

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

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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		1851
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	124.3
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	5.51
				277V	20.49
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.995
				277V	0.924
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4969
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		91.1
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		74
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%		-5%
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		0.124
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
(Goniophotometer – Section 4.2)			Non-Worst Case		14.8

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-07	V1-24B @15W5000K	-	250728008-S1
2	Goniophotometer Test	2025-08-07	V1-24B @15W5000K	-	250728008-S1
3	THD and PF Test	2025-08-07	V1-24B @15W5000K	-	250728008-S1

Remark (If any):

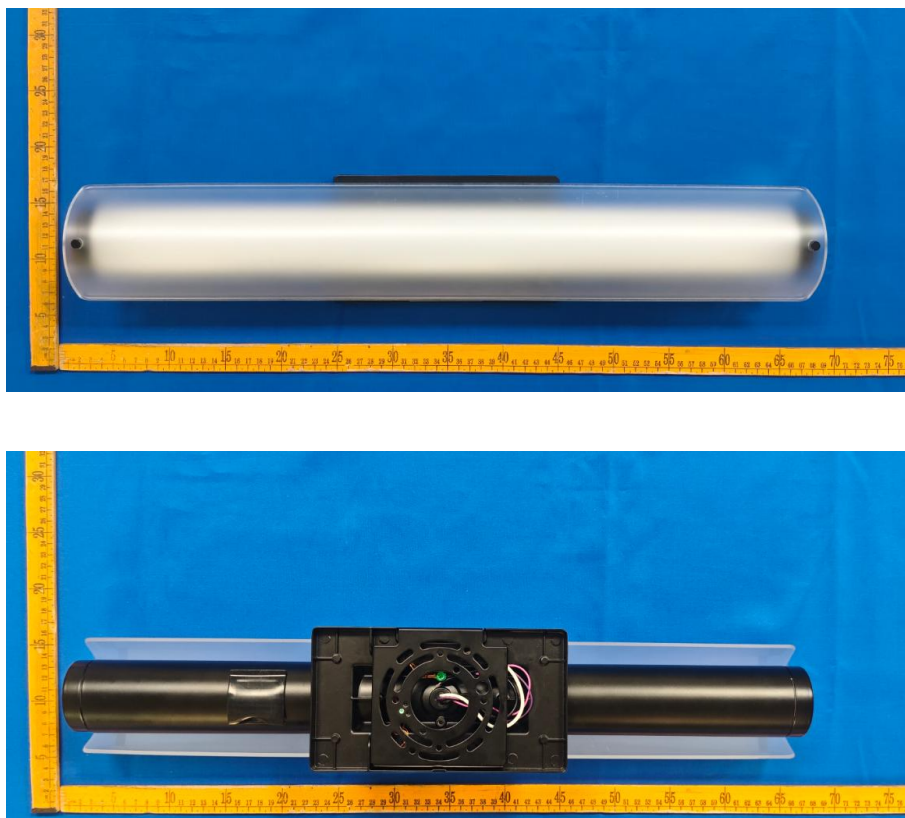
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24B @15W5000K, 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 @15W5000K	Sample ID	250728008-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

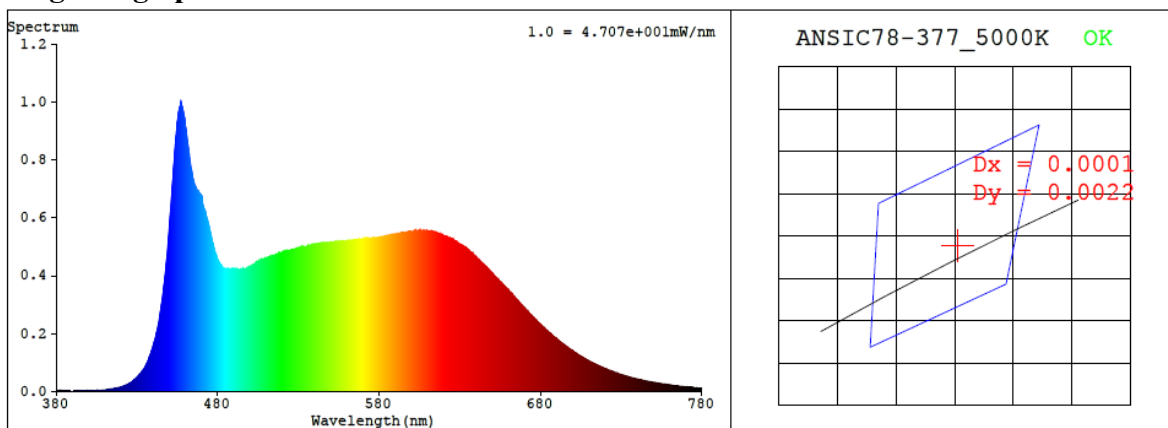
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.124	14.8	0.995
277.0	60	0.058	14.9	0.924

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4969	91.1	74	0.0011	1.3	87	95	-5%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3461$ $y = 0.3546$ / $u' = 0.2109$ $v' = 0.4863$ ($duv=1.09e-03$)

