

Photometric Test Report

Relevant Standards

- ☒ ANSI/IES LM-79-2019
- ☒ ANSI C82.77-2017

Prepared For

RAB Lighting Inc.

Address: 408 W 14th St New York, NY 10014

Prepared By

Dongguan New Testing Centre Co., Ltd.

Address: 3F No. 1 the 1st North Industry Road, Songshan Lake Science & Technology Park, Dongguan, Guangdong, China

Prepare by:

Alan Wang

Engineer: Alan Wang

Date: 2025-08-22

Review by:

Vincent Yuan

Technical Lead: Vincent Yuan

Issue Date: 2025-08-22

Revised Date: N/A

1.0 Test Summary

Wall mount Luminaire					
Requirement Category		Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		1788
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	121.6
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	5.60
				277V	20.84
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.994
				277V	0.921
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4046
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.0
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		82
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		87
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		95
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-3%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.5%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U4-G2
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		277.0
(Goniophotometer – Section 4.2)			Non-Worst Case		120.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.058
(Goniophotometer – Section 4.2)			Non-Worst Case		0.122
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.7
(Goniophotometer – Section 4.2)			Non-Worst Case		14.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-07	V1-24B @15W4000K	-	250728008-S1
2	Goniophotometer Test	2025-08-07	V1-24B @15W4000K	-	250728008-S1
3	THD and PF Test	2025-08-07	V1-24B @15W4000K	-	250728008-S1

Remark (If any):

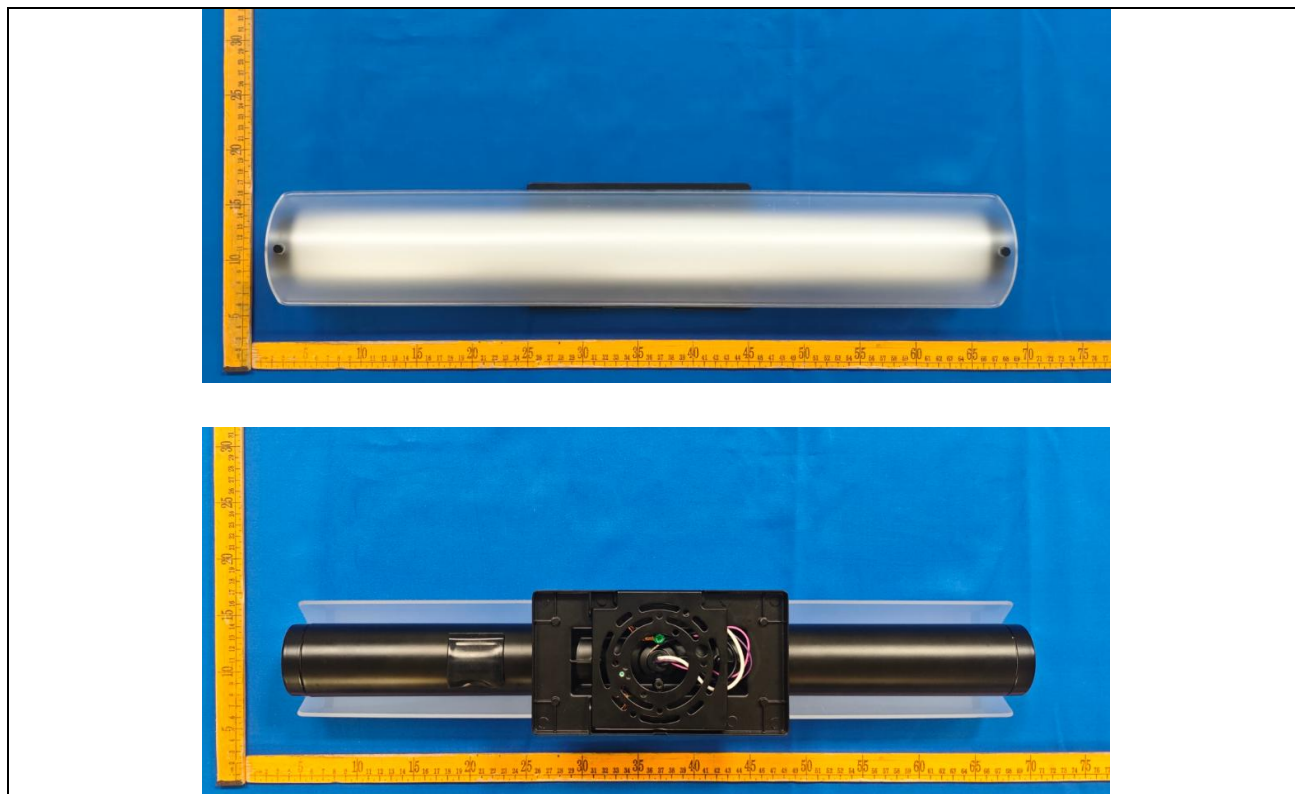
1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24B @15W4000K, color tunable from 2700K, 3000K, 3500K, 4000K and 5000K.

