

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		1183
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	110.6
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.64
				277V	32.22
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.991
				277V	0.857
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3045±175	3044
			4 steps	3045±100	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.6
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		72
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		90
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-U3-G1
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		0.045
(Goniophotometer – Section 4.2)			Non-Worst Case		0.087
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.7
(Goniophotometer – Section 4.2)			Non-Worst Case		10.4

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-07	V1-24B @10W3000K	-	250728008-S1
2	Goniophotometer Test	2025-08-07	V1-24B @10W3000K	-	250728008-S1
3	THD and PF Test	2025-08-07	V1-24B @10W3000K	-	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 @10W3000K, 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 @10W3000K	Sample ID	250728008-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

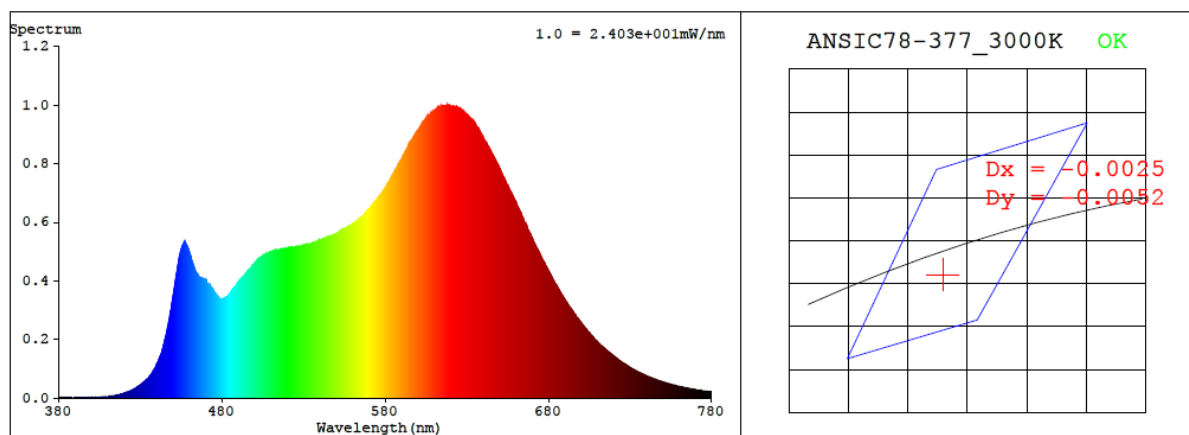
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm1^{\circ}\text{C}$.</p> <p>The sample measurements 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	0.087	10.4	0.991
277.0	60	0.045	10.7	0.857

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3044	92.6	72	-0.0018	2.3	90	96	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4314$ $y = 0.3978$ / $u' = 0.2497$ $v' = 0.5180$ ($duv = -1.76e-03$)

