

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

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Date: 2025-08-20

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Issue Date: 2025-08-20

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		1503
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	124.2
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		12.1
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	5.90
				277V	24.91
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.991
				277V	0.890
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4969
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		91.1
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		74
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		87
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		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		26.9%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U4-G2
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		277.0
(Goniophotometer – Section 4.2)			Non-Worst Case		120.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.049
(Goniophotometer – Section 4.2)			Non-Worst Case		0.100
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		12.1
(Goniophotometer – Section 4.2)			Non-Worst Case		11.9

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-06	V1-18 @12W5000K	-	250728005-S1
2	Goniophotometer Test	2025-08-06	V1-18 @12W5000K	-	250728005-S1
3	THD and PF Test	2025-08-06	V1-18 @12W5000K	-	250728005-S1

Remark (If any):

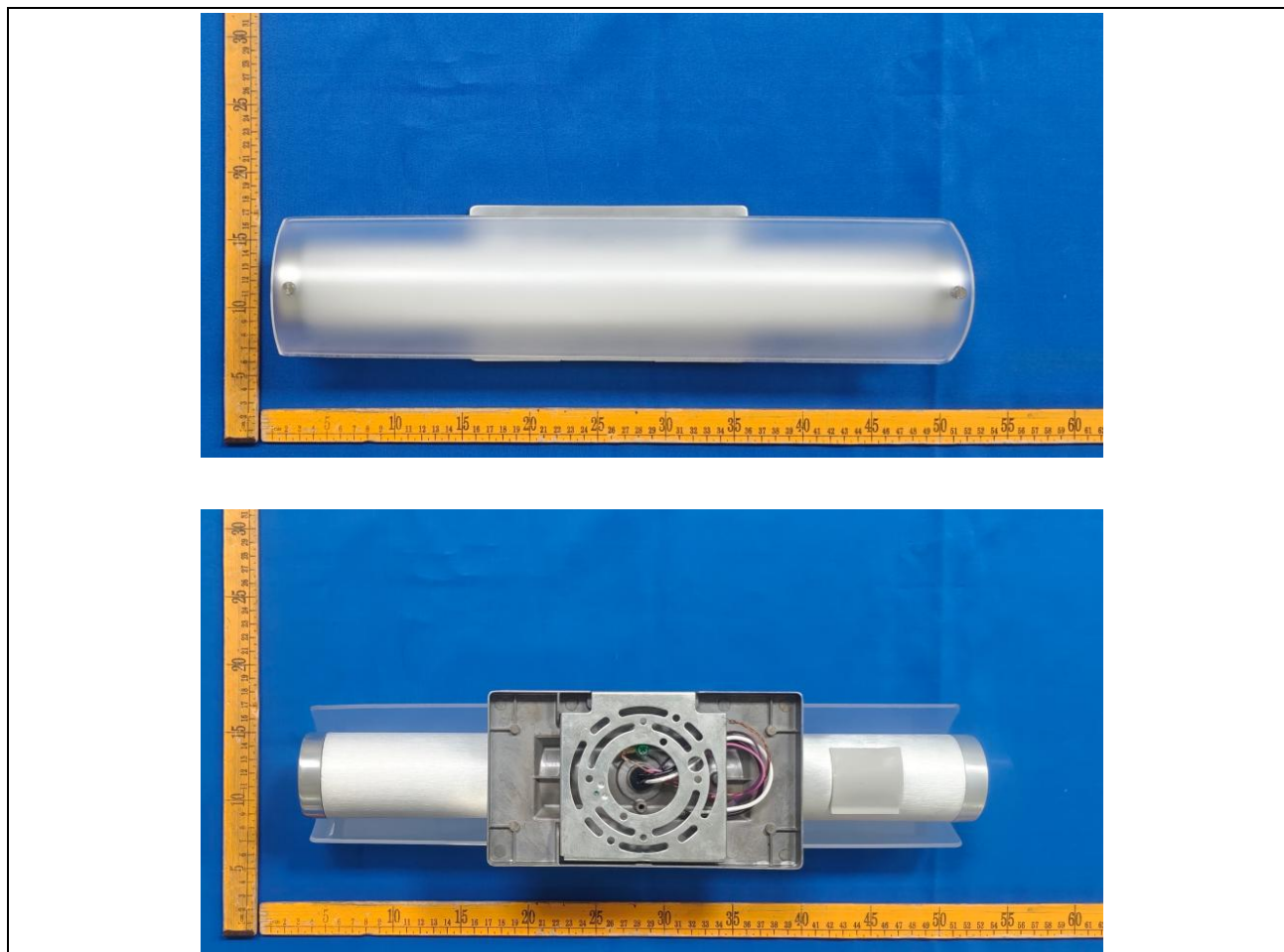
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-18 @12W5000K, 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.	V1-18 @12W5000K	Sample ID	250728005-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

