

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: 2025-08-21

Review by:

Vincent Yuan

Technical Lead: Vincent Yuan

Issue Date: 2025-08-21

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		1666
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	106.1
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.93
				277V	15.02
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.994
				277V	0.955
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3045±175	3004
			4 steps	3045±100	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.8
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		69
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		97
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-4%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.6%
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		0.132
(Goniophotometer – Section 4.2)			Non-Worst Case		0.059
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.7
(Goniophotometer – Section 4.2)			Non-Worst Case		15.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-28	V1-18B @16W3000K	-	250728006-S1
2	Goniophotometer Test	2025-07-28	V1-18B @16W3000K	-	250728006-S1
3	THD and PF Test	2025-07-28	V1-18B @16W3000K	-	250728006-S1

Remark (If any):

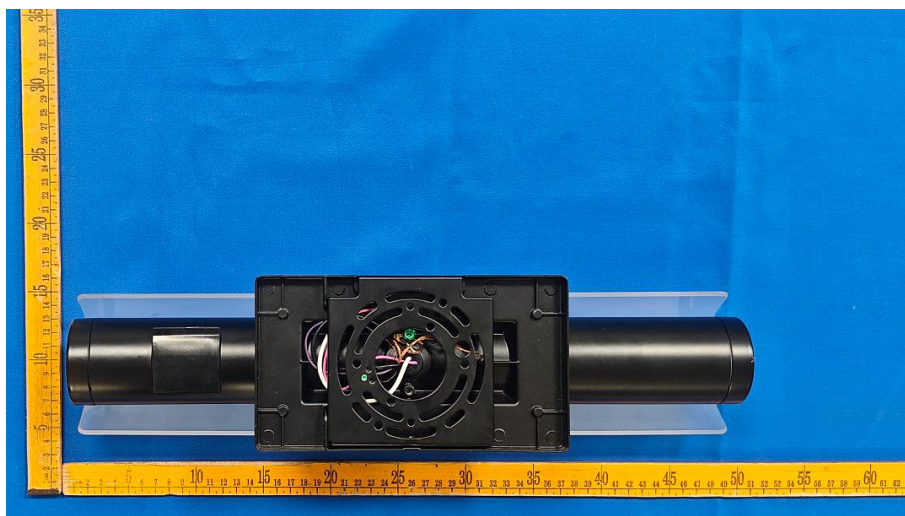
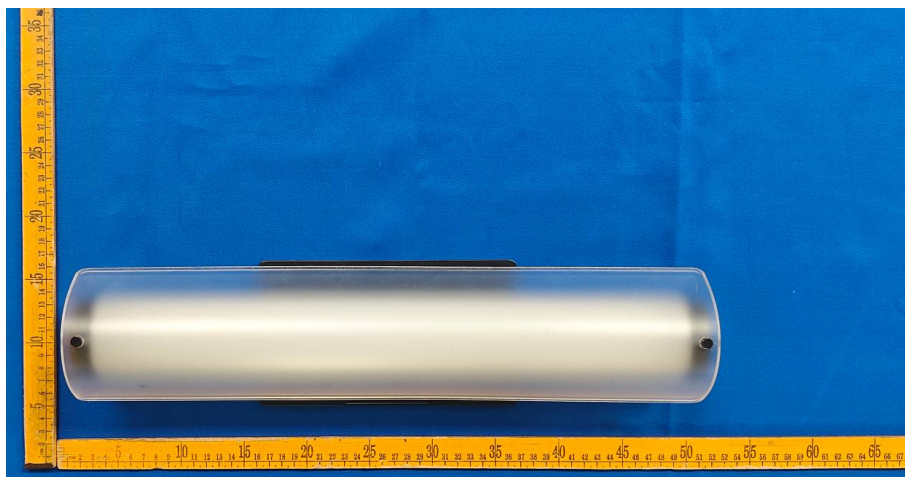
1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
3. This report must not be used by the client to claim product certification, approval, or endorsement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

3.0 Product Description

Luminaire Description: Model No. V1-18B @16W3000K, 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.	V1-18B @16W3000K	Sample ID	250728006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

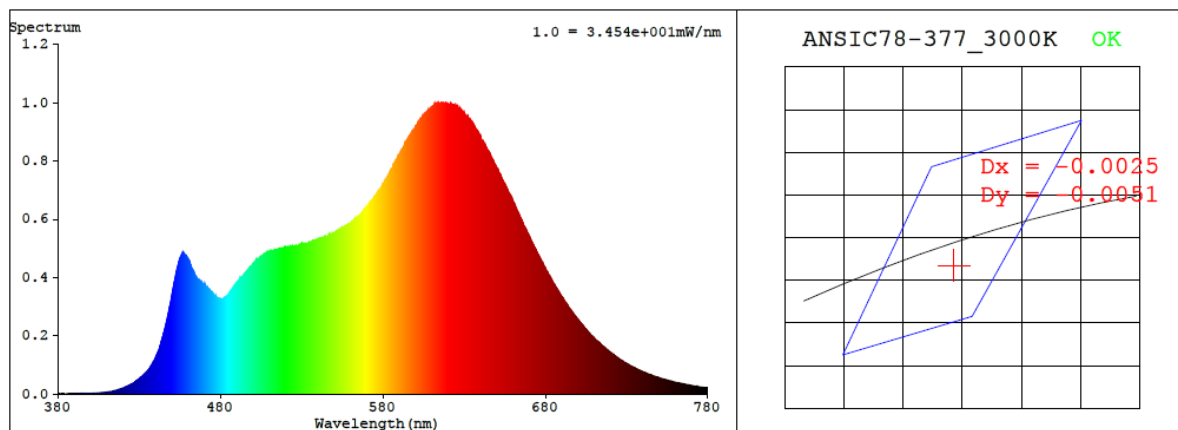
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.132	15.7	0.994
277.0	60	0.059	15.6	0.955