CCT= 3044K Prcp WL: $L_d = 583.3nm$ Purity=48.9%

Peak WL: $L_p = 618nm$ FWHM: $= 162.8nm$ Ratio: R=25.2% G=70.9% B=3.9%

Render Index: $R_a = 92.6$ AvgR = 91.2 TM30: $R_f = 91$ $R_g = 98$

EEL: 0.12554 A+

R1 =98 R2 =95 R3 =92 R4 =96 R5 =96 R6 =89 R7 =89

R8 =85 R9 =72 R10=89 R11=96 R12=82 R13=97 R14=96 R15=95

4.1 Integrating Sphere Test

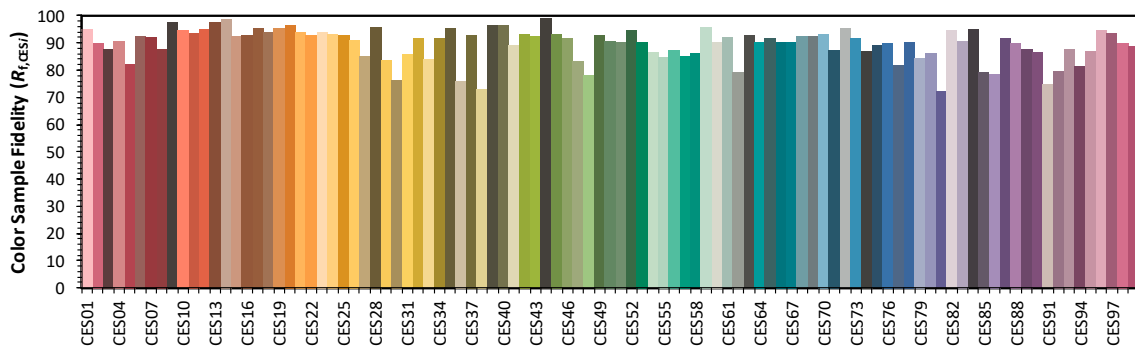
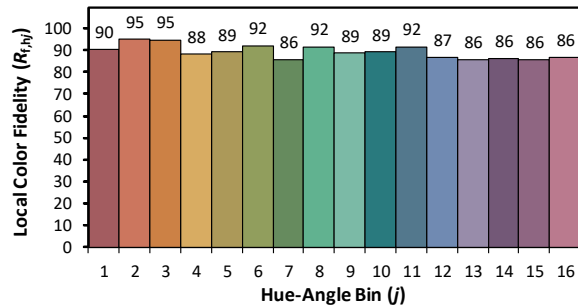
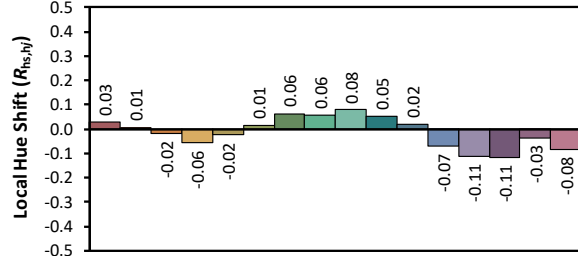
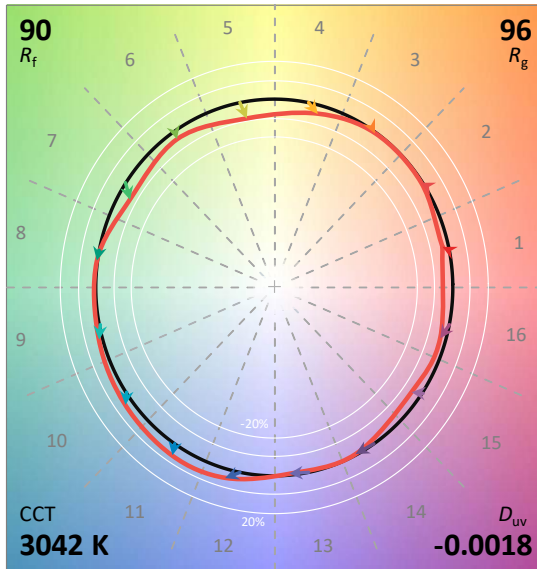
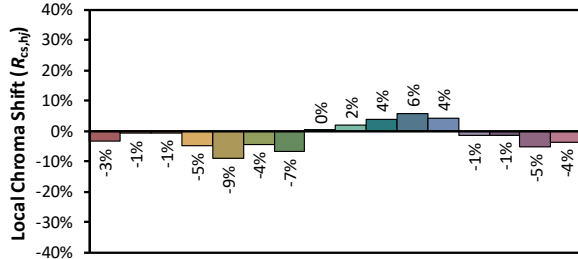
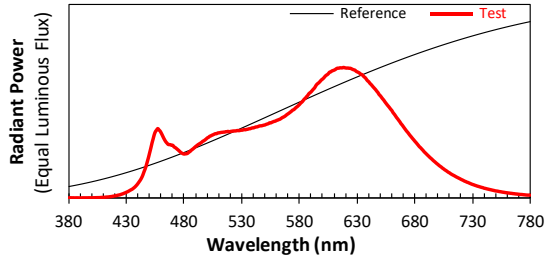
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/22

Model: V1-24B @10W3000K



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

x 0.4314
 y 0.3977
 u' 0.2498
 v' 0.5180

CIE 13.3-1995
(CRI)