Electrical Specification: 120-277Vac, 50/60Hz

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	V1-24B @15W4000K	Sample ID	250728008-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

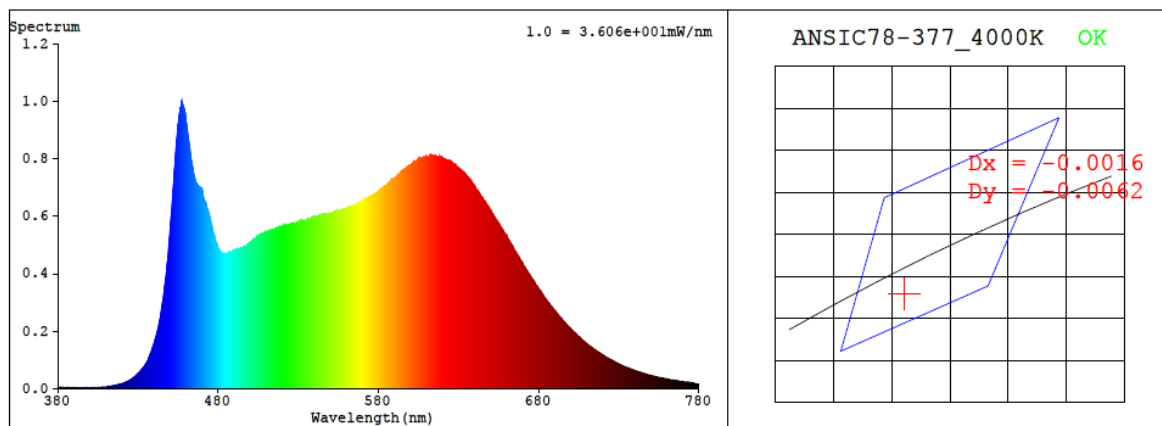
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load.</p> <p>The sample was measured using 4π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780nm.</p>

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
120.0	60	0.122	14.6	0.994
277.0	60	0.058	14.7	0.921

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4046	92.0	82	-0.0025	3.9	87	95	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3768$ $y = 0.3693$ / $u' = 0.2257$ $v' = 0.4977$ ($duv = -2.45e-03$)

CCT= 4046K Prcp WL: Ld=580.4nm Purity=23.9%

Peak WL: Lp=457nm FWHM: =30.7nm Ratio:R=20.7% G=73.8% B=5.5%

Render Index: Ra = 92.0 AvgR = 91.0 TM30:Rf=89 Rg=97

EEL: 0.11728 A+

R1 =97	R2 =95	R3 =93	R4 =91	R5 =94	R6 =91	R7 =88
R8 =87	R9 =82	R10=90	R11=95	R12=74	R13=96	R14=97 R15=95

4.1 Integrating Sphere Test

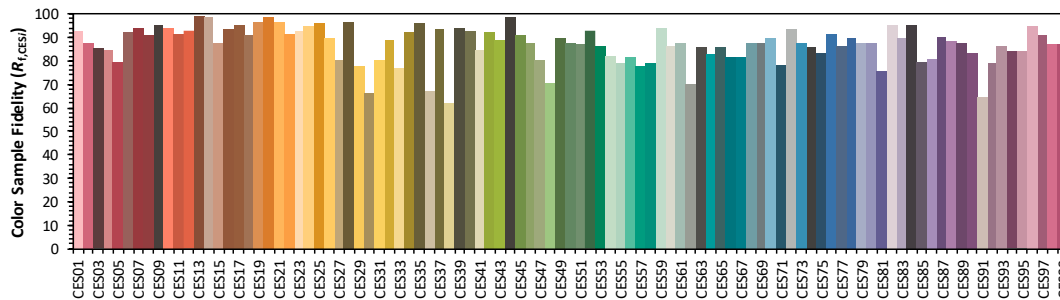
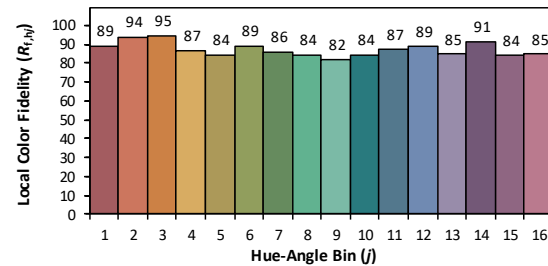
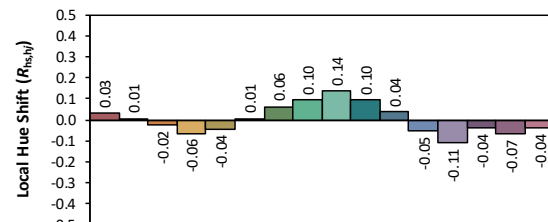
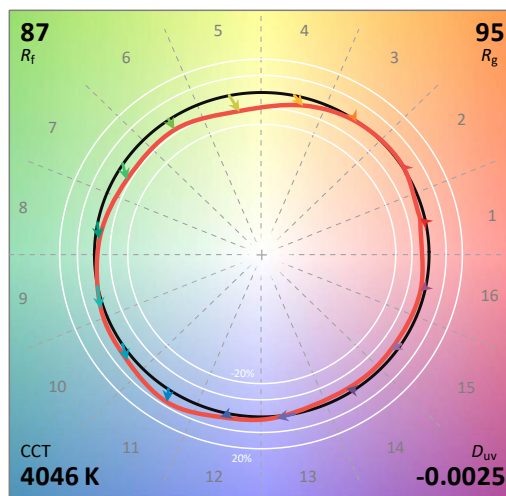
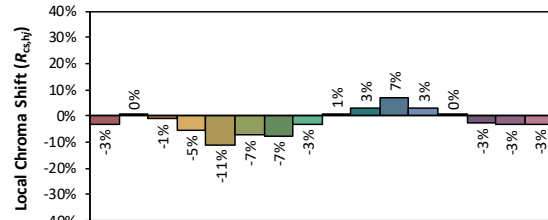
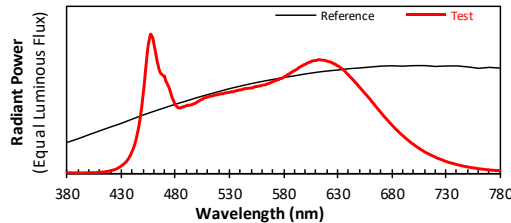
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/22