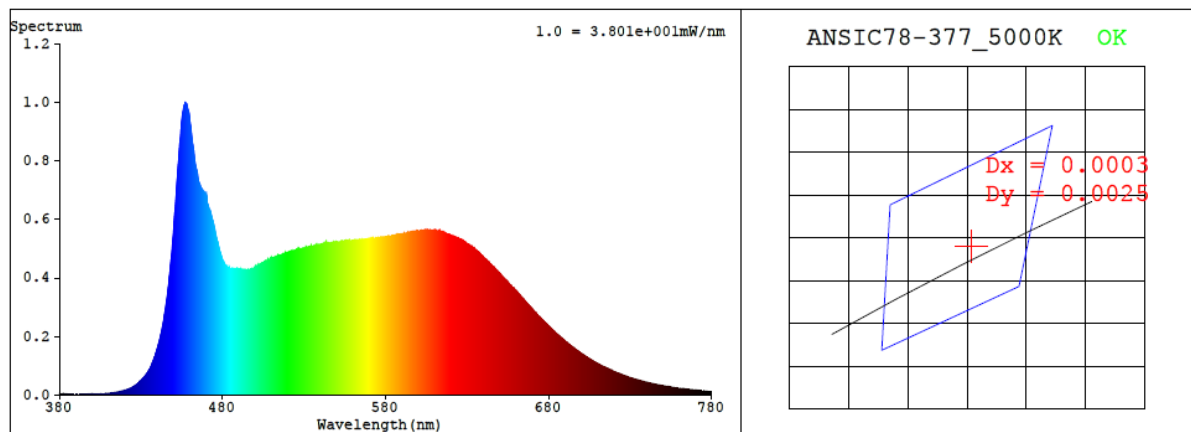
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.100	11.9	0.991
277.0	60	0.049	12.1	0.890

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4969	91.1	74	0.0012	1.3	87	94	-5%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3463$ $y = 0.3549$ / $u' = 0.2109$ $v' = 0.4864$ ($duv=1.16e-03$)

CCT= 4969K Prcp WL: Ld=572.0nm Purity=10.4%

Peak WL: Lp=457nm FWHM: =29.1nm Ratio:R=17.8% G=75.8% B=6.4%

Render Index: Ra = 91.1 AvgR = 89.4 TM30:Rf=89 Rg=96

EEL: 0.00000 A++ Highest

R1 =96 R2 =97 R3 =93 R4 =85 R5 =92 R6 =95 R7 =87

R8 =84 R9 =74 R10=95 R11=89 R12=67 R13=99 R14=97 R15=92

4.1 Integrating Sphere Test

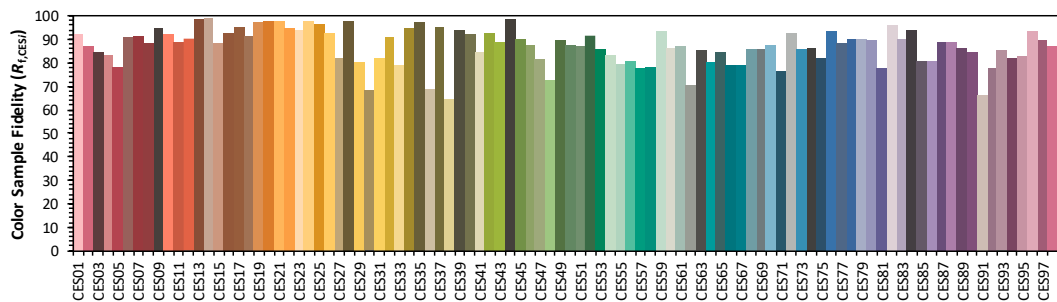
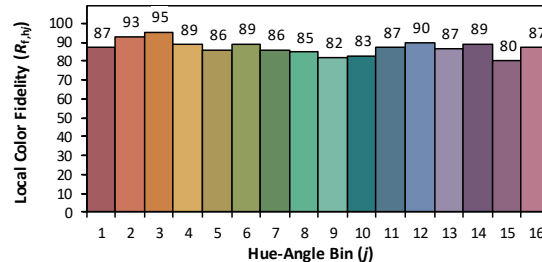
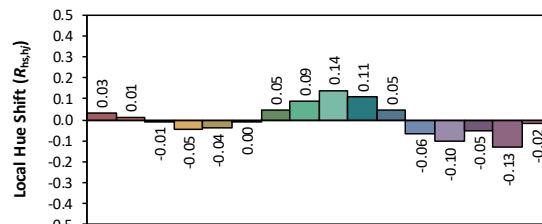
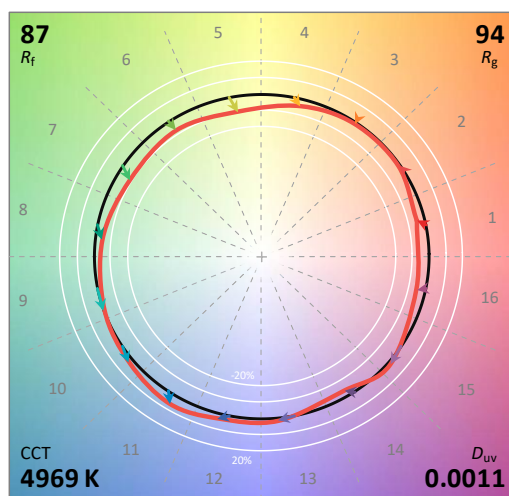
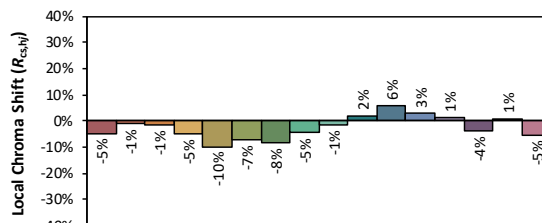
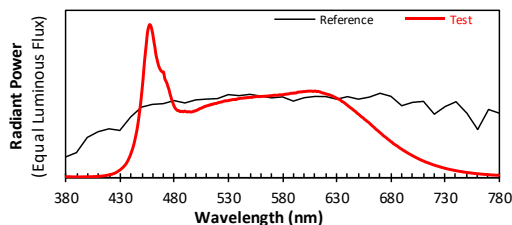
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/20