R_a 93
 R_g 72

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	1.90E-06	447	2.49E-04	514	5.05E-04	581	7.27E-04	648	8.07E-04	715	1.66E-04
381	2.00E-06	448	2.81E-04	515	5.05E-04	582	7.35E-04	649	7.92E-04	716	1.61E-04
382	1.80E-06	449	3.12E-04	516	5.08E-04	583	7.45E-04	650	7.83E-04	717	1.57E-04
383	1.50E-06	450	3.48E-04	517	5.08E-04	584	7.57E-04	651	7.72E-04	718	1.52E-04
384	1.70E-06	451	3.83E-04	518	5.10E-04	585	7.64E-04	652	7.60E-04	719	1.48E-04
385	1.00E-06	452	4.21E-04	519	5.07E-04	586	7.75E-04	653	7.50E-04	720	1.43E-04
386	1.60E-06	453	4.53E-04	520	5.10E-04	587	7.85E-04	654	7.37E-04	721	1.39E-04
387	1.50E-06	454	4.87E-04	521	5.11E-04	588	7.98E-04	655	7.25E-04	722	1.35E-04
388	1.60E-06	455	5.09E-04	522	5.13E-04	589	8.06E-04	656	7.13E-04	723	1.30E-04
389	6.00E-07	456	5.20E-04	523	5.14E-04	590	8.13E-04	657	7.03E-04	724	1.27E-04
390	1.50E-06	457	5.32E-04	524	5.14E-04	591	8.24E-04	658	6.92E-04	725	1.22E-04
391	1.10E-06	458	5.22E-04	525	5.15E-04	592	8.34E-04	659	6.80E-04	726	1.19E-04
392	1.70E-06	459	5.13E-04	526	5.17E-04	593	8.43E-04	660	6.70E-04	727	1.15E-04
393	1.50E-06	460	4.98E-04	527	5.16E-04	594	8.58E-04	661	6.55E-04	728	1.11E-04
394	1.50E-06	461	4.80E-04	528	5.16E-04	595	8.71E-04	662	6.44E-04	729	1.07E-04
395	1.60E-06	462	4.61E-04	529	5.19E-04	596	8.78E-04	663	6.31E-04	730	1.04E-04
396	1.60E-06	463	4.45E-04	530	5.19E-04	597	8.85E-04	664	6.18E-04	731	1.01E-04
397	1.80E-06	464	4.31E-04	531	5.21E-04	598	8.95E-04	665	6.07E-04	732	9.78E-05
398	1.90E-06	465	4.20E-04	532	5.24E-04	599	9.05E-04	666	5.95E-04	733	9.49E-05
399	1.70E-06	466	4.11E-04	533	5.23E-04	600	9.11E-04	667	5.83E-04	734	9.17E-05
400	1.80E-06	467	4.09E-04	534	5.26E-04	601	9.20E-04	668	5.69E-04	735	8.91E-05
401	2.10E-06	468	4.08E-04	535	5.27E-04	602	9.31E-04	669	5.59E-04	736	8.66E-05
402	2.30E-06	469	4.04E-04	536	5.30E-04	603	9.39E-04	670	5.46E-04	737	8.38E-05
403	2.60E-06	470	4.04E-04	537	5.31E-04	604	9.45E-04	671	5.34E-04	738	8.12E-05
404	2.90E-06	471	3.92E-04	538	5.34E-04	605	9.53E-04	672	5.22E-04	739	7.92E-05
405	3.10E-06	472	3.87E-04	539	5.37E-04	606	9.64E-04	673	5.10E-04	740	7.53E-05
406	3.20E-06	473	3.80E-04	540	5.37E-04	607	9.66E-04	674	5.00E-04	741	7.37E-05
407	3.60E-06	474	3.73E-04	541	5.40E-04	608	9.73E-04	675	4.88E-04	742	7.13E-05
408	4.50E-06	475	3.66E-04	542	5.44E-04	609	9.76E-04	676	4.77E-04	743	6.90E-05
409	4.60E-06	476	3.57E-04	543	5.45E-04	610	9.79E-04	677	4.67E-04	744	6.71E-05
410	5.10E-06	477	3.49E-04	544	5.47E-04	611	9.84E-04	678	4.55E-04	745	6.49E-05
411	5.90E-06	478	3.43E-04	545	5.51E-04	612	9.91E-04	679	4.46E-04	746	6.31E-05
412	7.00E-06	479	3.39E-04	546	5.53E-04	613	9.94E-04	680	4.34E-04	747	6.08E-05
413	7.60E-06	480	3.37E-04	547	5.53E-04	614	9.94E-04	681	4.25E-04	748	5.89E-05
