

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: 2025-08-21

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		1836
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	117.7
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.6
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.97
				277V	15.42
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.994
				277V	0.952
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4031
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.1
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		26.7%
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		0.131
(Goniophotometer – Section 4.2)			Non-Worst Case		0.059
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.6
(Goniophotometer – Section 4.2)			Non-Worst Case		15.5

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-28	V1-18B @16W4000K	-	250728006-S1
2	Goniophotometer Test	2025-07-28	V1-18B @16W4000K	-	250728006-S1
3	THD and PF Test	2025-07-28	V1-18B @16W4000K	-	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 @16W4000K, 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 @16W4000K	Sample ID	250728006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

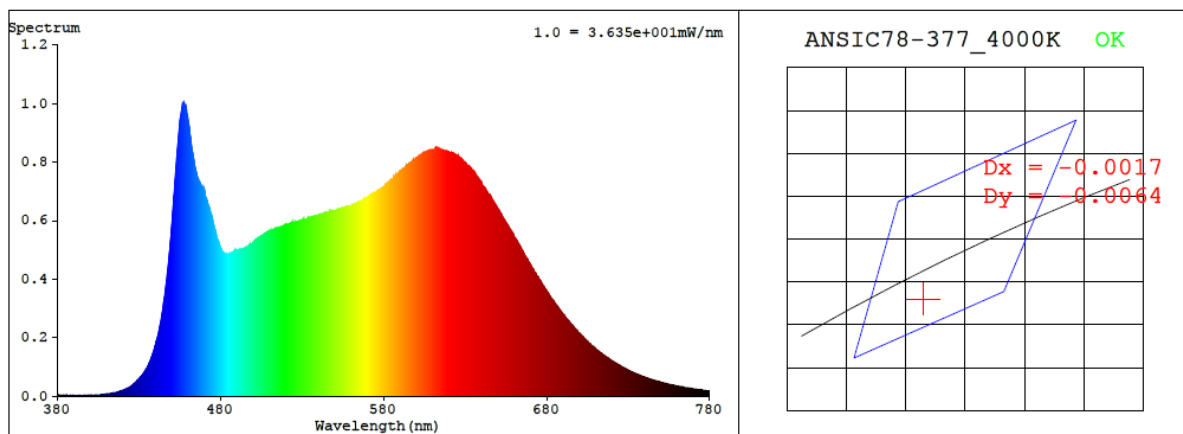
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.131	15.6	0.994
277.0	60	0.059	15.5	0.952

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4031	92.1	80	-0.0026	3.9	87	95	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3774$ $y = 0.3695$ / $u' = 0.2260$ $v' = 0.4979$ ($duv = -2.55e-03$)

CCT= 4031K Prcp WL: $L_d = 580.5\text{nm}$ Purity=24.2%

Peak WL: $L_p = 457\text{nm}$ FWHM: $= 32.0\text{nm}$ Ratio: R=20.8% G=73.8% B=5.5%

