

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		1179
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	108.1
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.9
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	8.63
				277V	32.49
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.989
				277V	0.846
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3045±175	3045
			4 steps	3045±100	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.7
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		71
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		96
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-U3-G1
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		0.047
(Goniophotometer – Section 4.2)			Non-Worst Case		0.085
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.9
(Goniophotometer – Section 4.2)			Non-Worst Case		10.1

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-07	V1-24 @10W3000K	-	250728007-S1
2	Goniophotometer Test	2025-08-07	V1-24 @10W3000K	-	250728007-S1
3	THD and PF Test	2025-08-07	V1-24 @10W3000K	-	250728007-S1

Remark (If any):

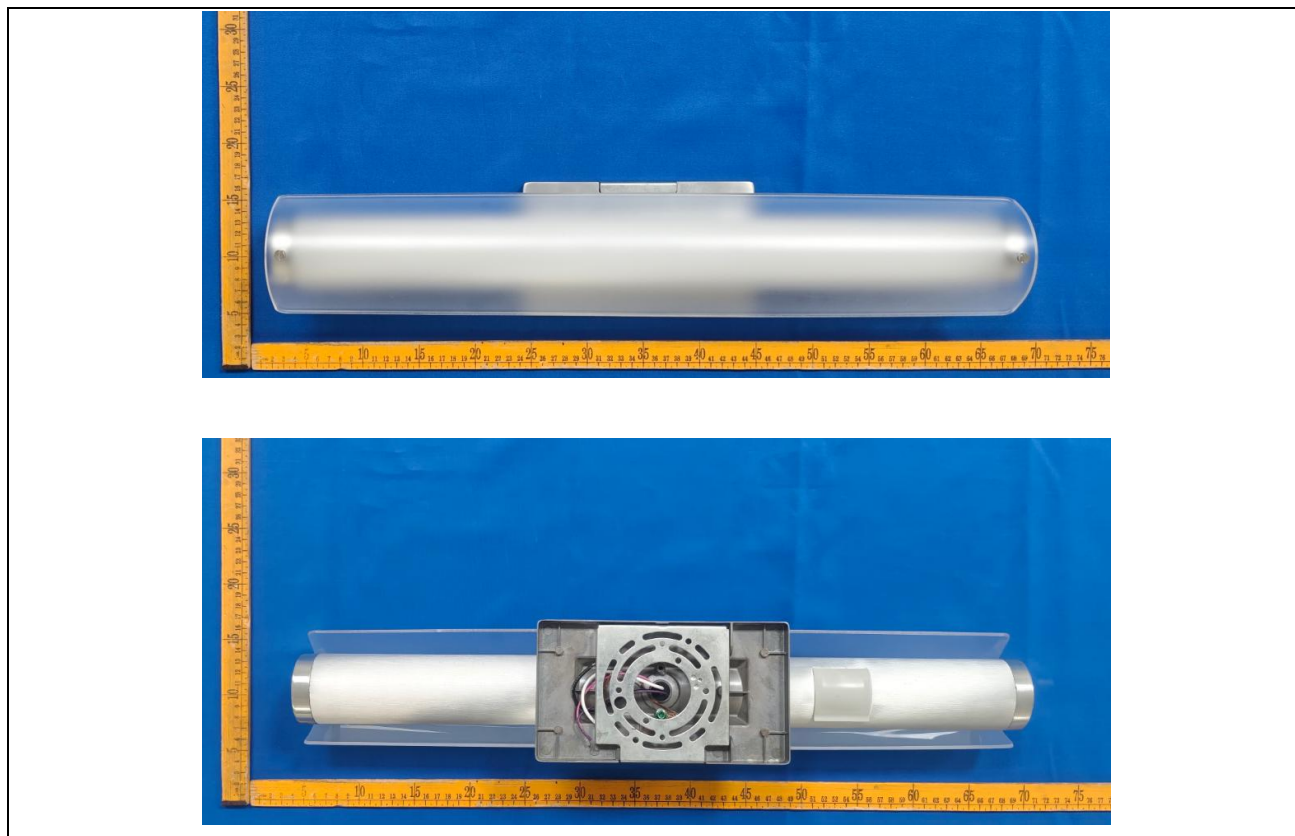
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24 @10W3000K, 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.	V1-24 @10W3000K	Sample ID	250728007-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

