

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		2411
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	120.6
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		20.0
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.18
				277V	12.65
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.996
				277V	0.972
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		91.2
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		87
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		94
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		26.4%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U5-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		0.167
(Goniophotometer – Section 4.2)			Non-Worst Case		0.074
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		20.0
(Goniophotometer – Section 4.2)			Non-Worst Case		19.8

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-29	V1-24B @20W5000K	-	250728008-S1
2	Goniophotometer Test	2025-07-29	V1-24B @20W5000K	-	250728008-S1
3	THD and PF Test	2025-07-29	V1-24B @20W5000K	-	250728008-S1

Remark (If any):

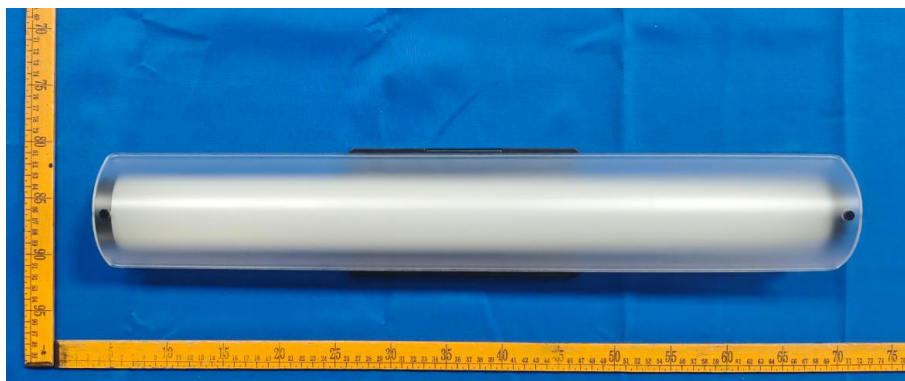
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24B @20W5000K, 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 @20W5000K	Sample ID	250728008-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

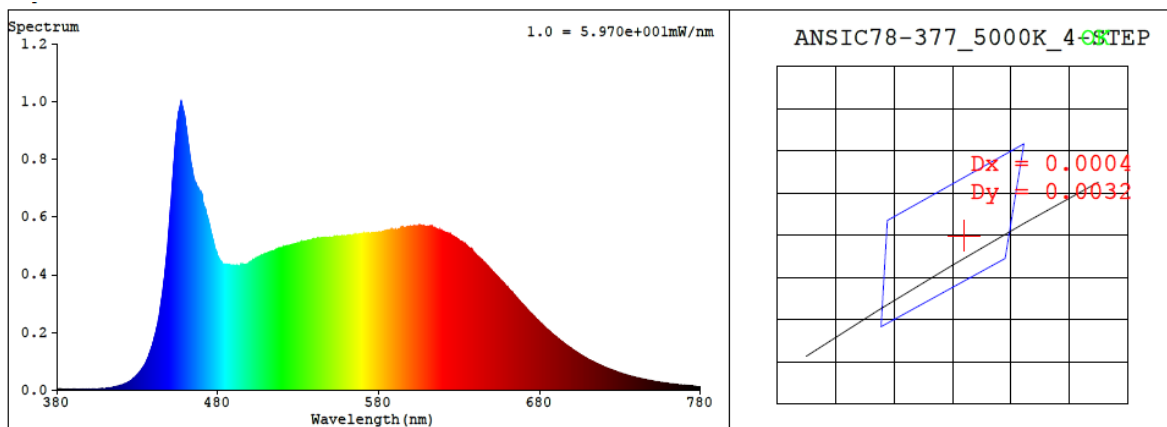
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm 1^{\circ}\text{C}$.</p> <p>The sample measurements 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	0.167	20.0	0.996
277.0	60	0.074	19.8	0.972

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4969	91.2	72	0.0015	1.2	87	94	-5%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3464$ $y = 0.3556$ / $u' = 0.2108$ $v' = 0.4868$ ($duv = 1.46e-03$)

