

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		2232
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	113.3
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		19.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.28
				277V	13.13
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.995
				277V	0.970
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3328
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.5
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		75
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		89
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		96
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-G4-G2
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		120.0
(Goniophotometer – Section 4.2)			Non-Worst Case		277.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.165
(Goniophotometer – Section 4.2)			Non-Worst Case		0.073
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		19.7
(Goniophotometer – Section 4.2)			Non-Worst Case		19.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-29	V1-24B @20W3500K	-	250728008-S1
2	Goniophotometer Test	2025-07-29	V1-24B @20W3500K	-	250728008-S1
3	THD and PF Test	2025-07-29	V1-24B @20W3500K	-	250728008-S1

Remark (If any):

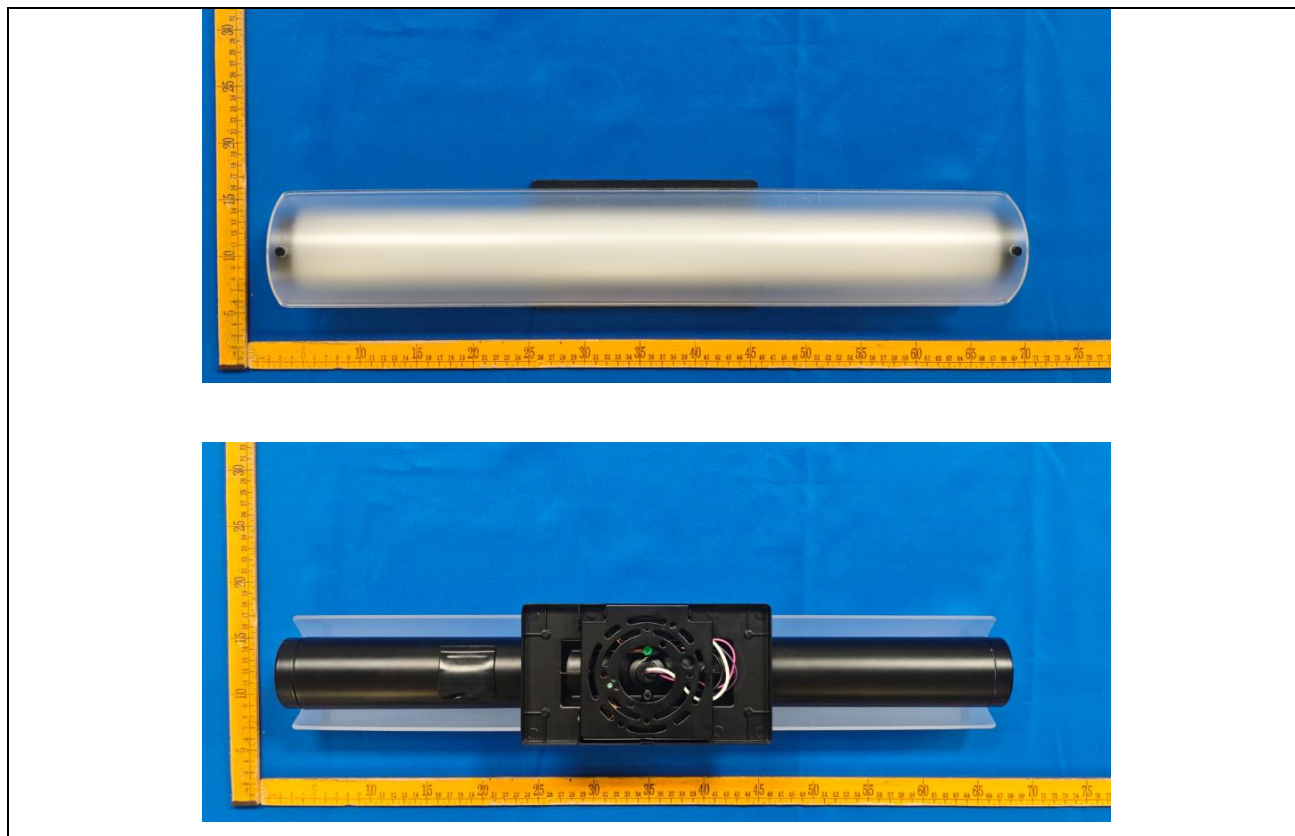
1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
3. This report must not be used by the client to claim product certification, approval, or endorsement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

3.0 Product Description

Luminaire Description: Model No. V1-24B @20W3500K, 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 @20W3500K	Sample ID	250728008-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