Render Index: $R_a = 92.1$ AvgR = 91.1 TM30: Rf=89 Rg=97

EEL: 0.12407 A+

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

R8 =87 R9 =80 R10=90 R11=96 R12=74 R13=96 R14=97 R15=95

4.1 Integrating Sphere Test

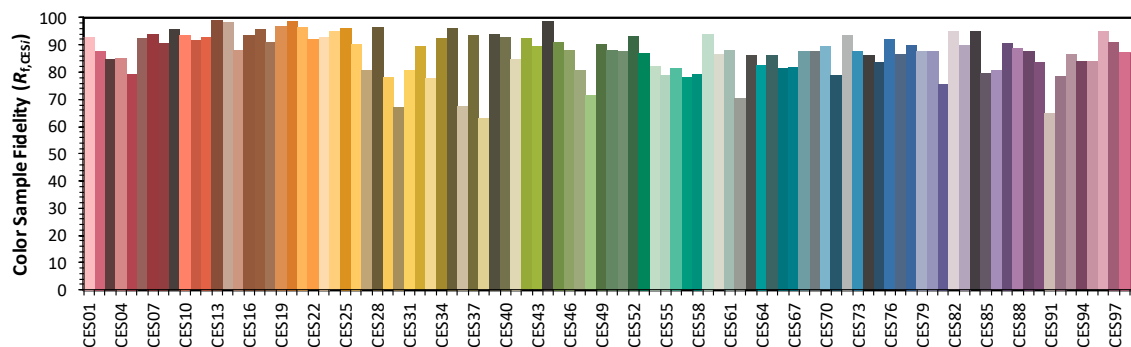
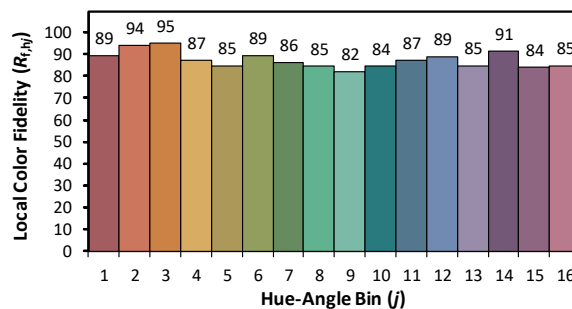
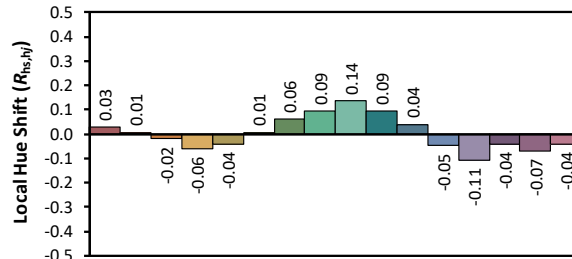
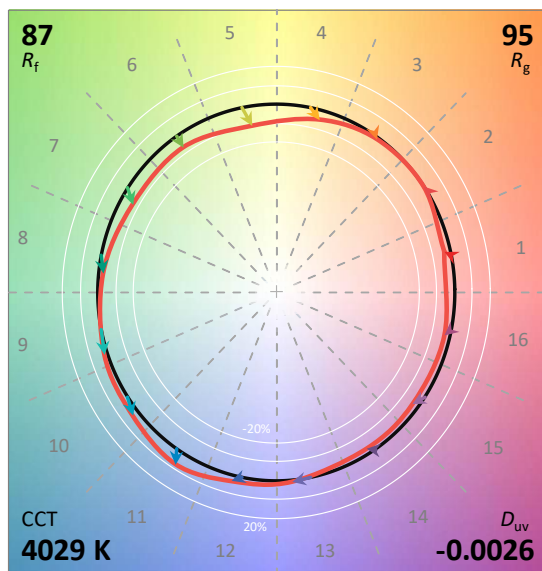
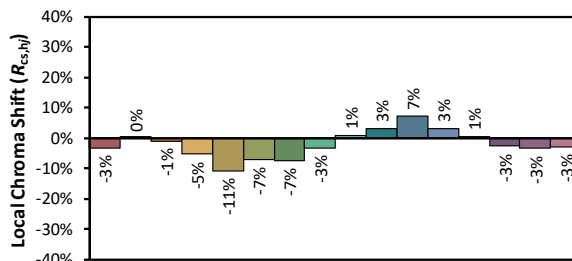
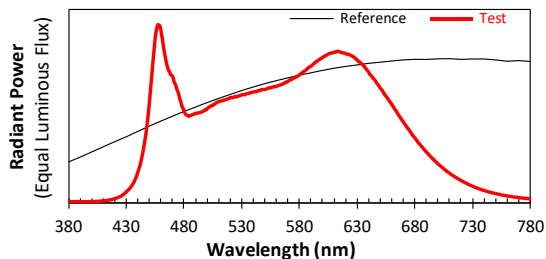
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/21