CCT= 4969K Prcp WL: Ld=571.7nm Purity=10.6%

Peak WL: Lp=457nm FWHM: =29.5nm Ratio:R=17.7% G=76.0% B=6.4%

Render Index: Ra = 91.2 AvgR = 89.3 TM30:Rf=89 Rg=96

EEI: 0.11809 A+

R1 =96 R2 =97 R3 =94 R4 =86 R5 =91 R6 =95 R7 =87

R8 =84 R9 =72 R10=96 R11=89 R12=67 R13=99 R14=97 R15=91

4.1 Integrating Sphere Test

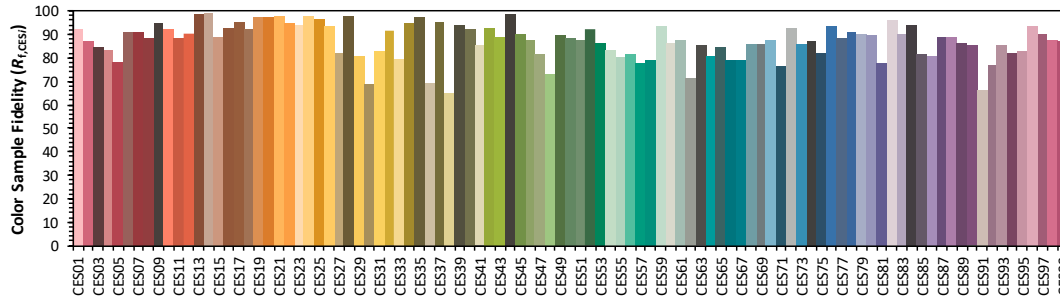
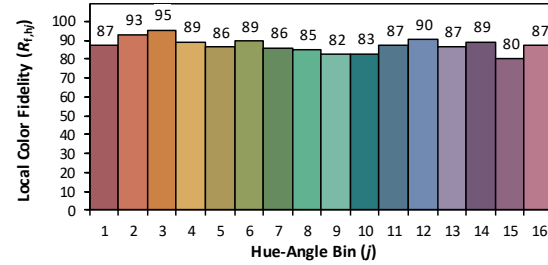
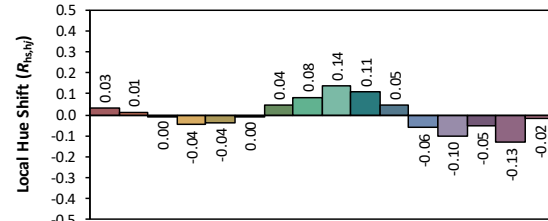
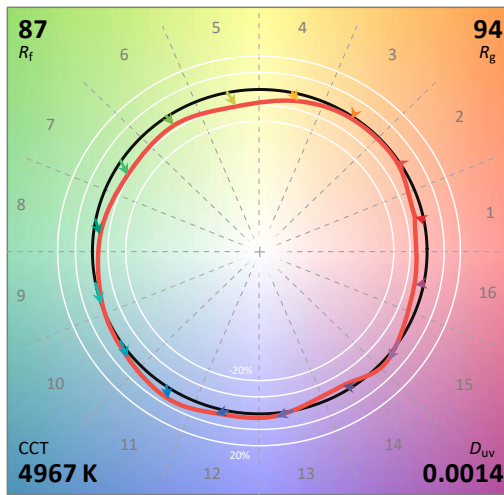
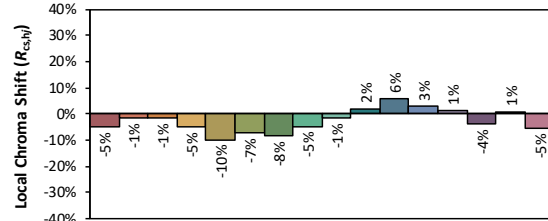
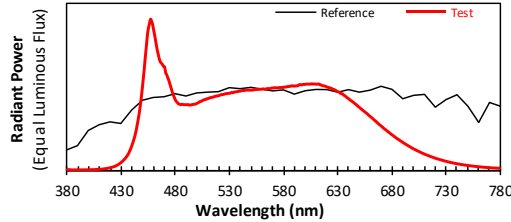
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/22

Model: V1-24B @20W5000K



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

x 0.3463
 y 0.3554
 u' 0.2108
 v' 0.4867

CIE 13.3-1995
(CRI)