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3004	92.8	69	-0.0017	2.4	90	97	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4342$ $y = 0.3989$ / $u' = 0.2510$ $v' = 0.5189$ ($duv = -1.72e-03$)

CCT= 3004K Prcp WL: $L_d = 583.4\text{nm}$ Purity=50.0%

Peak WL: $L_p = 616\text{nm}$ FWHM: $=155.4\text{nm}$ Ratio: R=25.3% G=70.9% B=3.8%

Render Index: $R_a = 92.8$ AvgR = 91.3 TM30: $R_f = 91$ $R_g = 98$

EEL: 0.13735 A+

R1 =98 R2 =96 R3 =92 R4 =96 R5 =97 R6 =90 R7 =89

R8 =84 R9 =69 R10=91 R11=96 R12=83 R13=97 R14=96 R15=94

4.1 Integrating Sphere Test

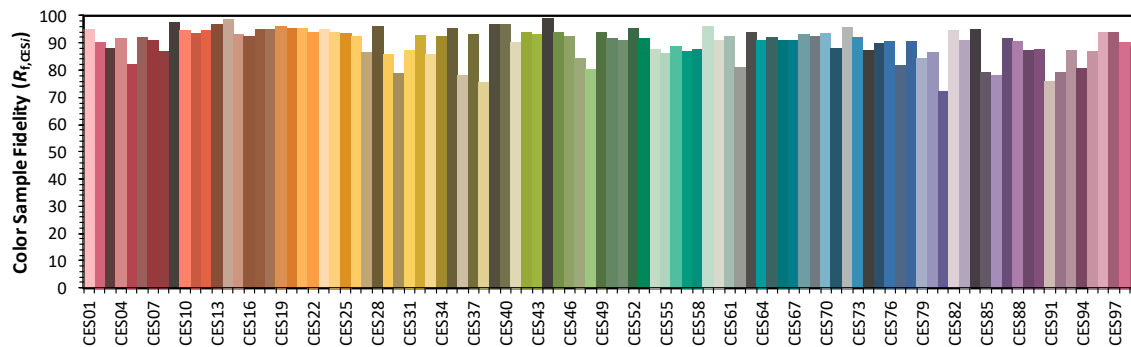
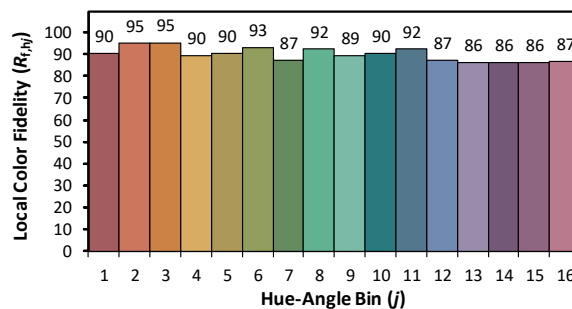
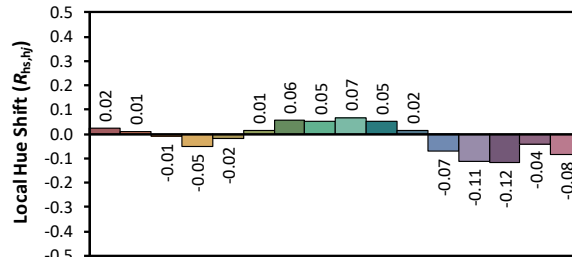
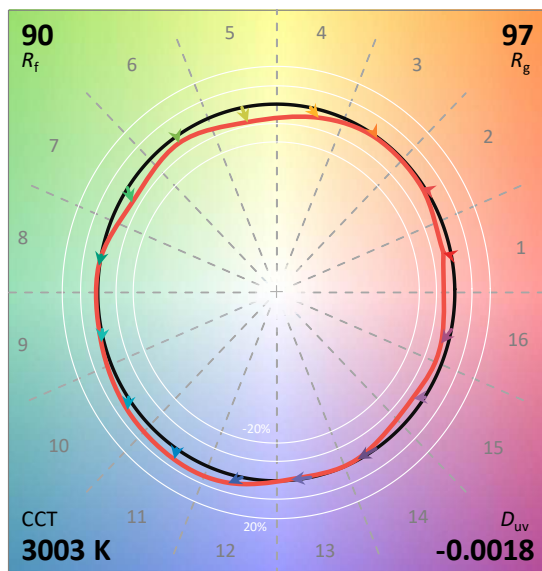
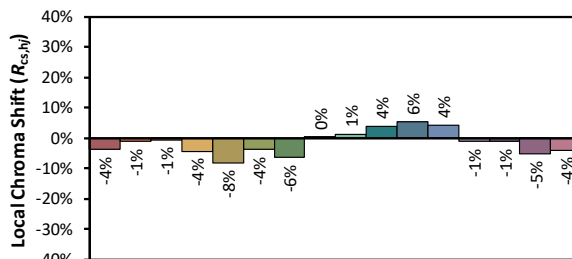
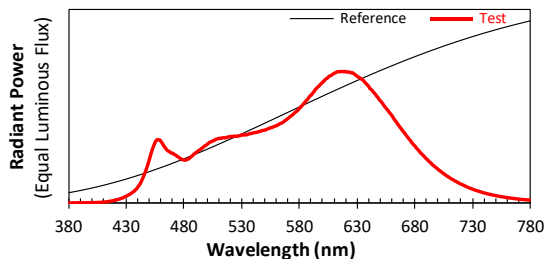
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/21

