	224	250	235
54	236	233	217	252	232	247	216	228	227	232	227	236	238	243	225	251	236
55	237	234	218	253	232	249	217	230	228	234	228	238	239	244	225	252	237
56	238	234	219	254	233	250	218	231	229	236	229	239	239	245	226	252	238
57	238	235	220	255	233	250	219	233	230	237	231	240	240	246	226	253	238
58	239	235	220	256	234	251	219	234	231	238	232	242	240	247	226	254	239
59	239	235	221	257	234	252	220	235	232	239	233	243	241	247	227	254	239
60	239	235	221	257	234	252	220	236	232	240	234	243	241	247	227	254	239
61	239	235	221	257	234	253	221	237	233	241	234	244	241	248	228	254	239

62	240	235	221	257	234	253	221	237	233	241	235	244	240	248	228	255	240
63	240	236	221	258	234	254	222	237	234	241	235	244	240	249	228	256	240
64	240	236	221	258	235	253	222	237	234	242	235	244	240	250	227	256	240
65	240	236	221	258	235	254	222	238	235	242	236	245	240	249	227	256	240
66	240	236	220	258	235	253	222	237	237	243	237	246	240	249	226	256	240
67	239	237	220	258	235	254	222	238	237	244	237	246	239	249	226	257	239
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69	240	238	220	259	234	254	223	238	238	243	238	246	237	249	225	258	240
70	241	239	220	259	234	254	224	237	238	243	238	246	236	249	225	258	241
71	241	240	221	260	234	255	223	238	237	244	238	245	236	249	225	260	241
72	242	241	221	261	235	255	224	238	237	243	237	245	235	250	225	261	242
73	242	242	222	262	235	256	224	238	237	244	237	246	235	251	225	262	242
74	243	242	223	263	235	256	225	238	238	245	237	246	235	252	225	263	243
75	244	244	224	264	236	257	226	240	239	245	238	246	236	252	226	265	244
76	245	244	224	265	237	257	227	240	239	246	238	247	236	254	226	265	245
77	245	245	225	265	238	258	227	242	240	247	239	248	237	254	226	267	245
78	245	246	225	266	239	259	228	243	241	247	239	249	238	255	227	267	245
79	245	247	226	266	240	260	229	244	242	248	240	250	238	256	227	268	245
80	246	247	226	267	240	261	230	245	244	250	241	251	239	257	228	269	246
81	246	248	227	267	241	261	232	246	245	250	242	252	239	258	228	269	246
82	246	248	227	267	242	262	233	247	246	251	243	253	240	259	228	269	246
83	245	248	227	267	242	263	234	249	246	252	244	254	240	259	228	270	245
84	246	248	227	267	242	263	234	249	247	253	245	255	240	260	228	270	246
85	245	248	227	267	243	263	235	250	248	254	245	255	240	260	227	270	245
86	245	248	227	268	243	263	235	250	249	254	245	255	241	260	227	270	245
87	245	248	227	267	243	263	235	251	249	255	246	255	241	260	227	270	245
88	245	248	227	267	243	263	236	251	250	255	246	256	241	260	226	270	245
89	244	248	227	267	243	263	236	251	250	255	246	256	240	260	226	270	244
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91	244	248	227	267	244	263	236	252	250	255	246	256	240	261	225	270	244
92	244	248	226	267	244	262	236	251	250	255	246	256	240	261	225	270	244
93	243	247	226	266	244	263	236	251	250	255	245	255	240	261	225	270	243