Model: V1-18B @16W4000K



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

x 0.3774
 y 0.3694
 u' 0.2261
 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	4.10E-06	447	3.97E-04	514	5.74E-04	581	7.21E-04	648	6.60E-04	715	1.40E-04
381	3.00E-06	448	4.50E-04	515	5.74E-04	582	7.25E-04	649	6.50E-04	716	1.37E-04
382	3.20E-06	449	5.10E-04	516	5.75E-04	583	7.31E-04	650	6.40E-04	717	1.33E-04
383	2.30E-06	450	5.78E-04	517	5.79E-04	584	7.35E-04	651	6.33E-04	718	1.29E-04
384	3.20E-06	451	6.52E-04	518	5.80E-04	585	7.39E-04	652	6.24E-04	719	1.25E-04
385	2.80E-06	452	7.28E-04	519	5.83E-04	586	7.46E-04	653	6.12E-04	720	1.21E-04
386	2.50E-06	453	8.01E-04	520	5.87E-04	587	7.51E-04	654	6.03E-04	721	1.18E-04
387	2.50E-06	454	8.69E-04	521	5.88E-04	588	7.56E-04	655	5.94E-04	722	1.14E-04
388	2.90E-06	455	9.34E-04	522	5.87E-04	589	7.60E-04	656	5.86E-04	723	1.11E-04
389	1.70E-06	456	9.72E-04	523	5.90E-04	590	7.64E-04	657	5.75E-04	724	1.08E-04
390	2.50E-06	457	9.96E-04	524	5.93E-04	591	7.69E-04	658	5.67E-04	725	1.05E-04
391	2.40E-06	458	9.94E-04	525	5.92E-04	592	7.76E-04	659	5.57E-04	726	1.01E-04
392	2.10E-06	459	9.87E-04	526	5.92E-04	593	7.80E-04	660	5.49E-04	727	9.80E-05
393	2.50E-06	460	9.53E-04	527	5.96E-04	594	7.89E-04	661	5.38E-04	728	9.49E-05
394	2.50E-06	461	9.17E-04	528	5.98E-04	595	7.91E-04	662	5.28E-04	729	9.22E-05
395	2.30E-06	462	8.71E-04	529	6.00E-04	596	7.97E-04	663	5.18E-04	730	8.88E-05
396	2.60E-06	463	8.33E-04	530	6.03E-04	597	7.99E-04	664	5.10E-04	731	8.65E-05
397	3.50E-06	464	7.97E-04	531	6.04E-04	598	8.06E-04	665	4.97E-04	732	8.34E-05
398	2.40E-06	465	7.69E-04	532	6.03E-04	599	8.07E-04	666	4.88E-04	733	8.11E-05
399	3.10E-06	466	7.46E-04	533	6.06E-04	600	8.14E-04	667	4.77E-04	734	7.86E-05
400	3.10E-06	467	7.34E-04	534	6.09E-04	601	8.16E-04	668	4.70E-04	735	7.65E-05
401	3.40E-06	468	7.18E-04	535	6.10E-04	602	8.22E-04	669	4.59E-04	736	7.40E-05
402	3.60E-06	469	7.12E-04	536	6.11E-04	603	8.24E-04	670	4.51E-04	737	7.19E-05
403	4.10E-06	470	7.05E-04	537	6.14E-04	604	8.28E-04	671	4.41E-04	738	6.89E-05
404	4.20E-06	471	6.79E-04	538	6.16E-04	605	8.32E-04	672	4.32E-04	739	6.71E-05
405	4.70E-06	472	6.65E-04	539	6.17E-04	606	8.34E-04	673	4.22E-04	740	6.54E-05
406	5.00E-06	473	6.47E-04	540	6.19E-04	607	8.37E-04	674	4.12E-04	741	6.30E-05
407	5.40E-06	474	6.27E-04	541	6.21E-04	608	8.37E-04	675	4.05E-04	742	6.13E-05
408	5.80E-06	475	6.11E-04	542	6.20E-04	609	8.40E-04	676	3.95E-04	743	5.91E-05
409	6.70E-06	476	5.83E-04	543	6.22E-04	610	8.42E-04	677	3.86E-04	744	5.73E-05
410	7.00E-06	477	5.63E-04	544	6.26E-04	611	8.43E-04	678	3.76E-04	745	5.54E-05
411	8.00E-06	478	5.38E-04	545	6.27E-04	612	8.46E-04	679	3.68E-04	746	5.43E-05
412	8.90E-06	479	5.26E-04	546	6.28E-04	613	8.48E-04	680	3.60E-04	747	5.22E-05