Model: V1-18B @16W3000K



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

x 0.4342
 y 0.3988
 u' 0.2511
 v' 0.5189

CIE 13.3-1995
(CRI)

R_a 93
 R_g 69

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	0.00E+00	447	2.56E-04	514	4.96E-04	581	7.29E-04	648	8.00E-04	715	1.66E-04
381	6.00E-07	448	2.81E-04	515	4.95E-04	582	7.38E-04	649	7.86E-04	716	1.62E-04
382	1.00E-07	449	3.10E-04	516	4.95E-04	583	7.49E-04	650	7.76E-04	717	1.57E-04
383	1.30E-06	450	3.40E-04	517	4.99E-04	584	7.58E-04	651	7.67E-04	718	1.52E-04
384	1.00E-06	451	3.70E-04	518	5.01E-04	585	7.69E-04	652	7.55E-04	719	1.47E-04
385	7.00E-07	452	3.98E-04	519	5.03E-04	586	7.79E-04	653	7.43E-04	720	1.43E-04
386	1.10E-06	453	4.23E-04	520	5.05E-04	587	7.89E-04	654	7.30E-04	721	1.38E-04
387	1.30E-06	454	4.46E-04	521	5.05E-04	588	8.01E-04	655	7.19E-04	722	1.36E-04
388	1.40E-06	455	4.66E-04	522	5.04E-04	589	8.12E-04	656	7.09E-04	723	1.31E-04
389	1.00E-06	456	4.77E-04	523	5.07E-04	590	8.18E-04	657	6.97E-04	724	1.27E-04
390	1.20E-06	457	4.81E-04	524	5.08E-04	591	8.31E-04	658	6.86E-04	725	1.22E-04
391	1.60E-06	458	4.79E-04	525	5.07E-04	592	8.41E-04	659	6.75E-04	726	1.19E-04
392	1.10E-06	459	4.77E-04	526	5.07E-04	593	8.52E-04	660	6.65E-04	727	1.15E-04
393	1.60E-06	460	4.64E-04	527	5.10E-04	594	8.65E-04	661	6.52E-04	728	1.12E-04
394	1.50E-06	461	4.53E-04	528	5.10E-04	595	8.73E-04	662	6.36E-04	729	1.08E-04
395	1.80E-06	462	4.36E-04	529	5.13E-04	596	8.83E-04	663	6.25E-04	730	1.05E-04
396	2.00E-06	463	4.25E-04	530	5.18E-04	597	8.89E-04	664	6.14E-04	731	1.02E-04
397	1.80E-06	464	4.13E-04	531	5.16E-04	598	9.01E-04	665	6.00E-04	732	9.84E-05
398	2.10E-06	465	4.02E-04	532	5.17E-04	599	9.08E-04	666	5.89E-04	733	9.53E-05
399	1.90E-06	466	3.94E-04	533	5.18E-04	600	9.17E-04	667	5.76E-04	734	9.21E-05
400	2.20E-06	467	3.91E-04	534	5.18E-04	601	9.24E-04	668	5.66E-04	735	9.03E-05
401	2.30E-06	468	3.83E-04	535	5.22E-04	602	9.36E-04	669	5.52E-04	736	8.67E-05
402	3.10E-06	469	3.79E-04	536	5.23E-04	603	9.43E-04	670	5.42E-04	737	8.44E-05
403	2.90E-06	470	3.78E-04	537	5.27E-04	604	9.48E-04	671	5.31E-04	738	8.13E-05
404	3.70E-06	471	3.70E-04	538	5.28E-04	605	9.57E-04	672	5.19E-04	739	7.91E-05
405	3.80E-06	472	3.66E-04	539	5.30E-04	606	9.64E-04	673	5.08E-04	740	7.60E-05
406	4.20E-06	473	3.60E-04	540	5.32E-04	607	9.68E-04	674	4.97E-04	741	7.44E-05
407	4.60E-06	474	3.53E-04	541	5.34E-04	608	9.73E-04	675	4.84E-04	742	7.20E-05
408	5.10E-06	475	3.49E-04	542	5.36E-04	609	9.79E-04	676	4.75E-04	743	6.92E-05
409	5.70E-06	476	3.40E-04	543	5.37E-04	610	9.85E-04	677	4.63E-04	744	6.69E-05
410	6.40E-06	477	3.36E-04	544	5.40E-04	611	9.88E-04	678	4.51E-04	745	6.59E-05
411	7.70E-06	478	3.29E-04	545	5.43E-04	612	9.93E-04	679	4.41E-04	746	6.32E-05
412	8.60E-06	479	3.28E-04	546	5.44E-04	613	9.97E-04	680	4.32E-04	747	6.13E-05
413	9.30E-06	480	3.26E-04	547	5.49E-04	614	9.97E-04	681	4.21E-04	748	5.94E-05