94	243	247	226	266	244	262	236	251	250	255	245	256	240	261	224	269	243
95	242	246	225	265	244	262	236	252	250	255	245	255	239	260	224	268	242
96	242	246	225	265	243	261	236	251	250	255	245	255	239	260	223	268	242
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99	239	242	222	262	243	260	235	250	249	254	244	254	237	259	221	265	239
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101	237	240	221	260	242	258	234	249	248	253	243	253	235	257	219	263	237
102	236	239	219	259	241	257	233	248	248	252	242	252	234	257	218	261	236
103	234	237	218	258	240	256	232	247	247	251	242	251	233	256	217	260	234
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106	230	232	213	254	237	252	230	244	244	248	239	248	229	253	213	254	230
107	228	230	211	253	236	251	228	243	243	247	238	247	228	251	211	252	228
108	226	228	209	251	235	249	227	242	242	246	237	246	226	250	210	250	226
109	224	226	208	249	234	247	225	240	241	244	235	244	224	248	208	247	224
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111	219	221	204	244	231	243	222	237	237	241	232	241	221	245	203	242	219
112	217	219	201	241	229	240	220	235	235	239	230	239	218	243	201	239	217
113	214	215	199	238	227	237	217	233	233	237	228	237	216	241	199	236	214
114	211	213	196	235	225	234	215	230	231	235	226	235	214	238	196	233	211
115	208	209	193	232	222	231	212	228	229	233	223	232	212	235	193	229	208
116	205	206	190	229	220	228	210	225	226	230	221	230	209	233	191	226	205
117	202	203	187	226	218	224	207	222	223	227	218	227	206	229	188	222	202
118	199	199	184	222	215	221	204	219	220	224	216	224	204	226	185	218	199
119	195	195	181	219	212	217	201	216	217	221	213	220	201	222	181	214	195
120	191	192	177	215	209	213	197	213	214	218	210	217	198	219	178	211	191
121	187	188	174	211	206	209	194	209	212	214	207	213	195	215	175	207	187
122	183	185	171	208	203	205	190	206	208	211	203	210	192	211	171	204	183
123	180	182	168	204	199	201	187	203	205	207	200	206	190	208	168	200	180
124	176	178	164	200	195	198	184	200	201	204	196	203	187	204	165	196	176
125	172	175	161	196	192	194	180	196	197	200	192	199	183	200	161	192	172

126	168	171	158	193	189	190	177	193	193	197	188	195	180	196	157	189	168
127	164	168	154	189	185	186	173	190	189	193	185	192	177	192	154	185	164
128	161	165	151	186	182	183	170	187	185	190	181	188	173	188	150	181	161
129	157	162	148	182	178	179	166	184	182	187	177	185	170	185	147	177	157
130	154	158	145	178	174	176	163	180	178	184	173	182	167	181	144	173	154
131	151	154	142	174	171	172	160	177	175	180	170	179	164	178	141	168	151
132	148	151	139	170	167	169	157	174	172	177	166	175	160	174	137	164	148
133	144	147	136	166	163	165	154	171	168	174	162	172	157	171	134	159	144
134	141	143	133	162	159	161	150	166	165	171	159	169	153	168	130	155	141
135	138	139	130	158	155	157	147	163	161	167	156	165	150	164	127	150	138
136	134	135	126	153	151	153	144	159	158	163	152	162	146	159	124	146	134
137	130	131	122	149	147	149	140	155	155	159	149	158	142	155	120	141	130
138	126	127	118	144	143	145	136	151	151	155	146	154	138	151	117	137	126
139	122	123	113	140	138	141	132	147	148	151	142	150	134	146	112	132	122
140	117	119	109	135	133	137	128	143	144	147	138	146	129	141	108	128	117
141	112	115	104	131	128	133	124	139	140	143	134	142	125	136	104	123	112
142	107	111	100	125	123	129	119	135	136	139	130	138	120	131	100	118	107
143	102	107	95	120	118	124	115	131	131	134	126	133	115	126	96	114	102
144	97	103	90	114	114	120	110	127	127	130	121	129	111	121	92	109	97
145	92	99	86	109	109	116	106	123	122	126	117	125	106	117	88	104	92
146	88	94	83	103	104	111	101	118	117	122	112	121	102	112	84	99	88
147	84	89	79	98	100	107	97	113	113	118	107	116	97	108	81	94	84
148	81	85	76	93	95	102	93	108	108	113	103	112	93	103	77	90	81
149	77	81	72	88	91	98	89	103	103	109	98	108	88	98	74	85	77
150	73	77	67	82	86	94	85	99	99	104	94	103	84	93	71	81	73
151	68	73	63	76	81	90	81	94	95	99	90	99	80	88	67	77	68
152	64	69	59	70	76	86	77	90	91	95	86	94	76	83	63	72	64
153	59	64	55	64	71	81	73	85	88	90	82	89	72	78	59	67	59
154	55	60	51	59	67	76	69	81	84	86	79	85	68	74	56	62	55
155	51	56	48	54	62	71	65	76	79	82	75	81	64	69	52	57	51
156	48	52	44	49	58	67	61	72	75	78	71	77	60	64	49	53	48
157	44	48	40	45	55	62	57	67	70	74	66	72	56	60	46	49	44

