

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		2367
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	120.1
			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	6.48
				277V	13.29
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	3985±275	4055
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.2
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		80
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		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 @20W4000K	-	250728008-S1
2	Goniophotometer Test	2025-07-29	V1-24B @20W4000K	-	250728008-S1
3	THD and PF Test	2025-07-29	V1-24B @20W4000K	-	250728008-S1

Remark (If any):

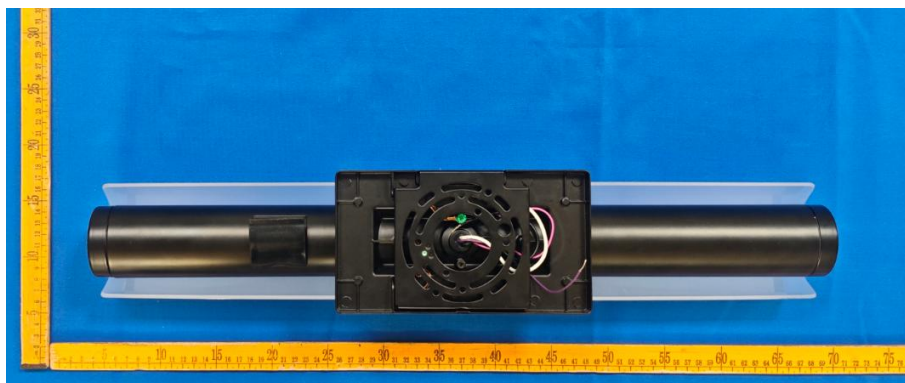
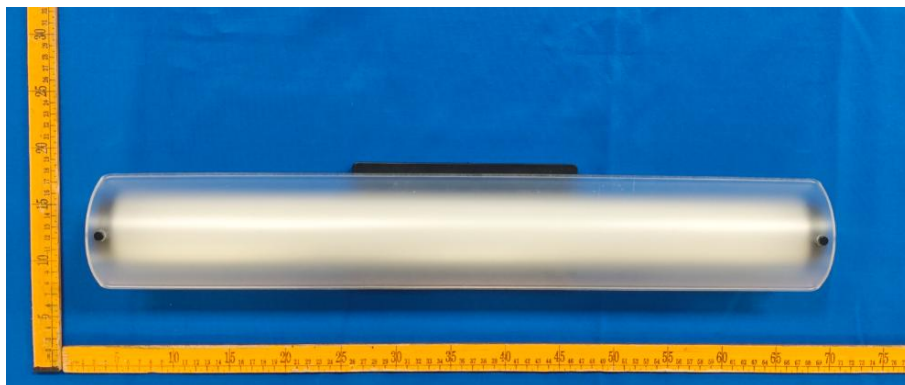
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24B @20W4000K, 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 @20W4000K	Sample ID	250728008-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

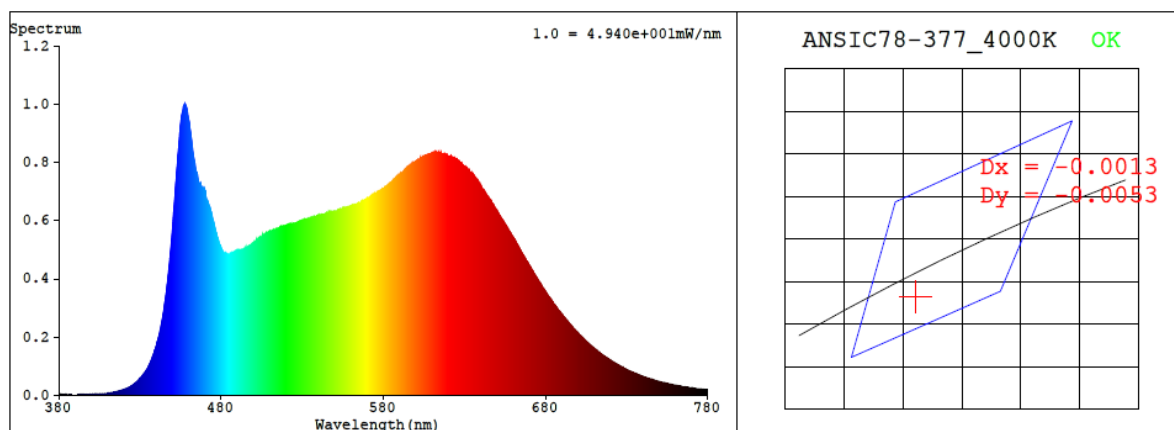
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made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

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4055	92.2	80	-0.0021	3.7	87	95	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3768$ $y = 0.3699$ / $u' = 0.2254$ $v' = 0.4980$ ($duv = -2.14e-03$)

CCT= 4055K Prcp WL: $L_d = 580.2\text{nm}$ Purity=24.1%

Peak WL: $L_p = 458\text{nm}$ FWHM: $\approx 31.8\text{nm}$ Ratio: R=20.6% G=73.9% B=5.5%