414	1.08E-05	481	3.25E-04	548	5.50E-04	615	9.97E-04	682	4.11E-04	749	5.75E-05
415	1.21E-05	482	3.28E-04	549	5.52E-04	616	1.00E-03	683	4.02E-04	750	5.60E-05
416	1.34E-05	483	3.33E-04	550	5.53E-04	617	9.98E-04	684	3.90E-04	751	5.39E-05
417	1.52E-05	484	3.36E-04	551	5.58E-04	618	9.97E-04	685	3.80E-04	752	5.25E-05
418	1.68E-05	485	3.44E-04	552	5.60E-04	619	9.99E-04	686	3.72E-04	753	5.07E-05
419	1.85E-05	486	3.51E-04	553	5.66E-04	620	9.96E-04	687	3.63E-04	754	4.94E-05
420	2.05E-05	487	3.59E-04	554	5.67E-04	621	9.95E-04	688	3.54E-04	755	4.77E-05
421	2.29E-05	488	3.68E-04	555	5.72E-04	622	9.96E-04	689	3.44E-04	756	4.64E-05
422	2.55E-05	489	3.74E-04	556	5.73E-04	623	9.93E-04	690	3.35E-04	757	4.50E-05
423	2.79E-05	490	3.82E-04	557	5.77E-04	624	9.92E-04	691	3.28E-04	758	4.32E-05
424	3.03E-05	491	3.88E-04	558	5.81E-04	625	9.88E-04	692	3.18E-04	759	4.16E-05
425	3.39E-05	492	3.96E-04	559	5.84E-04	626	9.89E-04	693	3.10E-04	760	4.05E-05
426	3.63E-05	493	4.01E-04	560	5.87E-04	627	9.82E-04	694	3.02E-04	761	3.94E-05
427	4.02E-05	494	4.07E-04	561	5.91E-04	628	9.76E-04	695	2.92E-04	762	3.84E-05
428	4.45E-05	495	4.14E-04	562	5.97E-04	629	9.68E-04	696	2.86E-04	763	3.71E-05
429	4.87E-05	496	4.20E-04	563	6.02E-04	630	9.63E-04	697	2.78E-04	764	3.57E-05
430	5.25E-05	497	4.27E-04	564	6.05E-04	631	9.55E-04	698	2.70E-04	765	3.47E-05
431	5.79E-05	498	4.35E-04	565	6.10E-04	632	9.52E-04	699	2.64E-04	766	3.35E-05
432	6.23E-05	499	4.39E-04	566	6.15E-04	633	9.45E-04	700	2.56E-04	767	3.25E-05
433	6.76E-05	500	4.47E-04	567	6.23E-04	634	9.39E-04	701	2.49E-04	768	3.18E-05
434	7.32E-05	501	4.54E-04	568	6.29E-04	635	9.34E-04	702	2.42E-04	769	3.03E-05
435	7.92E-05	502	4.61E-04	569	6.36E-04	636	9.23E-04	703	2.36E-04	770	2.94E-05
436	8.56E-05	503	4.64E-04	570	6.42E-04	637	9.12E-04	704	2.29E-04	771	2.82E-05
437	9.40E-05	504	4.67E-04	571	6.50E-04	638	9.04E-04	705	2.23E-04	772	2.75E-05
438	1.02E-04	505	4.73E-04	572	6.57E-04	639	8.94E-04	706	2.16E-04	773	2.70E-05
439	1.12E-04	506	4.75E-04	573	6.64E-04	640	8.85E-04	707	2.09E-04	774	2.58E-05
440	1.25E-04	507	4.82E-04	574	6.70E-04	641	8.69E-04	708	2.03E-04	775	2.49E-05
441	1.37E-04	508	4.85E-04	575	6.78E-04	642	8.63E-04	709	1.98E-04	776	2.43E-05
442	1.50E-04	509	4.88E-04	576	6.86E-04	643	8.54E-04	710	1.93E-04	777	2.34E-05
443	1.69E-04	510	4.89E-04	577	6.94E-04	644	8.42E-04	711	1.86E-04	778	2.26E-05
444	1.88E-04	511	4.92E-04	578	7.00E-04	645	8.33E-04	712	1.81E-04	779	2.26E-05
445	2.10E-04	512	4.92E-04	579	7.09E-04	646	8.22E-04	713	1.77E-04	780	2.27E-05
446	2.31E-04	513	4.94E-04	580	7.20E-04	647	8.10E-04	714	1.71E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18B @16W3000K	Sample ID	250728006-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	25.2	Humidity (%RH)	43.3

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	0.132	15.7	0.994
NON-WORST CASE	277.0	60	0.059	15.6	0.955