413	9.70E-06	480	5.08E-04	547	6.32E-04	614	8.46E-04	681	3.52E-04	748	5.08E-05
414	1.04E-05	481	4.94E-04	548	6.32E-04	615	8.44E-04	682	3.43E-04	749	4.95E-05
415	1.21E-05	482	4.89E-04	549	6.33E-04	616	8.41E-04	683	3.34E-04	750	4.78E-05
416	1.30E-05	483	4.86E-04	550	6.33E-04	617	8.40E-04	684	3.27E-04	751	4.63E-05
417	1.45E-05	484	4.82E-04	551	6.35E-04	618	8.37E-04	685	3.19E-04	752	4.46E-05
418	1.62E-05	485	4.86E-04	552	6.38E-04	619	8.37E-04	686	3.11E-04	753	4.35E-05
419	1.85E-05	486	4.88E-04	553	6.40E-04	620	8.34E-04	687	3.03E-04	754	4.24E-05
420	1.98E-05	487	4.91E-04	554	6.41E-04	621	8.31E-04	688	2.95E-04	755	4.07E-05
421	2.23E-05	488	4.93E-04	555	6.44E-04	622	8.31E-04	689	2.89E-04	756	3.93E-05
422	2.45E-05	489	4.97E-04	556	6.44E-04	623	8.30E-04	690	2.81E-04	757	3.82E-05
423	2.77E-05	490	4.99E-04	557	6.47E-04	624	8.26E-04	691	2.75E-04	758	3.72E-05
424	3.01E-05	491	5.00E-04	558	6.49E-04	625	8.21E-04	692	2.67E-04	759	3.55E-05
425	3.31E-05	492	5.01E-04	559	6.50E-04	626	8.20E-04	693	2.60E-04	760	3.43E-05
426	3.73E-05	493	5.03E-04	560	6.51E-04	627	8.14E-04	694	2.54E-04	761	3.39E-05
427	4.21E-05	494	5.03E-04	561	6.53E-04	628	8.10E-04	695	2.47E-04	762	3.25E-05
428	4.68E-05	495	5.07E-04	562	6.56E-04	629	8.03E-04	696	2.40E-04	763	3.17E-05
429	5.31E-05	496	5.09E-04	563	6.58E-04	630	7.98E-04	697	2.34E-04	764	3.06E-05
430	5.90E-05	497	5.13E-04	564	6.60E-04	631	7.91E-04	698	2.28E-04	765	2.94E-05
431	6.56E-05	498	5.19E-04	565	6.63E-04	632	7.87E-04	699	2.22E-04	766	2.86E-05
432	7.17E-05	499	5.18E-04	566	6.65E-04	633	7.83E-04	700	2.15E-04	767	2.80E-05
433	7.92E-05	500	5.24E-04	567	6.69E-04	634	7.75E-04	701	2.10E-04	768	2.71E-05
434	8.82E-05	501	5.32E-04	568	6.74E-04	635	7.71E-04	702	2.04E-04	769	2.63E-05
435	9.76E-05	502	5.36E-04	569	6.74E-04	636	7.63E-04	703	1.99E-04	770	2.51E-05
436	1.09E-04	503	5.40E-04	570	6.79E-04	637	7.54E-04	704	1.93E-04	771	2.48E-05
437	1.22E-04	504	5.40E-04	571	6.83E-04	638	7.46E-04	705	1.88E-04	772	2.36E-05
438	1.37E-04	505	5.48E-04	572	6.87E-04	639	7.37E-04	706	1.81E-04	773	2.26E-05
439	1.53E-04	506	5.48E-04	573	6.90E-04	640	7.30E-04	707	1.77E-04	774	2.24E-05
440	1.74E-04	507	5.55E-04	574	6.93E-04	641	7.16E-04	708	1.71E-04	775	2.17E-05
441	1.94E-04	508	5.59E-04	575	6.97E-04	642	7.11E-04	709	1.67E-04	776	2.10E-05
442	2.16E-04	509	5.62E-04	576	7.00E-04	643	7.02E-04	710	1.63E-04	777	2.03E-05
443	2.46E-04	510	5.65E-04	577	7.04E-04	644	6.94E-04	711	1.57E-04	778	1.97E-05
444	2.78E-04	511	5.68E-04	578	7.06E-04	645	6.88E-04	712	1.53E-04	779	1.98E-05
445	3.15E-04	512	5.68E-04	579	7.11E-04	646	6.79E-04	713	1.49E-04	780	1.98E-05
446	3.53E-04	513	5.69E-04	580	7.15E-04	647	6.67E-04	714	1.45E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18B @16W4000K	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	0.131	15.6	0.994
NON-WORST CASE	277.0	60	0.059	15.5	0.952