Render Index: $R_a = 92.2$ AvgR = 91.1 TM30: $R_f = 89$ $R_g = 97$

EEL: 0.12216 A+

R1 =97 R2 =95 R3 =93 R4 =91 R5 =94 R6 =92 R7 =88

R8 =87 R9 =80 R10=91 R11=95 R12=74 R13=97 R14=97 R15=95

4.1 Integrating Sphere Test

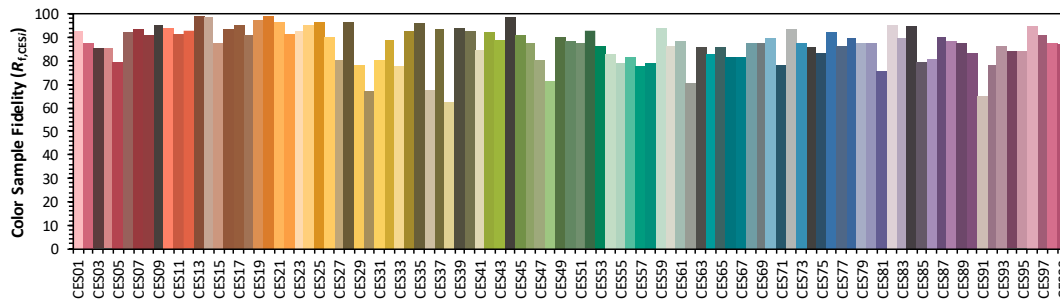
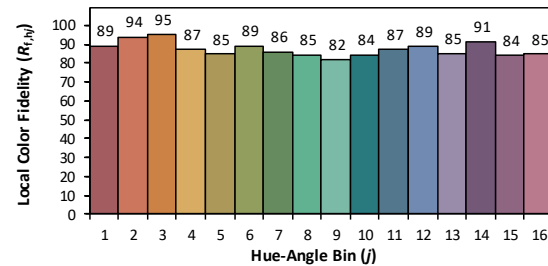
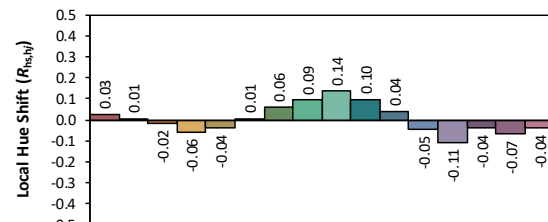
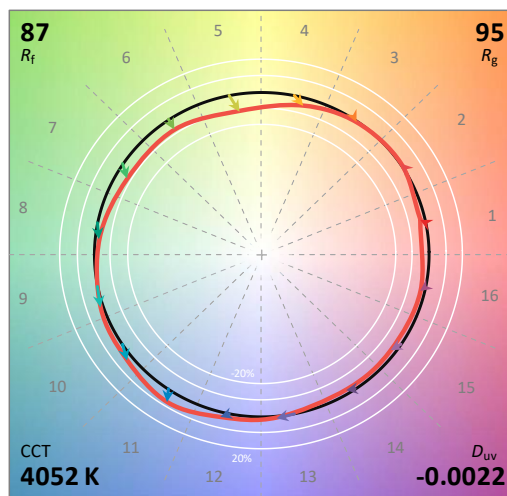
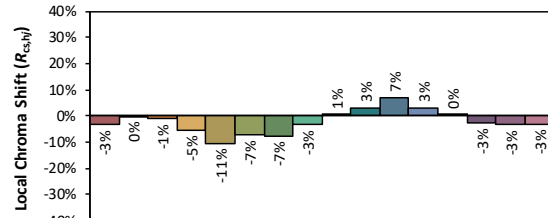
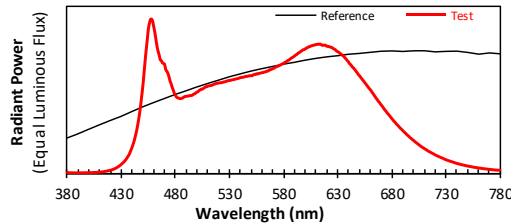
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/22