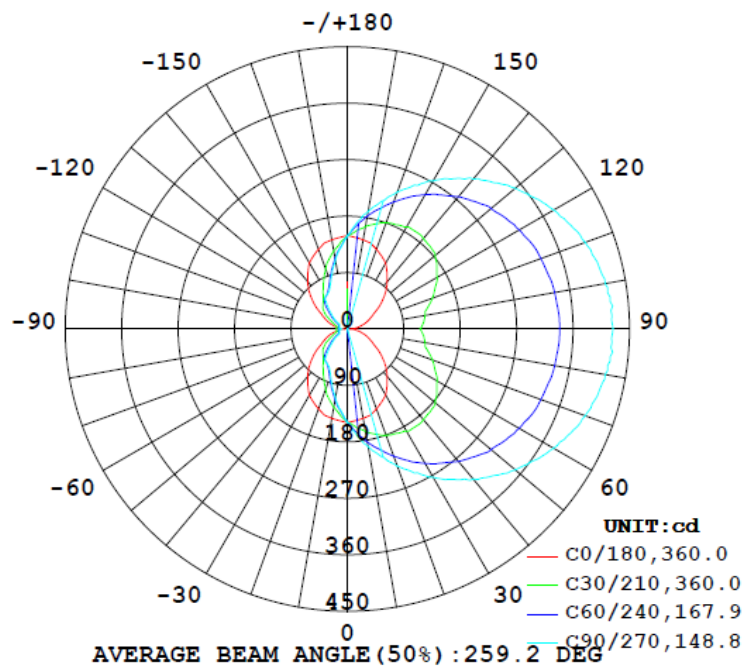
Test Result

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°)	
1666	87.3	154.6	180.0	96.5	106.1	26.6%	B0-U4-G2

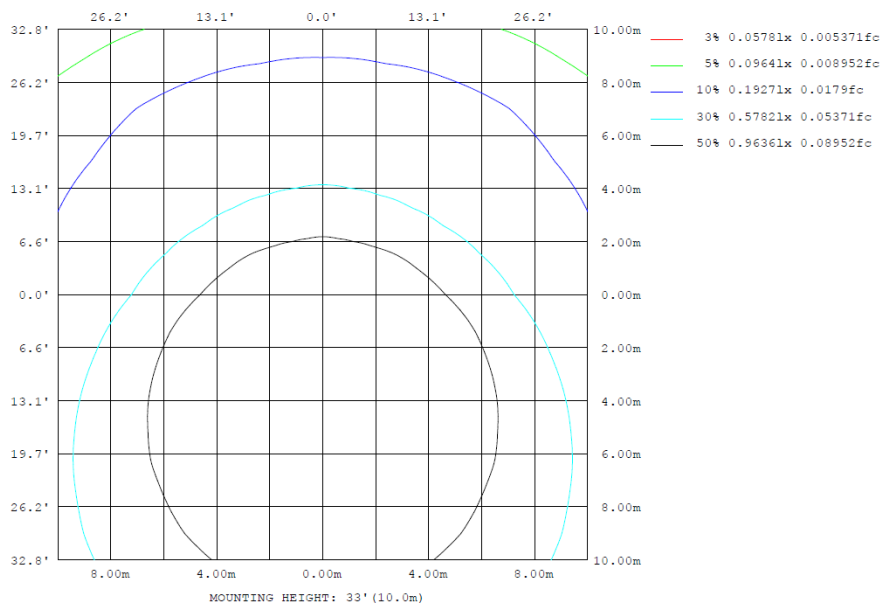
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