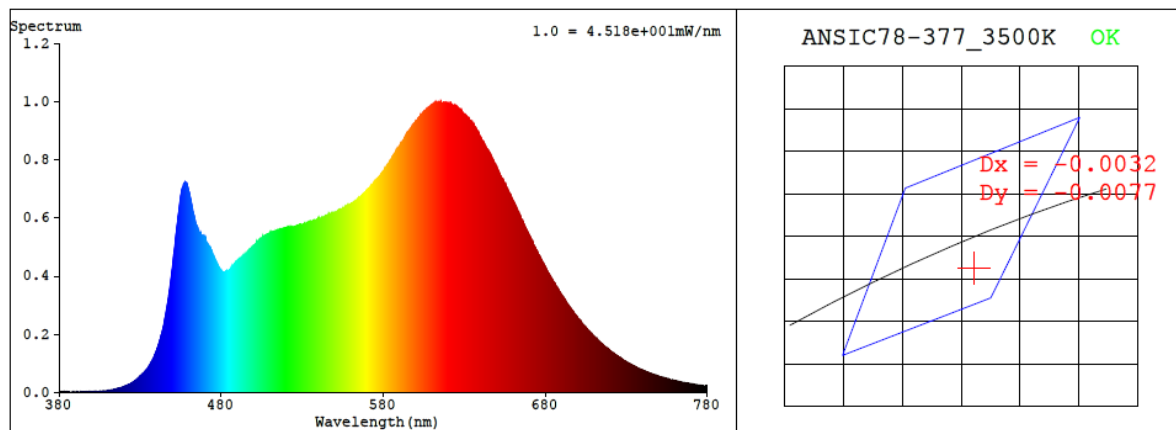
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm 1^{\circ}\text{C}$.</p> <p>The sample measurements 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	0.165	19.7	0.995
277.0	60	0.073	19.6	0.970

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3328	92.5	75	-0.0027	4.8	89	96	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4122$ $y = 0.3878$ / $u' = 0.2414$ $v' = 0.5111$ ($duv = -2.70e-03$)

CCT= 3328K Prcp WL: $L_d = 582.7\text{nm}$ Purity=40.1%

Peak WL: $L_p = 615\text{nm}$ FWHM: $=174.5\text{nm}$ Ratio: R=23.6% G=72.0% B=4.4%

Render Index: $R_a = 92.5$ AvgR = 91.3 TM30: $R_f = 91$ $R_g = 98$

EEL: 0.12914 A+

R1 =97 R2 =95 R3 =92 R4 =95 R5 =96 R6 =90 R7 =89

R8 =86 R9 =75 R10=89 R11=97 R12=80 R13=96 R14=96 R15=96

4.1 Integrating Sphere Test

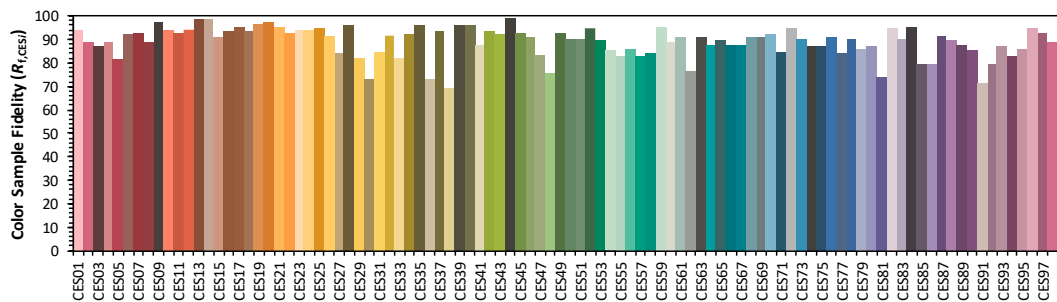
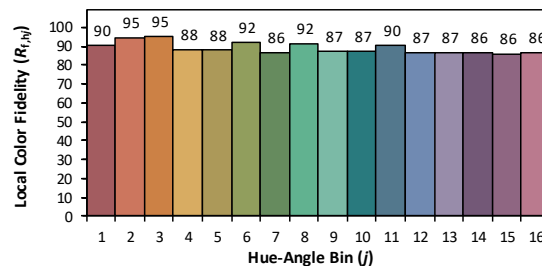
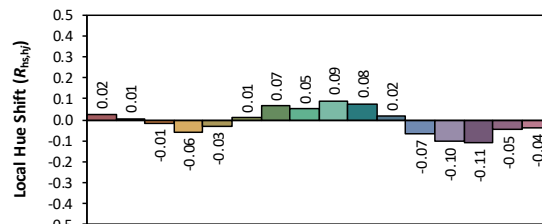
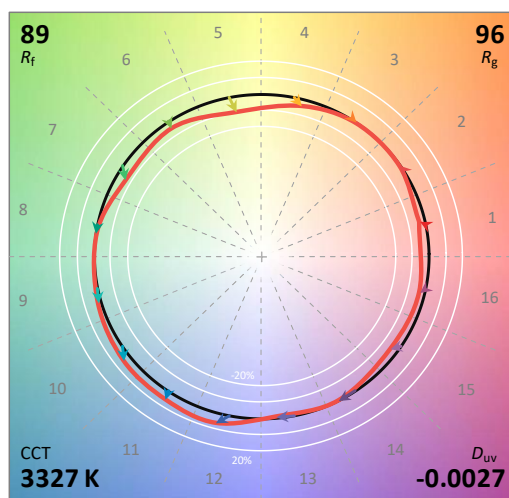
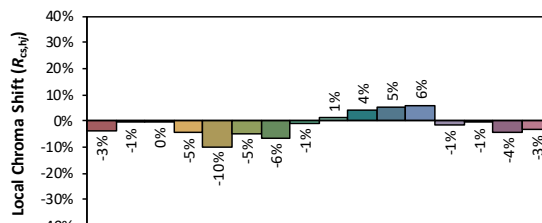
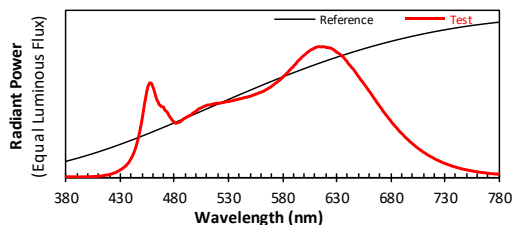
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/22