Model: V1-24B @20W4000K



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

x 0.3768
 y 0.3698
 u' 0.2255
 v' 0.4979

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 80

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	4.60E-06	447	3.94E-04	514	5.70E-04	581	7.16E-04	648	6.52E-04	715	1.39E-04
381	3.70E-06	448	4.48E-04	515	5.73E-04	582	7.19E-04	649	6.41E-04	716	1.35E-04
382	2.50E-06	449	5.09E-04	516	5.75E-04	583	7.24E-04	650	6.33E-04	717	1.31E-04
383	1.70E-06	450	5.72E-04	517	5.79E-04	584	7.29E-04	651	6.24E-04	718	1.28E-04
384	3.30E-06	451	6.49E-04	518	5.81E-04	585	7.32E-04	652	6.15E-04	719	1.24E-04
385	1.70E-06	452	7.28E-04	519	5.81E-04	586	7.38E-04	653	6.06E-04	720	1.20E-04
386	2.30E-06	453	7.99E-04	520	5.84E-04	587	7.43E-04	654	5.97E-04	721	1.16E-04
387	2.20E-06	454	8.66E-04	521	5.84E-04	588	7.48E-04	655	5.88E-04	722	1.13E-04
388	1.90E-06	455	9.34E-04	522	5.85E-04	589	7.52E-04	656	5.79E-04	723	1.10E-04
389	1.90E-06	456	9.70E-04	523	5.86E-04	590	7.57E-04	657	5.69E-04	724	1.06E-04
390	1.90E-06	457	9.95E-04	524	5.88E-04	591	7.63E-04	658	5.60E-04	725	1.03E-04
391	1.80E-06	458	9.96E-04	525	5.91E-04	592	7.67E-04	659	5.51E-04	726	1.00E-04
392	2.20E-06	459	9.82E-04	526	5.91E-04	593	7.73E-04	660	5.43E-04	727	9.77E-05
393	2.60E-06	460	9.45E-04	527	5.94E-04	594	7.79E-04	661	5.34E-04	728	9.45E-05
394	2.50E-06	461	9.10E-04	528	5.97E-04	595	7.81E-04	662	5.24E-04	729	9.08E-05
395	3.00E-06	462	8.65E-04	529	5.98E-04	596	7.88E-04	663	5.13E-04	730	8.78E-05
396	2.50E-06	463	8.20E-04	530	6.00E-04	597	7.92E-04	664	5.03E-04	731	8.50E-05
397	2.80E-06	464	7.88E-04	531	6.00E-04	598	7.98E-04	665	4.93E-04	732	8.27E-05
398	2.90E-06	465	7.64E-04	532	6.03E-04	599	7.99E-04	666	4.83E-04	733	8.05E-05
399	3.40E-06	466	7.34E-04	533	6.05E-04	600	8.03E-04	667	4.73E-04	734	7.80E-05
400	3.10E-06	467	7.28E-04	534	6.05E-04	601	8.08E-04	668	4.63E-04	735	7.56E-05
401	3.70E-06	468	7.14E-04	535	6.08E-04	602	8.11E-04	669	4.55E-04	736	7.37E-05
402	3.40E-06	469	7.10E-04	536	6.10E-04	603	8.17E-04	670	4.45E-04	737	7.10E-05
403	3.70E-06	470	7.05E-04	537	6.11E-04	604	8.18E-04	671	4.37E-04	738	6.89E-05
404	4.20E-06	471	6.72E-04	538	6.12E-04	605	8.21E-04	672	4.27E-04	739	6.63E-05
405	4.60E-06	472	6.60E-04	539	6.15E-04	606	8.24E-04	673	4.17E-04	740	6.42E-05
406	4.80E-06	473	6.47E-04	540	6.18E-04	607	8.26E-04	674	4.08E-04	741	6.22E-05
407	5.40E-06	474	6.25E-04	541	6.19E-04	608	8.29E-04	675	3.99E-04	742	6.02E-05
408	5.80E-06	475	5.98E-04	542	6.21E-04	609	8.29E-04	676	3.89E-04	743	5.87E-05
409	6.10E-06	476	5.80E-04	543	6.21E-04	610	8.33E-04	677	3.82E-04	744	5.67E-05
410	7.10E-06	477	5.56E-04	544	6.23E-04	611	8.33E-04	678	3.73E-04	745	5.47E-05
411	7.70E-06	478	5.37E-04	545	6.26E-04	612	8.35E-04	679	3.64E-04	746	5.32E-05
412	8.50E-06	479	5.18E-04	546	6.26E-04	613	8.34E-04	680	3.56E-04	747	5.17E-05
413	9.20E-06	480	5.03E-04	547	6.27E-04	614	8.34E-04	681	3.47E-04	748	5.00E-05
414	1.09E-05	481	4.93E-04	548	6.30E-04	615	8.31E-04	682	3.38E-04	749	4.85E-05
415	1.19E-05	482	4.87E-04	549	6.30E-04	616	8.27E-04	683	3.31E-04	750	4.67E-05
416	1.29E-05	483	4.86E-04	550	6.31E-04	617	8.29E-04	684	3.23E-04	751	4.57E-05
417	1.43E-05	484	4.83E-04	551	6.30E-04	618	8.28E-04	685	3.14E-04	752	4.41E-05
418	1.59E-05	485	4.83E-04	552	6.36E-04	619	8.27E-04	686	3.08E-04	753	4.29E-05
419	1.75E-05	486	4.84E-04	553	6.38E-04	620	8.22E-04	687	3.00E-04	754	4.14E-05
420	1.94E-05	487	4.89E-04	554	6.39E-04	621	8.20E-04	688	2.92E-04	755	4.01E-05
421	2.12E-05	488	4.93E-04	555	6.44E-04	622	8.20E-04	689	2.86E-04	756	3.88E-05
422	2.40E-05	489	4.96E-04	556	6.41E-04	623	8.16E-04	690	2.79E-04	757	3.76E-05
423	2.65E-05	490	4.97E-04	557	6.45E-04	624	8.15E-04	691	2.71E-04	758	3.68E-05
424	2.97E-05	491	4.98E-04	558	6.46E-04	625	8.12E-04	692	2.65E-04	759	3.55E-05
425	3.24E-05	492	4.99E-04	559	6.48E-04	626	8.06E-04	693	2.58E-04	760	3.42E-05
426	3.73E-05	493	5.01E-04	560	6.50E-04	627	8.03E-04	694	2.51E-04	761	3.33E-05
427	4.15E-05	494	5.02E-04	561	6.51E-04	628	7.98E-04	695	2.44E-04	762	3.22E-05
428	4.62E-05	495	5.03E-04	562	6.54E-04	629	7.91E-04	696	2.38E-04	763	3.15E-05
429	5.15E-05	496	5.06E-04	563	6.55E-04	630	7.87E-04	697	2.31E-04	764	3.02E-05
430	5.77E-05	497	5.12E-04	564	6.57E-04	631	7.83E-04	698	2.26E-04	765	2.94E-05
431	6.37E-05	498	5.14E-04	565	6.61E-04	632	7.76E-04	699	2.19E-04	766	2.85E-05
432	7.08E-05	499	5.20E-04	566	6.61E-04	633	7.72E-04	700	2.14E-04	767	2.77E-05
433	7.77E-05	500	5.25E-04	567	6.69E-04	634	7.65E-04	701	2.08E-04	768	2.69E-05
434	8.64E-05	501	5.28E-04	568	6.70E-04	635	7.61E-04	702	2.02E-04	769	2.57E-05
435	9.60E-05	502	5.36E-04	569	6.72E-04	636	7.54E-04	703	1.96E-04	770	2.49E-05
436	1.08E-04	503	5.39E-04	570	6.76E-04	637	7.45E-04	704	1.91E-04	771	2.42E-05
437	1.18E-04	504	5.44E-04	571	6.78E-04	638	7.38E-04	705	1.85E-04	772	2.35E-05
438	1.34E-04	505	5.44E-04	572	6.83E-04	639	7.28E-04	706	1.80E-04	773	2.27E-05
439	1.52E-04	506	5.49E-04	573	6.88E-04	640	7.22E-04	707	1.74E-04	774	2.21E-05
440	1.70E-04	507	5.54E-04	574	6.90E-04	641	7.09E-04	708	1.70E-04	775	2.11E-05
441	1.90E-04	508	5.59E-04	575	6.92E-04	642	7.03E-04	709	1.65E-04	776	2.06E-05
442	2.13E-04	509	5.59E-04	576	6.97E-04	643	6.94E-04	710	1.61E-04	777	2.00E-05
443	2.41E-04	510	5.64E-04	577	6.99E-04	644	6.86E-04	711	1.56E-04	778	1.95E-05
444	2.71E-04	511	5.64E-04	578	7.03E-04	645	6.78E-04	712	1.52E-04	779	1.94E-05
445	3.07E-04	512	5.66E-04	579	7.07E-04	646	6.71E-04	713	1.47E-04	780	1.95E-05
446	3.48E-04	513	5.67E-04	580	7.09E-04	647	6.60E-04	714	1.43E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24B @20W4000K	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