CCT= 4969K Prcp WL: $L_d=572.0nm$ Purity=10.2%

Peak WL: $L_p=457nm$ FWHM: $=28.9nm$ Ratio:R=17.8% G=75.8% B=6.4%

Render Index: $R_a = 91.1$ AvgR = 89.3 TM30:Rf=89 Rg=96

EEL: 0.11482 A+

R1 =96	R2 =97	R3 =93	R4 =86	R5 =92	R6 =94	R7 =87
R8 =84	R9 =74	R10=95	R11=89	R12=67	R13=99	R14=97 R15=92

4.1 Integrating Sphere Test

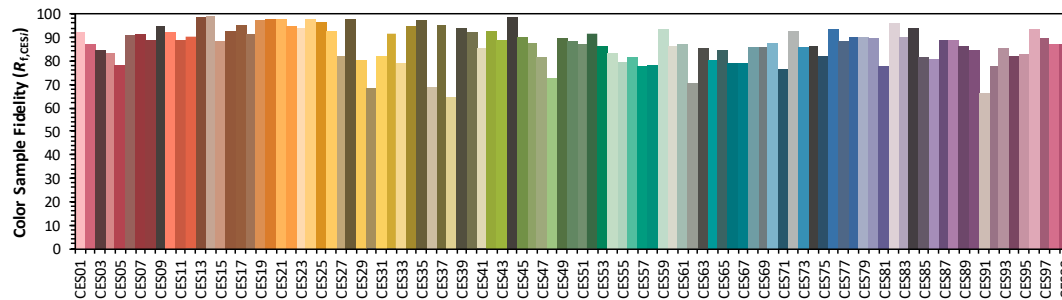
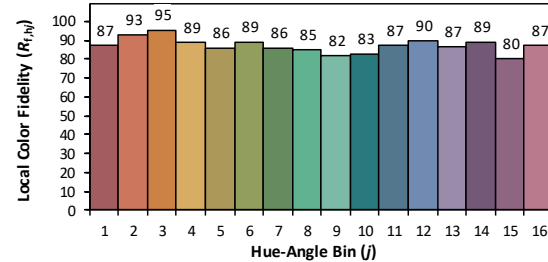
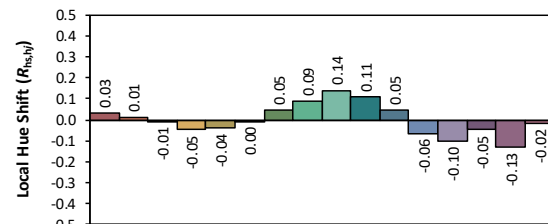
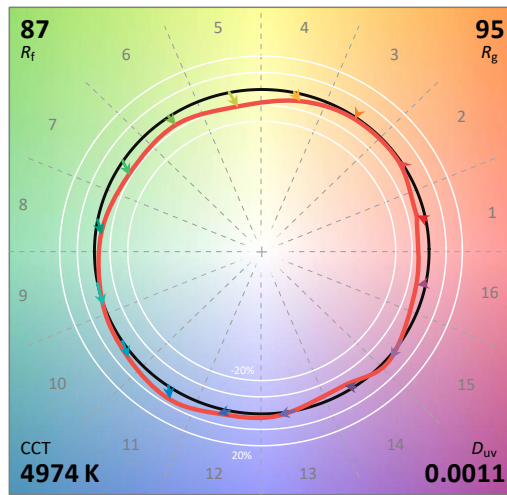
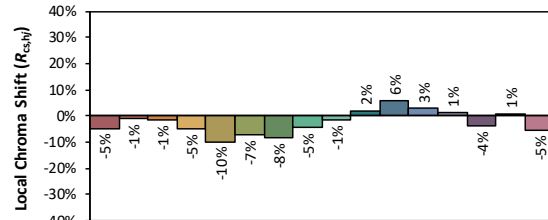
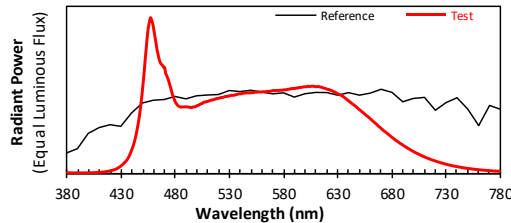
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/22