Model: V1-18 @12W5000K



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

x 0.3462
 y 0.3547
 u' 0.2110
 v' 0.4864

CIE 13.3-1995
(CRI)
 R_a 91
 R_g 74

4.1 Integrating Sphere Test

Spectral Distribution over Visible Wavelength											
WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)
380	3.80E-06	447	3.86E-04	514	4.77E-04	581	5.40E-04	648	4.26E-04	715	9.33E-05
381	3.00E-06	448	4.41E-04	515	4.76E-04	582	5.43E-04	649	4.19E-04	716	9.05E-05
382	3.40E-06	449	4.99E-04	516	4.79E-04	583	5.42E-04	650	4.14E-04	717	8.78E-05
383	3.60E-06	450	5.68E-04	517	4.81E-04	584	5.44E-04	651	4.09E-04	718	8.55E-05
384	2.90E-06	451	6.42E-04	518	4.82E-04	585	5.44E-04	652	4.02E-04	719	8.22E-05
385	2.10E-06	452	7.29E-04	519	4.83E-04	586	5.45E-04	653	3.96E-04	720	8.01E-05
386	2.00E-06	453	8.04E-04	520	4.87E-04	587	5.48E-04	654	3.91E-04	721	7.79E-05
387	2.20E-06	454	8.72E-04	521	4.89E-04	588	5.49E-04	655	3.85E-04	722	7.53E-05
388	2.50E-06	455	9.41E-04	522	4.90E-04	589	5.50E-04	656	3.78E-04	723	7.35E-05
389	1.90E-06	456	9.78E-04	523	4.91E-04	590	5.49E-04	657	3.73E-04	724	7.15E-05
390	2.10E-06	457	9.97E-04	524	4.93E-04	591	5.51E-04	658	3.67E-04	725	6.91E-05
391	2.20E-06	458	9.93E-04	525	4.96E-04	592	5.50E-04	659	3.62E-04	726	6.71E-05
392	1.80E-06	459	9.69E-04	526	4.98E-04	593	5.52E-04	660	3.57E-04	727	6.47E-05
393	1.90E-06	460	9.35E-04	527	5.00E-04	594	5.56E-04	661	3.50E-04	728	6.31E-05
394	2.40E-06	461	8.89E-04	528	4.99E-04	595	5.57E-04	662	3.43E-04	729	6.08E-05
395	2.10E-06	462	8.47E-04	529	5.00E-04	596	5.57E-04	663	3.36E-04	730	5.89E-05
396	2.50E-06	463	7.99E-04	530	5.01E-04	597	5.59E-04	664	3.31E-04	731	5.71E-05
397	2.60E-06	464	7.69E-04	531	5.04E-04	598	5.58E-04	665	3.24E-04	732	5.53E-05
398	2.70E-06	465	7.39E-04	532	5.04E-04	599	5.60E-04	666	3.17E-04	733	5.38E-05
399	2.90E-06	466	7.18E-04	533	5.07E-04	600	5.60E-04	667	3.11E-04	734	5.21E-05
400	3.20E-06	467	7.04E-04	534	5.08E-04	601	5.60E-04	668	3.05E-04	735	5.07E-05
401	3.00E-06	468	6.94E-04	535	5.07E-04	602	5.62E-04	669	3.00E-04	736	4.92E-05
402	3.20E-06	469	6.89E-04	536	5.10E-04	603	5.62E-04	670	2.93E-04	737	4.77E-05
403	3.00E-06	470	6.87E-04	537	5.07E-04	604	5.63E-04	671	2.87E-04	738	4.63E-05
404	3.40E-06	471	6.48E-04	538	5.12E-04	605	5.63E-04	672	2.81E-04	739	4.45E-05
405	3.80E-06	472	6.31E-04	539	5.14E-04	606	5.63E-04	673	2.74E-04	740	4.33E-05
406	4.30E-06	473	6.17E-04	540	5.14E-04	607	5.63E-04	674	2.68E-04	741	4.18E-05
407	4.50E-06	474	5.93E-04	541	5.16E-04	608	5.62E-04	675	2.64E-04	742	4.07E-05
408	5.00E-06	475	5.73E-04	542	5.16E-04	609	5.61E-04	676	2.58E-04	743	3.92E-05
409	5.00E-06	476	5.44E-04	543	5.17E-04	610	5.64E-04	677	2.52E-04	744	3.83E-05
410	5.80E-06	477	5.20E-04	544	5.17E-04	611	5.62E-04	678	2.47E-04	745	3.70E-05
411	6.40E-06	478	4.98E-04	545	5.20E-04	612	5.60E-04	679	2.41E-04	746	3.62E-05
412	7.10E-06	479	4.79E-04	546	5.19E-04	613	5.62E-04	680	2.35E-04	747	3.45E-05
413	7.50E-06	480	4.60E-04	547	5.21E-04	614	5.59E-04	681	2.30E-04	748	3.34E-05
414	8.40E-06	481	4.49E-04	548	5.21E-04	615	5.58E-04	682	2.23E-04	749	3.27E-05