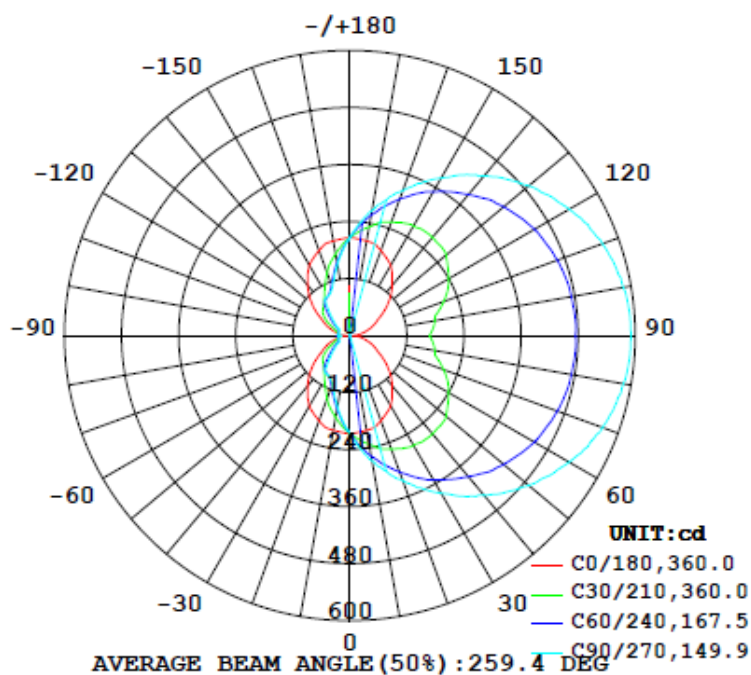
Test Result

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°)	
2367	87.2	154.0	180.0	97.0	120.1	26.5%	B0-U4-G2