R_a 91
 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	3.40E-06	447	3.98E-04	514	4.82E-04	581	5.48E-04	648	4.29E-04	715	9.34E-05
381	3.60E-06	448	4.54E-04	515	4.82E-04	582	5.48E-04	649	4.21E-04	716	9.07E-05
382	4.10E-06	449	5.14E-04	516	4.85E-04	583	5.50E-04	650	4.16E-04	717	8.83E-05
383	2.80E-06	450	5.84E-04	517	4.88E-04	584	5.52E-04	651	4.09E-04	718	8.61E-05
384	2.30E-06	451	6.54E-04	518	4.90E-04	585	5.52E-04	652	4.04E-04	719	8.30E-05
385	1.90E-06	452	7.34E-04	519	4.90E-04	586	5.53E-04	653	3.97E-04	720	8.05E-05
386	2.40E-06	453	8.07E-04	520	4.92E-04	587	5.55E-04	654	3.92E-04	721	7.80E-05
387	2.70E-06	454	8.84E-04	521	4.94E-04	588	5.57E-04	655	3.86E-04	722	7.58E-05
388	2.20E-06	455	9.36E-04	522	4.97E-04	589	5.56E-04	656	3.80E-04	723	7.39E-05
389	2.10E-06	456	9.67E-04	523	4.99E-04	590	5.54E-04	657	3.75E-04	724	7.19E-05
390	2.80E-06	457	9.96E-04	524	4.99E-04	591	5.56E-04	658	3.69E-04	725	6.97E-05
391	2.30E-06	458	9.82E-04	525	5.01E-04	592	5.57E-04	659	3.61E-04	726	6.76E-05
392	2.60E-06	459	9.58E-04	526	5.04E-04	593	5.57E-04	660	3.56E-04	727	6.56E-05
393	2.30E-06	460	9.20E-04	527	5.05E-04	594	5.62E-04	661	3.50E-04	728	6.34E-05
394	2.40E-06	461	8.83E-04	528	5.06E-04	595	5.65E-04	662	3.44E-04	729	6.12E-05
395	2.70E-06	462	8.41E-04	529	5.07E-04	596	5.63E-04	663	3.38E-04	730	5.98E-05
396	2.80E-06	463	8.00E-04	530	5.07E-04	597	5.64E-04	664	3.31E-04	731	5.77E-05
397	2.90E-06	464	7.69E-04	531	5.10E-04	598	5.66E-04	665	3.25E-04	732	5.58E-05
398	2.70E-06	465	7.36E-04	532	5.13E-04	599	5.65E-04	666	3.19E-04	733	5.43E-05
399	3.10E-06	466	7.16E-04	533	5.11E-04	600	5.67E-04	667	3.12E-04	734	5.25E-05
400	3.50E-06	467	7.06E-04	534	5.14E-04	601	5.67E-04	668	3.06E-04	735	5.09E-05
401	2.90E-06	468	6.97E-04	535	5.16E-04	602	5.68E-04	669	2.99E-04	736	4.94E-05
402	3.60E-06	469	6.85E-04	536	5.18E-04	603	5.68E-04	670	2.94E-04	737	4.78E-05
403	3.60E-06	470	6.81E-04	537	5.18E-04	604	5.68E-04	671	2.88E-04	738	4.66E-05
404	3.80E-06	471	6.44E-04	538	5.20E-04	605	5.68E-04	672	2.82E-04	739	4.49E-05
405	3.90E-06	472	6.29E-04	539	5.21E-04	606	5.70E-04	673	2.75E-04	740	4.34E-05
406	4.60E-06	473	6.08E-04	540	5.22E-04	607	5.69E-04	674	2.70E-04	741	4.20E-05
407	5.10E-06	474	5.91E-04	541	5.24E-04	608	5.69E-04	675	2.64E-04	742	4.09E-05
408	5.30E-06	475	5.66E-04	542	5.26E-04	609	5.68E-04	676	2.58E-04	743	3.98E-05
409	5.80E-06	476	5.43E-04	543	5.25E-04	610	5.68E-04	677	2.53E-04	744	3.84E-05
410	6.10E-06	477	5.19E-04	544	5.27E-04	611	5.67E-04	678	2.47E-04	745	3.72E-05
411	7.00E-06	478	4.98E-04	545	5.27E-04	612	5.68E-04	679	2.42E-04	746	3.63E-05
412	7.50E-06	479	4.80E-04	546	5.29E-04	613	5.69E-04	680	2.35E-04	747	3.48E-05
413	8.20E-06	480	4.63E-04	547	5.29E-04	614	5.63E-04	681	2.30E-04	748	3.41E-05
414	9.10E-06	481	4.53E-04	548	5.28E-04	615	5.62E-04	682	2.26E-04	749	3.30E-05
415	1.02E-05	482	4.45E-04	549	5.28E-04	616	5.58E-04	683	2.20E-04	750	3.18E-05
416	1.12E-05	483	4.37E-04	550	5.28E-04	617	5.56E-04	684	2.14E-04	751	3.11E-05
417	1.22E-05	484	4.35E-04	551	5.28E-04	618	5.56E-04	685	2.09E-04	752	2.99E-05
418	1.40E-05	485	4.33E-04	552	5.30E-04	619	5.53E-04	686	2.05E-04	753	2.93E-05
419	1.56E-05	486	4.35E-04	553	5.31E-04	620	5.50E-04	687	2.00E-04	754	2.84E-05
420	1.72E-05	487	4.34E-04	554	5.33E-04	621	5.47E-04	688	1.95E-04	755	2.72E-05
421	1.89E-05	488	4.32E-04	555	5.33E-04	622	5.45E-04	689	1.90E-04	756	2.68E-05
422	2.13E-05	489	4.33E-04	556	5.33E-04	623	5.44E-04	690	1.86E-04	757	2.57E-05
423	2.33E-05	490	4.32E-04	557	5.34E-04	624	5.41E-04	691	1.80E-04	758	2.49E-05
424	2.58E-05	491	4.32E-04	558	5.34E-04	625	5.37E-04	692	1.77E-04	759	2.41E-05
425	2.91E-05	492	4.33E-04	559	5.34E-04	626	5.34E-04	693	1.72E-04	760	2.34E-05
426	3.31E-05	493	4.29E-04	560	5.35E-04	627	5.31E-04	694	1.67E-04	761	2.25E-05
427	3.69E-05	494	4.30E-04	561	5.36E-04	628	5.28E-04	695	1.63E-04	762	2.18E-05
428	4.17E-05	495	4.32E-04	562	5.36E-04	629	5.23E-04	696	1.59E-04	763	2.13E-05
429	4.69E-05	496	4.34E-04	563	5.34E-04	630	5.19E-04	697	1.55E-04	764	2.05E-05
430	5.26E-05	497	4.34E-04	564	5.36E-04	631	5.16E-04	698	1.51E-04	765	2.01E-05
431	5.92E-05	498	4.36E-04	565	5.38E-04	632	5.13E-04	699	1.46E-04	766	1.91E-05
432	6.60E-05	499	4.37E-04	566	5.39E-04	633	5.06E-04	700	1.43E-04	767	1.89E-05
433	7.40E-05	500	4.42E-04	567	5.38E-04	634	5.06E-04	701	1.39E-04	768	1.82E-05
434	8.18E-05	501	4.44E-04	568	5.40E-04	635	5.00E-04	702	1.35E-04	769	1.74E-05
435	9.15E-05	502	4.50E-04	569	5.42E-04	636	4.94E-04	703	1.31E-04	770	1.68E-05
436	1.02E-04	503	4.54E-04	570	5.42E-04	637	4.90E-04	704	1.28E-04	771	1.65E-05
437	1.15E-04	504	4.55E-04	571	5.44E-04	638	4.83E-04	705	1.25E-04	772	1.59E-05
438	1.32E-04	505	4.60E-04	572	5.44E-04	639	4.78E-04	706	1.21E-04	773	1.55E-05
439	1.48E-04	506	4.63E-04	573	5.44E-04	640	4.73E-04	707	1.17E-04	774	1.50E-05
440	1.69E-04	507	4.66E-04	574	5.44E-04	641	4.67E-04	708	1.14E-04	775	1.48E-05
441	1.90E-04	508	4.67E-04	575	5.44E-04	642	4.61E-04	709	1.11E-04	776	1.42E-05
442	2.13E-04	509	4.71E-04	576	5.45E-04	643	4.57E-04	710	1.08E-04	777	1.37E-05
443	2.41E-04	510	4.73E-04	577	5.46E-04	644	4.51E-04	711	1.05E-04	778	1.32E-05
444	2.74E-04	511	4.75E-04	578	5.46E-04	645	4.45E-04	712	1.02E-04	779	1.32E-05
445	3.12E-04	512	4.78E-04	579	5.46E-04	646	4.40E-04	713	9.91E-05	780	1.32E-05
446	3.53E-04	513	4.79E-04	580	5.47E-04	647	4.33E-04	714	9.66E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24B @20W5000K	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	0.167	20.0	0.996
NON-WORST CASE	277.0	60	0.074	19.8	0.972