415	9.30E-06	482	4.42E-04	549	5.21E-04	616	5.54E-04	683	2.18E-04	750	3.15E-05
416	1.02E-05	483	4.36E-04	550	5.23E-04	617	5.52E-04	684	2.14E-04	751	3.06E-05
417	1.17E-05	484	4.37E-04	551	5.22E-04	618	5.49E-04	685	2.09E-04	752	2.96E-05
418	1.30E-05	485	4.29E-04	552	5.23E-04	619	5.48E-04	686	2.04E-04	753	2.90E-05
419	1.43E-05	486	4.30E-04	553	5.25E-04	620	5.45E-04	687	1.99E-04	754	2.82E-05
420	1.59E-05	487	4.31E-04	554	5.26E-04	621	5.43E-04	688	1.94E-04	755	2.71E-05
421	1.74E-05	488	4.27E-04	555	5.27E-04	622	5.42E-04	689	1.89E-04	756	2.60E-05
422	1.93E-05	489	4.32E-04	556	5.28E-04	623	5.39E-04	690	1.85E-04	757	2.52E-05
423	2.18E-05	490	4.31E-04	557	5.27E-04	624	5.37E-04	691	1.80E-04	758	2.46E-05
424	2.40E-05	491	4.29E-04	558	5.27E-04	625	5.34E-04	692	1.75E-04	759	2.40E-05
425	2.67E-05	492	4.27E-04	559	5.27E-04	626	5.33E-04	693	1.71E-04	760	2.29E-05
426	3.04E-05	493	4.29E-04	560	5.28E-04	627	5.27E-04	694	1.66E-04	761	2.25E-05
427	3.45E-05	494	4.28E-04	561	5.28E-04	628	5.25E-04	695	1.62E-04	762	2.19E-05
428	3.94E-05	495	4.27E-04	562	5.29E-04	629	5.21E-04	696	1.58E-04	763	2.10E-05
429	4.44E-05	496	4.27E-04	563	5.29E-04	630	5.16E-04	697	1.54E-04	764	2.03E-05
430	4.87E-05	497	4.29E-04	564	5.30E-04	631	5.14E-04	698	1.50E-04	765	1.97E-05
431	5.55E-05	498	4.33E-04	565	5.29E-04	632	5.10E-04	699	1.46E-04	766	1.90E-05
432	6.12E-05	499	4.32E-04	566	5.31E-04	633	5.07E-04	700	1.42E-04	767	1.84E-05
433	6.87E-05	500	4.37E-04	567	5.31E-04	634	5.02E-04	701	1.38E-04	768	1.80E-05
434	7.64E-05	501	4.38E-04	568	5.32E-04	635	4.96E-04	702	1.35E-04	769	1.71E-05
435	8.45E-05	502	4.43E-04	569	5.33E-04	636	4.93E-04	703	1.31E-04	770	1.67E-05
436	9.62E-05	503	4.46E-04	570	5.34E-04	637	4.88E-04	704	1.27E-04	771	1.63E-05
437	1.09E-04	504	4.51E-04	571	5.35E-04	638	4.82E-04	705	1.24E-04	772	1.57E-05
438	1.24E-04	505	4.52E-04	572	5.36E-04	639	4.77E-04	706	1.20E-04	773	1.52E-05
439	1.40E-04	506	4.56E-04	573	5.36E-04	640	4.71E-04	707	1.17E-04	774	1.46E-05
440	1.59E-04	507	4.58E-04	574	5.37E-04	641	4.65E-04	708	1.13E-04	775	1.46E-05
441	1.79E-04	508	4.63E-04	575	5.36E-04	642	4.59E-04	709	1.10E-04	776	1.40E-05
442	2.02E-04	509	4.64E-04	576	5.37E-04	643	4.54E-04	710	1.07E-04	777	1.35E-05
443	2.30E-04	510	4.68E-04	577	5.39E-04	644	4.49E-04	711	1.04E-04	778	1.31E-05
444	2.62E-04	511	4.68E-04	578	5.39E-04	645	4.44E-04	712	1.01E-04	779	1.30E-05
445	2.96E-04	512	4.71E-04	579	5.39E-04	646	4.37E-04	713	9.79E-05	780	1.31E-05
446	3.36E-04	513	4.72E-04	580	5.39E-04	647	4.33E-04	714	9.57E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18 @12W5000K	Sample ID	250728005-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.9	Humidity (%RH)	42.1

Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using a type C goniophotometer and software.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^\circ\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.</p> <p>The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1.0° vertical intervals and 15° horizontal intervals.</p>

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	277.0	60	0.049	12.1	0.890
NON-WORST CASE	120.0	60	0.100	11.9	0.991