Model: V1-24B @15W5000K



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

x 0.3461
 y 0.3545
 u' 0.2110
 v' 0.4862

CIE 13.3-1995
(CRI)
 R_a 91
 R_g 74

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	3.50E-06	447	3.81E-04	514	4.69E-04	581	5.34E-04	648	4.21E-04	715	9.16E-05
381	2.80E-06	448	4.37E-04	515	4.69E-04	582	5.33E-04	649	4.13E-04	716	8.90E-05
382	3.10E-06	449	4.96E-04	516	4.73E-04	583	5.35E-04	650	4.08E-04	717	8.61E-05
383	2.10E-06	450	5.67E-04	517	4.74E-04	584	5.37E-04	651	4.02E-04	718	8.40E-05
384	1.90E-06	451	6.38E-04	518	4.77E-04	585	5.37E-04	652	3.97E-04	719	8.16E-05
385	2.00E-06	452	7.21E-04	519	4.77E-04	586	5.39E-04	653	3.91E-04	720	7.90E-05
386	2.30E-06	453	7.99E-04	520	4.80E-04	587	5.40E-04	654	3.86E-04	721	7.72E-05
387	2.10E-06	454	8.74E-04	521	4.81E-04	588	5.42E-04	655	3.79E-04	722	7.40E-05
388	2.40E-06	455	9.33E-04	522	4.84E-04	589	5.43E-04	656	3.73E-04	723	7.25E-05
389	2.00E-06	456	9.69E-04	523	4.85E-04	590	5.41E-04	657	3.68E-04	724	7.02E-05
390	1.90E-06	457	9.94E-04	524	4.85E-04	591	5.43E-04	658	3.62E-04	725	6.84E-05
391	2.10E-06	458	9.80E-04	525	4.87E-04	592	5.45E-04	659	3.57E-04	726	6.56E-05
392	1.70E-06	459	9.56E-04	526	4.90E-04	593	5.44E-04	660	3.51E-04	727	6.43E-05
393	2.20E-06	460	9.19E-04	527	4.91E-04	594	5.47E-04	661	3.43E-04	728	6.24E-05
394	2.00E-06	461	8.76E-04	528	4.92E-04	595	5.49E-04	662	3.38E-04	729	5.98E-05
395	2.40E-06	462	8.35E-04	529	4.94E-04	596	5.48E-04	663	3.31E-04	730	5.84E-05
396	2.40E-06	463	7.91E-04	530	4.94E-04	597	5.50E-04	664	3.26E-04	731	5.64E-05
397	2.30E-06	464	7.59E-04	531	4.97E-04	598	5.51E-04	665	3.19E-04	732	5.45E-05
398	2.60E-06	465	7.27E-04	532	4.99E-04	599	5.52E-04	666	3.14E-04	733	5.31E-05
399	2.70E-06	466	7.08E-04	533	4.98E-04	600	5.52E-04	667	3.06E-04	734	5.15E-05
400	2.60E-06	467	6.97E-04	534	4.99E-04	601	5.52E-04	668	3.00E-04	735	4.99E-05
401	3.00E-06	468	6.91E-04	535	5.00E-04	602	5.55E-04	669	2.94E-04	736	4.82E-05
402	3.10E-06	469	6.79E-04	536	5.04E-04	603	5.56E-04	670	2.89E-04	737	4.67E-05
403	3.20E-06	470	6.76E-04	537	5.03E-04	604	5.54E-04	671	2.82E-04	738	4.54E-05
404	3.50E-06	471	6.39E-04	538	5.07E-04	605	5.55E-04	672	2.77E-04	739	4.42E-05
405	3.80E-06	472	6.24E-04	539	5.08E-04	606	5.57E-04	673	2.70E-04	740	4.25E-05
406	4.00E-06	473	6.05E-04	540	5.07E-04	607	5.56E-04	674	2.66E-04	741	4.13E-05
407	4.50E-06	474	5.86E-04	541	5.08E-04	608	5.56E-04	675	2.60E-04	742	4.01E-05
408	4.70E-06	475	5.60E-04	542	5.10E-04	609	5.55E-04	676	2.55E-04	743	3.90E-05
409	5.40E-06	476	5.37E-04	543	5.11E-04	610	5.53E-04	677	2.48E-04	744	3.77E-05
410	5.80E-06	477	5.10E-04	544	5.13E-04	611	5.53E-04	678	2.43E-04	745	3.66E-05
411	6.30E-06	478	4.90E-04	545	5.14E-04	612	5.54E-04	679	2.37E-04	746	3.54E-05
412	6.80E-06	479	4.71E-04	546	5.13E-04	613	5.54E-04	680	2.32E-04	747	3.42E-05
413	7.50E-06	480	4.54E-04	547	5.14E-04	614	5.50E-04	681	2.26E-04	748	3.34E-05
414	8.20E-06	481	4.45E-04	548	5.14E-04	615	5.51E-04	682	2.21E-04	749	3.22E-05
415	9.30E-06	482	4.35E-04	549	5.14E-04	616	5.48E-04	683	2.16E-04	750	3.11E-05
416	1.04E-05	483	4.29E-04	550	5.16E-04	617	5.45E-04	684	2.10E-04	751	3.03E-05
417	1.14E-05	484	4.26E-04	551	5.15E-04	618	5.44E-04	685	2.05E-04	752	2.91E-05
418	1.26E-05	485	4.23E-04	552	5.16E-04	619	5.42E-04	686	2.01E-04	753	2.84E-05
419	1.39E-05	486	4.24E-04	553	5.17E-04	620	5.38E-04	687	1.96E-04	754	2.75E-05
420	1.57E-05	487	4.24E-04	554	5.19E-04	621	5.36E-04	688	1.91E-04	755	2.66E-05
421	1.72E-05	488	4.24E-04	555	5.18E-04	622	5.36E-04	689	1.86E-04	756	2.58E-05
422	1.92E-05	489	4.25E-04	556	5.19E-04	623	5.31E-04	690	1.82E-04	757	2.52E-05
423	2.13E-05	490	4.24E-04	557	5.20E-04	624	5.31E-04	691	1.77E-04	758	2.40E-05
424	2.35E-05	491	4.24E-04	558	5.19E-04	625	5.27E-04	692	1.73E-04	759	2.36E-05
425	2.62E-05	492	4.24E-04	559	5.19E-04	626	5.23E-04	693	1.68E-04	760	2.25E-05
426	3.00E-05	493	4.21E-04	560	5.20E-04	627	5.20E-04	694	1.64E-04	761	2.21E-05
427	3.38E-05	494	4.21E-04	561	5.21E-04	628	5.18E-04	695	1.60E-04	762	2.13E-05
428	3.86E-05	495	4.20E-04	562	5.21E-04	629	5.13E-04	696	1.56E-04	763	2.06E-05
429	4.30E-05	496	4.23E-04	563	5.20E-04	630	5.09E-04	697	1.51E-04	764	2.01E-05
430	4.84E-05	497	4.24E-04	564	5.22E-04	631	5.05E-04	698	1.47E-04	765	1.95E-05
431	5.47E-05	498	4.25E-04	565	5.24E-04	632	5.03E-04	699	1.43E-04	766	1.87E-05
432	6.06E-05	499	4.27E-04	566	5.23E-04	633	4.99E-04	700	1.40E-04	767	1.83E-05
433	6.83E-05	500	4.32E-04	567	5.24E-04	634	4.96E-04	701	1.36E-04	768	1.75E-05
434	7.53E-05	501	4.33E-04	568	5.25E-04	635	4.91E-04	702	1.32E-04	769	1.70E-05
435	8.36E-05	502	4.38E-04	569	5.26E-04	636	4.86E-04	703	1.29E-04	770	1.65E-05
436	9.48E-05	503	4.41E-04	570	5.28E-04	637	4.81E-04	704	1.25E-04	771	1.60E-05
437	1.06E-04	504	4.45E-04	571	5.29E-04	638	4.75E-04	705	1.22E-04	772	1.55E-05
438	1.22E-04	505	4.46E-04	572	5.28E-04	639	4.69E-04	706	1.19E-04	773	1.50E-05
439	1.39E-04	506	4.53E-04	573	5.29E-04	640	4.65E-04	707	1.15E-04	774	1.46E-05
440	1.57E-04	507	4.55E-04	574	5.30E-04	641	4.59E-04	708	1.12E-04	775	1.40E-05
441	1.76E-04	508	4.55E-04	575	5.29E-04	642	4.53E-04	709	1.08E-04	776	1.38E-05
442	1.99E-04	509	4.59E-04	576	5.30E-04	643	4.48E-04	710	1.06E-04	777	1.33E-05
443	2.26E-04	510	4.59E-04	577	5.31E-04	644	4.42E-04	711	1.02E-04	778	1.30E-05
444	2.58E-04	511	4.62E-04	578	5.31E-04	645	4.37E-04	712	9.95E-05	779	1.30E-05
445	2.95E-04	512	4.65E-04	579	5.31E-04	646	4.32E-04	713	9.71E-05	780	1.30E-05
446	3.35E-04	513	4.66E-04	580	5.32E-04	647	4.26E-04	714	9.42E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24B @15W5000K	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	14.9	0.924
NON-WORST CASE	120.0	60	0.124	14.8	0.995