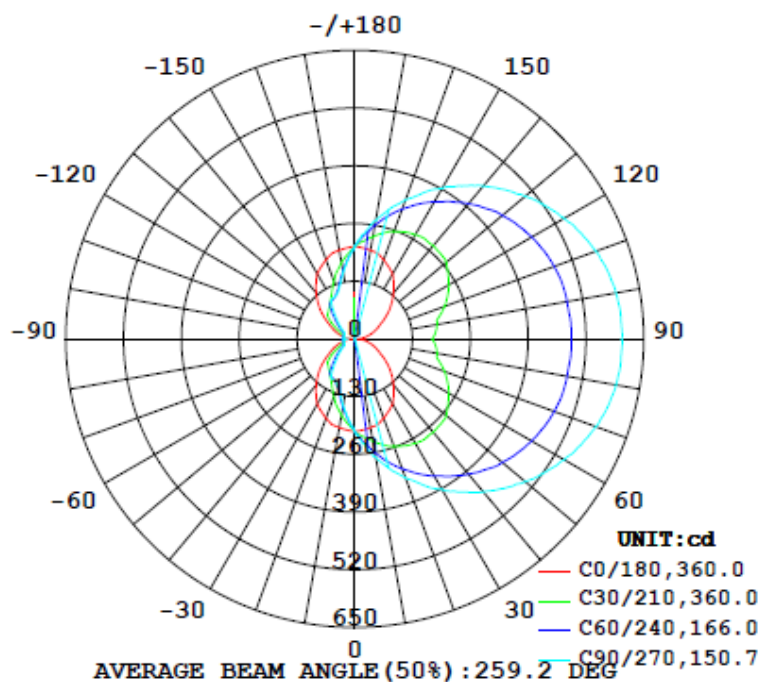
Test Result

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°)	
2411	85.7	155.0	180.0	98.0	120.6	26.4%	B0-U5-G2