158	40	43	37	41	51	58	53	62	66	69	62	67	52	55	42	45	40
159	37	39	33	37	47	54	50	57	62	64	58	63	48	51	39	41	37
160	34	36	31	33	43	49	46	52	58	59	54	58	45	46	36	37	34
161	31	32	28	30	39	45	42	48	54	55	50	54	41	43	33	33	31
162	27	29	25	27	36	40	39	44	50	52	47	50	37	39	31	30	27
163	25	25	22	24	32	36	36	39	46	48	43	46	34	35	27	26	25
164	22	22	20	22	29	33	33	36	42	44	39	42	31	31	25	23	22
165	19	19	18	19	26	29	30	32	38	40	36	38	28	28	22	20	19
166	17	17	16	17	23	26	27	29	35	36	33	35	25	25	20	18	17
167	15	14	14	15	21	24	24	26	31	32	29	31	22	22	17	15	15
168	13	12	13	13	18	21	22	23	28	29	26	27	20	18	15	13	13
169	11	10	11	12	16	19	19	21	25	25	24	24	18	16	13	11	11
170	9	9	10	11	14	17	17	19	22	23	21	21	15	14	11	10	9
171	8	8	9	10	12	15	15	17	19	19	19	18	12	13	9	9	8
172	6	7	8	9	11	13	14	15	17	17	17	16	11	11	7	8	6
173	6	6	6	7	10	12	12	14	15	14	15	14	10	9	7	6	6
174	4	4	5	6	9	9	11	12	13	13	13	12	8	6	6	4	4
175	2	2	3	5	7	8	9	10	12	11	11	11	5	4	4	3	2
176	2	2	2	2	5	6	7	8	9	9	9	8	2	3	2	2	2
177	2	2	2	2	2	3	5	5	7	6	6	4	2	2	2	2	2
178	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
179	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
180	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

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

Test date	2026-03-13	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 4000K 18W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.144	16.99	0.981	7.48
0E-B1	277.0	60	0.070	16.99	0.879	13.13
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

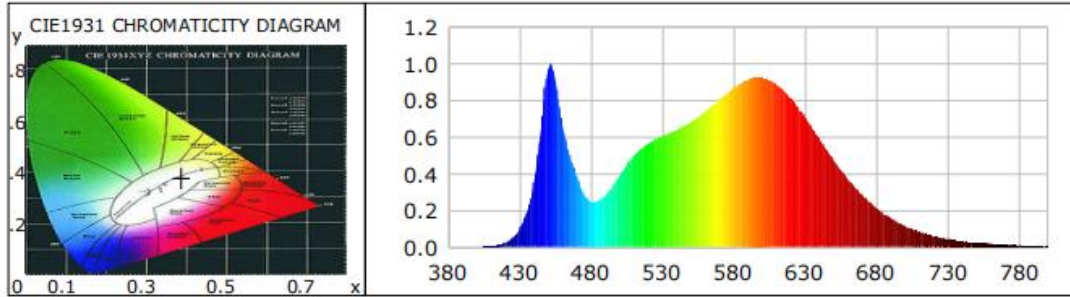
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	83	R9	11
Frequency (Hz)	60	R2	91	R10	78
CCT (K)	3796	R3	96	R11	81
Duv	-0.0025	R4	82	R12	64
Chromaticity (x, y)	x=0.3878 y=0.3757	R5	83	R13	85
Chromaticity (u', v')	u'=-0.2304 v'=0.5022	R6	87	R14	98
Color Rendering Index CRI(Ra)	84	R7	85	R15	77
R9	11	R8	64	--	--
Rf	84	--	--	--	--
Rg	96	--	--	--	--
Rcs,h1(%)	-12				