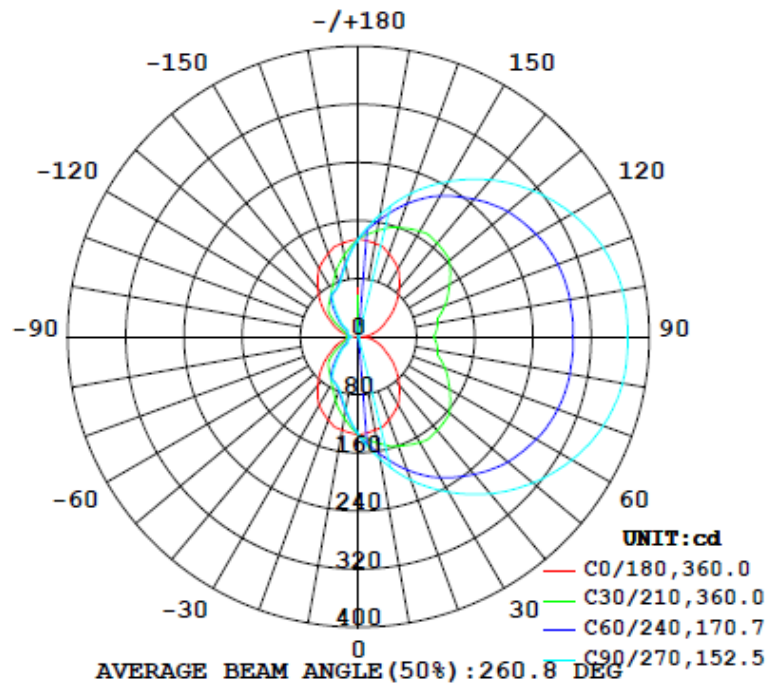
Test Result

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°)	
1503	93.0	156.4	180.0	96.4	124.2	26.9%	B0-U4-G2

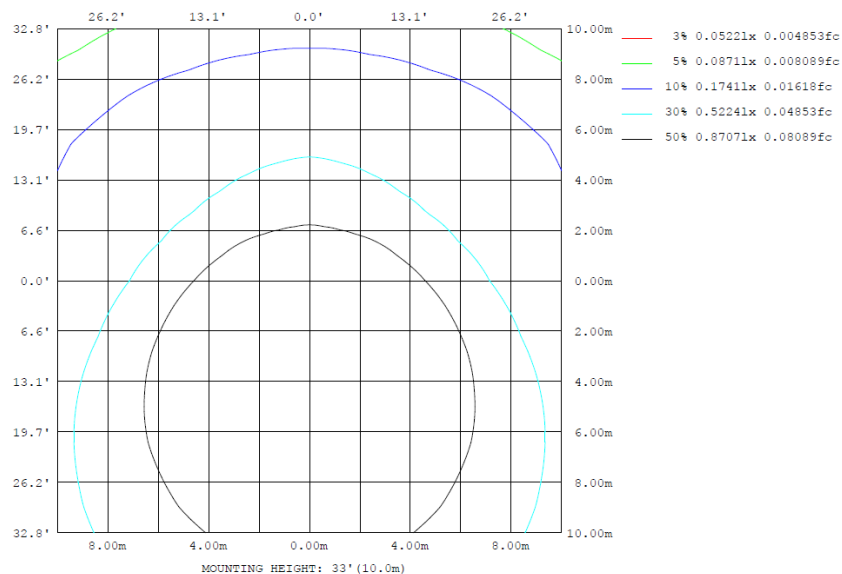
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