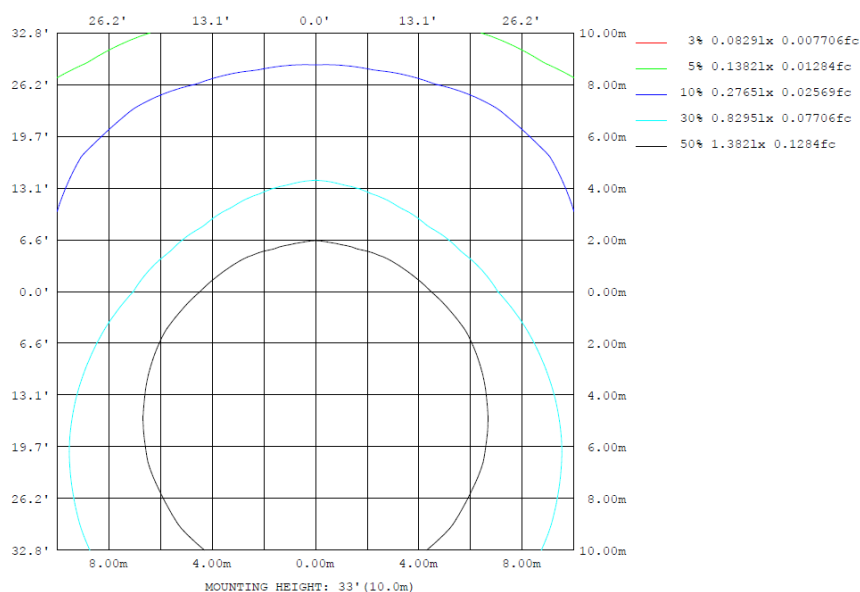
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