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	2660.5	2642.8	>=2000(-10%)
Luminous Efficacy (lm/W)	156.59	155.55	Standard>=130(-3%)
Most worst Luminous/Highest Watts	155.55		

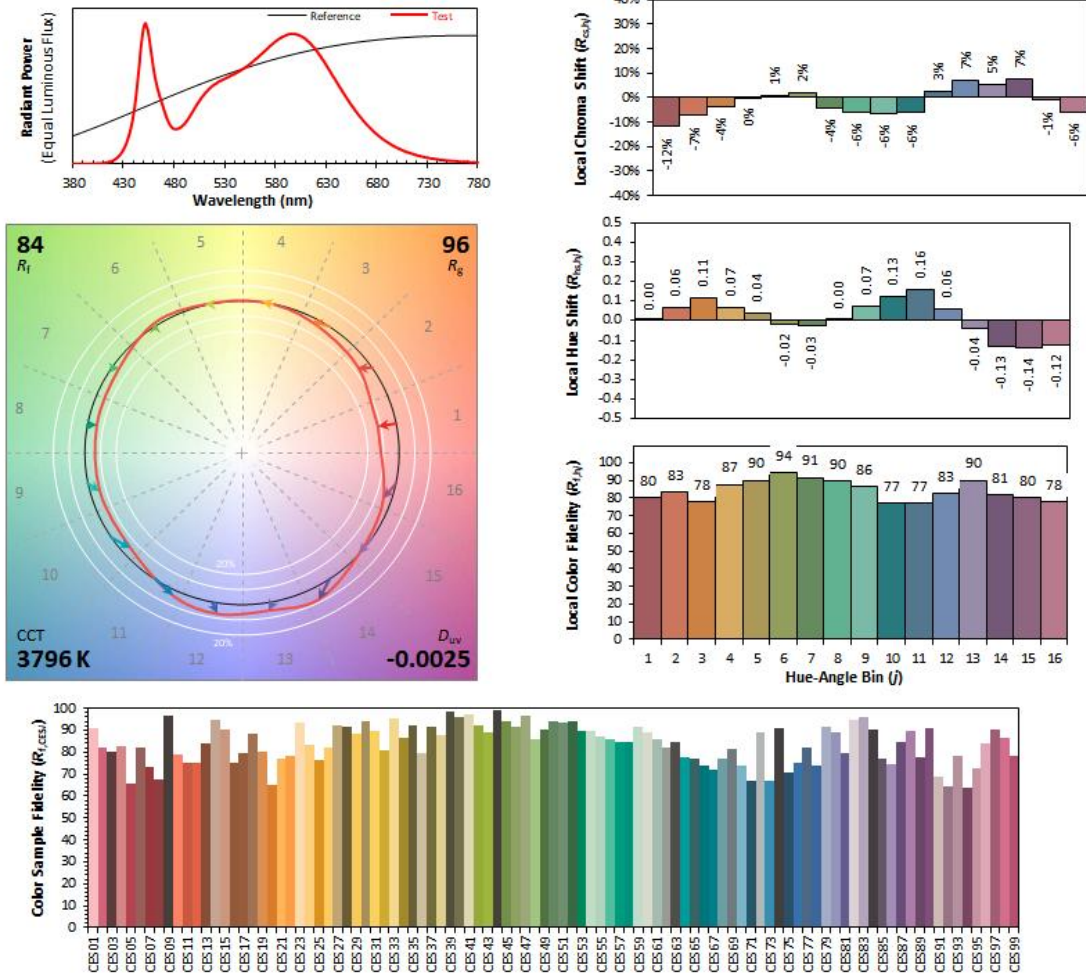
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	0.0237	535	0.5874	30.6445	690	0.2824	14.7325
385	0.0005	0.0267	540	0.6029	31.4542	695	0.2462	12.8470
390	0.0006	0.0332	545	0.6224	32.4714	700	0.2118	11.0506
395	0.0003	0.0177	550	0.6395	33.3644	705	0.1821	9.4990
400	0.0012	0.0624	555	0.6596	34.4122	710	0.1567	8.1744
405	0.0023	0.1174	560	0.6838	35.6750	715	0.1348	7.0312
410	0.0043	0.2243	565	0.7104	37.0654	720	0.1145	5.9759
415	0.0111	0.5776	570	0.7410	38.6577	725	0.0977	5.0979
420	0.0240	1.2499	575	0.7721	40.2847	730	0.0829	4.3243
425	0.0503	2.6218	580	0.8034	41.9167	735	0.0715	3.7290
430	0.1001	5.2247	585	0.8383	43.7377	740	0.0603	3.1485
435	0.1898	9.9045	590	0.8694	45.3592	745	0.0515	2.6893
440	0.3498	18.2488	595	0.8937	46.6283	750	0.0440	2.2946
445	0.6548	34.1601	600	0.9124	47.6023	755	0.0357	1.8610
450	0.9704	50.6286	605	0.9238	48.1950	760	0.0323	1.6875
455	0.9147	47.7246	610	0.9226	48.1335	765	0.0278	1.4504
460	0.6654	34.7143	615	0.9094	47.4435	770	0.0229	1.1948
465	0.5024	26.2114	620	0.8886	46.3627	775	0.0203	1.0598
470	0.3852	20.0993	625	0.8553	44.6240	780	0.0177	0.9235
475	0.2889	15.0722	630	0.8114	42.3327	785	0.0139	0.7244
480	0.2483	12.9567	635	0.7636	39.8392	790	0.0120	0.6241
485	0.2526	13.1805	640	0.7057	36.8166	795	0.0107	0.5558
490	0.2809	14.6528	645	0.6473	33.7714	800	0.0089	0.4662
495	0.3308	17.2572	650	0.5894	30.7527			
500	0.3902	20.3579	655	0.5312	27.7159			
505	0.4463	23.2833	660	0.4741	24.7345			
510	0.4960	25.8763	665	0.4196	21.8923			
515	0.5345	27.8841	670	0.3712	19.3642			
520	0.5635	29.3976	675	0.3243	16.9173			
525	0.5874	30.6445	680	0.2824	14.7325			
530	0.6029	31.4542	685	0.2462	12.8470			