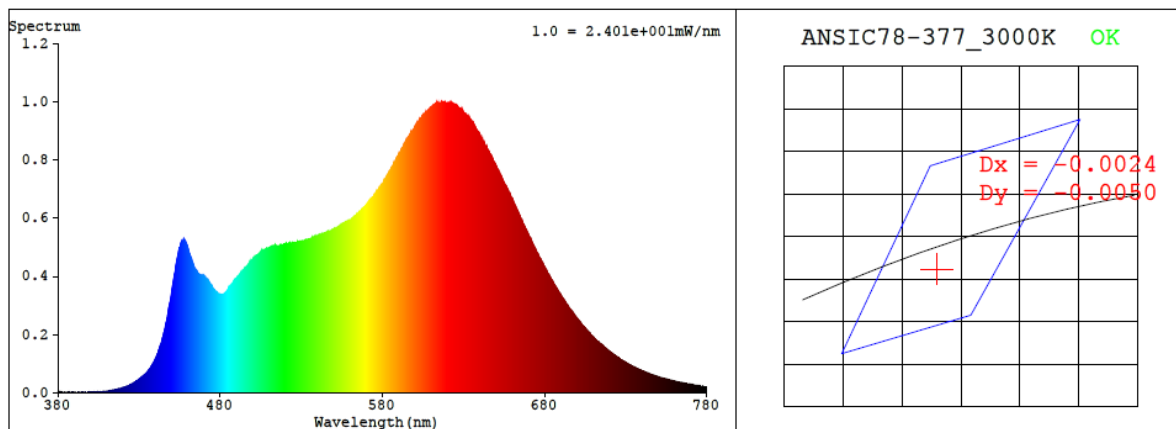
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.085	10.1	0.989
277.0	60	0.047	10.9	0.846

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3045	92.7	71	-0.0017	2.2	90	96	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4314$ $y = 0.3980$ / $u' = 0.2496$ $v' = 0.5181$ ($duv = -1.68e-03$)

CCT= 3045K Prcp WL: $L_d = 583.3\text{nm}$ Purity=48.9%

Peak WL: $L_p = 617\text{nm}$ FWHM: $= 162.7\text{nm}$ Ratio: R=25.1% G=71.0% B=3.9%

Render Index: $R_a = 92.7$ AvgR = 91.2 TM30: $R_f = 91$ $R_g = 98$

EEL: 0.12866 A+

R1 =98 R2 =95 R3 =92 R4 =96 R5 =96 R6 =89 R7 =89

R8 =85 R9 =71 R10=90 R11=96 R12=82 R13=97 R14=96 R15=95

4.1 Integrating Sphere Test

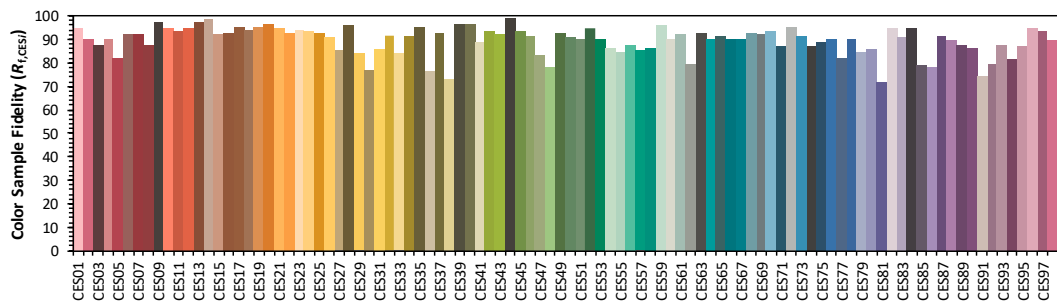
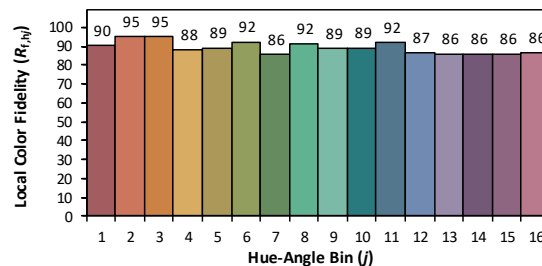
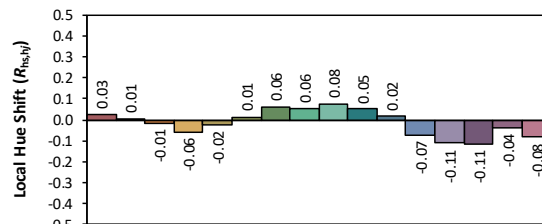
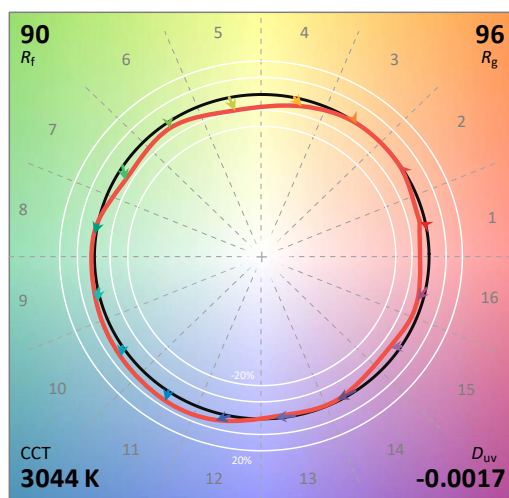
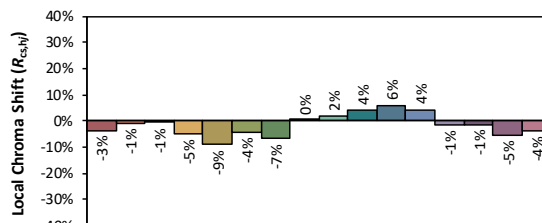
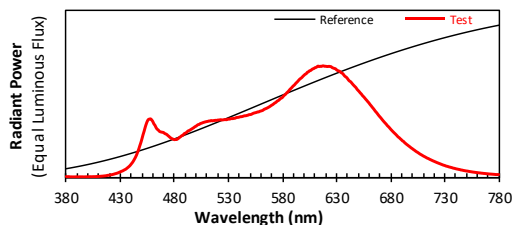
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/21