414	8.10E-06	481	3.39E-04	548	5.56E-04	615	9.97E-04	682	4.14E-04	749	5.68E-05
415	9.40E-06	482	3.40E-04	549	5.58E-04	616	9.97E-04	683	4.03E-04	750	5.45E-05
416	1.06E-05	483	3.43E-04	550	5.60E-04	617	9.97E-04	684	3.92E-04	751	5.35E-05
417	1.15E-05	484	3.51E-04	551	5.64E-04	618	1.00E-03	685	3.85E-04	752	5.21E-05
418	1.37E-05	485	3.57E-04	552	5.67E-04	619	9.98E-04	686	3.74E-04	753	4.99E-05
419	1.50E-05	486	3.66E-04	553	5.70E-04	620	9.96E-04	687	3.65E-04	754	4.87E-05
420	1.66E-05	487	3.72E-04	554	5.76E-04	621	9.95E-04	688	3.54E-04	755	4.71E-05
421	1.83E-05	488	3.79E-04	555	5.75E-04	622	9.95E-04	689	3.46E-04	756	4.52E-05
422	2.08E-05	489	3.88E-04	556	5.80E-04	623	9.93E-04	690	3.37E-04	757	4.42E-05
423	2.27E-05	490	3.95E-04	557	5.84E-04	624	9.93E-04	691	3.28E-04	758	4.24E-05
424	2.44E-05	491	4.02E-04	558	5.87E-04	625	9.89E-04	692	3.20E-04	759	4.11E-05
425	2.74E-05	492	4.09E-04	559	5.89E-04	626	9.85E-04	693	3.11E-04	760	4.01E-05
426	3.05E-05	493	4.15E-04	560	5.94E-04	627	9.82E-04	694	3.04E-04	761	3.87E-05
427	3.35E-05	494	4.20E-04	561	5.97E-04	628	9.79E-04	695	2.95E-04	762	3.77E-05
428	3.75E-05	495	4.26E-04	562	6.01E-04	629	9.71E-04	696	2.87E-04	763	3.63E-05
429	4.10E-05	496	4.34E-04	563	6.04E-04	630	9.66E-04	697	2.79E-04	764	3.56E-05
430	4.51E-05	497	4.39E-04	564	6.10E-04	631	9.62E-04	698	2.72E-04	765	3.39E-05
431	4.91E-05	498	4.45E-04	565	6.16E-04	632	9.56E-04	699	2.64E-04	766	3.32E-05
432	5.40E-05	499	4.52E-04	566	6.20E-04	633	9.48E-04	700	2.57E-04	767	3.18E-05
433	5.92E-05	500	4.60E-04	567	6.25E-04	634	9.45E-04	701	2.49E-04	768	3.09E-05
434	6.39E-05	501	4.65E-04	568	6.32E-04	635	9.37E-04	702	2.43E-04	769	3.01E-05
435	6.87E-05	502	4.72E-04	569	6.39E-04	636	9.27E-04	703	2.36E-04	770	2.89E-05
436	7.59E-05	503	4.76E-04	570	6.45E-04	637	9.21E-04	704	2.29E-04	771	2.78E-05
437	8.31E-05	504	4.81E-04	571	6.51E-04	638	9.09E-04	705	2.23E-04	772	2.72E-05
438	9.22E-05	505	4.85E-04	572	6.58E-04	639	8.97E-04	706	2.16E-04	773	2.68E-05
439	1.02E-04	506	4.89E-04	573	6.65E-04	640	8.90E-04	707	2.10E-04	774	2.54E-05
440	1.14E-04	507	4.93E-04	574	6.73E-04	641	8.78E-04	708	2.04E-04	775	2.48E-05
441	1.26E-04	508	4.93E-04	575	6.77E-04	642	8.70E-04	709	1.98E-04	776	2.36E-05
442	1.39E-04	509	4.98E-04	576	6.85E-04	643	8.59E-04	710	1.93E-04	777	2.29E-05
443	1.55E-04	510	4.99E-04	577	6.94E-04	644	8.49E-04	711	1.86E-04	778	2.24E-05
444	1.75E-04	511	5.01E-04	578	7.00E-04	645	8.39E-04	712	1.81E-04	779	2.23E-05
445	2.00E-04	512	5.03E-04	579	7.09E-04	646	8.29E-04	713	1.76E-04	780	2.24E-05
446	2.22E-04	513	5.03E-04	580	7.17E-04	647	8.17E-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 @10W3000K	Sample ID	250728008-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.9	Humidity (%RH)	42.6