TM30

ANSI/IES TM-30-18 Color Rendition Report



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

x	0.3878	CIE 13.3-1995 (CRI) R_a 84 R_g 11
y	0.3757	
u'	0.2304	
v'	0.5022	

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

2.9 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction BL-QP-033)

Test date	2026-03-13	Test Ambient:	25.2 ° C
Test Orientation	Horizontal	Stabilization Time (min)	90
Model Number	HIDFA-35S-E26-8CCT-BYP(Setting at 5000K 18W)	Operation time(min)	110

Electrical Measurement:

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
UTU260301	120.0	60	0.147	17.3	0.979	7.32
0E-B1	277.0	60	0.072	17.39	0.878	13.2
DLC Pass Criteria					>= 0.9(-3%)	<= 20(+5)

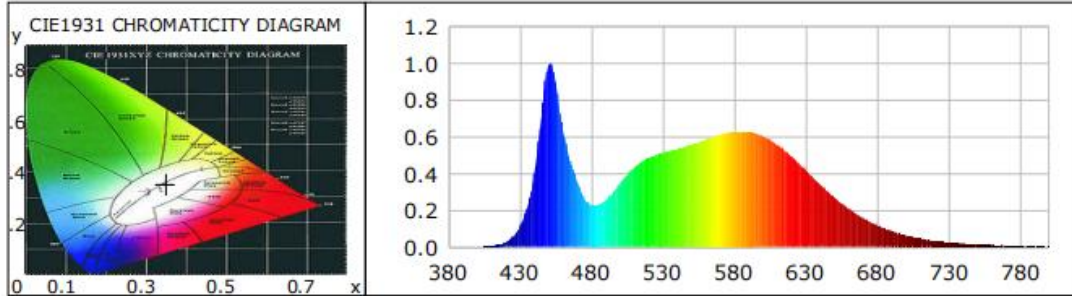
Chromaticity Measurement - Sphere-Spectroradiometer Method:

Parameter	Result	Special Color Rendering Indices			
Test Voltage (V)	120.0	R1	80	R9	1
Frequency (Hz)	60	R2	88	R10	71
CCT (K)	4913	R3	93	R11	79
Duv	0.0010	R4	80	R12	55
Chromaticity (x, y)	x=0.3478 y=0.3557	R5	80	R13	82
Chromaticity (u', v')	u'=0.2117 v'=0.487	R6	82	R14	96
Color Rendering Index CRI(Ra)	82	R7	86	R15	74
R9	1	R8	65	--	--
Rf	82	--	--	--	--
Rg	95	--	--	--	--
Rcs,h1(%)	-13				

Photometric Measurement – Sphere-Spectroradiometer Method:

Parameter	Result		DLC V6.0 Pass Criteria
Test Voltage (V)	120.0	277.0	--
Frequency (Hz)	60	60	
Total Luminous (lm)	2626.8	2633.5	>=2000(-10%)
Luminous Efficacy (lm/W)	151.84	151.44	Standard >=130(-3%)
Most worst Luminous/Highest Watts	151.05		

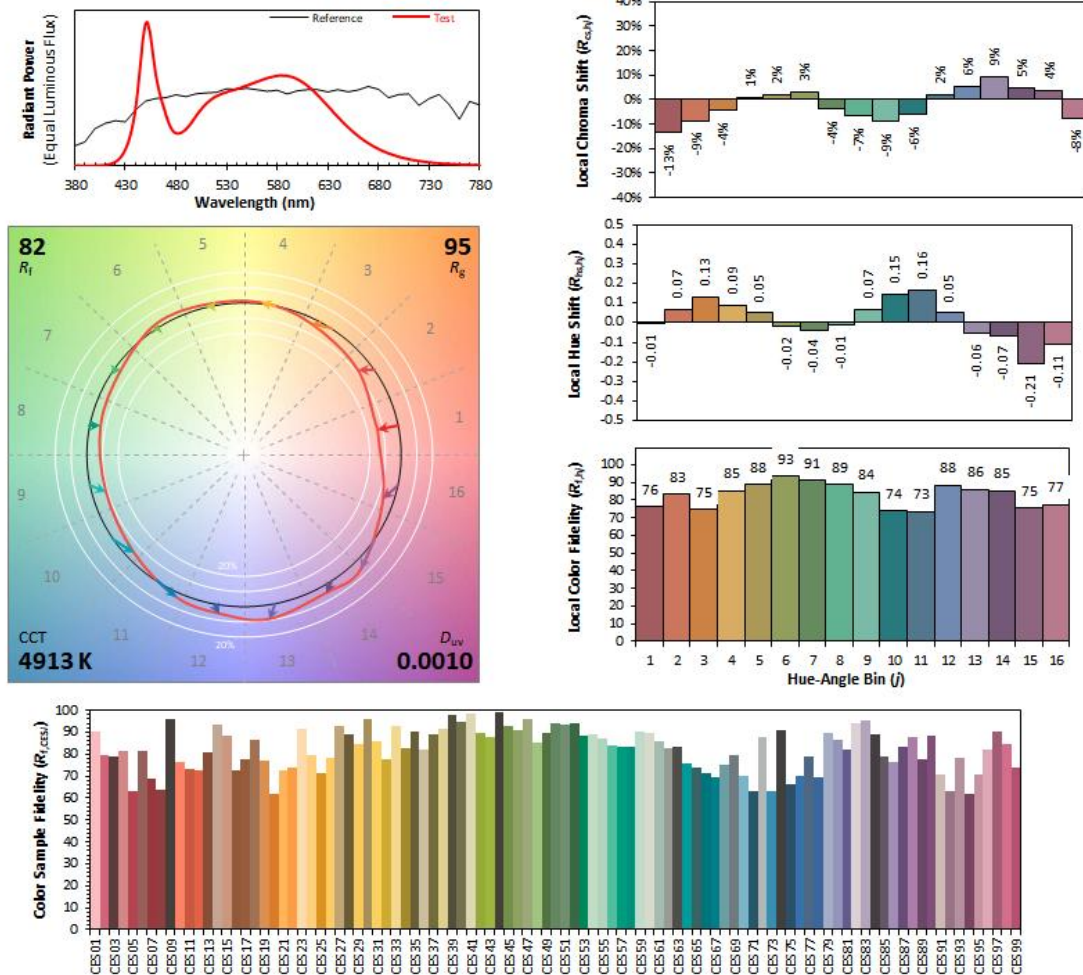
Spectral Power Distribution & Chromaticity Diagram



WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0002	0.0147	535	0.5007	34.1689	690	0.1572	10.7303
385	0.0008	0.0577	540	0.5122	34.9538	695	0.1351	9.2190
390	0.0007	0.0471	545	0.5235	35.7205	700	0.1171	7.9892
395	0.0007	0.0458	550	0.5355	36.5434	705	0.0997	6.8007
400	0.0012	0.0808	555	0.5461	37.2666	710	0.0865	5.9020
405	0.0027	0.1817	560	0.5585	38.1115	715	0.0737	5.0263
410	0.0048	0.3273	565	0.5720	39.0311	720	0.0625	4.2646
415	0.0120	0.8155	570	0.5871	40.0632	725	0.0533	3.6340
420	0.0268	1.8319	575	0.5990	40.8738	730	0.0459	3.1297
425	0.0563	3.8444	580	0.6098	41.6093	735	0.0382	2.6091
430	0.1133	7.7304	585	0.6201	42.3108	740	0.0338	2.3092
435	0.2167	14.7837	590	0.6267	42.7616	745	0.0282	1.9266
440	0.3995	27.2625	595	0.6282	42.8691	750	0.0246	1.6781
445	0.7210	49.1962	600	0.6269	42.7813	755	0.0191	1.3052
450	0.9922	67.7086	605	0.6176	42.1411	760	0.0176	1.2013
455	0.8932	60.9509	610	0.6026	41.1187	765	0.0154	1.0516
460	0.6364	43.4282	615	0.5820	39.7131	770	0.0127	0.8675
465	0.4747	32.3922	620	0.5567	37.9894	775	0.0114	0.7787
470	0.3551	24.2325	625	0.5261	35.8965	780	0.0098	0.6708
475	0.2638	17.9998	630	0.4913	33.5237	785	0.0079	0.5411
480	0.2269	15.4840	635	0.4544	31.0095	790	0.0076	0.5196
485	0.2309	15.7586	640	0.4158	28.3713	795	0.0058	0.3990
490	0.2562	17.4827	645	0.3768	25.7133	800	0.0041	0.2788
495	0.2981	20.3409	650	0.3394	23.1570			
500	0.3484	23.7728	655	0.3027	20.6578			
505	0.3939	26.8754	660	0.2679	18.2806			
510	0.4339	29.6096	665	0.2366	16.1455			
515	0.4633	31.6129	670	0.2074	14.1508			
520	0.4846	33.0662	675	0.1805	12.3182			
525	0.5007	34.1689	680	0.1572	10.7303			
530	0.5122	34.9538	685	0.1351	9.2190			

TM30

ANSI/IES TM-30-18 Color Rendition Report



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

x 0.3478
 y 0.3557
 u' 0.2117
 v' 0.4870

CIE 13.3-1995
(CRI)

R_a 82
 R_g 1

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.	Calibration Date
Goniophotometric System	GPM-3000	DYHXF120001	2025-10-23
AC Power Source	CHP-500C	DYBWD010159	2025-10-13
Standard Lamp*	24V/150W	DYJYR040040	2025-12-30
Standard Lamp**	24V/100W	DYBWR030014	2025-12-30
Digital Power Meter	WT500	DYDWQ20010	2025-10-13
Integral Sphere (2M)	2M	DYJCE120067	2025-10-23
Digital Power Meter	WT500	DYDWQ200006	2025-10-13
Optical Color and Electrical Measurement System	CMS-3000S	DYJCE120067	2025-10-23

* 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 *****