Model: V1-24B @20W3500K



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

x 0.4122
 y 0.3877
 u' 0.2415
 v' 0.5110

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 76

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	3.00E-06	447	3.12E-04	514	5.53E-04	581	7.70E-04	648	7.97E-04	715	1.67E-04
381	2.60E-06	448	3.51E-04	515	5.58E-04	582	7.77E-04	649	7.84E-04	716	1.62E-04
382	2.60E-06	449	3.94E-04	516	5.59E-04	583	7.85E-04	650	7.72E-04	717	1.57E-04
383	3.30E-06	450	4.38E-04	517	5.62E-04	584	7.95E-04	651	7.62E-04	718	1.53E-04
384	2.30E-06	451	4.87E-04	518	5.63E-04	585	8.01E-04	652	7.49E-04	719	1.49E-04
385	2.50E-06	452	5.42E-04	519	5.64E-04	586	8.12E-04	653	7.38E-04	720	1.44E-04
386	2.40E-06	453	5.89E-04	520	5.65E-04	587	8.20E-04	654	7.29E-04	721	1.40E-04
387	1.70E-06	454	6.34E-04	521	5.63E-04	588	8.30E-04	655	7.17E-04	722	1.35E-04
388	2.10E-06	455	6.77E-04	522	5.65E-04	589	8.37E-04	656	7.06E-04	723	1.30E-04
389	2.00E-06	456	7.01E-04	523	5.67E-04	590	8.45E-04	657	6.95E-04	724	1.27E-04
390	1.40E-06	457	7.18E-04	524	5.69E-04	591	8.56E-04	658	6.83E-04	725	1.24E-04
391	2.40E-06	458	7.20E-04	525	5.70E-04	592	8.62E-04	659	6.71E-04	726	1.20E-04
392	1.40E-06	459	7.13E-04	526	5.72E-04	593	8.74E-04	660	6.59E-04	727	1.16E-04
393	2.60E-06	460	6.93E-04	527	5.74E-04	594	8.85E-04	661	6.49E-04	728	1.12E-04
394	2.40E-06	461	6.69E-04	528	5.76E-04	595	8.93E-04	662	6.36E-04	729	1.09E-04
395	2.00E-06	462	6.40E-04	529	5.78E-04	596	9.01E-04	663	6.25E-04	730	1.05E-04
396	2.30E-06	463	6.11E-04	530	5.78E-04	597	9.07E-04	664	6.12E-04	731	1.02E-04
397	2.20E-06	464	5.88E-04	531	5.79E-04	598	9.18E-04	665	5.99E-04	732	9.95E-05
398	2.40E-06	465	5.73E-04	532	5.82E-04	599	9.24E-04	666	5.89E-04	733	9.58E-05
399	2.90E-06	466	5.53E-04	533	5.84E-04	600	9.32E-04	667	5.76E-04	734	9.30E-05
400	2.90E-06	467	5.49E-04	534	5.85E-04	601	9.37E-04	668	5.63E-04	735	9.05E-05
401	3.20E-06	468	5.39E-04	535	5.87E-04	602	9.45E-04	669	5.53E-04	736	8.74E-05
402	3.60E-06	469	5.37E-04	536	5.89E-04	603	9.54E-04	670	5.41E-04	737	8.41E-05
403	3.70E-06	470	5.35E-04	537	5.92E-04	604	9.58E-04	671	5.30E-04	738	8.14E-05
404	4.10E-06	471	5.15E-04	538	5.92E-04	605	9.66E-04	672	5.19E-04	739	7.91E-05
405	4.50E-06	472	5.07E-04	539	5.94E-04	606	9.71E-04	673	5.05E-04	740	7.70E-05
406	4.40E-06	473	5.00E-04	540	5.99E-04	607	9.76E-04	674	4.95E-04	741	7.45E-05
407	5.40E-06	474	4.87E-04	541	5.98E-04	608	9.80E-04	675	4.84E-04	742	7.22E-05
408	5.40E-06	475	4.70E-04	542	6.01E-04	609	9.83E-04	676	4.73E-04	743	7.01E-05
409	6.00E-06	476	4.60E-04	543	6.03E-04	610	9.89E-04	677	4.63E-04	744	6.81E-05
410	7.00E-06	477	4.45E-04	544	6.06E-04	611	9.91E-04	678	4.52E-04	745	6.56E-05
411	7.80E-06	478	4.37E-04	545	6.09E-04	612	9.95E-04	679	4.42E-04	746	6.31E-05
412	8.80E-06	479	4.26E-04	546	6.10E-04	613	9.97E-04	680	4.31E-04	747	6.11E-05