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	0.045	10.7	0.857
NON-WORST CASE	120.0	60	0.087	10.4	0.991

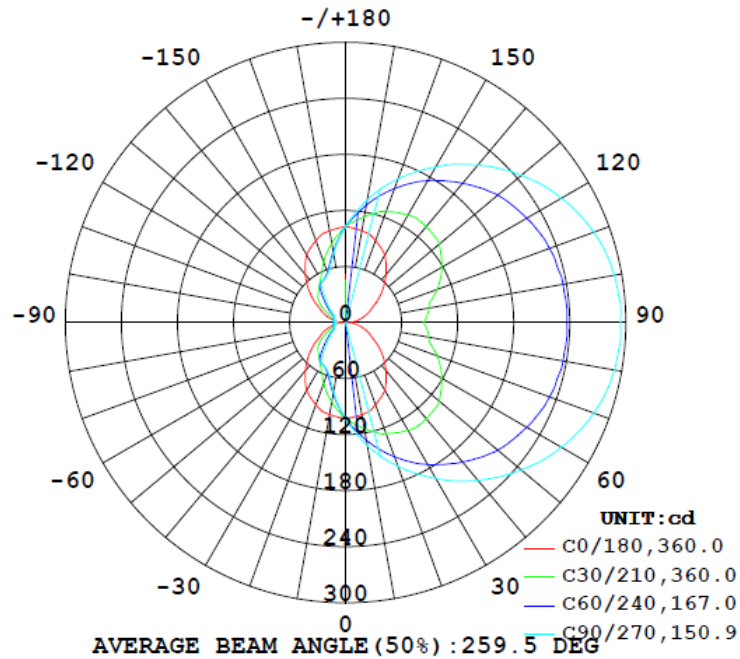
Test Result

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°)	
1183	86.8	155.0	180.0	97.7	110.6	26.5%	B0-U3-G1