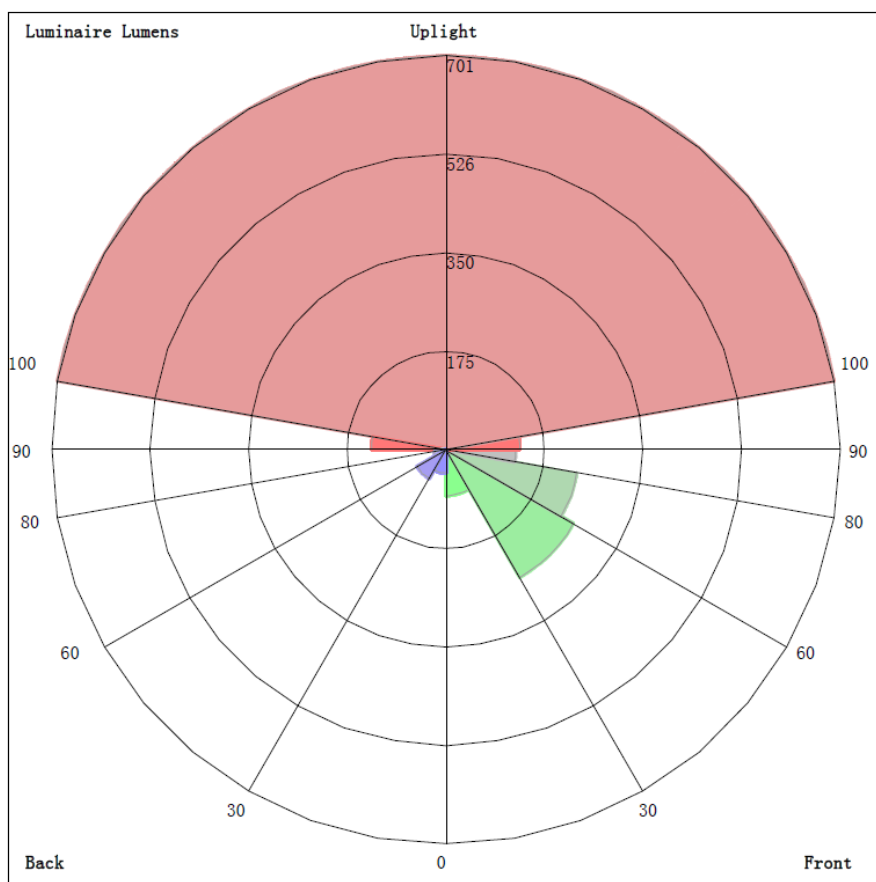
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	ϕ lum, lamp
10	144.5	174.8	190.5	174.8	144.5	119.4	111.7	119.4	0- 10	14.11	14.11	0.85,0.85
20	135.4	199.8	232.4	199.8	135.4	91.18	78.94	91.18	10- 20	41.50	55.61	3.34,3.34
30	122.0	219.2	272.8	219.2	122.0	68.00	64.31	68.00	20- 30	66.89	122.5	7.35,7.35
40	98.83	235.9	312.4	235.9	98.83	59.12	51.01	59.12	30- 40	90.90	213.4	12.8,12.8
50	74.14	244.6	349.4	244.6	74.14	43.91	30.43	43.91	40- 50	109.4	322.8	19.4,19.4
60	47.90	247.9	379.8	247.9	47.90	25.83	14.49	25.83	50- 60	120.6	443.5	26.6,26.6
70	32.21	245.2	403.7	245.2	32.21	15.87	13.94	15.87	60- 70	126.8	570.3	34.2,34.2
80	17.41	241.1	417.3	241.1	17.41	15.60	12.92	15.60	70- 80	130.4	700.7	42.1,42.1
90	3.501	236.0	423.6	236.0	3.501	16.50	13.75	16.50	80- 90	132.3	833.0	50,50
100	17.41	241.1	417.3	241.1	17.41	15.60	12.92	15.60	90-100	132.3	965.3	57.9,57.9
110	32.21	245.2	403.7	245.2	32.21	15.87	13.94	15.87	100-110	130.4	1096	65.8,65.8
120	47.90	247.9	379.8	247.9	47.90	25.83	14.49	25.83	110-120	126.8	1223	73.4,73.4
130	74.14	244.6	349.4	244.6	74.14	43.91	30.43	43.91	120-130	120.6	1343	80.6,80.6
140	98.83	235.9	312.4	235.9	98.83	59.12	51.01	59.12	130-140	109.4	1453	87.2,87.2
150	122.0	219.2	272.8	219.2	122.0	68.00	64.31	68.00	140-150	90.90	1544	92.6,92.6
160	135.4	199.8	232.4	199.8	135.4	91.18	78.94	91.18	150-160	66.89	1610	96.7,96.7
170	144.5	174.8	190.5	174.8	144.5	119.4	111.7	119.4	160-170	41.50	1652	99.2,99.2
180	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	170-180	14.11	1666	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	14.11	0-10	14.11	0.85%
10-20	41.50	0-20	55.61	3.37%
20-30	66.89	0-30	122.50	7.42%
30-40	90.90	0-40	213.40	12.92%
40-50	109.43	0-50	322.83	19.54%
50-60	120.63	0-60	443.46	26.84%
60-70	126.83	0-70	570.29	34.52%
70-80	130.43	0-80	700.72	42.42%
80-90	132.30	0-90	833.02	50.43%
90-100	132.30	0-100	965.32	58.44%
100-110	130.43	0-110	1095.75	66.33%
110-120	126.83	0-120	1222.58	74.01%
120-130	120.63	0-130	1343.21	81.31%
130-140	109.43	0-140	1452.64	87.94%
140-150	90.90	0-150	1543.54	93.44%
150-160	66.89	0-160	1610.43	97.49%
160-170	41.50	0-170	1651.93	100.00%
170-180	14.11	0-180	1666.04	100.85%