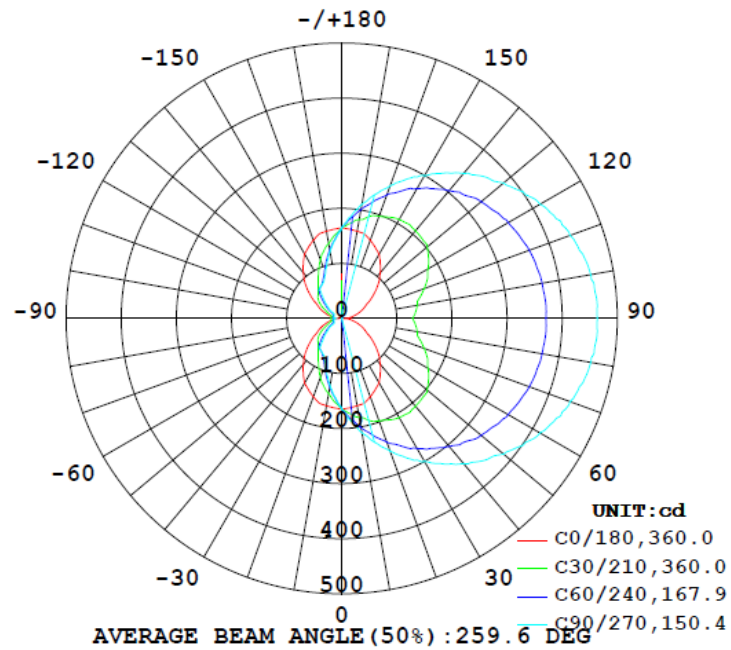
Test Result

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°)	
1836	87.9	154.4	180.0	96.2	117.7	26.7%	B0-U4-G2