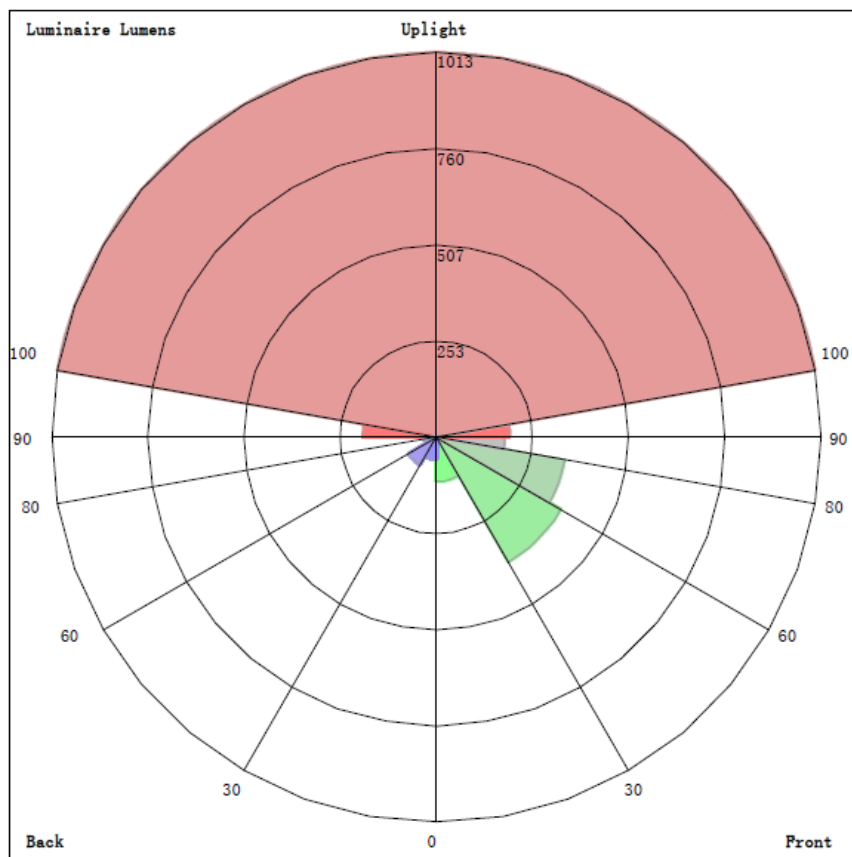
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total	%lum, lamp
10	202.9	248.1	270.0	248.1	202.9	162.9	151.6	162.9	0- 10	19.75	19.75	0.82,0.82
20	189.8	290.3	333.3	290.3	189.8	124.3	112.1	124.3	10- 20	58.42	78.17	3.24,3.24
30	169.8	317.8	391.1	317.8	169.8	100.9	103.6	100.9	20- 30	95.83	174.0	7.22,7.22
40	135.6	342.9	449.5	342.9	135.6	93.29	69.22	93.29	30- 40	131.1	305.1	12.7,12.7
50	101.1	357.7	500.1	357.7	101.1	60.76	42.16	60.76	40- 50	157.6	462.7	19.2,19.2
60	66.24	362.8	544.0	362.8	66.24	37.29	26.58	37.29	50- 60	174.8	637.5	26.4,26.4
70	44.08	361.3	577.2	361.3	44.08	27.15	25.72	27.15	60- 70	185.2	822.7	34.1,34.1
80	23.39	352.5	596.4	352.5	23.39	26.83	25.53	26.83	70- 80	190.5	1013	42,42
90	4.172	346.0	600.9	346.0	4.172	28.43	26.43	28.43	80- 90	192.6	1206	50,50
100	23.39	352.5	596.4	352.5	23.39	26.83	25.53	26.83	90-100	192.6	1398	58,58
110	44.08	361.3	577.2	361.3	44.08	27.15	25.72	27.15	100-110	190.5	1589	65.9,65.9
120	66.24	362.8	544.0	362.8	66.24	37.29	26.58	37.29	110-120	185.2	1774	73.6,73.6
130	101.1	357.7	500.1	357.7	101.1	60.76	42.16	60.76	120-130	174.8	1949	80.8,80.8
140	135.6	342.9	449.5	342.9	135.6	93.29	69.22	93.29	130-140	157.6	2106	87.3,87.3
150	169.8	317.8	391.1	317.8	169.8	100.9	103.6	100.9	140-150	131.1	2237	92.8,92.8
160	189.8	290.3	333.3	290.3	189.8	124.3	112.1	124.3	150-160	95.83	2333	96.8,96.8
170	202.9	248.1	270.0	248.1	202.9	162.9	151.6	162.9	160-170	58.42	2392	99.2,99.2
180	208.9	208.9	208.9	208.9	208.9	208.9	208.9	208.9	170-180	19.75	2411	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	19.75	0-10	19.75	0.83%
10-20	58.42	0-20	78.17	3.27%
20-30	95.83	0-30	174.00	7.28%
30-40	131.08	0-40	305.08	12.76%
40-50	157.61	0-50	462.69	19.35%
50-60	174.79	0-60	637.48	26.65%
60-70	185.20	0-70	822.68	34.40%
70-80	190.46	0-80	1013.14	42.36%
80-90	192.60	0-90	1205.74	50.41%
90-100	192.60	0-100	1398.34	58.47%
100-110	190.46	0-110	1588.80	66.43%
110-120	185.20	0-120	1774.00	74.17%
120-130	174.79	0-130	1948.79	81.48%
130-140	157.61	0-140	2106.40	88.07%
140-150	131.08	0-150	2237.48	93.55%
150-160	95.83	0-160	2333.31	97.56%
160-170	58.42	0-170	2391.73	100.00%
170-180	19.75	0-180	2411.48	100.83%