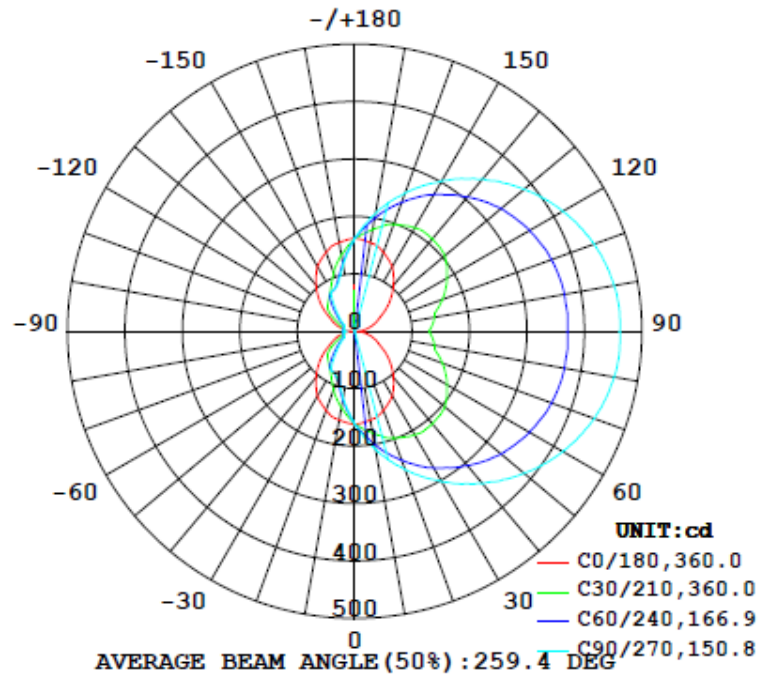
Test Result

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°)	
1851	86.0	154.6	180.0	97.3	124.3	26.5%	B0-U4-G2