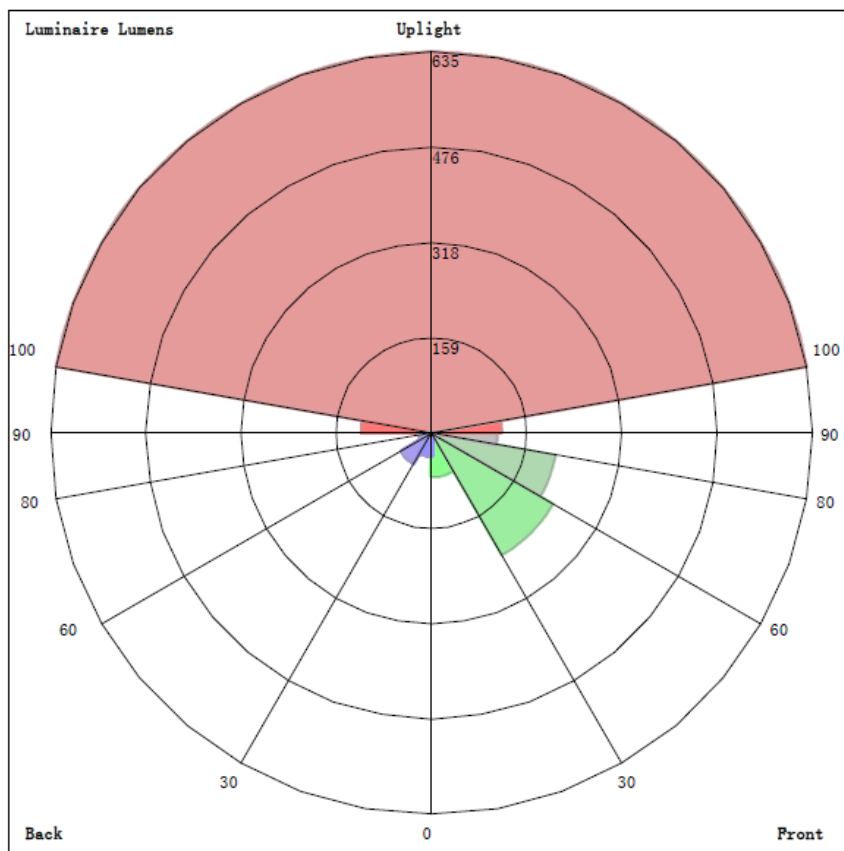
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	130.7	156.4	170.4	156.4	130.7	107.7	101.1	107.7	0- 10	12.72	12.72	0.85,0.85
20	122.0	180.2	209.8	180.2	122.0	84.38	77.41	84.38	10- 20	37.48	50.20	3.34,3.34
30	109.0	198.0	246.9	198.0	109.0	69.75	71.08	69.75	20- 30	61.40	111.6	7.42,7.42
40	87.41	212.7	282.1	212.7	87.41	63.68	49.55	63.68	30- 40	83.55	195.2	13,13
50	66.05	219.1	313.0	219.1	66.05	42.63	31.63	42.63	40- 50	99.72	294.9	19.6,19.6
60	44.91	220.3	339.0	220.3	44.91	26.21	17.17	26.21	50- 60	109.5	404.3	26.9,26.9
70	30.74	217.0	358.2	217.0	30.74	16.91	15.85	16.91	60- 70	114.3	518.6	34.5,34.5
80	17.01	209.5	368.8	209.5	17.01	15.91	13.13	15.91	70- 80	116.4	635.0	42.2,42.2
90	3.723	204.5	370.0	204.5	3.723	14.79	13.58	14.79	80- 90	116.6	751.6	50,50
100	17.01	209.5	368.8	209.5	17.01	15.91	13.13	15.91	90-100	116.6	868.2	57.8,57.8
110	30.74	217.0	358.2	217.0	30.74	16.91	15.85	16.91	100-110	116.4	984.7	65.5,65.5
120	44.91	220.3	339.0	220.3	44.91	26.21	17.17	26.21	110-120	114.3	1099	73.1,73.1
130	66.05	219.1	313.0	219.1	66.05	42.63	31.63	42.63	120-130	109.5	1208	80.4,80.4
140	87.41	212.7	282.1	212.7	87.41	63.68	49.55	63.68	130-140	99.72	1308	87,87
150	109.0	198.0	246.9	198.0	109.0	69.75	71.08	69.75	140-150	83.55	1392	92.6,92.6
160	122.0	180.2	209.8	180.2	122.0	84.38	77.41	84.38	150-160	61.40	1453	96.7,96.7
170	130.7	156.4	170.4	156.4	130.7	107.7	101.1	107.7	160-170	37.48	1491	99.2,99.2
180	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	170-180	12.72	1503	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	12.72	0-10	12.72	0.85%
10-20	37.48	0-20	50.20	3.37%
20-30	61.40	0-30	111.60	7.49%
30-40	83.55	0-40	195.15	13.09%
40-50	99.72	0-50	294.87	19.78%
50-60	109.47	0-60	404.34	27.13%
60-70	114.28	0-70	518.62	34.79%
70-80	116.42	0-80	635.04	42.60%
80-90	116.60	0-90	751.64	50.43%
90-100	116.60	0-100	868.24	58.25%
100-110	116.42	0-110	984.66	66.06%
110-120	114.28	0-120	1098.94	73.73%
120-130	109.47	0-130	1208.41	81.07%
130-140	99.72	0-140	1308.13	87.76%
140-150	83.55	0-150	1391.68	93.37%
150-160	61.40	0-160	1453.08	97.49%
160-170	37.48	0-170	1490.56	100.00%
170-180	12.72	0-180	1503.28	100.85%