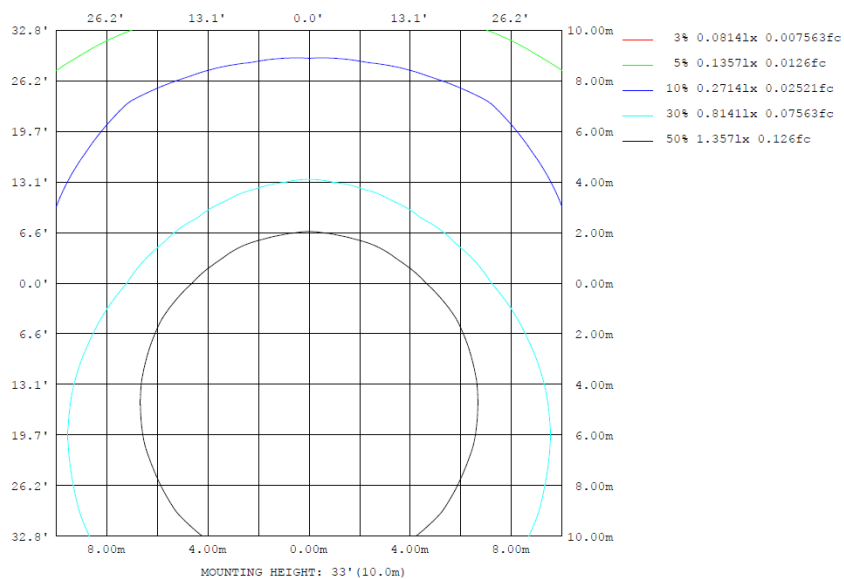
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