Model: V1-24B @15W4000K



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

x 0.3768
 y 0.3692
 u' 0.2257
 v' 0.4977

CIE 13.3-1995
(CRI)

R_a 92
 R_g 82

4.1 Integrating Sphere Test

Spectral Distribution over Visible Wavelength											
WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)
380	3.90E-06	447	3.73E-04	514	5.53E-04	581	6.90E-04	648	6.36E-04	715	1.35E-04
381	2.70E-06	448	4.26E-04	515	5.54E-04	582	6.93E-04	649	6.26E-04	716	1.31E-04
382	3.60E-06	449	4.85E-04	516	5.58E-04	583	6.99E-04	650	6.18E-04	717	1.27E-04
383	3.70E-06	450	5.53E-04	517	5.58E-04	584	7.05E-04	651	6.09E-04	718	1.25E-04
384	2.50E-06	451	6.22E-04	518	5.61E-04	585	7.07E-04	652	6.00E-04	719	1.20E-04
385	2.10E-06	452	7.04E-04	519	5.61E-04	586	7.14E-04	653	5.91E-04	720	1.17E-04
386	2.70E-06	453	7.82E-04	520	5.63E-04	587	7.18E-04	654	5.83E-04	721	1.13E-04
387	3.00E-06	454	8.62E-04	521	5.65E-04	588	7.25E-04	655	5.73E-04	722	1.09E-04
388	2.20E-06	455	9.21E-04	522	5.68E-04	589	7.28E-04	656	5.65E-04	723	1.06E-04
389	2.80E-06	456	9.61E-04	523	5.68E-04	590	7.32E-04	657	5.56E-04	724	1.03E-04
390	2.70E-06	457	9.93E-04	524	5.67E-04	591	7.36E-04	658	5.48E-04	725	1.00E-04
391	2.70E-06	458	9.82E-04	525	5.71E-04	592	7.41E-04	659	5.38E-04	726	9.74E-05
392	2.10E-06	459	9.67E-04	526	5.74E-04	593	7.45E-04	660	5.30E-04	727	9.45E-05
393	2.20E-06	460	9.30E-04	527	5.74E-04	594	7.53E-04	661	5.19E-04	728	9.12E-05
394	2.60E-06	461	8.89E-04	528	5.75E-04	595	7.58E-04	662	5.09E-04	729	8.80E-05
395	2.60E-06	462	8.49E-04	529	5.77E-04	596	7.62E-04	663	5.01E-04	730	8.56E-05
396	2.50E-06	463	8.05E-04	530	5.78E-04	597	7.66E-04	664	4.92E-04	731	8.27E-05
397	3.00E-06	464	7.72E-04	531	5.80E-04	598	7.71E-04	665	4.81E-04	732	8.01E-05
398	3.40E-06	465	7.40E-04	532	5.83E-04	599	7.75E-04	666	4.72E-04	733	7.75E-05
399	3.00E-06	466	7.19E-04	533	5.81E-04	600	7.77E-04	667	4.62E-04	734	7.50E-05
400	3.30E-06	467	7.09E-04	534	5.84E-04	601	7.81E-04	668	4.53E-04	735	7.31E-05
401	3.20E-06	468	7.03E-04	535	5.87E-04	602	7.88E-04	669	4.44E-04	736	7.11E-05
402	3.80E-06	469	6.95E-04	536	5.90E-04	603	7.90E-04	670	4.35E-04	737	6.94E-05
403	3.70E-06	470	6.93E-04	537	5.89E-04	604	7.93E-04	671	4.25E-04	738	6.67E-05
404	3.90E-06	471	6.61E-04	538	5.92E-04	605	7.95E-04	672	4.16E-04	739	6.45E-05
405	4.20E-06	472	6.47E-04	539	5.94E-04	606	8.01E-04	673	4.07E-04	740	6.22E-05
406	4.20E-06	473	6.29E-04	540	5.95E-04	607	8.02E-04	674	3.98E-04	741	6.07E-05
407	4.60E-06	474	6.14E-04	541	5.96E-04	608	8.04E-04	675	3.90E-04	742	5.88E-05
408	5.70E-06	475	5.90E-04	542	6.00E-04	609	8.05E-04	676	3.80E-04	743	5.70E-05
409	5.90E-06	476	5.66E-04	543	6.01E-04	610	8.05E-04	677	3.73E-04	744	5.53E-05
410	6.40E-06	477	5.39E-04	544	6.03E-04	611	8.07E-04	678	3.63E-04	745	5.32E-05
411	7.20E-06	478	5.23E-04	545	6.06E-04	612	8.10E-04	679	3.56E-04	746	5.19E-05