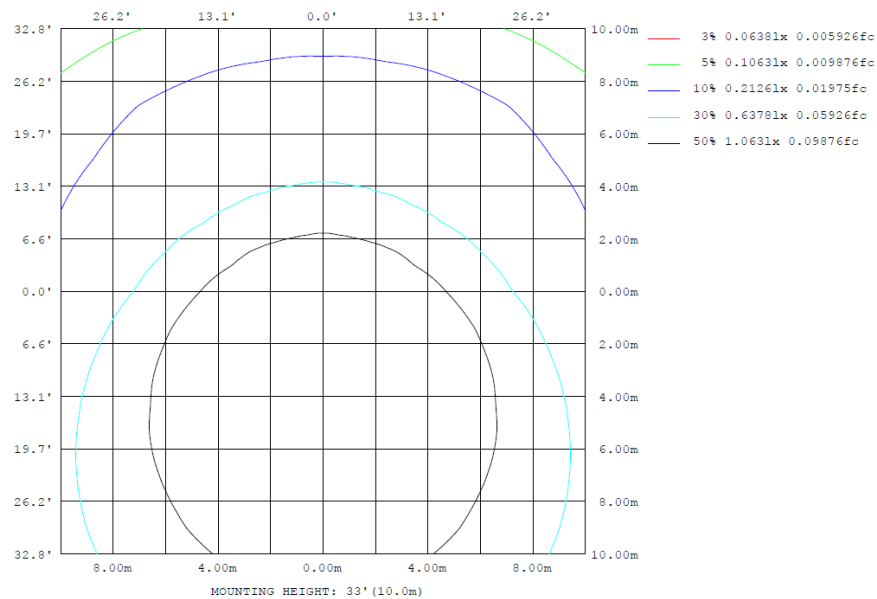
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

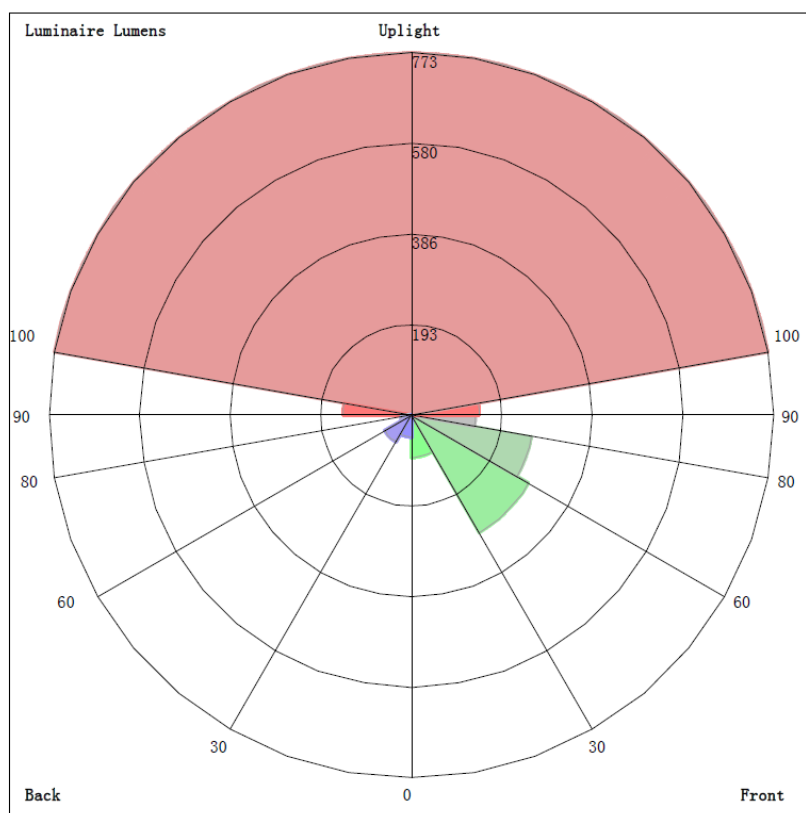
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	161.1	192.7	210.7	192.7	161.1	131.9	123.2	131.9	0- 10	15.57	15.57	0.85,0.85
20	151.2	221.6	256.4	221.6	151.2	102.1	87.18	102.1	10- 20	45.90	61.47	3.35,3.35
30	135.2	241.5	299.7	241.5	135.2	75.69	71.70	75.69	20- 30	73.99	135.5	7.38,7.38
40	108.8	263.4	344.0	263.4	108.8	65.73	56.64	65.73	30- 40	100.4	235.8	12.8,12.8
50	81.26	270.6	382.8	270.6	81.26	49.28	33.67	49.28	40- 50	120.8	356.6	19.4,19.4
60	52.60	272.1	415.0	272.1	52.60	28.66	16.00	28.66	50- 60	133.0	489.6	26.7,26.7
70	35.24	271.0	441.1	271.0	35.24	17.54	15.28	17.54	60- 70	139.7	629.3	34.3,34.3
80	18.96	264.9	458.9	264.9	18.96	17.26	14.32	17.26	70- 80	143.5	772.8	42.1,42.1
90	3.781	259.1	464.0	259.1	3.781	18.12	15.20	18.12	80- 90	145.4	918.2	50,50
100	18.96	264.9	458.9	264.9	18.96	17.26	14.32	17.26	90-100	145.4	1064	57.9,57.9
110	35.24	271.0	441.1	271.0	35.24	17.54	15.28	17.54	100-110	143.5	1207	65.7,65.7
120	52.60	272.1	415.0	272.1	52.60	28.66	16.00	28.66	110-120	139.7	1347	73.3,73.3
130	81.26	270.6	382.8	270.6	81.26	49.28	33.67	49.28	120-130	133.0	1480	80.6,80.6
140	108.8	263.4	344.0	263.4	108.8	65.73	56.64	65.73	130-140	120.8	1601	87.2,87.2
150	135.2	241.5	299.7	241.5	135.2	75.69	71.70	75.69	140-150	100.4	1701	92.6,92.6
160	151.2	221.6	256.4	221.6	151.2	102.1	87.18	102.1	150-160	73.99	1775	96.7,96.7
170	161.1	192.7	210.7	192.7	161.1	131.9	123.2	131.9	160-170	45.90	1821	99.2,99.2
180	164.8	164.8	164.8	164.8	164.8	164.8	164.8	164.8	170-180	15.57	1836	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	15.57	0-10	15.57	0.86%
10-20	45.90	0-20	61.47	3.38%
20-30	73.99	0-30	135.46	7.44%
30-40	100.37	0-40	235.83	12.95%
40-50	120.76	0-50	356.59	19.58%
50-60	132.99	0-60	489.58	26.89%
60-70	139.70	0-70	629.28	34.56%
70-80	143.50	0-80	772.78	42.44%
80-90	145.42	0-90	918.20	50.43%
90-100	145.42	0-100	1063.62	58.41%
100-110	143.50	0-110	1207.12	66.30%
110-120	139.70	0-120	1346.82	73.97%
120-130	132.99	0-130	1479.81	81.27%
130-140	120.76	0-140	1600.57	87.90%
140-150	100.37	0-150	1700.94	93.42%
150-160	73.99	0-160	1774.93	97.48%
160-170	45.90	0-170	1820.83	100.00%
170-180	15.57	0-180	1836.40	100.86%