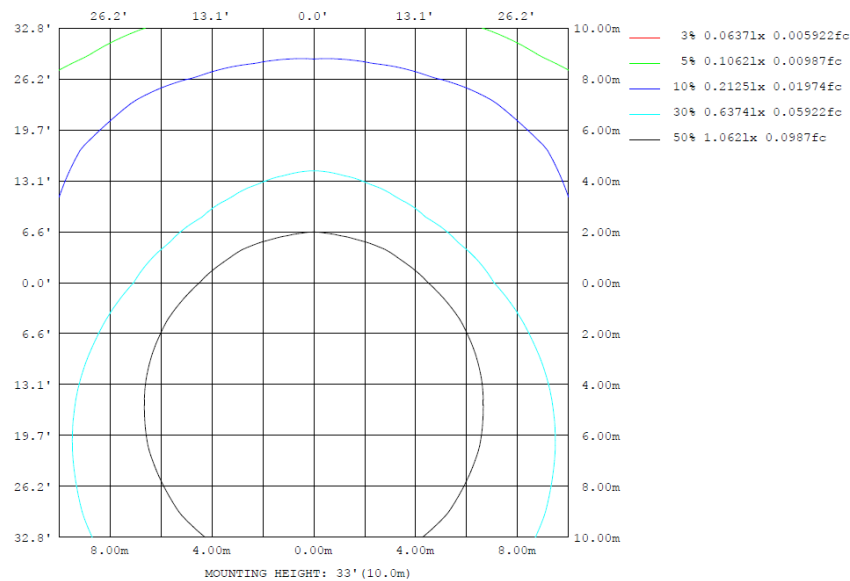
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