413	9.50E-06	480	4.18E-04	547	6.11E-04	614	9.97E-04	681	4.20E-04	748	5.98E-05
414	1.12E-05	481	4.13E-04	548	6.14E-04	615	9.97E-04	682	4.10E-04	749	5.80E-05
415	1.20E-05	482	4.13E-04	549	6.16E-04	616	9.95E-04	683	4.00E-04	750	5.62E-05
416	1.41E-05	483	4.17E-04	550	6.17E-04	617	9.97E-04	684	3.90E-04	751	5.41E-05
417	1.55E-05	484	4.18E-04	551	6.18E-04	618	9.96E-04	685	3.81E-04	752	5.27E-05
418	1.64E-05	485	4.21E-04	552	6.25E-04	619	9.97E-04	686	3.73E-04	753	5.08E-05
419	1.84E-05	486	4.27E-04	553	6.27E-04	620	9.92E-04	687	3.62E-04	754	4.93E-05
420	2.06E-05	487	4.34E-04	554	6.29E-04	621	9.90E-04	688	3.53E-04	755	4.78E-05
421	2.24E-05	488	4.41E-04	555	6.35E-04	622	9.92E-04	689	3.44E-04	756	4.67E-05
422	2.49E-05	489	4.49E-04	556	6.35E-04	623	9.88E-04	690	3.36E-04	757	4.44E-05
423	2.75E-05	490	4.52E-04	557	6.39E-04	624	9.88E-04	691	3.29E-04	758	4.36E-05
424	3.01E-05	491	4.57E-04	558	6.44E-04	625	9.85E-04	692	3.20E-04	759	4.19E-05
425	3.35E-05	492	4.62E-04	559	6.46E-04	626	9.80E-04	693	3.10E-04	760	4.14E-05
426	3.72E-05	493	4.66E-04	560	6.48E-04	627	9.75E-04	694	3.01E-04	761	3.93E-05
427	4.13E-05	494	4.71E-04	561	6.52E-04	628	9.71E-04	695	2.95E-04	762	3.82E-05
428	4.58E-05	495	4.74E-04	562	6.56E-04	629	9.62E-04	696	2.87E-04	763	3.70E-05
429	5.04E-05	496	4.80E-04	563	6.59E-04	630	9.57E-04	697	2.79E-04	764	3.58E-05
430	5.65E-05	497	4.88E-04	564	6.64E-04	631	9.51E-04	698	2.71E-04	765	3.48E-05
431	6.01E-05	498	4.93E-04	565	6.70E-04	632	9.46E-04	699	2.64E-04	766	3.41E-05
432	6.63E-05	499	4.99E-04	566	6.72E-04	633	9.40E-04	700	2.57E-04	767	3.25E-05
433	7.27E-05	500	5.05E-04	567	6.80E-04	634	9.34E-04	701	2.51E-04	768	3.19E-05
434	7.90E-05	501	5.09E-04	568	6.84E-04	635	9.26E-04	702	2.44E-04	769	3.05E-05
435	8.62E-05	502	5.20E-04	569	6.87E-04	636	9.19E-04	703	2.36E-04	770	2.97E-05
436	9.54E-05	503	5.22E-04	570	6.96E-04	637	9.10E-04	704	2.30E-04	771	2.90E-05
437	1.04E-04	504	5.28E-04	571	7.01E-04	638	8.99E-04	705	2.24E-04	772	2.77E-05
438	1.16E-04	505	5.30E-04	572	7.08E-04	639	8.90E-04	706	2.16E-04	773	2.64E-05
439	1.29E-04	506	5.34E-04	573	7.14E-04	640	8.81E-04	707	2.11E-04	774	2.60E-05
440	1.43E-04	507	5.40E-04	574	7.20E-04	641	8.66E-04	708	2.05E-04	775	2.54E-05
441	1.59E-04	508	5.43E-04	575	7.25E-04	642	8.59E-04	709	1.99E-04	776	2.44E-05
442	1.76E-04	509	5.45E-04	576	7.33E-04	643	8.48E-04	710	1.92E-04	777	2.38E-05
443	1.97E-04	510	5.49E-04	577	7.39E-04	644	8.38E-04	711	1.87E-04	778	2.34E-05
444	2.20E-04	511	5.51E-04	578	7.44E-04	645	8.30E-04	712	1.83E-04	779	2.35E-05
445	2.48E-04	512	5.52E-04	579	7.55E-04	646	8.20E-04	713	1.77E-04	780	2.36E-05
446	2.79E-04	513	5.53E-04	580	7.60E-04	647	8.08E-04	714	1.72E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24B @20W3500K	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	120.0	60	0.165	19.7	0.995
NON-WORST CASE	277.0	60	0.073	19.6	0.970