4.2 Goniophotometer Test

LCS/BUG

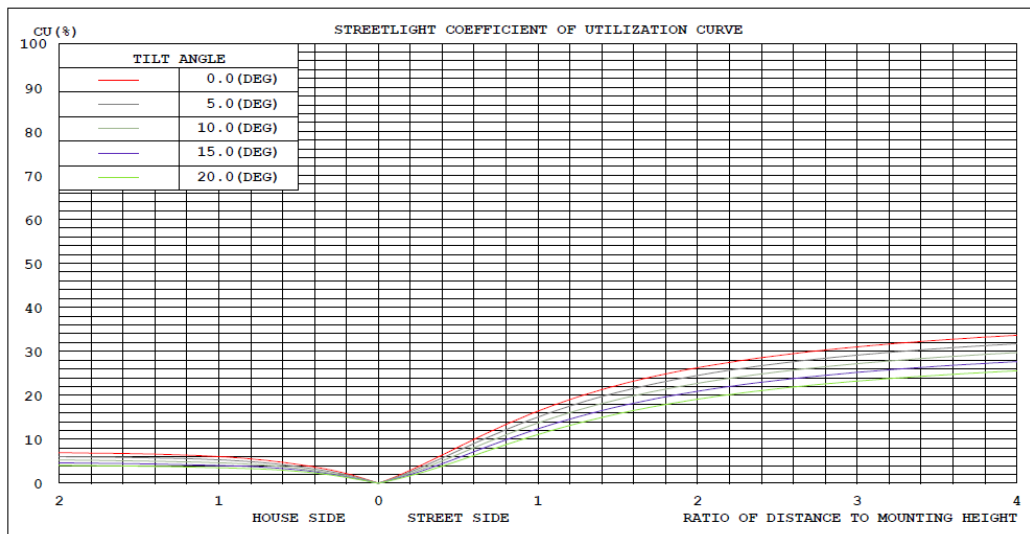


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

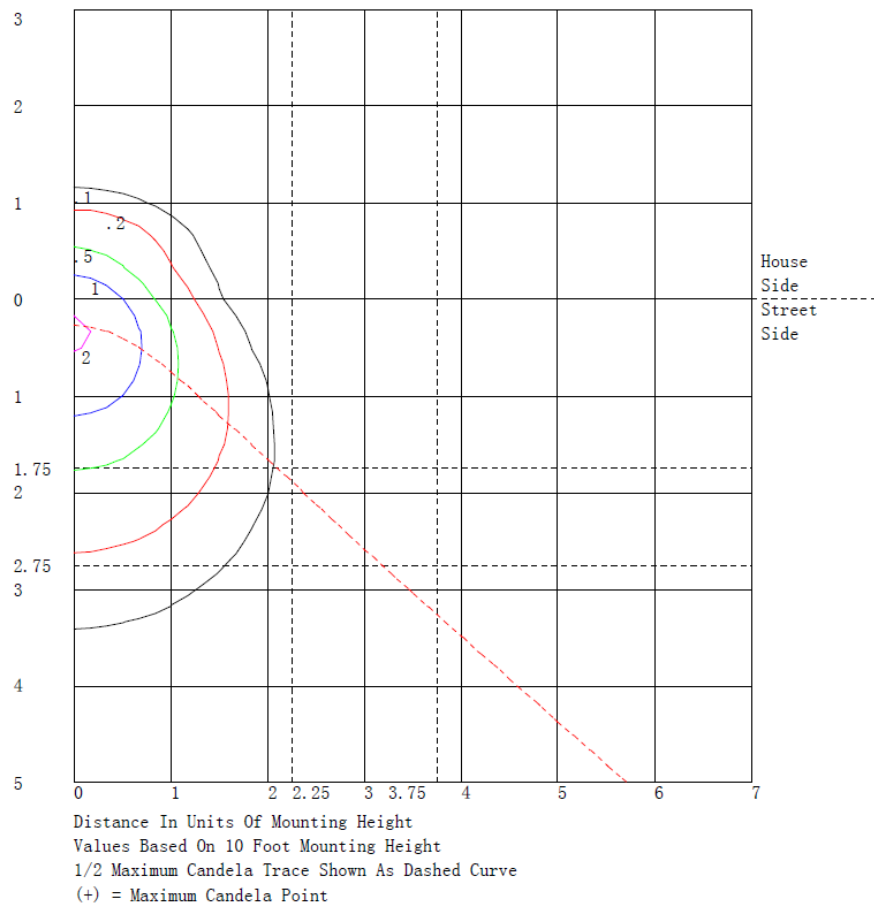
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	89.6	N.A.	4.9
FM - Front-Medium (30-60)	288.9	N.A.	15.7
FH - Front-High (60-80)	260.5	N.A.	14.2
FVH - Front-Very High (80-90)	136.3	N.A.	7.4
BL - Back-Low (0-30)	45.9	N.A.	2.5
BM - Back-Medium (30-60)	65.2	N.A.	3.6
BH - Back-High (60-80)	22.7	N.A.	1.2
BVH - Back-Very High (80-90)	9.1	N.A.	0.5
UL - Uplight-Low (90-100)	145.4	N.A.	7.9
UH - Uplight-High (100-180)	772.8	N.A.	42.1
Total	1836.4	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	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
5	163	168	173	179	183	185	186	185	183	179	173	168	163	156	152	148	144	143	144
10	161	171	182	193	201	208	211	208	201	193	182	171	161	149	138	132	127	124	123
15	159	176	192	206	220	229	233	229	220	206	192	176	159	141	127	117	109	105	105
20	151	174	198	222	238	250	256	250	238	222	198	174	151	128	114	102	92.1	87.4	87.2
25	143	172	203	233	256	271	279	271	256	233	203	172	143	118	99.1	86.5	79.9	76.5	76.8
30	135	171	208	241	273	292	300	292	273	241	208	171	135	107	85.9	75.7	72.5	71.3	71.7
35	122	165	210	253	288	312	323	312	288	253	210	165	122	93.0	75.1	69.4	68.8	68.7	69.0
40	109	157	208	263	303	332	344	332	303	263	208	157	109	79.7	67.3	65.7	63.3	58.2	56.6
45	95.6	148	206	266	316	353	365	353	316	266	206	148	95.6	67.7	61.3	60.0	51.0	45.3	43.5
50	81.3	134	203	271	330	368	383	368	330	271	203	134	81.3	59.1	56.5	49.3	39.5	34.7	33.7
55	66.9	118	192	274	339	384	402	384	339	274	192	118	66.9	51.8	49.1	38.0	30.2	26.0	25.3
60	52.6	103	181	272	349	399	415	399	349	272	181	103	52.6	45.5	39.5	28.7	20.8	16.9	16.0
65	43.9	89.1	172	272	356	411	429	411	356	272	172	89.1	43.9	38.4	30.8	20.9	16.5	15.7	15.5
70	35.2	76.0	159	271	362	422	441	422	362	271	159	76.0	35.2	30.7	24.8	17.5	16.6	15.6	15.3
75	26.6	62.4	146	267	366	429	453	429	366	267	146	62.4	26.6	22.8	19.7	17.4	16.5	14.8	14.9
80	19.0	59.1	139	265	369	436	459	436	369	265	139	59.1	19.0	21.4	18.5	17.3	15.5	14.5	14.3
85	11.4	56.6	134	263	371	440	463	440	371	263	134	56.6	11.4	20.9	19.6	17.6	15.7	13.5	13.1
90	3.78	53.8	129	259	370	440	464	440	370	259	129	53.8	3.78	20.5	20.7	18.1	16.8	13.9	15.2
95	11.4	56.6	134	263	371	440	463	440	371	263	134	56.6	11.4	20.9	19.6	17.6	15.7	13.5	13.1
100	19.0	59.1	139	265	369	436	459	436	369	265	139	59.1	19.0	21.4	18.5	17.3	15.5	14.5	14.3
105	26.6	62.4	146	267	366	429	453	429	366	267	146	62.4	26.6	22.8	19.7	17.4	16.5	14.8	14.9
110	35.2	76.0	159	271	362	422	441	422	362	271	159	76.0	35.2	30.7	24.8	17.5	16.6	15.6	15.3
115	43.9	89.1	172	272	356	411	429	411	356	272	172	89.1	43.9	38.4	30.8	20.9	16.5	15.7	15.5
120	52.6	103	181	272	349	399	415	399	349	272	181	103	52.6	45.5	39.5	28.7	20.8	16.9	16.0