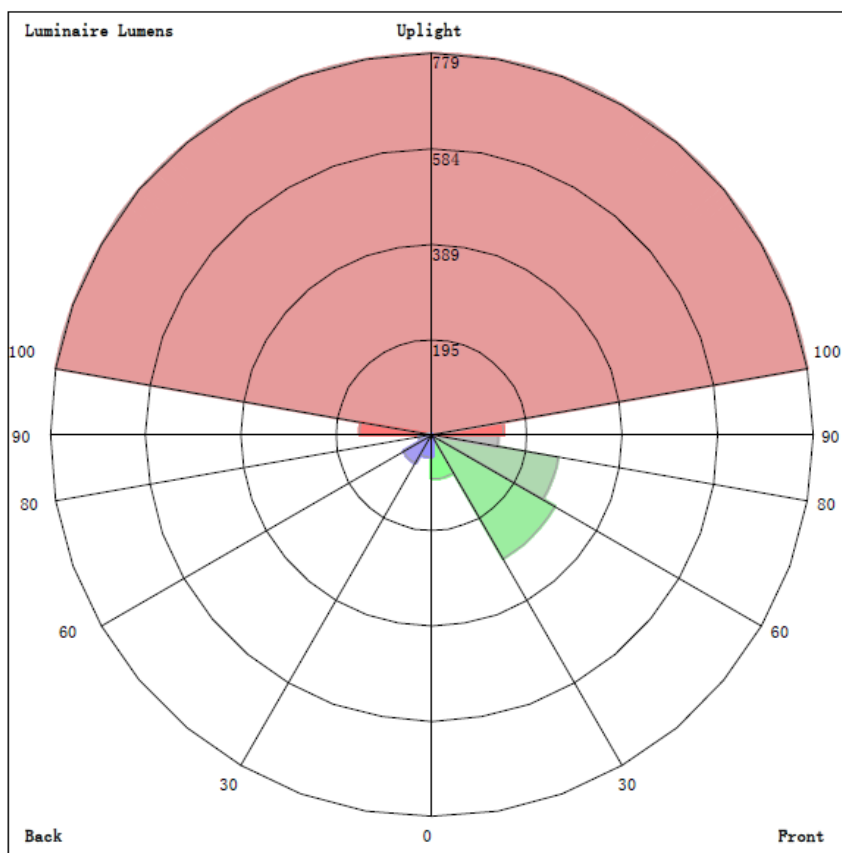
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	%lum, lamp
10	157.0	190.6	208.7	190.6	157.0	126.4	117.6	126.4	0- 10	15.25	15.25	0.82,0.82
20	146.4	222.3	256.1	222.3	146.4	97.07	87.50	97.07	10- 20	45.09	60.34	3.26,3.26
30	130.9	243.4	302.0	243.4	130.9	79.00	80.32	79.00	20- 30	73.95	134.3	7.25,7.25
40	105.0	261.9	346.3	261.9	105.0	72.99	53.61	72.99	30- 40	101.1	235.4	12.7,12.7
50	78.83	272.8	385.0	272.8	78.83	47.67	32.95	47.67	40- 50	121.4	356.7	19.3,19.3
60	52.24	277.3	418.5	277.3	52.24	29.50	20.59	29.50	50- 60	134.5	491.2	26.5,26.5
70	34.96	274.0	443.9	274.0	34.96	21.30	19.93	21.30	60- 70	142.1	633.3	34.2,34.2
80	18.66	266.7	458.6	266.7	18.66	20.71	19.31	20.71	70- 80	145.7	779.0	42.1,42.1
90	3.308	259.8	461.5	259.8	3.308	21.69	20.45	21.69	80- 90	146.8	925.7	50,50
100	18.66	266.7	458.6	266.7	18.66	20.71	19.31	20.71	90-100	146.8	1073	57.9,57.9
110	34.96	274.0	443.9	274.0	34.96	21.30	19.93	21.30	100-110	145.7	1218	65.8,65.8
120	52.24	277.3	418.5	277.3	52.24	29.50	20.59	29.50	110-120	142.1	1360	73.5,73.5
130	78.83	272.8	385.0	272.8	78.83	47.67	32.95	47.67	120-130	134.5	1495	80.7,80.7
140	105.0	261.9	346.3	261.9	105.0	72.99	53.61	72.99	130-140	121.4	1616	87.3,87.3
150	130.9	243.4	302.0	243.4	130.9	79.00	80.32	79.00	140-150	101.1	1717	92.7,92.7
160	146.4	222.3	256.1	222.3	146.4	97.07	87.50	97.07	150-160	73.95	1791	96.7,96.7
170	157.0	190.6	208.7	190.6	157.0	126.4	117.6	126.4	160-170	45.09	1836	99.2,99.2
180	162.6	162.6	162.6	162.6	162.6	162.6	162.6	162.6	170-180	15.25	1851	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)	Percent
0-10	15.25	0-10	15.25 0.83%
10-20	45.09	0-20	60.34 3.29%
20-30	73.95	0-30	134.29 7.31%
30-40	101.08	0-40	235.37 12.82%
40-50	121.35	0-50	356.72 19.43%
50-60	134.48	0-60	491.20 26.75%
60-70	142.07	0-70	633.27 34.49%
70-80	145.69	0-80	778.96 42.42%
80-90	146.77	0-90	925.73 50.42%
90-100	146.77	0-100	1072.50 58.41%
100-110	145.69	0-110	1218.19 66.34%
110-120	142.07	0-120	1360.26 74.08%
120-130	134.48	0-130	1494.74 81.40%
130-140	121.35	0-140	1616.09 88.01%
140-150	101.08	0-150	1717.17 93.52%
150-160	73.95	0-160	1791.12 97.54%
160-170	45.09	0-170	1836.21 100.00%
170-180	15.25	0-180	1851.46 100.83%