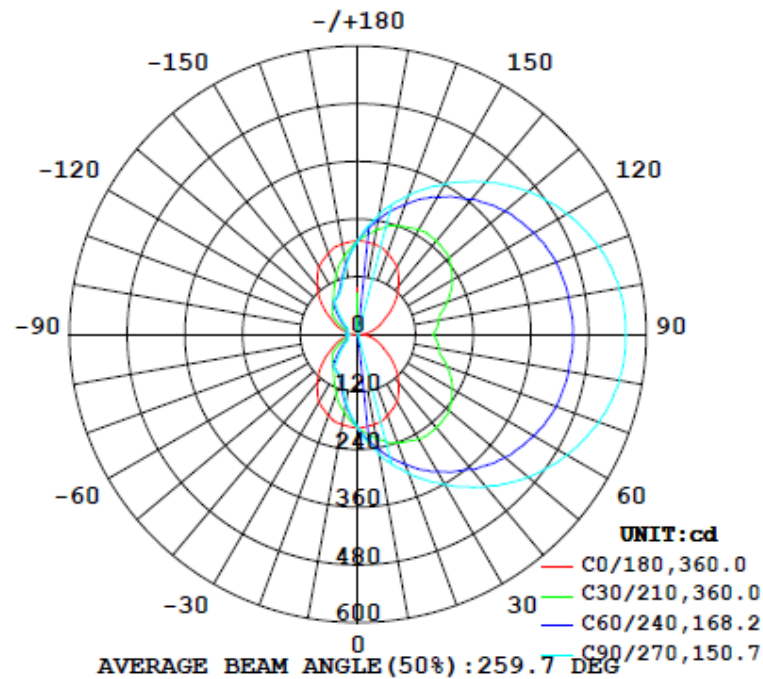
Test Result

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°)	
2232	87.1	154.4	180.0	96.7	113.3	26.5%	B0-G4-G2

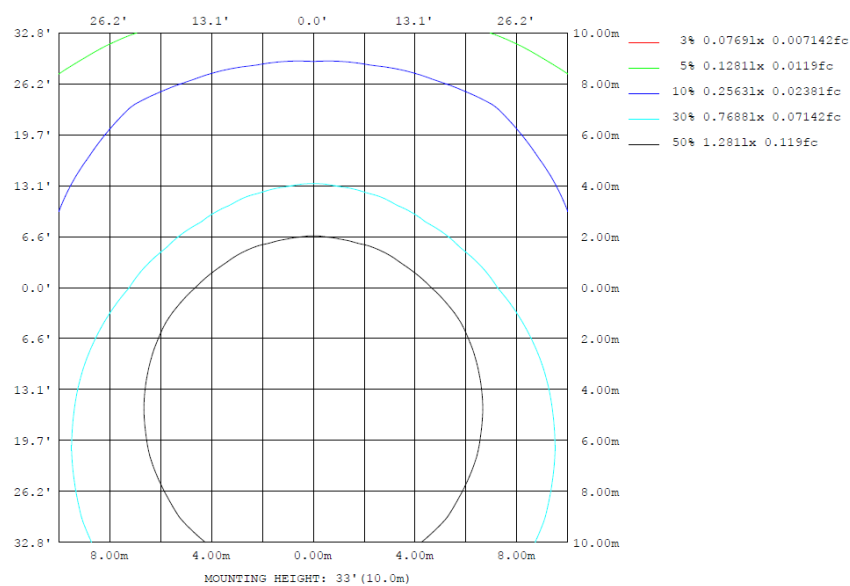
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