125	66.9	118	192	274	339	384	402	384	339	274	192	118	66.9	51.8	49.1	38.0	30.2	26.0	25.3
130	81.3	134	203	271	330	368	383	368	330	271	203	134	81.3	59.1	56.5	49.3	39.5	34.7	33.7
135	95.6	148	206	266	316	353	365	353	316	266	206	148	95.6	67.7	61.3	60.0	51.0	45.3	43.5
140	109	157	208	263	303	332	344	332	303	263	208	157	109	79.7	67.3	65.7	63.3	58.2	56.6
145	122	165	210	253	288	312	323	312	288	253	210	165	122	93.0	75.1	69.4	68.8	68.7	69.0
150	135	171	208	241	273	292	300	292	273	241	208	171	135	107	85.9	75.7	72.5	71.3	71.7
155	143	172	203	233	256	271	279	271	256	233	203	172	143	118	99.1	86.5	79.9	76.5	76.8
160	151	174	198	222	238	250	256	250	238	222	198	174	151	128	114	102	92.1	87.4	87.2
165	159	176	192	206	220	229	233	229	220	206	192	176	159	141	127	117	109	105	105
170	161	171	182	193	201	208	211	208	201	193	182	171	161	149	138	132	127	124	123
175	163	168	173	179	183	185	186	185	183	179	173	168	163	156	152	148	144	143	144
180	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	165	165	165	165	165														
5	143	144	148	152	156														
10	124	127	132	138	149														
15	105	109	117	127	141														
20	87.4	92.1	102	114	128														
25	76.5	79.9	86.5	99.1	118														
30	71.3	72.5	75.7	85.9	107														
35	68.7	68.8	69.4	75.1	93.0														
40	58.2	63.3	65.7	67.3	79.7														
45	45.3	51.0	60.0	61.3	67.7														
50	34.7	39.5	49.3	56.5	59.1														
55	26.0	30.2	38.0	49.1	51.8														
60	16.9	20.8	28.7	39.5	45.5														
65	15.7	16.5	20.9	30.8	38.4														
70	15.6	16.6	17.5	24.8	30.7														
75	14.8	16.5	17.4	19.7	22.8														
80	14.5	15.5	17.3	18.5	21.4														
85	13.5	15.7	17.6	19.6	20.9														
90	13.9	16.8	18.1	20.7	20.5														
95	13.5	15.7	17.6	19.6	20.9														
100	14.5	15.5	17.3	18.5	21.4														
105	14.8	16.5	17.4	19.7	22.8														
110	15.6	16.6	17.5	24.8	30.7														
115	15.7	16.5	20.9	30.8	38.4														
120	16.9	20.8	28.7	39.5	45.5														
125	26.0	30.2	38.0	49.1	51.8														
130	34.7	39.5	49.3	56.5	59.1														
135	45.3	51.0	60.0	61.3	67.7														
140	58.2	63.3	65.7	67.3	79.7														
145	68.7	68.8	69.4	75.1	93.0														
150	71.3	72.5	75.7	85.9	107														
155	76.5	79.9	86.5	99.1	118														
160	87.4	92.1	102	114	128														
165	105	109	117	127	141														
170	124	127	132	138	149														
175	143	144	148	152	156														
180	165	165	165	165	165														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18B @16W4000K	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	0.131	15.6	0.994	6.97
277.0	60	0.059	15.5	0.952	15.42

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*****