412	7.50E-06	479	5.05E-04	546	6.06E-04	613	8.12E-04	680	3.47E-04	747	5.00E-05
413	8.30E-06	480	4.89E-04	547	6.06E-04	614	8.10E-04	681	3.39E-04	748	4.84E-05
414	8.90E-06	481	4.80E-04	548	6.08E-04	615	8.09E-04	682	3.31E-04	749	4.68E-05
415	1.06E-05	482	4.71E-04	549	6.08E-04	616	8.08E-04	683	3.23E-04	750	4.54E-05
416	1.15E-05	483	4.67E-04	550	6.09E-04	617	8.06E-04	684	3.15E-04	751	4.43E-05
417	1.24E-05	484	4.66E-04	551	6.09E-04	618	8.07E-04	685	3.07E-04	752	4.29E-05
418	1.43E-05	485	4.68E-04	552	6.13E-04	619	8.04E-04	686	3.00E-04	753	4.12E-05
419	1.60E-05	486	4.72E-04	553	6.16E-04	620	8.02E-04	687	2.93E-04	754	4.02E-05
420	1.76E-05	487	4.74E-04	554	6.20E-04	621	8.00E-04	688	2.85E-04	755	3.90E-05
421	1.94E-05	488	4.76E-04	555	6.19E-04	622	7.97E-04	689	2.78E-04	756	3.80E-05
422	2.18E-05	489	4.78E-04	556	6.21E-04	623	7.95E-04	690	2.71E-04	757	3.69E-05
423	2.40E-05	490	4.83E-04	557	6.22E-04	624	7.93E-04	691	2.64E-04	758	3.55E-05
424	2.65E-05	491	4.83E-04	558	6.24E-04	625	7.90E-04	692	2.58E-04	759	3.41E-05
425	2.95E-05	492	4.87E-04	559	6.24E-04	626	7.84E-04	693	2.50E-04	760	3.30E-05
426	3.28E-05	493	4.85E-04	560	6.28E-04	627	7.81E-04	694	2.45E-04	761	3.21E-05
427	3.71E-05	494	4.88E-04	561	6.30E-04	628	7.79E-04	695	2.38E-04	762	3.09E-05
428	4.16E-05	495	4.89E-04	562	6.31E-04	629	7.72E-04	696	2.31E-04	763	3.02E-05
429	4.68E-05	496	4.93E-04	563	6.32E-04	630	7.67E-04	697	2.25E-04	764	2.91E-05
430	5.27E-05	497	4.95E-04	564	6.35E-04	631	7.64E-04	698	2.18E-04	765	2.84E-05
431	5.82E-05	498	4.99E-04	565	6.38E-04	632	7.59E-04	699	2.13E-04	766	2.78E-05
432	6.44E-05	499	5.02E-04	566	6.41E-04	633	7.50E-04	700	2.08E-04	767	2.66E-05
433	7.14E-05	500	5.09E-04	567	6.43E-04	634	7.48E-04	701	2.02E-04	768	2.55E-05
434	7.81E-05	501	5.12E-04	568	6.47E-04	635	7.41E-04	702	1.96E-04	769	2.51E-05
435	8.69E-05	502	5.17E-04	569	6.50E-04	636	7.34E-04	703	1.91E-04	770	2.42E-05
436	9.69E-05	503	5.21E-04	570	6.53E-04	637	7.28E-04	704	1.85E-04	771	2.33E-05
437	1.10E-04	504	5.26E-04	571	6.58E-04	638	7.19E-04	705	1.81E-04	772	2.26E-05
438	1.24E-04	505	5.28E-04	572	6.59E-04	639	7.10E-04	706	1.76E-04	773	2.16E-05
439	1.39E-04	506	5.35E-04	573	6.63E-04	640	7.04E-04	707	1.70E-04	774	2.15E-05
440	1.57E-04	507	5.39E-04	574	6.67E-04	641	6.93E-04	708	1.65E-04	775	2.07E-05
441	1.76E-04	508	5.39E-04	575	6.66E-04	642	6.86E-04	709	1.61E-04	776	2.01E-05
442	1.96E-04	509	5.43E-04	576	6.71E-04	643	6.79E-04	710	1.56E-04	777	1.91E-05
443	2.23E-04	510	5.44E-04	577	6.76E-04	644	6.69E-04	711	1.51E-04	778	1.86E-05
444	2.54E-04	511	5.47E-04	578	6.77E-04	645	6.63E-04	712	1.47E-04	779	1.86E-05
445	2.91E-04	512	5.49E-04	579	6.80E-04	646	6.53E-04	713	1.43E-04	780	1.86E-05
446	3.27E-04	513	5.51E-04	580	6.84E-04	647	6.44E-04	714	1.40E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24B @15W4000K	Sample ID	250728008-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.9	Humidity (%RH)	42.1

Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using a type C goniophotometer and software.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^\circ\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.</p> <p>The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1.0° vertical intervals and 15° horizontal intervals.</p>

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	277.0	60	0.058	14.7	0.921
NON-WORST CASE	120.0	60	0.122	14.6	0.994

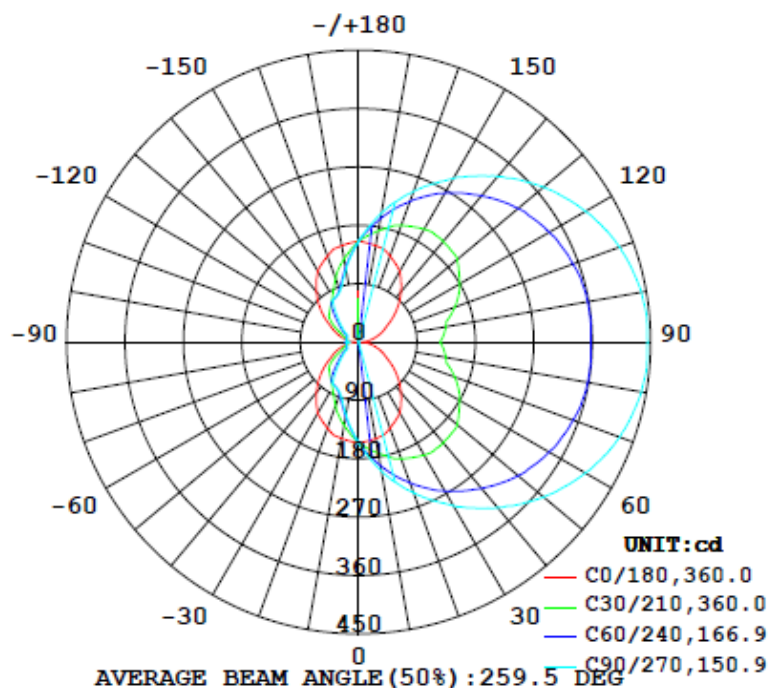
Test Result

Flux (lm)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)	Zonal Lumen Requirement	BUG
	C0-180	C90-270	C0-180	C90-270		(0°-60°)	
1788	86.2	154.6	180.0	97.6	121.6	26.5%	B0-U4-G2

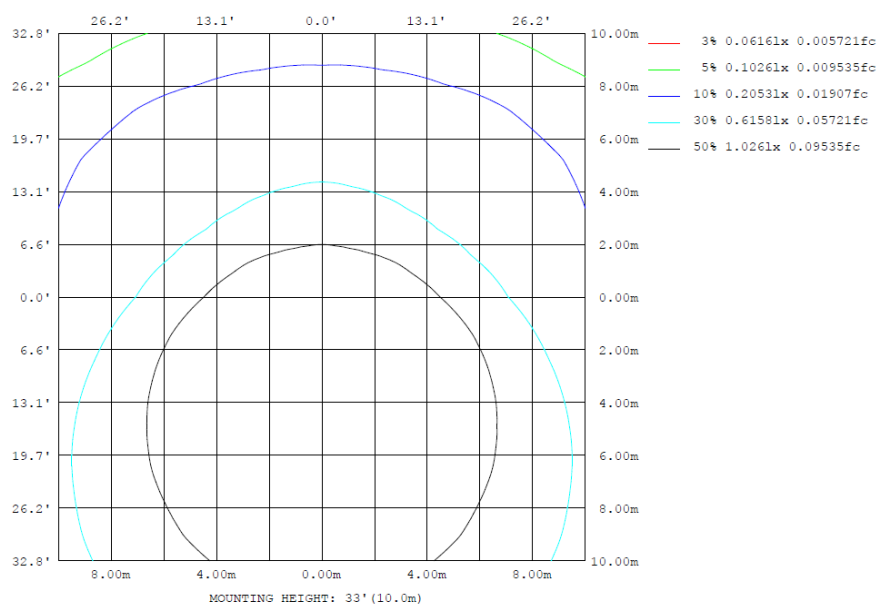
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