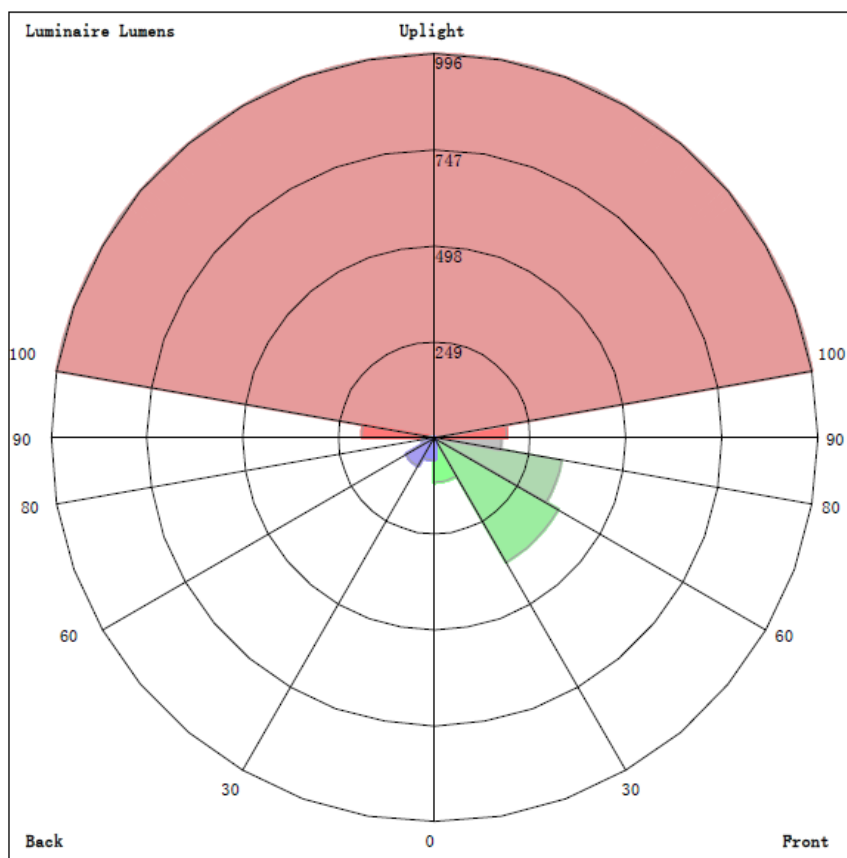
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	202.4	247.3	267.1	247.3	202.4	164.4	152.7	164.4	0- 10	19.67	19.67	0.83,0.83
20	190.8	284.7	324.7	284.7	190.8	125.7	108.5	125.7	10- 20	58.07	77.74	3.28,3.28
30	171.7	311.8	382.6	311.8	171.7	96.31	94.99	96.31	20- 30	94.39	172.1	7.27,7.27
40	138.6	334.3	439.4	334.3	138.6	86.48	70.34	86.48	30- 40	128.7	300.8	12.7,12.7
50	104.2	347.9	490.7	347.9	104.2	63.51	42.77	63.51	40- 50	155.3	456.1	19.3,19.3
60	68.50	353.7	532.2	353.7	68.50	39.02	25.45	39.02	50- 60	172.0	628.0	26.5,26.5
70	45.54	349.5	565.0	349.5	45.54	26.36	24.60	26.36	60- 70	181.5	809.5	34.2,34.2
80	24.41	341.5	583.6	341.5	24.41	26.46	24.69	26.46	70- 80	186.0	995.6	42.1,42.1
90	5.113	334.7	591.2	334.7	5.113	27.26	25.82	27.26	80- 90	187.8	1183	50,50
100	24.41	341.5	583.6	341.5	24.41	26.46	24.69	26.46	90-100	187.8	1371	57.9,57.9
110	45.54	349.5	565.0	349.5	45.54	26.36	24.60	26.36	100-110	186.0	1557	65.8,65.8
120	68.50	353.7	532.2	353.7	68.50	39.02	25.45	39.02	110-120	181.5	1739	73.5,73.5
130	104.2	347.9	490.7	347.9	104.2	63.51	42.77	63.51	120-130	172.0	1911	80.7,80.7
140	138.6	334.3	439.4	334.3	138.6	86.48	70.34	86.48	130-140	155.3	2066	87.3,87.3
150	171.7	311.8	382.6	311.8	171.7	96.31	94.99	96.31	140-150	128.7	2195	92.7,92.7
160	190.8	284.7	324.7	284.7	190.8	125.7	108.5	125.7	150-160	94.39	2289	96.7,96.7
170	202.4	247.3	267.1	247.3	202.4	164.4	152.7	164.4	160-170	58.07	2347	99.2,99.2
180	206.5	206.5	206.5	206.5	206.5	206.5	206.5	206.5	170-180	19.67	2367	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	19.67	0-10	19.67	0.84%
10-20	58.07	0-20	77.74	3.31%
20-30	94.39	0-30	172.13	7.33%
30-40	128.69	0-40	300.82	12.82%
40-50	155.26	0-50	456.08	19.43%
50-60	171.95	0-60	628.03	26.76%
60-70	181.49	0-70	809.52	34.49%
70-80	186.03	0-80	995.55	42.42%
80-90	187.77	0-90	1183.32	50.42%
90-100	187.77	0-100	1371.09	58.42%
100-110	186.03	0-110	1557.12	66.35%
110-120	181.49	0-120	1738.61	74.08%
120-130	171.95	0-130	1910.56	81.41%
130-140	155.26	0-140	2065.82	88.02%
140-150	128.69	0-150	2194.51	93.50%
150-160	94.39	0-160	2288.90	97.53%
160-170	58.07	0-170	2346.97	100.00%
170-180	19.67	0-180	2366.64	100.84%