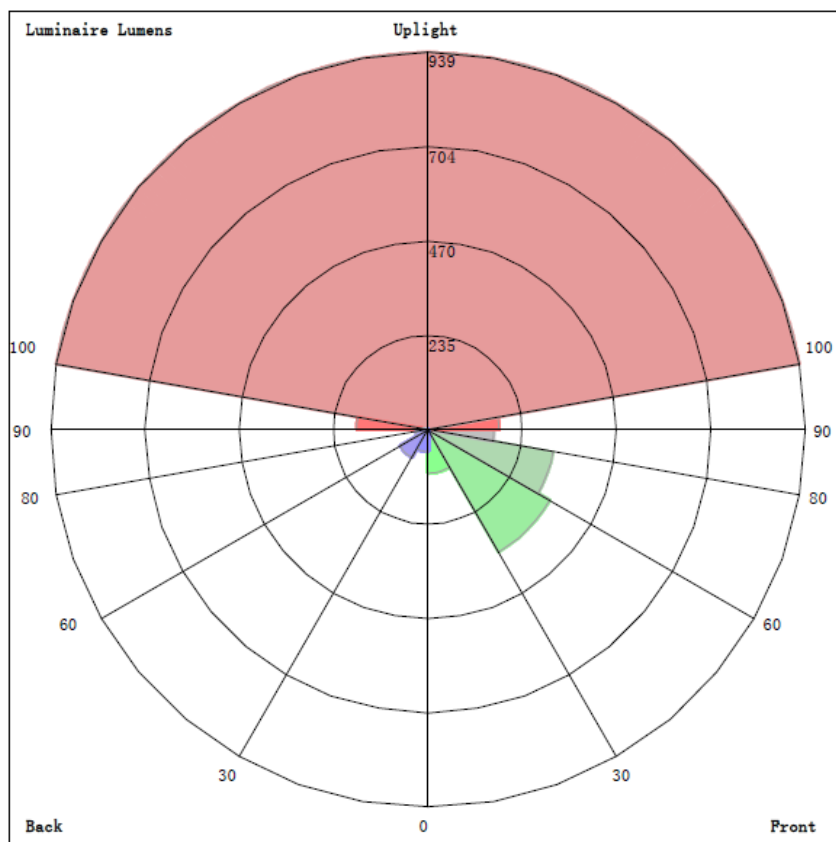
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	φ zone	φ total	lum, lamp
10	190.7	230.9	253.7	230.9	190.7	155.2	144.0	155.2	0- 10	18.55	18.55	0.83,0.83
20	179.8	268.6	306.1	268.6	179.8	118.1	102.1	118.1	10- 20	54.77	73.32	3.28,3.28
30	163.0	294.1	361.6	294.1	163.0	90.92	88.95	90.92	20- 30	88.96	162.3	7.27,7.27
40	131.7	315.6	413.4	315.6	131.7	81.28	66.40	81.28	30- 40	121.4	283.7	12.7,12.7
50	98.72	329.7	462.3	329.7	98.72	59.77	40.27	59.77	40- 50	146.5	430.1	19.3,19.3
60	64.01	334.6	502.0	334.6	64.01	36.75	23.96	36.75	50- 60	162.4	592.6	26.5,26.5
70	42.82	331.0	534.0	331.0	42.82	24.88	23.26	24.88	60- 70	171.2	763.8	34.2,34.2
80	23.11	320.5	552.1	320.5	23.11	24.97	23.16	24.97	70- 80	175.4	939.2	42.1,42.1
90	4.884	314.1	557.5	314.1	4.884	25.64	24.25	25.64	80- 90	176.9	1116	50,50
100	23.11	320.5	552.1	320.5	23.11	24.97	23.16	24.97	90-100	176.9	1293	57.9,57.9
110	42.82	331.0	534.0	331.0	42.82	24.88	23.26	24.88	100-110	175.4	1468	65.8,65.8
120	64.01	334.6	502.0	334.6	64.01	36.75	23.96	36.75	110-120	171.2	1640	73.5,73.5
130	98.72	329.7	462.3	329.7	98.72	59.77	40.27	59.77	120-130	162.4	1802	80.7,80.7
140	131.7	315.6	413.4	315.6	131.7	81.28	66.40	81.28	130-140	146.5	1949	87.3,87.3
150	163.0	294.1	361.6	294.1	163.0	90.92	88.95	90.92	140-150	121.4	2070	92.7,92.7
160	179.8	268.6	306.1	268.6	179.8	118.1	102.1	118.1	150-160	88.96	2159	96.7,96.7
170	190.7	230.9	253.7	230.9	190.7	155.2	144.0	155.2	160-170	54.77	2214	99.2,99.2
180	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	170-180	18.55	2232	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	18.55	0-10	18.55	0.84%
10-20	54.77	0-20	73.32	3.31%
20-30	88.96	0-30	162.28	7.33%
30-40	121.40	0-40	283.68	12.81%
40-50	146.46	0-50	430.14	19.43%
50-60	162.42	0-60	592.56	26.77%
60-70	171.25	0-70	763.81	34.50%
70-80	175.44	0-80	939.25	42.43%
80-90	176.89	0-90	1116.14	50.42%
90-100	176.89	0-100	1293.03	58.41%
100-110	175.44	0-110	1468.47	66.33%
110-120	171.25	0-120	1639.72	74.07%
120-130	162.42	0-130	1802.14	81.41%
130-140	146.46	0-140	1948.60	88.02%
140-150	121.40	0-150	2070.00	93.51%
150-160	88.96	0-160	2158.96	97.53%
160-170	54.77	0-170	2213.73	100.00%
170-180	18.55	0-180	2232.28	100.84%