4.2 Goniophotometer Test

LCS/BUG

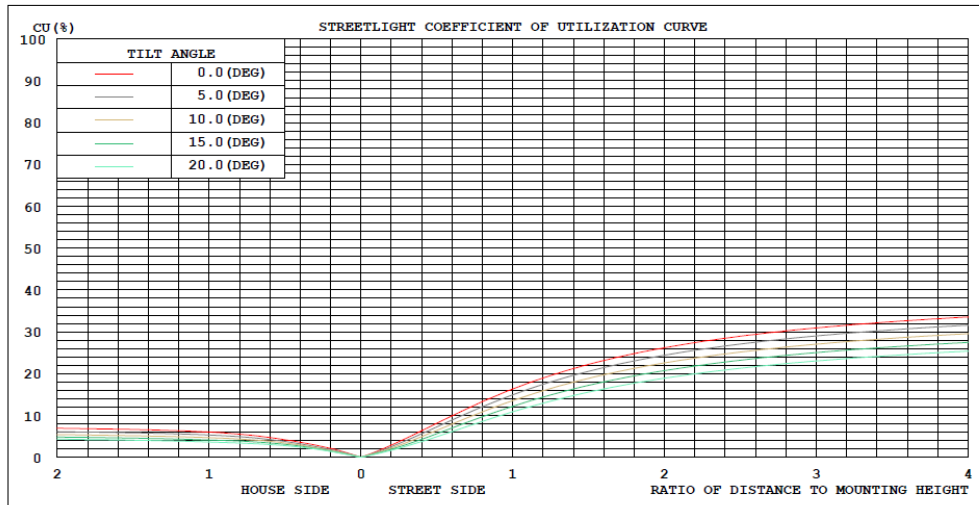


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

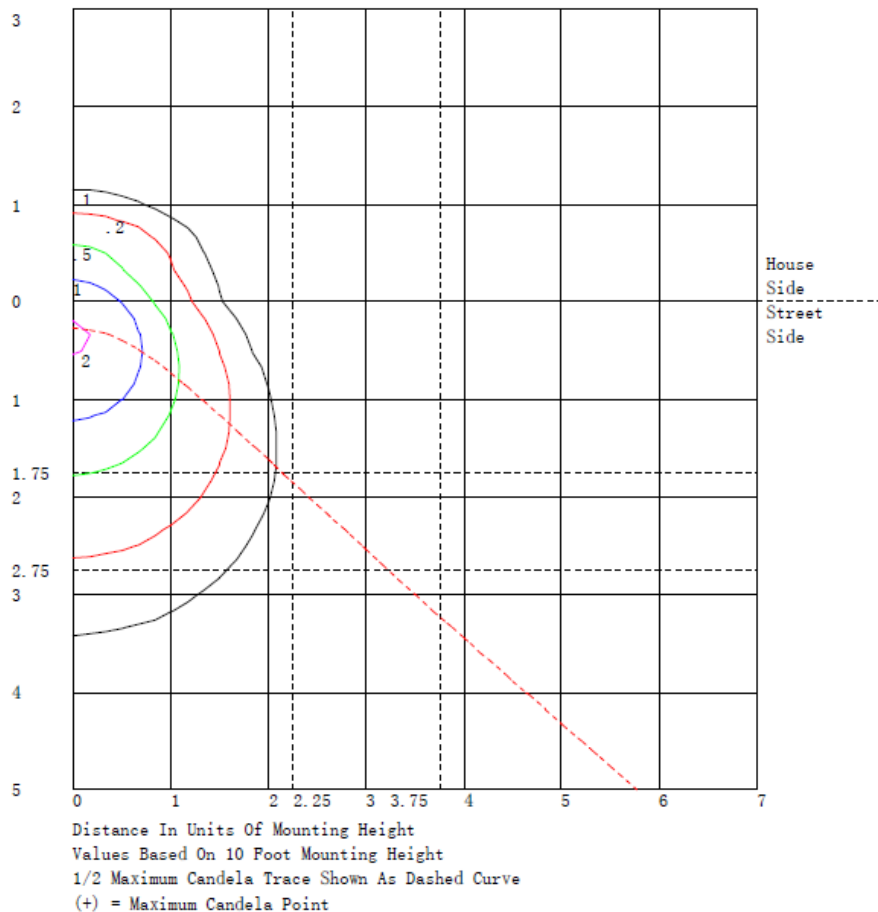
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	89.3	N.A.	4.8
FM - Front-Medium (30-60)	290.7	N.A.	15.7
FH - Front-High (60-80)	262.4	N.A.	14.2
FVH - Front-Very High (80-90)	136.5	N.A.	7.4
BL - Back-Low (0-30)	45.0	N.A.	2.4
BM - Back-Medium (30-60)	66.2	N.A.	3.6
BH - Back-High (60-80)	25.3	N.A.	1.4
BVH - Back-Very High (80-90)	10.2	N.A.	0.6
UL - Uplight-Low (90-100)	146.8	N.A.	7.9
UH - Uplight-High (100-180)	779.0	N.A.	42.1
Total	1851.4	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	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163
5	160	165	171	176	180	183	185	183	180	176	171	165	160	153	148	143	141	139	139
10	157	168	180	191	200	206	209	206	200	191	180	168	157	145	135	126	121	118	118
15	154	172	190	207	220	229	233	229	220	207	190	172	154	137	122	111	103	99.5	99.3
20	146	171	198	222	239	250	256	250	239	222	198	171	146	125	108	97.1	90.0	87.3	87.5
25	139	170	203	233	258	272	280	272	258	233	203	170	139	113	94.9	85.8	82.5	81.7	82.0
30	131	169	208	243	275	293	302	293	275	243	208	169	131	101	84.3	79.0	79.5	79.7	80.3
35	118	163	211	254	291	315	325	315	291	254	211	163	118	88.8	76.6	75.8	75.6	70.4	68.7
40	105	155	210	262	305	335	346	335	305	262	210	155	105	77.5	70.9	73.0	62.4	55.7	53.6
45	92.1	148	208	269	320	354	365	354	320	269	208	148	92.1	67.9	66.5	60.9	49.0	43.7	42.0
50	78.8	134	205	273	333	371	385	371	333	273	205	134	78.8	60.5	61.7	47.7	38.7	34.3	32.9
55	65.5	119	196	277	342	386	403	386	342	277	196	119	65.5	54.2	51.4	37.2	30.6	27.2	26.5
60	52.2	103	186	277	351	400	418	400	351	277	186	103	52.2	48.3	39.4	29.5	24.0	21.4	20.6
65	43.6	89.7	175	277	358	413	432	413	358	277	175	89.7	43.6	40.1	30.1	23.8	21.3	20.3	20.0
70	35.0	76.6	163	274	365	423	444	423	365	274	163	76.6	35.0	30.9	24.7	21.3	21.1	20.3	19.9
75	26.3	62.7	149	271	369	431	453	431	369	271	149	62.7	26.3	21.5	20.4	20.9	21.1	20.4	19.8
80	18.7	59.1	141	267	371	436	459	436	371	267	141	59.1	18.7	19.5	19.2	20.7	20.4	20.0	19.3
85	11.0	56.3	136	265	372	439	462	439	372	265	136	56.3	11.0	18.5	19.6	21.2	20.6	18.0	17.4
90	3.31	53.1	129	260	370	438	461	438	370	260	129	53.1	3.31	17.6	20.0	21.7	21.8	17.6	20.4
95	11.0	56.3	136	265	372	439	462	439	372	265	136	56.3	11.0	18.5	19.6	21.2	20.6	18.0	17.4
100	18.7	59.1	141	267	371	436	459	436	371	267	141	59.1	18.7	19.5	19.2	20.7	20.4	20.0	19.3
105	26.3	62.7	149	271	369	431	453	431	369	271	149	62.7	26.3	21.5	20.4	20.9	21.1	20.4	19.8
110	35.0	76.6	163	274	365	423	444	423	365	274	163	76.6	35.0	30.9	24.7	21.3	21.1	20.3	19.9
115	43.6	89.7	175	277	358	413	432	413	358	277	175	89.7	43.6	40.1	30.1	23.8	21.3	20.3	20.0
120	52.2	103	186	277	351	400	418	400	351	277	186	103	52.2	48.3	39.4	29.5	24.0	21.4	20.6