4.2 Goniophotometer Test

LCS/BUG

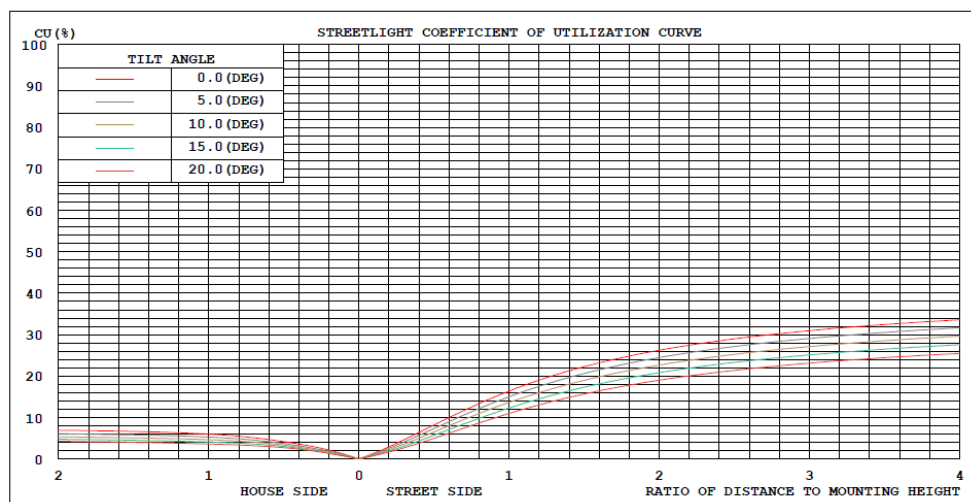


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

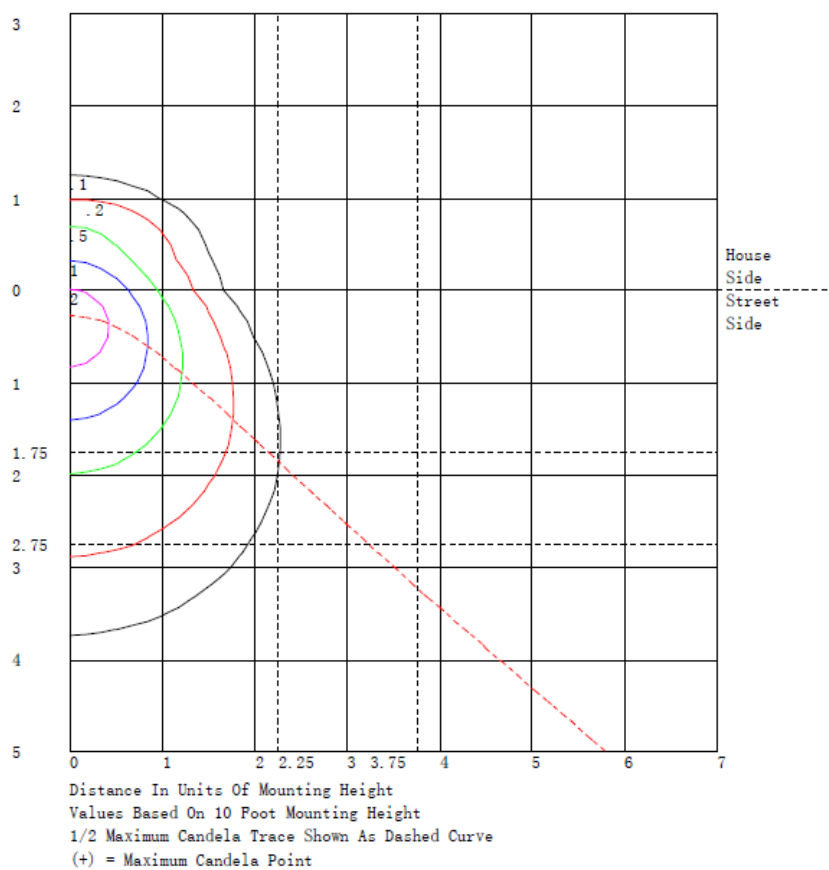
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	114.7	N.A.	4.8
FM - Front-Medium (30-60)	371.7	N.A.	15.7
FH - Front-High (60-80)	335.4	N.A.	14.2
FVH - Front-Very High (80-90)	174.7	N.A.	7.4
BL - Back-Low (0-30)	57.5	N.A.	2.4
BM - Back-Medium (30-60)	84.2	N.A.	3.6
BH - Back-High (60-80)	32.1	N.A.	1.4
BVH - Back-Very High (80-90)	13.1	N.A.	0.6
UL - Uplight-Low (90-100)	187.8	N.A.	7.9
UH - Uplight-High (100-180)	995.6	N.A.	42.1
Total	2366.8	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	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206
5	204	212	220	226	232	235	237	235	232	226	220	212	204	198	191	186	182	180	180
10	202	218	232	247	257	264	267	264	257	247	232	218	202	187	175	164	157	153	153
15	200	223	247	265	282	292	295	292	282	265	247	223	200	178	159	144	133	128	127
20	191	222	254	285	306	319	325	319	306	285	254	222	191	163	141	126	114	109	108
25	181	222	262	299	329	348	354	348	329	299	262	222	181	148	123	108	101	98.2	98.3
30	172	220	267	312	350	373	383	373	350	312	267	220	172	133	107	96.3	94.7	94.3	95.0
35	155	212	270	323	370	400	413	400	370	323	270	212	155	115	95.0	90.2	91.6	91.3	90.3
40	139	202	270	334	388	425	439	425	388	334	270	202	139	99.8	86.2	86.5	82.3	73.6	70.3
45	122	194	268	342	407	451	466	451	407	342	268	194	122	85.6	80.2	78.8	65.3	57.5	54.4
50	104	176	264	348	422	472	491	472	422	348	264	176	104	75.3	74.9	63.5	51.0	44.8	42.8
55	86.4	155	251	353	436	491	513	491	436	353	251	155	86.4	66.4	64.6	49.1	39.9	35.3	34.0
60	68.5	133	240	354	448	510	532	510	448	354	240	133	68.5	58.5	52.0	39.0	31.5	27.1	25.5
65	57.0	117	227	354	456	526	552	526	456	354	227	117	57.0	49.4	39.6	30.5	26.1	25.0	24.7
70	45.5	101	210	349	464	538	565	538	464	349	210	101	45.5	39.4	32.0	26.4	25.9	25.0	24.6
75	34.1	82.2	192	346	470	549	576	549	470	346	192	82.2	34.1	29.0	26.0	26.4	25.9	25.3	24.5
80	24.4	76.7	181	341	473	556	584	556	473	341	181	76.7	24.4	26.2	24.3	26.5	25.5	24.6	24.7
85	14.8	72.3	175	340	475	558	589	558	475	340	175	72.3	14.8	24.6	25.0	26.9	26.0	22.2	21.7
90	5.11	67.4	167	335	474	561	591	561	474	335	167	67.4	5.11	23.2	25.7	27.3	27.5	21.8	25.8
95	14.8	72.3	175	340	475	558	589	558	475	340	175	72.3	14.8	24.6	25.0	26.9	26.0	22.2	21.7
100	24.4	76.7	181	341	473	556	584	556	473	341	181	76.7	24.4	26.2	24.3	26.5	25.5	24.6	24.7
105	34.1	82.2	192	346	470	549	576	549	470	346	192	82.2	34.1	29.0	26.0	26.4	25.9	25.3	24.5
110	45.5	101	210	349	464	538	565	538	464	349	210	101	45.5	39.4	32.0	26.4	25.9	25.0	24.6
115	57.0	117	227	354	456	526	552	526	456	354	227	117	57.0	49.4	39.6	30.5	26.1	25.0	24.7
120	68.5	133	240	354	448	510	532	510	448	354	240	133	68.5	58.5	52.0	39.0	31.5	27.1	25.5
125	86.4	155	251	353	436	491	513	491	436	353	251	155	86.4	66.4	64.6	49.1	39.9	35.3	34.0
130	104	176	264	348	422	472	491	472	422	348	264	176	104	75.3	74.9	63.5	51.0	44.8	42.8
135	122	194	268	342	407	451	466	451	407	342	268	194	122	85.6	80.2	78.8	65.3	57.5	54.4
140	139	202	270	334	388	425	439	425	388	334	270	202	139	99.8	86.2	86.5	82.3	73.6	70.3
145	155	212	270	323	370	400	413	400	370	323	270	212	155	115	95.0	90.2	91.6	91.3	90.3
150	172	220	267	312	350	373	383	373	350	312	267	220	172	133	107	96.3	94.7	94.3	95.0
155	181	222	262	299	329	348	354	348	329	299	262	222	181	148	123	108	101	98.2	98.3
160	191	222	254	285	306	319	325	319	306	285	254	222	191	163	141	126	114	109	108
165	200	223	247	265	282	292	295	292	282	265	247	223	200	178	159	144	133	128	127
170	202	218	232	247	257	264	267	264	257	247	232	218	202	187	175	164	157	153	153
175	204	212	220	226	232	235	237	235	232	226	220	212	204	198	191	186	182	180	180
180	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206