4.2 Goniophotometer Test

LCS/BUG

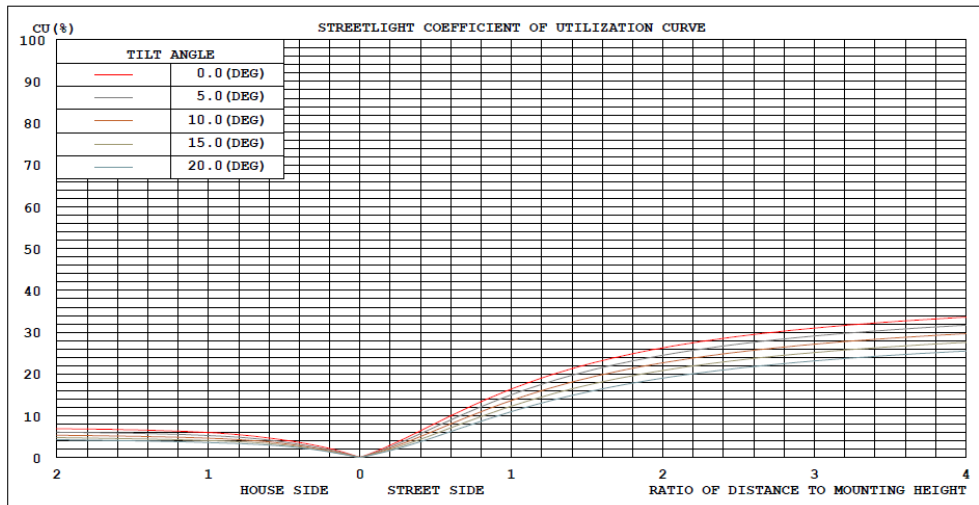


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

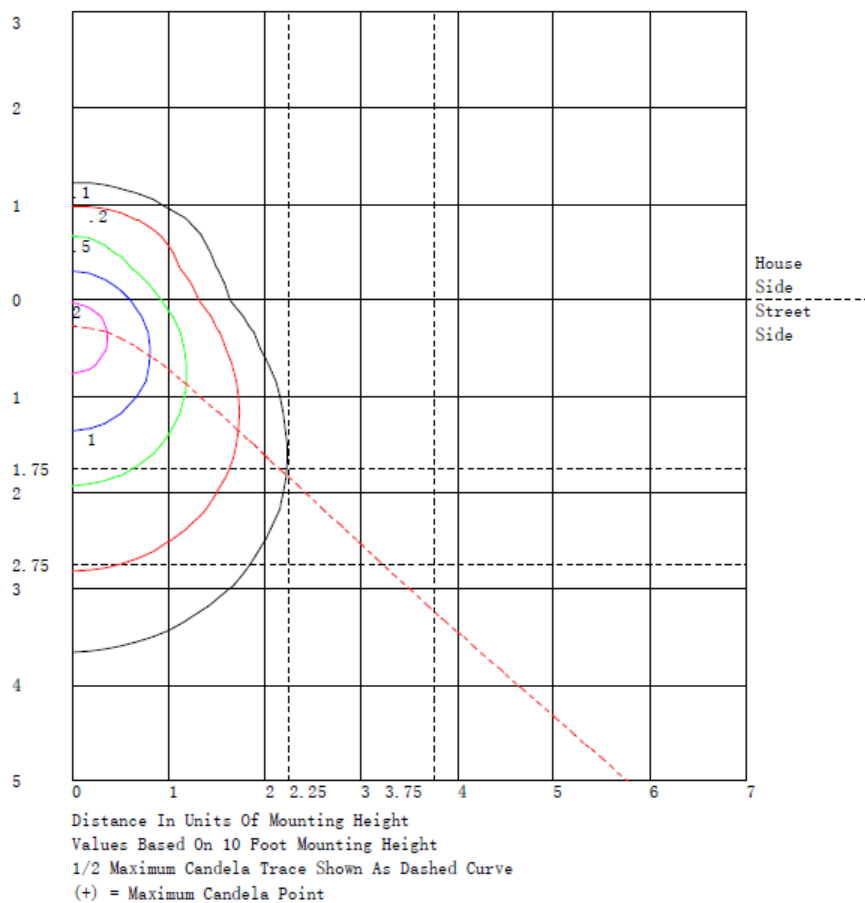
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	108.2	N.A.	4.8
FM - Front-Medium (30-60)	350.9	N.A.	15.7
FH - Front-High (60-80)	316.5	N.A.	14.2
FVH - Front-Very High (80-90)	164.6	N.A.	7.4
BL - Back-Low (0-30)	54.1	N.A.	2.4
BM - Back-Medium (30-60)	79.4	N.A.	3.6
BH - Back-High (60-80)	30.2	N.A.	1.4
BVH - Back-Very High (80-90)	12.3	N.A.	0.6
UL - Uplight-Low (90-100)	176.9	N.A.	7.9
UH - Uplight-High (100-180)	939.2	N.A.	42.1
Total	2232.3	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) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196
5	193	200	208	214	219	223	225	223	219	214	208	200	193	186	180	175	172	170	170
10	191	205	221	231	242	249	254	249	242	231	221	205	191	177	165	155	148	144	144
15	188	210	231	251	266	276	281	276	266	251	231	210	188	168	150	136	125	120	120
20	180	211	240	269	288	302	306	302	288	269	240	211	180	153	132	118	107	103	102
25	171	209	246	281	311	327	335	327	311	281	246	209	171	139	115	101	95.2	92.2	92.5
30	163	208	252	294	329	352	362	352	329	294	252	208	163	125	101	90.9	88.9	88.7	88.9
35	147	200	255	304	349	377	388	377	349	304	255	200	147	109	89.7	84.6	86.0	85.9	85.0
40	132	191	253	316	367	402	413	402	367	316	253	191	132	94.2	81.0	81.3	77.7	69.3	66.4
45	116	182	251	323	384	424	439	424	384	323	251	182	116	80.8	75.4	74.1	61.4	54.1	51.2
50	98.7	166	248	330	399	445	462	445	399	330	248	166	98.7	70.8	70.4	59.8	47.8	42.2	40.3
55	81.4	148	238	335	411	465	483	465	411	335	238	148	81.4	62.3	60.9	46.3	37.6	33.2	32.1
60	64.0	127	227	335	423	481	502	481	423	335	227	127	64.0	54.6	48.9	36.7	29.7	25.5	24.0
65	53.4	110	213	333	432	496	519	496	432	333	213	110	53.4	46.3	37.1	28.8	24.6	23.5	23.3
70	42.8	94.0	198	331	439	509	534	509	439	331	198	94.0	42.8	37.1	30.2	24.9	24.4	23.5	23.3
75	32.2	76.6	181	326	442	519	545	519	442	326	181	76.6	32.2	27.4	24.4	24.8	24.4	23.7	23.3
80	23.1	72.2	171	320	445	524	552	524	445	320	171	72.2	23.1	24.7	22.8	25.0	24.1	23.4	23.2
85	14.0	68.6	165	319	447	527	556	527	447	319	165	68.6	14.0	23.2	23.6	25.3	24.5	21.0	20.3
90	4.88	64.5	156	314	447	529	557	529	447	314	156	64.5	4.88	21.9	24.3	25.6	25.8	20.7	24.3
95	14.0	68.6	165	319	447	527	556	527	447	319	165	68.6	14.0	23.2	23.6	25.3	24.5	21.0	20.3
100	23.1	72.2	171	320	445	524	552	524	445	320	171	72.2	23.1	24.7	22.8	25.0	24.1	23.4	23.2
105	32.2	76.6	181	326	442	519	545	519	442	326	181	76.6	32.2	27.4	24.4	24.8	24.4	23.7	23.3
110	42.8	94.0	198	331	439	509	534	509	439	331	198	94.0	42.8	37.1	30.2	24.9	24.4	23.5	23.3
115	53.4	110	213	333	432	496	519	496	432	333	213	110	53.4	46.3	37.1	28.8	24.6	23.5	23.3
120	64.0	127	227	335	423	481	502	481	423	335	227	127	64.0	54.6	48.9	36.7	29.7	25.5	24.0