4.2 Goniophotometer Test

LCS/BUG

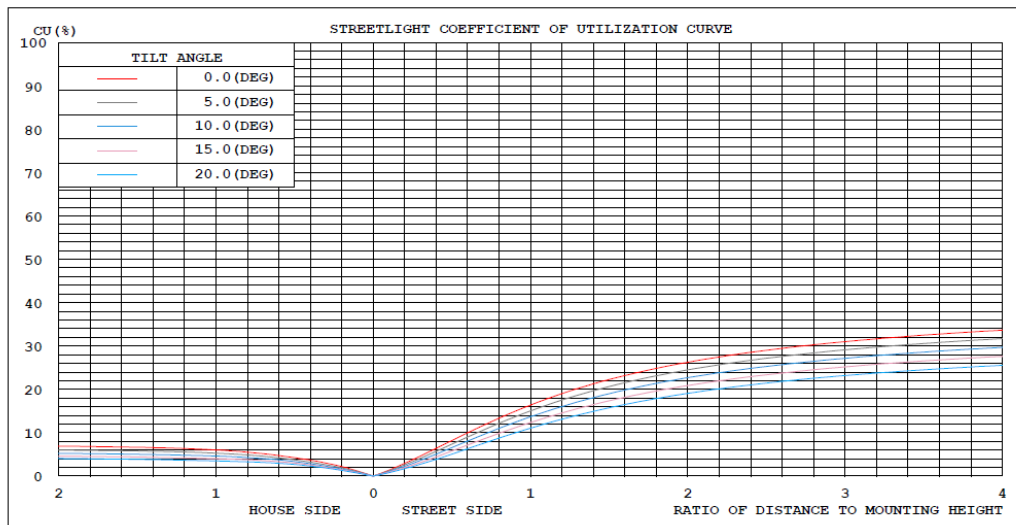


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

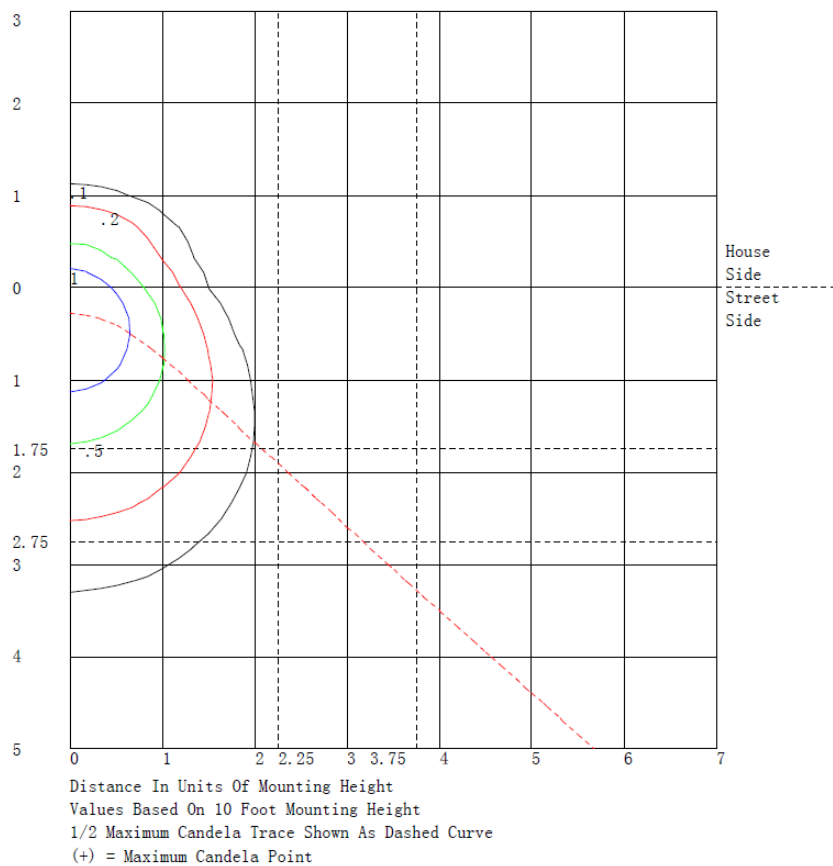
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	81.1	N.A.	4.9
FM - Front-Medium (30-60)	262.2	N.A.	15.7
FH - Front-High (60-80)	236.7	N.A.	14.2
FVH - Front-Very High (80-90)	124.1	N.A.	7.4
BL - Back-Low (0-30)	41.4	N.A.	2.5
BM - Back-Medium (30-60)	58.8	N.A.	3.5
BH - Back-High (60-80)	20.6	N.A.	1.2
BVH - Back-Very High (80-90)	8.3	N.A.	0.5
UL - Uplight-Low (90-100)	132.3	N.A.	7.9
UH - Uplight-High (100-180)	700.7	N.A.	42.1
Total	1666.2	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	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149
5	147	151	157	162	165	168	169	168	165	162	157	151	147	142	137	134	131	130	129
10	144	155	166	175	183	188	190	188	183	175	166	155	144	135	126	119	115	112	112
15	142	158	174	188	199	207	211	207	199	188	174	158	142	128	115	105	98.0	94.0	93.7
20	135	158	180	200	216	226	232	226	216	200	180	158	135	118	102	91.2	82.8	78.9	78.9
25	129	156	184	210	232	245	254	245	232	210	184	156	129	107	89.1	77.6	71.5	68.5	68.8
30	122	155	188	219	247	265	273	265	247	219	188	155	122	96.0	77.4	68.0	65.0	64.2	64.3
35	110	149	190	229	261	284	293	284	261	229	190	149	110	83.9	68.0	62.2	61.9	62.0	62.1
40	98.8	142	189	236	276	302	312	302	276	236	189	142	98.8	72.2	60.4	59.1	56.7	52.0	51.0
45	87.3	134	186	241	288	318	330	318	288	241	186	134	87.3	61.7	55.4	53.8	45.7	40.6	39.1
50	74.1	122	183	245	299	334	349	334	299	245	183	122	74.1	53.7	51.2	43.9	35.5	31.3	30.4
55	61.0	107	174	248	308	349	365	349	308	248	174	107	61.0	46.8	44.3	33.9	27.1	23.2	22.6
60	47.9	92.0	165	248	316	362	380	362	316	248	165	92.0	47.9	40.8	35.8	25.8	18.9	15.2	14.5
65	40.1	80.1	154	248	324	374	393	374	324	248	154	80.1	40.1	34.5	27.7	18.8	15.1	14.2	14.0
70	32.2	68.4	144	245	328	383	404	383	328	245	144	68.4	32.2	27.6	22.3	15.9	14.9	14.2	13.9
75	24.4	56.2	132	244	332	390	413	390	332	244	132	56.2	24.4	20.6	17.9	15.7	14.7	13.4	13.4
80	17.4	53.5	126	241	336	396	417	396	336	241	126	53.5	17.4	19.4	16.9	15.6	14.0	13.0	12.9
85	10.5	51.3	122	240	338	399	424	399	338	240	122	51.3	10.5	19.0	17.8	16.0	14.3	12.3	11.9
90	3.50	48.8	116	236	338	401	424	401	338	236	116	48.8	3.50	18.8	18.7	16.5	15.4	12.6	13.7
95	10.5	51.3	122	240	338	399	424	399	338	240	122	51.3	10.5	19.0	17.8	16.0	14.3	12.3	11.9
100	17.4	53.5	126	241	336	396	417	396	336	241	126	53.5	17.4	19.4	16.9	15.6	14.0	13.0	12.9
105	24.4	56.2	132	244	332	390	413	390	332	244	132	56.2	24.4	20.6	17.9	15.7	14.7	13.4	13.4
110	32.2	68.4	144	245	328	383	404	383	328	245	144	68.4	32.2	27.6	22.3	15.9	14.9	14.2	13.9
115	40.1	80.1	154	248	324	374	393	374	324	248	154	80.1	40.1	34.5	27.7	18.8	15.1	14.2	14.0
120	47.9	92.0	165	248	316	362	380	362	316	248	165	92.0	47.9	40.8	35.8	25.8	18.9	15.2	14.5