4.2 Goniophotometer Test

LCS/BUG

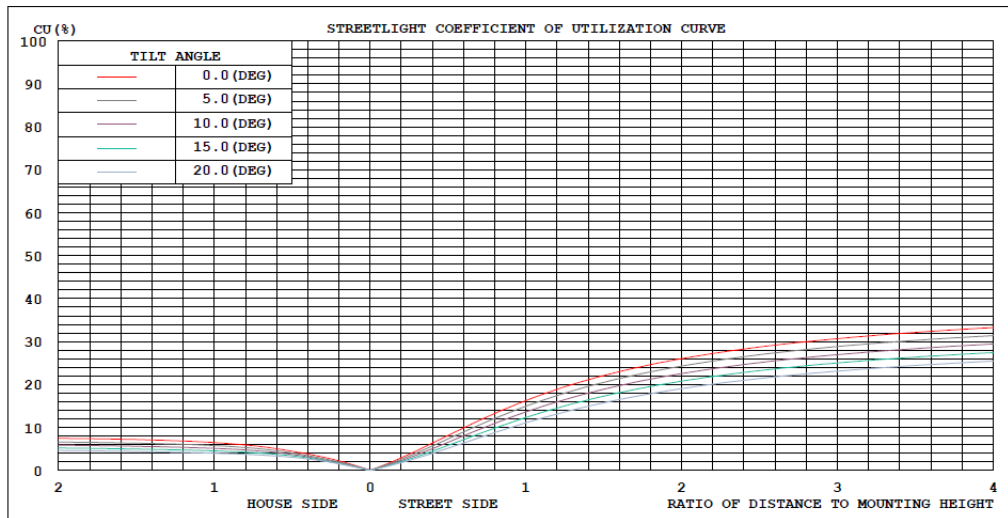


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

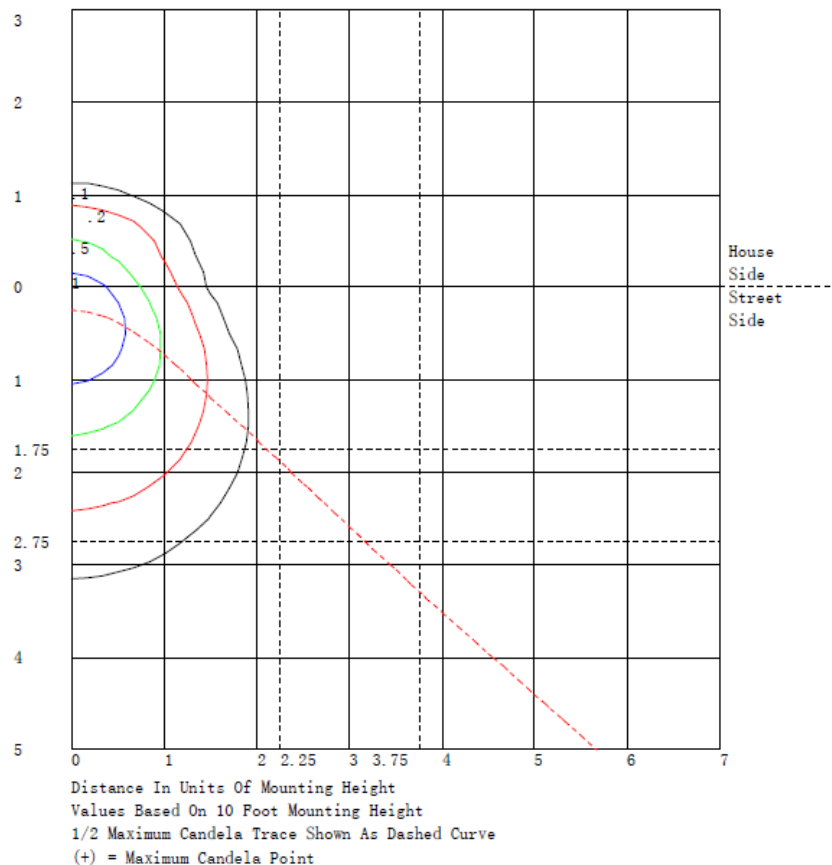
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	73.0	N.A.	4.9
FM - Front-Medium (30-60)	234.3	N.A.	15.6
FH - Front-High (60-80)	209.5	N.A.	13.9
FVH - Front-Very High (80-90)	109.0	N.A.	7.2
BL - Back-Low (0-30)	38.6	N.A.	2.6
BM - Back-Medium (30-60)	58.4	N.A.	3.9
BH - Back-High (60-80)	21.2	N.A.	1.4
BVH - Back-Very High (80-90)	7.6	N.A.	0.5
UL - Uplight-Low (90-100)	116.6	N.A.	7.8
UH - Uplight-High (100-180)	635.0	N.A.	42.2
Total	1503.2	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	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
5	133	137	142	146	149	151	152	151	149	146	142	137	133	128	125	121	119	118	118
10	131	140	148	156	163	168	170	168	163	156	148	140	131	122	114	108	103	101	101
15	129	142	155	168	179	187	190	187	179	168	155	142	129	115	104	95.0	89.5	86.9	86.9
20	122	140	160	180	195	205	210	205	195	180	160	140	122	105	92.6	84.4	79.1	77.1	77.4
25	116	138	164	190	210	223	229	223	210	190	164	138	116	95.6	82.2	75.5	72.9	72.1	72.7
30	109	136	168	198	224	240	247	240	224	198	168	136	109	86.4	73.9	69.7	69.8	70.2	71.1
35	98.2	130	170	206	236	256	265	256	236	206	170	130	98.2	76.6	67.6	66.6	66.3	62.7	62.0
40	87.4	123	168	213	247	272	282	272	247	213	168	123	87.4	67.6	62.7	63.7	55.6	50.4	49.6
45	76.6	116	166	216	258	287	298	287	258	216	166	116	76.6	59.8	58.5	53.6	44.5	40.3	39.5
50	66.1	105	163	219	268	300	313	300	268	219	163	105	66.1	53.6	53.8	42.6	35.6	32.3	31.6
55	55.5	92.6	154	222	275	312	327	312	275	222	154	92.6	55.5	48.0	45.0	33.7	28.2	25.2	24.7
60	44.9	79.1	145	220	282	323	339	323	282	220	145	79.1	44.9	42.6	34.9	26.2	20.5	17.7	17.2
65	37.8	69.6	136	219	288	333	350	333	288	219	136	69.6	37.8	35.4	27.0	19.9	17.0	16.5	16.4
70	30.7	60.3	127	217	292	340	358	340	292	217	127	60.3	30.7	27.6	21.9	16.9	16.5	15.8	15.9
75	23.7	50.2	116	213	294	346	364	346	294	213	116	50.2	23.7	19.6	17.6	16.5	15.8	15.3	15.5
80	17.0	48.4	111	209	295	349	369	349	295	209	111	48.4	17.0	17.4	16.1	15.9	14.2	13.7	13.1
85	10.4	47.2	108	208	296	351	370	351	296	208	108	47.2	10.4	15.9	16.1	15.4	13.3	11.9	11.5
90	3.72	45.6	103	204	295	351	370	351	295	204	103	45.6	3.72	14.5	16.0	14.8	13.5	12.1	13.6
95	10.4	47.2	108	208	296	351	370	351	296	208	108	47.2	10.4	15.9	16.1	15.4	13.3	11.9	11.5
100	17.0	48.4	111	209	295	349	369	349	295	209	111	48.4	17.0	17.4	16.1	15.9	14.2	13.7	13.1
105	23.7	50.2	116	213	294	346	364	346	294	213	116	50.2	23.7	19.6	17.6	16.5	15.8	15.3	15.5
110	30.7	60.3	127	217	292	340	358	340	292	217	127	60.3	30.7	27.6	21.9	16.9	16.5	15.8	15.9
115	37.8	69.6	136	219	288	333	350	333	288	219	136	69.6	37.8	35.4	27.0	19.9	17.0	16.5	16.4
120	44.9	79.1	145	220	282	323	339	323	282	220	145	79.1	44.9	42.6	34.9	26.2	20.5	17.7	17.2
125	55.5	92.6	154	222	275	312	327	312	275	222	154	92.6	55.5	48.0	45.0	33.7	28.2	25.2	24.7
130	66.1	105	163	219	268	300	313	300	268	219	163	105	66.1	53.6	53.8	42.6	35.6	32.3	31.6