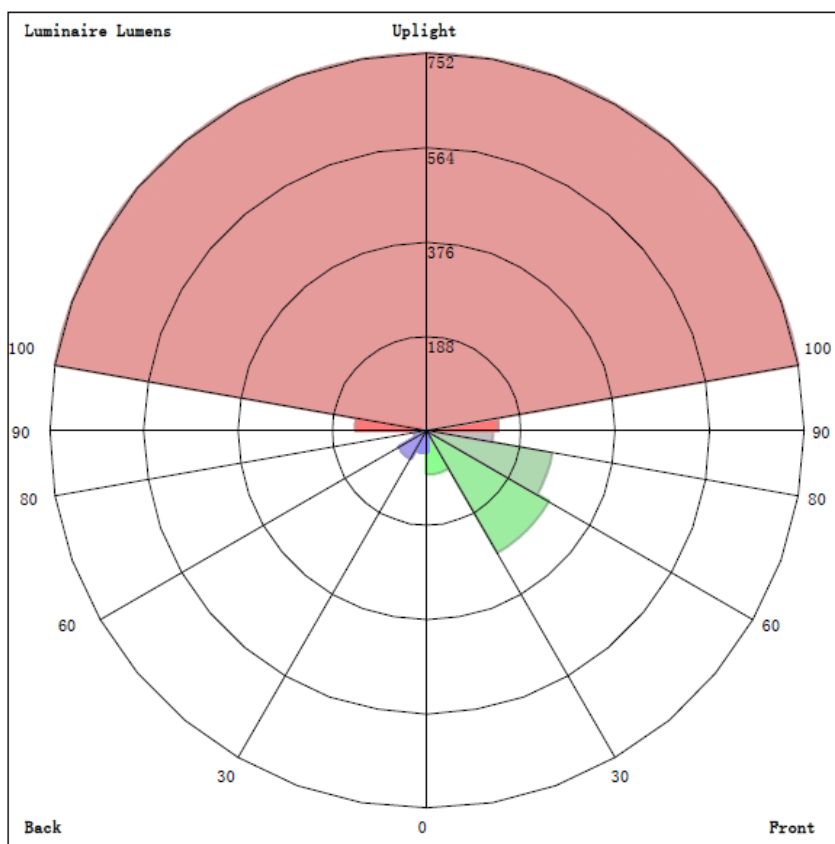
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	ϕ lum, lamp
10	151.2	184.5	201.7	184.5	151.2	122.6	113.7	122.6	0- 10	14.73	14.73	0.82,0.82
20	141.4	214.7	247.4	214.7	141.4	93.78	84.17	93.78	10- 20	43.57	58.30	3.26,3.26
30	126.5	235.4	291.3	235.4	126.5	76.24	77.49	76.24	20- 30	71.40	129.7	7.26,7.26
40	101.4	254.0	333.4	254.0	101.4	70.37	51.88	70.37	30- 40	97.57	227.3	12.7,12.7
50	75.98	263.9	371.8	263.9	75.98	46.03	32.01	46.03	40- 50	117.1	344.4	19.3,19.3
60	50.29	267.5	403.3	267.5	50.29	28.64	19.93	28.64	50- 60	129.8	474.2	26.5,26.5
70	33.86	265.3	428.0	265.3	33.86	20.45	19.22	20.45	60- 70	137.2	611.4	34.2,34.2
80	18.14	257.1	442.5	257.1	18.14	19.94	18.95	19.94	70- 80	140.6	752.1	42.1,42.1
90	3.111	252.0	445.2	252.0	3.111	20.96	19.68	20.96	80- 90	141.7	893.8	50,50
100	18.14	257.1	442.5	257.1	18.14	19.94	18.95	19.94	90-100	141.7	1036	57.9,57.9
110	33.86	265.3	428.0	265.3	33.86	20.45	19.22	20.45	100-110	140.6	1176	65.8,65.8
120	50.29	267.5	403.3	267.5	50.29	28.64	19.93	28.64	110-120	137.2	1313	73.5,73.5
130	75.98	263.9	371.8	263.9	75.98	46.03	32.01	46.03	120-130	129.8	1443	80.7,80.7
140	101.4	254.0	333.4	254.0	101.4	70.37	51.88	70.37	130-140	117.1	1560	87.3,87.3
150	126.5	235.4	291.3	235.4	126.5	76.24	77.49	76.24	140-150	97.57	1658	92.7,92.7
160	141.4	214.7	247.4	214.7	141.4	93.78	84.17	93.78	150-160	71.40	1729	96.7,96.7
170	151.2	184.5	201.7	184.5	151.2	122.6	113.7	122.6	160-170	43.57	1773	99.2,99.2
180	155.8	155.8	155.8	155.8	155.8	155.8	155.8	155.8	170-180	14.73	1788	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	14.73	0-10	14.73	0.83%
10-20	43.57	0-20	58.30	3.29%
20-30	71.40	0-30	129.70	7.32%
30-40	97.57	0-40	227.27	12.82%
40-50	117.12	0-50	344.39	19.43%
50-60	129.81	0-60	474.20	26.75%
60-70	137.22	0-70	611.42	34.49%
70-80	140.65	0-80	752.07	42.42%
80-90	141.74	0-90	893.81	50.42%
90-100	141.74	0-100	1035.55	58.41%
100-110	140.65	0-110	1176.20	66.34%
110-120	137.22	0-120	1313.42	74.08%
120-130	129.81	0-130	1443.23	81.41%
130-140	117.12	0-140	1560.35	88.01%
140-150	97.57	0-150	1657.92	93.52%
150-160	71.40	0-160	1729.32	97.54%
160-170	43.57	0-170	1772.89	100.00%
170-180	14.73	0-180	1787.62	100.83%