4.2 Goniophotometer Test

LCS/BUG

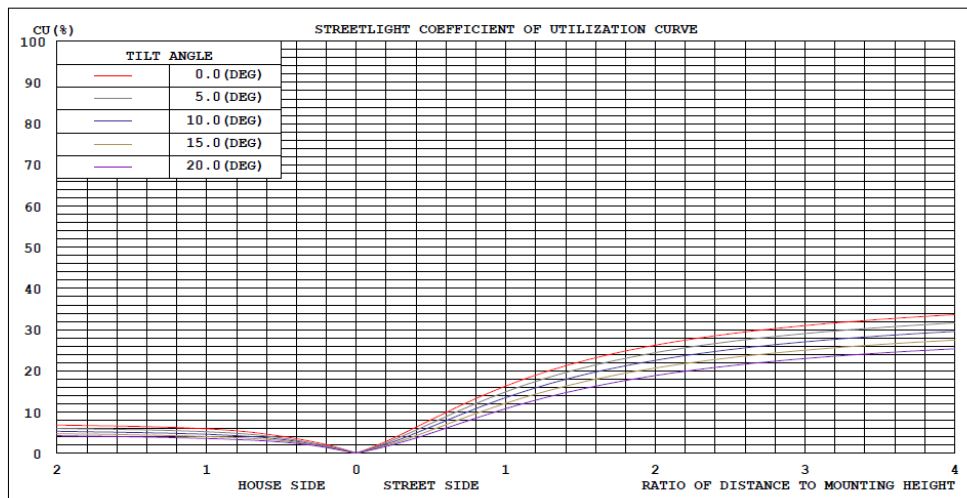


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

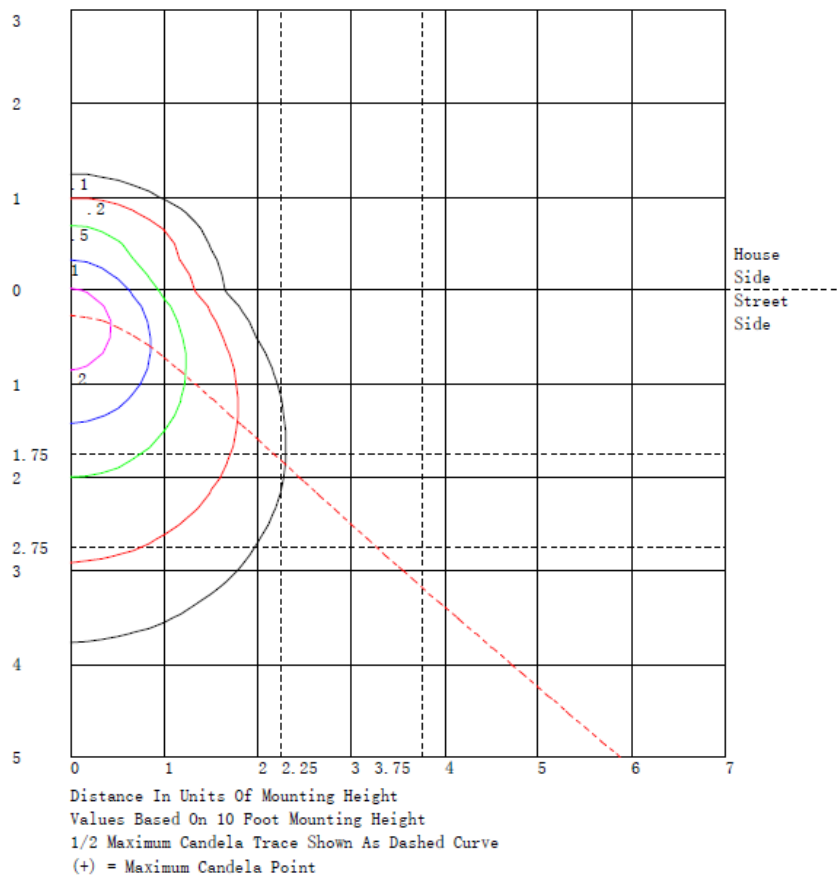
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	116.2	N.A.	4.8
FM - Front-Medium (30-60)	378.8	N.A.	15.7
FH - Front-High (60-80)	343.4	N.A.	14.2
FVH - Front-Very High (80-90)	179.3	N.A.	7.4
BL - Back-Low (0-30)	57.8	N.A.	2.4
BM - Back-Medium (30-60)	84.7	N.A.	3.5
BH - Back-High (60-80)	32.2	N.A.	1.3
BVH - Back-Very High (80-90)	13.3	N.A.	0.6
UL - Uplight-Low (90-100)	192.6	N.A.	8.0
UH - Uplight-High (100-180)	1013.1	N.A.	42.0
Total	2411.4	N.A.	100.0
BUG Rating	B0-U5-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	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209
5	206	214	221	228	234	236	237	236	234	228	221	214	206	198	191	186	182	179	179
10	203	218	233	248	261	268	270	268	261	248	233	218	203	187	174	163	155	152	152
15	200	223	247	269	286	298	303	298	286	269	247	223	200	178	157	142	132	128	128
20	190	223	258	290	311	326	333	326	311	290	258	223	190	162	138	124	115	112	112
25	180	222	266	304	335	353	363	353	335	304	266	222	180	145	121	110	105	105	106
30	170	221	271	318	357	382	391	382	357	318	271	221	170	130	108	101	101	102	104
35	153	213	275	330	378	409	421	409	378	330	275	213	153	114	97.7	96.9	97.2	90.9	88.8
40	136	203	274	343	398	435	449	435	398	343	274	203	136	99.2	90.5	93.3	80.4	71.1	69.2
45	118	192	272	349	416	460	476	460	416	349	272	192	118	86.9	85.1	77.9	62.7	55.9	54.0
50	101	175	269	358	433	483	500	483	433	358	269	175	101	76.9	79.3	60.8	49.6	43.6	42.2
55	83.7	155	256	362	447	503	523	503	447	362	256	155	83.7	68.4	65.1	47.5	39.0	34.5	33.5
60	66.2	133	244	363	459	523	544	523	459	363	244	133	66.2	60.5	49.7	37.3	30.4	27.3	26.6
65	55.2	117	230	363	470	539	562	539	470	363	230	117	55.2	50.2	37.6	30.1	27.2	26.3	25.7
70	44.1	100	215	361	477	552	577	552	477	361	215	100	44.1	38.5	31.3	27.1	27.1	26.3	25.7
75	33.0	82.4	197	357	483	563	589	563	483	357	197	82.4	33.0	26.4	26.3	27.0	27.0	26.2	25.7
80	23.4	78.3	188	353	485	570	596	570	485	353	188	78.3	23.4	24.2	25.0	26.8	26.1	25.8	25.5
85	13.8	75.2	183	351	487	571	600	571	487	351	183	75.2	13.8	23.3	25.7	27.6	26.7	23.3	23.6
90	4.17	71.4	174	346	487	573	601	573	487	346	174	71.4	4.17	22.4	26.3	28.4	29.1	23.9	26.4
95	13.8	75.2	183	351	487	571	600	571	487	351	183	75.2	13.8	23.3	25.7	27.6	26.7	23.3	23.6
100	23.4	78.3	188	353	485	570	596	570	485	353	188	78.3	23.4	24.2	25.0	26.8	26.1	25.8	25.5
105	33.0	82.4	197	357	483	563	589	563	483	357	197	82.4	33.0	26.4	26.3	27.0	27.0	26.2	25.7
110	44.1	100	215	361	477	552	577	552	477	361	215	100	44.1	38.5	31.3	27.1	27.1	26.3	25.7
115	55.2	117	230	363	470	539	562	539	470	363	230	117	55.2	50.2	37.6	30.1	27.2	26.3	25.7