Table--2

UNIT: cd

C (DEG) y	285	300	315	330	345														
0	206	206	206	206	206														
5	180	182	186	191	198														
10	153	157	164	175	187														
15	128	133	144	159	178														
20	109	114	126	141	163														
25	98.2	101	108	123	148														
30	94.3	94.7	96.3	107	133														
35	91.3	91.6	90.2	95.0	115														
40	73.6	82.3	86.5	86.2	99.8														
45	57.5	65.3	78.8	80.2	85.6														
50	44.8	51.0	63.5	74.9	75.3														
55	35.3	39.9	49.1	64.6	66.4														
60	27.1	31.5	39.0	52.0	58.5														
65	25.0	26.1	30.5	39.6	49.4														
70	25.0	25.9	26.4	32.0	39.4														
75	25.3	25.9	26.4	26.0	29.0														
80	24.6	25.5	26.5	24.3	26.2														
85	22.2	26.0	26.9	25.0	24.6														
90	21.8	27.5	27.3	25.7	23.2														
95	22.2	26.0	26.9	25.0	24.6														
100	24.6	25.5	26.5	24.3	26.2														
105	25.3	25.9	26.4	26.0	29.0														
110	25.0	25.9	26.4	32.0	39.4														
115	25.0	26.1	30.5	39.6	49.4														
120	27.1	31.5	39.0	52.0	58.5														
125	35.3	39.9	49.1	64.6	66.4														
130	44.8	51.0	63.5	74.9	75.3														
135	57.5	65.3	78.8	80.2	85.6														
140	73.6	82.3	86.5	86.2	99.8														
145	91.3	91.6	90.2	95.0	115														
150	94.3	94.7	96.3	107	133														
155	98.2	101	108	123	148														
160	109	114	126	141	163														
165	128	133	144	159	178														
170	153	157	164	175	187														
175	180	182	186	191	198														
180	206	206	206	206	206														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24B @20W4000K	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	6.48
277.0	60	0.073	19.6	0.970	13.29

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*****