4.2 Goniophotometer Test

LCS/BUG

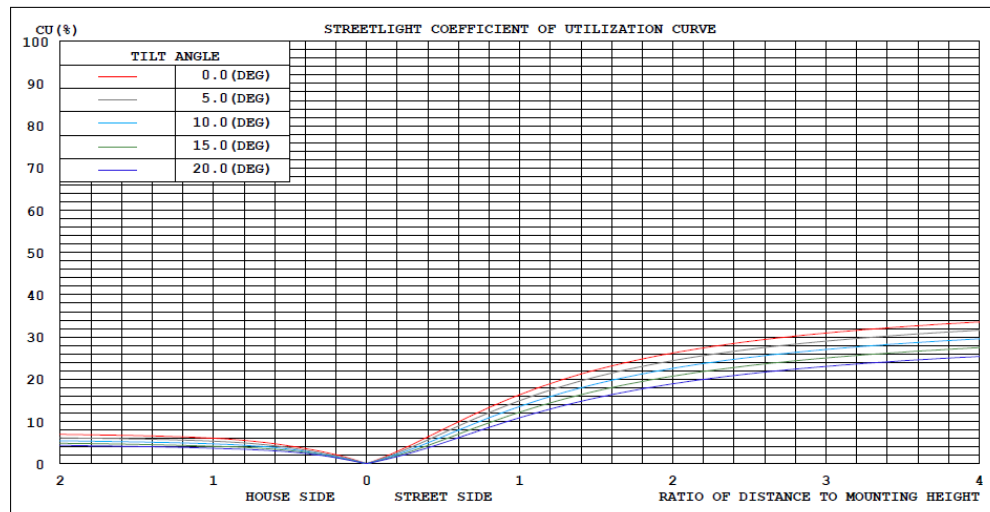


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

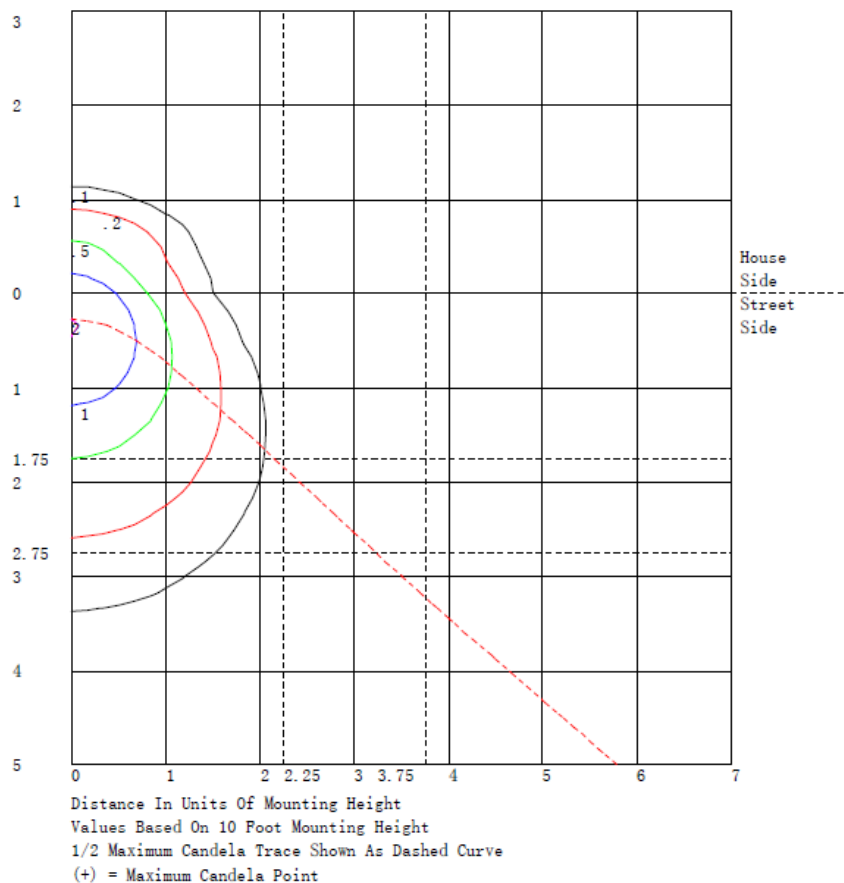
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	86.3	N.A.	4.8
FM - Front-Medium (30-60)	280.6	N.A.	15.7
FH - Front-High (60-80)	253.4	N.A.	14.2
FVH - Front-Very High (80-90)	131.9	N.A.	7.4
BL - Back-Low (0-30)	43.4	N.A.	2.4
BM - Back-Medium (30-60)	63.9	N.A.	3.6
BH - Back-High (60-80)	24.5	N.A.	1.4
BVH - Back-Very High (80-90)	9.9	N.A.	0.6
UL - Uplight-Low (90-100)	141.7	N.A.	7.9
UH - Uplight-High (100-180)	752.1	N.A.	42.1
Total	1787.7	N.A.	100.0
BUG Rating	B0-U4-G2		