125	65.5	119	196	277	342	386	403	386	342	277	196	119	65.5	54.2	51.4	37.2	30.6	27.2	26.5
130	78.8	134	205	273	333	371	385	371	333	273	205	134	78.8	60.5	61.7	47.7	38.7	34.3	32.9
135	92.1	148	208	269	320	354	365	354	320	269	208	148	92.1	67.9	66.5	60.9	49.0	43.7	42.0
140	105	155	210	262	305	335	346	335	305	262	210	155	105	77.5	70.9	73.0	62.4	55.7	53.6
145	118	163	211	254	291	315	325	315	291	254	211	163	118	88.8	76.6	75.8	75.6	70.4	68.7
150	131	169	208	243	275	293	302	293	275	243	208	169	131	101	84.3	79.0	79.5	79.7	80.3
155	139	170	203	233	258	272	280	272	258	233	203	170	139	113	94.9	85.8	82.5	81.7	82.0
160	146	171	198	222	239	250	256	250	239	222	198	171	146	125	108	97.1	90.0	87.3	87.5
165	154	172	190	207	220	229	233	229	220	207	190	172	154	137	122	111	103	99.5	99.3
170	157	168	180	191	200	206	209	206	200	191	180	168	157	145	135	126	121	118	118
175	160	165	171	176	180	183	185	183	180	176	171	165	160	153	148	143	141	139	139
180	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	163	163	163	163	163														
5	139	141	143	148	153														
10	118	121	126	135	145														
15	99.5	103	111	122	137														
20	87.3	90.0	97.1	108	125														
25	81.7	82.5	85.8	94.9	113														
30	79.7	79.5	79.0	84.3	101														
35	70.4	75.6	75.8	76.6	88.8														
40	55.7	62.4	73.0	70.9	77.5														
45	43.7	49.0	60.9	66.5	67.9														
50	34.3	38.7	47.7	61.7	60.5														
55	27.2	30.6	37.2	51.4	54.2														
60	21.4	24.0	29.5	39.4	48.3														
65	20.3	21.3	23.8	30.1	40.1														
70	20.3	21.1	21.3	24.7	30.9														
75	20.4	21.1	20.9	20.4	21.5														
80	20.0	20.4	20.7	19.2	19.5														
85	18.0	20.6	21.2	19.6	18.5														
90	17.6	21.8	21.7	20.0	17.6														
95	18.0	20.6	21.2	19.6	18.5														
100	20.0	20.4	20.7	19.2	19.5														
105	20.4	21.1	20.9	20.4	21.5														
110	20.3	21.1	21.3	24.7	30.9														
115	20.3	21.3	23.8	30.1	40.1														
120	21.4	24.0	29.5	39.4	48.3														
125	27.2	30.6	37.2	51.4	54.2														
130	34.3	38.7	47.7	61.7	60.5														
135	43.7	49.0	60.9	66.5	67.9														
140	55.7	62.4	73.0	70.9	77.5														
145	70.4	75.6	75.8	76.6	88.8														
150	79.7	79.5	79.0	84.3	101														
155	81.7	82.5	85.8	94.9	113														
160	87.3	90.0	97.1	108	125														
165	99.5	103	111	122	137														
170	118	121	126	135	145														
175	139	141	143	148	153														
180	163	163	163	163	163														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24B @15W5000K	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	0.124	14.8	0.995	5.51
277.0	60	0.058	14.9	0.924	20.49

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*****