125	81.4	148	238	335	411	465	483	465	411	335	238	148	81.4	62.3	60.9	46.3	37.6	33.2	32.1
130	98.7	166	248	330	399	445	462	445	399	330	248	166	98.7	70.8	70.4	59.8	47.8	42.2	40.3
135	116	182	251	323	384	424	439	424	384	323	251	182	116	80.8	75.4	74.1	61.4	54.1	51.2
140	132	191	253	316	367	402	413	402	367	316	253	191	132	94.2	81.0	81.3	77.7	69.3	66.4
145	147	200	255	304	349	377	388	377	349	304	255	200	147	109	89.7	84.6	86.0	85.9	85.0
150	163	208	252	294	329	352	362	352	329	294	252	208	163	125	101	90.9	88.9	88.7	88.9
155	171	209	246	281	311	327	335	327	311	281	246	209	171	139	115	101	95.2	92.2	92.5
160	180	211	240	269	288	302	306	302	288	269	240	211	180	153	132	118	107	103	102
165	188	210	231	251	266	276	281	276	266	251	231	210	188	168	150	136	125	120	120
170	191	205	221	231	242	249	254	249	242	231	221	205	191	177	165	155	148	144	144
175	193	200	208	214	219	223	225	223	219	214	208	200	193	186	180	175	172	170	170
180	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	196	196	196	196	196														
5	170	172	175	180	186														
10	144	148	155	165	177														
15	120	125	136	150	168														
20	103	107	118	132	153														
25	92.2	95.2	101	115	139														
30	88.7	88.9	90.9	101	125														
35	85.9	86.0	84.6	89.7	109														
40	69.3	77.7	81.3	81.0	94.2														
45	54.1	61.4	74.1	75.4	80.8														
50	42.2	47.8	59.8	70.4	70.8														
55	33.2	37.6	46.3	60.9	62.3														
60	25.5	29.7	36.7	48.9	54.6														
65	23.5	24.6	28.8	37.1	46.3														
70	23.5	24.4	24.9	30.2	37.1														
75	23.7	24.4	24.8	24.4	27.4														
80	23.4	24.1	25.0	22.8	24.7														
85	21.0	24.5	25.3	23.6	23.2														
90	20.7	25.8	25.6	24.3	21.9														
95	21.0	24.5	25.3	23.6	23.2														
100	23.4	24.1	25.0	22.8	24.7														
105	23.7	24.4	24.8	24.4	27.4														
110	23.5	24.4	24.9	30.2	37.1														
115	23.5	24.6	28.8	37.1	46.3														
120	25.5	29.7	36.7	48.9	54.6														
125	33.2	37.6	46.3	60.9	62.3														
130	42.2	47.8	59.8	70.4	70.8														
135	54.1	61.4	74.1	75.4	80.8														
140	69.3	77.7	81.3	81.0	94.2														
145	85.9	86.0	84.6	89.7	109														
150	88.7	88.9	90.9	101	125														
155	92.2	95.2	101	115	139														
160	103	107	118	132	153														
165	120	125	136	150	168														
170	144	148	155	165	177														
175	170	172	175	180	186														
180	196	196	196	196	196														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24B @20W3500K	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	0.165	19.7	0.995	6.28
277.0	60	0.073	19.6	0.970	13.13

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	2024-08-06	2025-08-05
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

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