4.2 Goniophotometer Test

Coefficients of Utilization



Isolines



4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) y (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156
5	153	159	165	170	174	177	178	177	174	170	165	159	153	148	143	139	136	134	134
10	151	163	174	185	193	199	202	199	193	185	174	163	151	140	130	123	117	114	114
15	149	166	184	200	213	221	225	221	213	200	184	166	149	132	118	107	99.6	96.1	95.9
20	141	165	191	215	231	242	247	242	231	215	191	165	141	121	104	93.8	86.8	84.2	84.2
25	134	165	196	225	249	263	269	263	249	225	196	165	134	109	91.5	82.7	79.6	78.6	79.2
30	126	163	201	235	265	283	291	283	265	235	201	163	126	97.9	81.3	76.2	76.4	76.9	77.5
35	114	158	204	245	280	304	313	304	280	245	204	158	114	85.8	73.8	72.9	73.1	68.1	66.6
40	101	150	203	254	295	323	333	323	295	254	203	150	101	74.8	68.4	70.4	60.4	53.7	51.9
45	88.8	143	201	258	308	341	353	341	308	258	201	143	88.8	65.6	64.1	58.8	47.4	42.3	40.6
50	76.0	130	198	264	321	358	372	358	321	264	198	130	76.0	58.4	59.5	46.0	37.5	33.1	32.0
55	63.1	115	189	267	330	373	388	373	330	267	189	115	63.1	52.1	49.7	35.8	29.7	26.3	25.7
60	50.3	99.2	180	267	339	386	403	386	339	267	180	99.2	50.3	46.5	38.1	28.6	23.1	20.6	19.9
65	42.1	86.8	170	267	346	398	417	398	346	267	170	86.8	42.1	38.6	29.1	22.9	20.4	19.7	19.4
70	33.9	74.2	158	265	352	408	428	408	352	265	158	74.2	33.9	29.8	23.9	20.5	20.3	19.6	19.2
75	25.7	60.8	144	262	356	415	436	415	356	262	144	60.8	25.7	20.8	19.6	20.2	20.3	19.7	19.1
80	18.1	57.3	136	257	358	420	442	420	358	257	136	57.3	18.1	18.8	18.4	19.9	19.6	19.1	19.0
85	10.6	54.5	132	256	359	423	446	423	359	256	132	54.5	10.6	17.8	18.8	20.4	19.8	17.4	16.8
90	3.11	51.3	125	252	357	423	445	423	357	252	125	51.3	3.11	16.9	19.2	21.0	21.0	17.1	17.7
95	10.6	54.5	132	256	359	423	446	423	359	256	132	54.5	10.6	17.8	18.8	20.4	19.8	17.4	16.8
100	18.1	57.3	136	257	358	420	442	420	358	257	136	57.3	18.1	18.8	18.4	19.9	19.6	19.1	19.0
105	25.7	60.8	144	262	356	415	436	415	356	262	144	60.8	25.7	20.8	19.6	20.2	20.3	19.7	19.1
110	33.9	74.2	158	265	352	408	428	408	352	265	158	74.2	33.9	29.8	23.9	20.5	20.3	19.6	19.2
115	42.1	86.8	170	267	346	398	417	398	346	267	170	86.8	42.1	38.6	29.1	22.9	20.4	19.7	19.4
120	50.3	99.2	180	267	339	386	403	386	339	267	180	99.2	50.3	46.5	38.1	28.6	23.1	20.6	19.9
125	63.1	115	189	267	330	373	388	373	330	267	189	115	63.1	52.1	49.7	35.8	29.7	26.3	25.7
130	76.0	130	198	264	321	358	372	358	321	264	198	130	76.0	58.4	59.5	46.0	37.5	33.1	32.0
135	88.8	143	201	258	308	341	353	341	308	258	201	143	88.8	65.6	64.1	58.8	47.4	42.3	40.6
140	101	150	203	254	295	323	333	323	295	254	203	150	101	74.8	68.4	70.4	60.4	53.7	51.9
145	114	158	204	245	280	304	313	304	280	245	204	158	114	85.8	73.8	72.9	73.1	68.1	66.6
150	126	163	201	235	265	283	291	283	265	235	201	163	126	97.9	81.3	76.2	76.4	76.9	77.5
155	134	165	196	225	249	263	269	263	249	225	196	165	134	109	91.5	82.7	79.6	78.6	79.2
160	141	165	191	215	231	242	247	242	231	215	191	165	141	121	104	93.8	86.8	84.2	84.2
165	149	166	184	200	213	221	225	221	213	200	184	166	149	132	118	107	99.6	96.1	95.9
170	151	163	174	185	193	199	202	199	193	185	174	163	151	140	130	123	117	114	114
175	153	159	165	170	174	177	178	177	174	170	165	159	153	148	143	139	136	134	134
180	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	156	156	156	156	156														
5	134	136	139	143	148														
10	114	117	123	130	140														
15	96.1	99.6	107	118	132														
20	84.2	86.8	93.8	104	121														
25	78.6	79.6	82.7	91.5	109														
30	76.9	76.4	76.2	81.3	97.9														
35	68.1	73.1	72.9	73.8	85.8														
40	53.7	60.4	70.4	68.4	74.8														
45	42.3	47.4	58.8	64.1	65.6														
50	33.1	37.5	46.0	59.5	58.4														
55	26.3	29.7	35.8	49.7	52.1														
60	20.6	23.1	28.6	38.1	46.5														
65	19.7	20.4	22.9	29.1	38.6														
70	19.6	20.3	20.5	23.9	29.8														
75	19.7	20.3	20.2	19.6	20.8														
80	19.1	19.6	19.9	18.4	18.8														
85	17.4	19.8	20.4	18.8	17.8														
90	17.1	21.0	21.0	19.2	16.9														
95	17.4	19.8	20.4	18.8	17.8														
100	19.1	19.6	19.9	18.4	18.8														
105	19.7	20.3	20.2	19.6	20.8														
110	19.6	20.3	20.5	23.9	29.8														
115	19.7	20.4	22.9	29.1	38.6														
120	20.6	23.1	28.6	38.1	46.5														
125	26.3	29.7	35.8	49.7	52.1														
130	33.1	37.5	46.0	59.5	58.4														
135	42.3	47.4	58.8	64.1	65.6														
140	53.7	60.4	70.4	68.4	74.8														
145	68.1	73.1	72.9	73.8	85.8														
150	76.9	76.4	76.2	81.3	97.9														
155	78.6	79.6	82.7	91.5	109														
160	84.2	86.8	93.8	104	121														
165	96.1	99.6	107	118	132														
170	114	117	123	130	140														
175	134	136	139	143	148														
180	156	156	156	156	156														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24B @15W4000K	Sample ID	250728008-S1
Temperature (°C)	25.4	Humidity (%RH)	41.0

Test Method
<p>The samples were tested according to the and Ansi C82.77: 2002 and ANSI C82.77-10:2020</p> <p>The total harmonic distortion shall be measured to the 40th order.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^{\circ}\text{C}$. The sample measurements were made using a digital power meter and power supply. The sample was operated at rated voltage and was stabilized before measurement. The total harmonic distortion was calculated.</p>

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	iTHD(%)
120.0	60	0.122	14.6	0.994	5.60
277.0	60	0.058	14.7	0.921	20.84

5.0 Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTC-F01-001	Goniophotometer System	2024-11-07	2025-11-06
NTC-F01-006	2.0 meter Integrating Sphere	2024-11-07	2025-11-06
NTC-F01-012	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-013	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-031	Digital Power Meter	2025-08-04	2026-08-03
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

*****End of Report*****