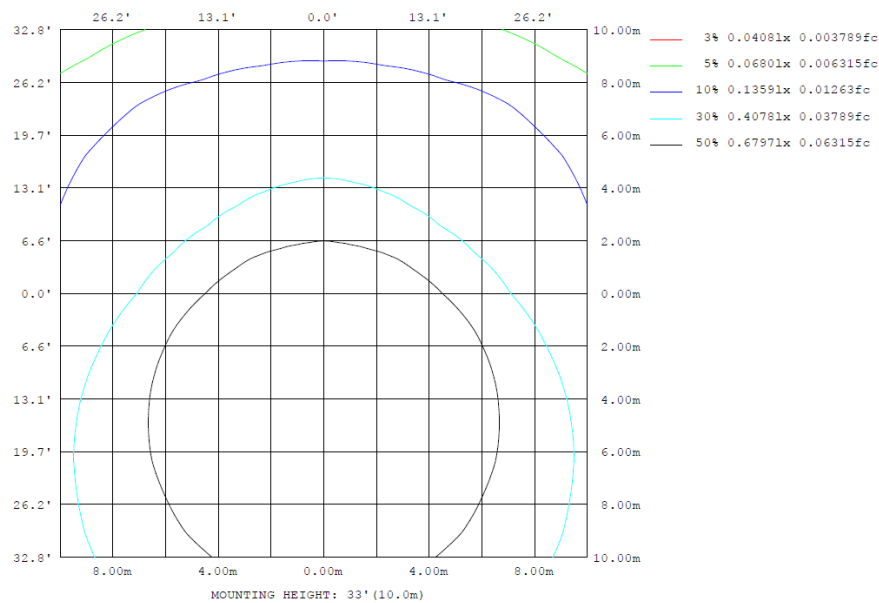
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

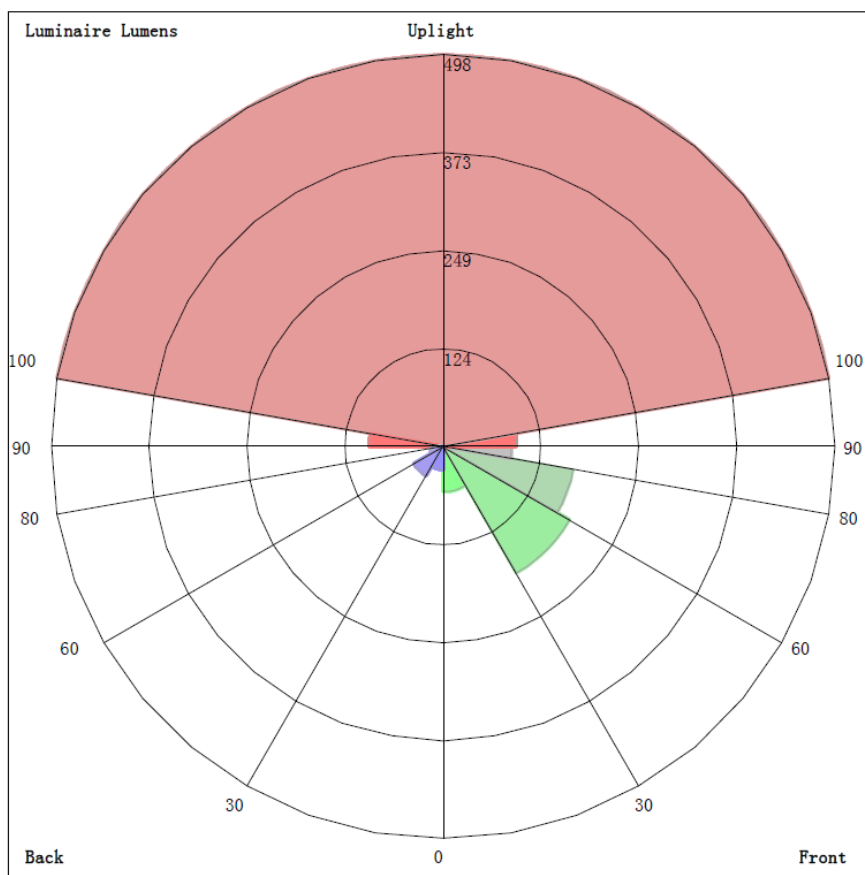
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	99.92	121.9	133.5	121.9	99.92	80.96	75.08	80.96	0- 10	9.742	9.742	0.82,0.82
20	93.58	141.9	163.8	141.9	93.58	62.08	55.90	62.08	10- 20	28.81	38.56	3.26,3.26
30	84.06	155.7	192.0	155.7	84.06	50.66	51.36	50.66	20- 30	47.28	85.83	7.25,7.25
40	67.21	168.2	220.6	168.2	67.21	46.50	34.43	46.50	30- 40	64.62	150.4	12.7,12.7
50	50.32	174.1	245.7	174.1	50.32	30.78	21.42	30.78	40- 50	77.53	228.0	19.3,19.3
60	33.39	176.7	266.4	176.7	33.39	19.20	13.47	19.20	50- 60	85.89	313.9	26.5,26.5
70	22.58	175.0	282.9	175.0	22.58	13.79	12.96	13.79	60- 70	90.84	404.7	34.2,34.2
80	12.23	169.9	292.2	169.9	12.23	13.24	12.82	13.24	70- 80	93.07	497.8	42.1,42.1
90	2.348	166.6	294.1	166.6	2.348	13.75	12.88	13.75	80- 90	93.84	591.6	50,50
100	12.23	169.9	292.2	169.9	12.23	13.24	12.82	13.24	90-100	93.84	685.5	57.9,57.9
110	22.58	175.0	282.9	175.0	22.58	13.79	12.96	13.79	100-110	93.07	778.5	65.8,65.8
120	33.39	176.7	266.4	176.7	33.39	19.20	13.47	19.20	110-120	90.84	869.4	73.5,73.5
130	50.32	174.1	245.7	174.1	50.32	30.78	21.42	30.78	120-130	85.89	955.3	80.7,80.7
140	67.21	168.2	220.6	168.2	67.21	46.50	34.43	46.50	130-140	77.53	1033	87.3,87.3
150	84.06	155.7	192.0	155.7	84.06	50.66	51.36	50.66	140-150	64.62	1097	92.7,92.7
160	93.58	141.9	163.8	141.9	93.58	62.08	55.90	62.08	150-160	47.28	1145	96.7,96.7
170	99.92	121.9	133.5	121.9	99.92	80.96	75.08	80.96	160-170	28.81	1173	99.2,99.2
180	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	170-180	9.742	1183	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	9.74	0-10	9.74	0.83%
10-20	28.81	0-20	38.55	3.29%
20-30	47.28	0-30	85.83	7.31%
30-40	64.62	0-40	150.45	12.82%
40-50	77.53	0-50	227.98	19.43%
50-60	85.89	0-60	313.87	26.75%
60-70	90.84	0-70	404.71	34.49%
70-80	93.07	0-80	497.78	42.42%
80-90	93.84	0-90	591.62	50.41%
90-100	93.84	0-100	685.46	58.41%
100-110	93.07	0-110	778.53	66.34%
110-120	90.84	0-120	869.37	74.08%
120-130	85.89	0-130	955.26	81.40%
130-140	77.53	0-140	1032.79	88.01%
140-150	64.62	0-150	1097.41	93.52%
150-160	47.28	0-160	1144.69	97.54%
160-170	28.81	0-170	1173.50	100.00%
170-180	9.74	0-180	1183.24	100.83%