135	76.6	116	166	216	258	287	298	287	258	216	166	116	76.6	59.8	58.5	53.6	44.5	40.3	39.5
140	87.4	123	168	213	247	272	282	272	247	213	168	123	87.4	67.6	62.7	63.7	55.6	50.4	49.6
145	98.2	130	170	206	236	256	265	256	236	206	170	130	98.2	76.6	67.6	66.6	66.3	62.7	62.0
150	109	136	168	198	224	240	247	240	224	198	168	136	109	86.4	73.9	69.7	69.8	70.2	71.1
155	116	138	164	190	210	223	229	223	210	190	164	138	116	95.6	82.2	75.5	72.9	72.1	72.7
160	122	140	160	180	195	205	210	205	195	180	160	140	122	105	92.6	84.4	79.1	77.1	77.4
165	129	142	155	168	179	187	190	187	179	168	155	142	129	115	104	95.0	89.5	86.9	86.9
170	131	140	148	156	163	168	170	168	163	156	148	140	131	122	114	108	103	101	101
175	133	137	142	146	149	151	152	151	149	146	142	137	133	128	125	121	119	118	118
180	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	135	135	135	135	135														
5	118	119	121	125	128														
10	101	103	108	114	122														
15	86.9	89.5	95.0	104	115														
20	77.1	79.1	84.4	92.6	105														
25	72.1	72.9	75.5	82.2	95.6														
30	70.2	69.8	69.7	73.9	86.4														
35	62.7	66.3	66.6	67.6	76.6														
40	50.4	55.6	63.7	62.7	67.6														
45	40.3	44.5	53.6	58.5	59.8														
50	32.3	35.6	42.6	53.8	53.6														
55	25.2	28.2	33.7	45.0	48.0														
60	17.7	20.5	26.2	34.9	42.6														
65	16.5	17.0	19.9	27.0	35.4														
70	15.8	16.5	16.9	21.9	27.6														
75	15.3	15.8	16.5	17.6	19.6														
80	13.7	14.2	15.9	16.1	17.4														
85	11.9	13.3	15.4	16.1	15.9														
90	12.1	13.5	14.8	16.0	14.5														
95	11.9	13.3	15.4	16.1	15.9														
100	13.7	14.2	15.9	16.1	17.4														
105	15.3	15.8	16.5	17.6	19.6														
110	15.8	16.5	16.9	21.9	27.6														
115	16.5	17.0	19.9	27.0	35.4														
120	17.7	20.5	26.2	34.9	42.6														
125	25.2	28.2	33.7	45.0	48.0														
130	32.3	35.6	42.6	53.8	53.6														
135	40.3	44.5	53.6	58.5	59.8														
140	50.4	55.6	63.7	62.7	67.6														
145	62.7	66.3	66.6	67.6	76.6														
150	70.2	69.8	69.7	73.9	86.4														
155	72.1	72.9	75.5	82.2	95.6														
160	77.1	79.1	84.4	92.6	105														
165	86.9	89.5	95.0	104	115														
170	101	103	108	114	122														
175	118	119	121	125	128														
180	135	135	135	135	135														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18 @12W5000K	Sample ID	250728005-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	0.100	11.9	0.991	5.90
277.0	60	0.049	12.1	0.890	24.91

5.0 Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTC-F01-001	Goniophotometer System	2024-11-07	2025-11-06
NTC-F01-006	2.0 meter Integrating Sphere	2024-11-07	2025-11-06
NTC-F01-012	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-013	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-031	Digital Power Meter	2025-08-04	2026-08-03
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

*****End of Report*****