125	61.0	107	174	248	308	349	365	349	308	248	174	107	61.0	46.8	44.3	33.9	27.1	23.2	22.6
130	74.1	122	183	245	299	334	349	334	299	245	183	122	74.1	53.7	51.2	43.9	35.5	31.3	30.4
135	87.3	134	186	241	288	318	330	318	288	241	186	134	87.3	61.7	55.4	53.8	45.7	40.6	39.1
140	98.8	142	189	236	276	302	312	302	276	236	189	142	98.8	72.2	60.4	59.1	56.7	52.0	51.0
145	110	149	190	229	261	284	293	284	261	229	190	149	110	83.9	68.0	62.2	61.9	62.0	62.1
150	122	155	188	219	247	265	273	265	247	219	188	155	122	96.0	77.4	68.0	65.0	64.2	64.3
155	129	156	184	210	232	245	254	245	232	210	184	156	129	107	89.1	77.6	71.5	68.5	68.8
160	135	158	180	200	216	226	232	226	216	200	180	158	135	118	102	91.2	82.8	78.9	78.9
165	142	158	174	188	199	207	211	207	199	188	174	158	142	128	115	105	98.0	94.0	93.7
170	144	155	166	175	183	188	190	188	183	175	166	155	144	135	126	119	115	112	112
175	147	151	157	162	165	168	169	168	165	162	157	151	147	142	137	134	131	130	129
180	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	149	149	149	149	149														
5	130	131	134	137	142														
10	112	115	119	126	135														
15	94.0	98.0	105	115	128														
20	78.9	82.8	91.2	102	118														
25	68.5	71.5	77.6	89.1	107														
30	64.2	65.0	68.0	77.4	96.0														
35	62.0	61.9	62.2	68.0	83.9														
40	52.0	56.7	59.1	60.4	72.2														
45	40.6	45.7	53.8	55.4	61.7														
50	31.3	35.5	43.9	51.2	53.7														
55	23.2	27.1	33.9	44.3	46.8														
60	15.2	18.9	25.8	35.8	40.8														
65	14.2	15.1	18.8	27.7	34.5														
70	14.2	14.9	15.9	22.3	27.6														
75	13.4	14.7	15.7	17.9	20.6														
80	13.0	14.0	15.6	16.9	19.4														
85	12.3	14.3	16.0	17.8	19.0														
90	12.6	15.4	16.5	18.7	18.8														
95	12.3	14.3	16.0	17.8	19.0														
100	13.0	14.0	15.6	16.9	19.4														
105	13.4	14.7	15.7	17.9	20.6														
110	14.2	14.9	15.9	22.3	27.6														
115	14.2	15.1	18.8	27.7	34.5														
120	15.2	18.9	25.8	35.8	40.8														
125	23.2	27.1	33.9	44.3	46.8														
130	31.3	35.5	43.9	51.2	53.7														
135	40.6	45.7	53.8	55.4	61.7														
140	52.0	56.7	59.1	60.4	72.2														
145	62.0	61.9	62.2	68.0	83.9														
150	64.2	65.0	68.0	77.4	96.0														
155	68.5	71.5	77.6	89.1	107														
160	78.9	82.8	91.2	102	118														
165	94.0	98.0	105	115	128														
170	112	115	119	126	135														
175	130	131	134	137	142														
180	149	149	149	149	149														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18B @16W3000K	Sample ID	250728006-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	0.132	15.7	0.994	6.93
277.0	60	0.059	15.6	0.955	15.02

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*****