120	66.2	133	244	363	459	523	544	523	459	363	244	133	66.2	60.5	49.7	37.3	30.4	27.3	26.6
125	83.7	155	256	362	447	503	523	503	447	362	256	155	83.7	68.4	65.1	47.5	39.0	34.5	33.5
130	101	175	269	358	433	483	500	483	433	358	269	175	101	76.9	79.3	60.8	49.6	43.6	42.2
135	118	192	272	349	416	460	476	460	416	349	272	192	118	86.9	85.1	77.9	62.7	55.9	54.0
140	136	203	274	343	398	435	449	435	398	343	274	203	136	99.2	90.5	93.3	80.4	71.1	69.2
145	153	213	275	330	378	409	421	409	378	330	275	213	153	114	97.7	96.9	97.2	90.9	88.8
150	170	221	271	318	357	382	391	382	357	318	271	221	170	130	108	101	101	102	104
155	180	222	266	304	335	353	363	353	335	304	266	222	180	145	121	110	105	105	106
160	190	223	258	290	311	326	333	326	311	290	258	223	190	162	138	124	115	112	112
165	200	223	247	269	286	298	303	298	286	269	247	223	200	178	157	142	132	128	128
170	203	218	233	248	261	268	270	268	261	248	233	218	203	187	174	163	155	152	152
175	206	214	221	228	234	236	237	236	234	228	221	214	206	198	191	186	182	179	179
180	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	209	209	209	209	209														
5	179	182	186	191	198														
10	152	155	163	174	187														
15	128	132	142	157	178														
20	112	115	124	138	162														
25	105	105	110	121	145														
30	102	101	101	108	130														
35	90.9	97.2	96.9	97.7	114														
40	71.1	80.4	93.3	90.5	99.2														
45	55.9	62.7	77.9	85.1	86.9														
50	43.6	49.6	60.8	79.3	76.9														
55	34.5	39.0	47.5	65.1	68.4														
60	27.3	30.4	37.3	49.7	60.5														
65	26.3	27.2	30.1	37.6	50.2														
70	26.3	27.1	27.1	31.3	38.5														
75	26.2	27.0	27.0	26.3	26.4														
80	25.8	26.1	26.8	25.0	24.2														
85	23.3	26.7	27.6	25.7	23.3														
90	23.9	29.1	28.4	26.3	22.4														
95	23.3	26.7	27.6	25.7	23.3														
100	25.8	26.1	26.8	25.0	24.2														
105	26.2	27.0	27.0	26.3	26.4														
110	26.3	27.1	27.1	31.3	38.5														
115	26.3	27.2	30.1	37.6	50.2														
120	27.3	30.4	37.3	49.7	60.5														
125	34.5	39.0	47.5	65.1	68.4														
130	43.6	49.6	60.8	79.3	76.9														
135	55.9	62.7	77.9	85.1	86.9														
140	71.1	80.4	93.3	90.5	99.2														
145	90.9	97.2	96.9	97.7	114														
150	102	101	101	108	130														
155	105	105	110	121	145														
160	112	115	124	138	162														
165	128	132	142	157	178														
170	152	155	163	174	187														
175	179	182	186	191	198														
180	209	209	209	209	209														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24B @20W5000K	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	0.167	20.0	0.996	6.18
277.0	60	0.074	19.8	0.972	12.65

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*****