4.2 Goniophotometer Test

LCS/BUG

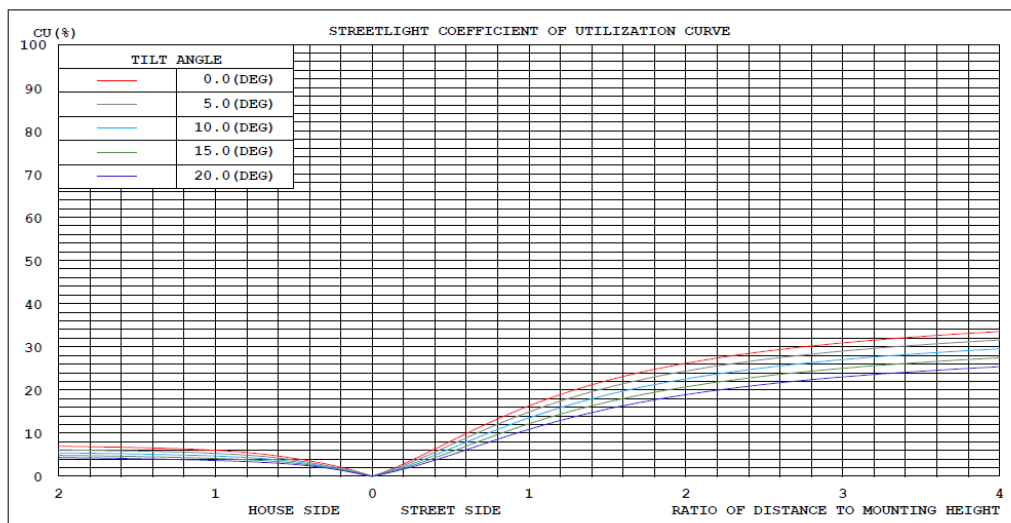


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

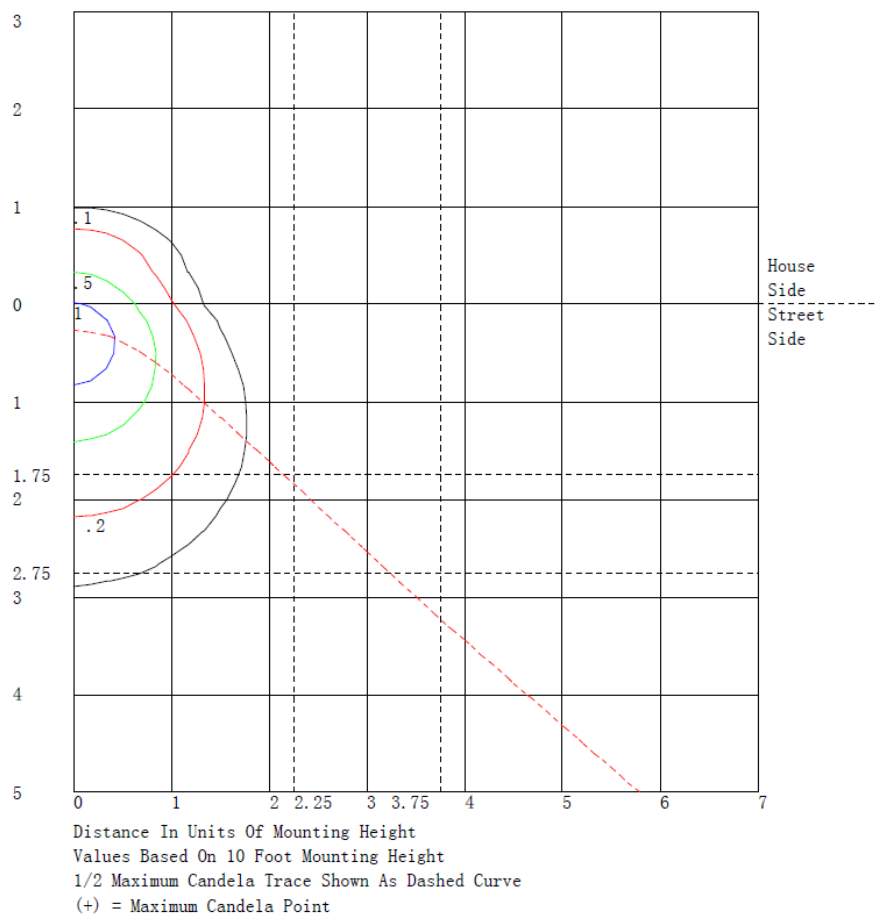
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	57.1	N.A.	4.8
FM - Front-Medium (30-60)	185.6	N.A.	15.7
FH - Front-High (60-80)	167.5	N.A.	14.2
FVH - Front-Very High (80-90)	87.2	N.A.	7.4
BL - Back-Low (0-30)	28.8	N.A.	2.4
BM - Back-Medium (30-60)	42.5	N.A.	3.6
BH - Back-High (60-80)	16.4	N.A.	1.4
BVH - Back-Very High (80-90)	6.6	N.A.	0.6
UL - Uplight-Low (90-100)	93.8	N.A.	7.9
UH - Uplight-High (100-180)	497.8	N.A.	42.1
Total	1183.3	N.A.	100.0
BUG Rating	B0-U3-G1		

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	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103
5	102	105	109	112	115	117	118	117	115	112	109	105	102	97.9	94.6	92.0	90.1	89.0	88.9
10	99.9	108	115	122	128	132	133	132	128	122	115	108	99.9	92.7	86.2	81.0	77.2	75.2	75.1
15	98.3	110	121	132	141	146	149	146	141	132	121	110	98.3	87.6	78.1	70.8	65.9	63.7	63.6
20	93.6	109	126	142	153	160	164	160	153	142	126	109	93.6	79.8	69.2	62.1	57.5	55.9	55.9
25	88.8	109	130	149	165	174	178	174	165	149	130	109	88.8	72.1	60.7	54.9	52.9	52.1	52.6
30	84.1	108	133	156	175	187	192	187	175	156	133	108	84.1	64.9	54.0	50.7	50.7	51.1	51.4
35	75.6	104	135	162	185	201	207	201	185	162	135	104	75.6	56.9	49.1	48.5	48.6	45.2	44.1
40	67.2	99.4	134	168	195	214	221	214	195	168	134	99.4	67.2	49.8	45.2	46.5	40.1	35.6	34.4
45	58.8	94.5	133	171	204	226	234	226	204	171	133	94.5	58.8	43.6	41.9	39.1	31.7	28.3	27.2
50	50.3	86.1	131	174	212	237	246	237	212	174	131	86.1	50.3	38.9	38.4	30.8	25.2	22.2	21.4
55	41.9	76.1	125	177	219	246	257	246	219	177	125	76.1	41.9	34.8	32.4	24.1	19.9	17.7	17.2
60	33.4	65.7	119	177	224	255	266	255	224	177	119	65.7	33.4	31.0	25.4	19.2	15.6	13.9	13.5
65	28.0	57.6	112	177	229	264	275	264	229	177	112	57.6	28.0	25.8	19.5	15.4	13.7	13.3	13.1
70	22.6	49.4	104	175	232	269	283	269	232	175	104	49.4	22.6	20.0	16.1	13.8	13.7	13.2	13.0
75	17.2	40.5	95.3	173	234	274	288	274	234	173	95.3	40.5	17.2	14.0	13.2	13.4	13.7	13.2	12.9
80	12.2	38.2	90.5	170	236	278	292	278	236	170	90.5	38.2	12.2	12.6	12.3	13.2	13.3	13.0	12.8
85	7.29	36.4	87.6	169	237	280	294	280	237	169	87.6	36.4	7.29	11.9	12.5	13.5	13.2	11.8	11.1
90	2.35	34.3	83.5	167	237	280	294	280	237	167	83.5	34.3	2.35	11.3	12.8	13.7	13.7	11.6	12.9
95	7.29	36.4	87.6	169	237	280	294	280	237	169	87.6	36.4	7.29	11.9	12.5	13.5	13.2	11.8	11.1
100	12.2	38.2	90.5	170	236	278	292	278	236	170	90.5	38.2	12.2	12.6	12.3	13.2	13.3	13.0	12.8
105	17.2	40.5	95.3	173	234	274	288	274	234	173	95.3	40.5	17.2	14.0	13.2	13.4	13.7	13.2	12.9
110	22.6	49.4	104	175	232	269	283	269	232	175	104	49.4	22.6	20.0	16.1	13.8	13.7	13.2	13.0
115	28.0	57.6	112	177	229	264	275	264	229	177	112	57.6	28.0	25.8	19.5	15.4	13.7	13.3	13.1
120	33.4	65.7	119	177	224	255	266	255	224	177	119	65.7	33.4	31.0	25.4	19.2	15.6	13.9	13.5
125	41.9	76.1	125	177	219	246	257	246	219	177	125	76.1	41.9	34.8	32.4	24.1	19.9	17.7	17.2
130	50.3	86.1	131	174	212	237	246	237	212	174	131	86.1	50.3	38.9	38.4	30.8	25.2	22.2	21.4
135	58.8	94.5	133	171	204	226	234	226	204	171	133	94.5	58.8	43.6	41.9	39.1	31.7	28.3	27.2
140	67.2	99.4	134	168	195	214	221	214	195	168	134	99.4	67.2	49.8	45.2	46.5	40.1	35.6	34.4
145	75.6	104	135	162	185	201	207	201	185	162	135	104	75.6	56.9	49.1	48.5	48.6	45.2	44.1
150	84.1	108	133	156	175	187	192	187	175	156	133	108	84.1	64.9	54.0	50.7	50.7	51.1	51.4
155	88.8	109	130	149	165	174	178	174	165	149	130	109	88.8	72.1	60.7	54.9	52.9	52.1	52.6
160	93.6	109	126	142	153	160	164	160	153	142	126	109	93.6	79.8	69.2	62.1	57.5	55.9	55.9
165	98.3	110	121	132	141	146	149	146	141	132	121	110	98.3	87.6	78.1	70.8	65.9	63.7	63.6
170	99.9	108	115	122	128	132	133	132	128	122	115	108	99.9	92.7	86.2	81.0	77.2	75.2	75.1
175	102	105	109	112	115	117	118	117	115	112	109	105	102	97.9	94.6	92.0	90.1	89.0	88.9
180	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	103	103	103	103	103														
5	89.0	90.1	92.0	94.6	97.9														
10	75.2	77.2	81.0	86.2	92.7														
15	63.7	65.9	70.8	78.1	87.6														
20	55.9	57.5	62.1	69.2	79.8														
25	52.1	52.9	54.9	60.7	72.1														
30	51.1	50.7	50.7	54.0	64.9														
35	45.2	48.6	48.5	49.1	56.9														
40	35.6	40.1	46.5	45.2	49.8														
45	28.3	31.7	39.1	41.9	43.6														
50	22.2	25.2	30.8	38.4	38.9														
55	17.7	19.9	24.1	32.4	34.8														
60	13.9	15.6	19.2	25.4	31.0														
65	13.3	13.7	15.4	19.5	25.8														
70	13.2	13.7	13.8	16.1	20.0														
75	13.2	13.7	13.4	13.2	14.0														
80	13.0	13.3	13.2	12.3	12.6														
85	11.8	13.2	13.5	12.5	11.9														
90	11.6	13.7	13.7	12.8	11.3														
95	11.8	13.2	13.5	12.5	11.9														
100	13.0	13.3	13.2	12.3	12.6														
105	13.2	13.7	13.4	13.2	14.0														
110	13.2	13.7	13.8	16.1	20.0														
115	13.3	13.7	15.4	19.5	25.8														
120	13.9	15.6	19.2	25.4	31.0														
125	17.7	19.9	24.1	32.4	34.8														
130	22.2	25.2	30.8	38.4	38.9														
135	28.3	31.7	39.1	41.9	43.6														
140	35.6	40.1	46.5	45.2	49.8														
145	45.2	48.6	48.5	49.1	56.9														
150	51.1	50.7	50.7	54.0	64.9														
155	52.1	52.9	54.9	60.7	72.1														
160	55.9	57.5	62.1	69.2	79.8														
165	63.7	65.9	70.8	78.1	87.6														
170	75.2	77.2	81.0	86.2	92.7														
175	89.0	90.1	92.0	94.6	97.9														
180	103	103	103	103	103														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24B @10W3000K	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	0.087	10.4	0.991	6.64
277.0	60	0.045	10.7	0.857	32.22

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*****