Model: V1-24 @10W3000K



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

x 0.4314
 y 0.3979
 u' 0.2497
 v' 0.5181

CIE 13.3-1995
(CRI)
 R_a 93
 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	4.60E-06	447	2.50E-04	514	5.08E-04	581	7.28E-04	648	8.03E-04	715	1.66E-04
381	2.90E-06	448	2.81E-04	515	5.05E-04	582	7.37E-04	649	7.89E-04	716	1.60E-04
382	3.70E-06	449	3.10E-04	516	5.07E-04	583	7.45E-04	650	7.78E-04	717	1.56E-04
383	2.40E-06	450	3.45E-04	517	5.08E-04	584	7.57E-04	651	7.68E-04	718	1.51E-04
384	1.60E-06	451	3.80E-04	518	5.10E-04	585	7.66E-04	652	7.55E-04	719	1.47E-04
385	1.60E-06	452	4.12E-04	519	5.09E-04	586	7.77E-04	653	7.46E-04	720	1.42E-04
386	1.20E-06	453	4.48E-04	520	5.12E-04	587	7.89E-04	654	7.32E-04	721	1.38E-04
387	1.40E-06	454	4.78E-04	521	5.12E-04	588	7.98E-04	655	7.22E-04	722	1.34E-04
388	1.40E-06	455	5.03E-04	522	5.14E-04	589	8.08E-04	656	7.11E-04	723	1.30E-04
389	2.00E-06	456	5.17E-04	523	5.15E-04	590	8.19E-04	657	6.99E-04	724	1.26E-04
390	2.30E-06	457	5.20E-04	524	5.13E-04	591	8.27E-04	658	6.88E-04	725	1.22E-04
391	8.00E-07	458	5.23E-04	525	5.14E-04	592	8.39E-04	659	6.77E-04	726	1.18E-04
392	2.30E-06	459	5.13E-04	526	5.15E-04	593	8.49E-04	660	6.66E-04	727	1.14E-04
393	2.00E-06	460	4.99E-04	527	5.17E-04	594	8.58E-04	661	6.52E-04	728	1.10E-04
394	1.80E-06	461	4.78E-04	528	5.15E-04	595	8.70E-04	662	6.41E-04	729	1.07E-04
395	2.00E-06	462	4.65E-04	529	5.18E-04	596	8.80E-04	663	6.28E-04	730	1.04E-04
396	1.30E-06	463	4.45E-04	530	5.21E-04	597	8.87E-04	664	6.16E-04	731	9.98E-05
397	1.70E-06	464	4.31E-04	531	5.20E-04	598	8.95E-04	665	6.04E-04	732	9.71E-05
398	2.00E-06	465	4.23E-04	532	5.23E-04	599	9.06E-04	666	5.90E-04	733	9.47E-05
399	2.50E-06	466	4.12E-04	533	5.26E-04	600	9.15E-04	667	5.80E-04	734	9.11E-05
400	2.20E-06	467	4.07E-04	534	5.25E-04	601	9.24E-04	668	5.67E-04	735	8.89E-05
401	2.70E-06	468	4.04E-04	535	5.28E-04	602	9.29E-04	669	5.54E-04	736	8.61E-05
402	3.20E-06	469	4.02E-04	536	5.28E-04	603	9.41E-04	670	5.42E-04	737	8.35E-05
403	2.60E-06	470	4.00E-04	537	5.33E-04	604	9.45E-04	671	5.32E-04	738	7.99E-05
404	3.00E-06	471	3.92E-04	538	5.36E-04	605	9.55E-04	672	5.19E-04	739	7.84E-05
405	3.40E-06	472	3.87E-04	539	5.36E-04	606	9.57E-04	673	5.07E-04	740	7.55E-05
406	3.50E-06	473	3.82E-04	540	5.39E-04	607	9.65E-04	674	4.96E-04	741	7.29E-05
407	3.80E-06	474	3.73E-04	541	5.42E-04	608	9.72E-04	675	4.85E-04	742	7.10E-05
408	4.70E-06	475	3.65E-04	542	5.42E-04	609	9.75E-04	676	4.75E-04	743	6.87E-05
409	5.00E-06	476	3.56E-04	543	5.45E-04	610	9.82E-04	677	4.62E-04	744	6.71E-05
410	5.50E-06	477	3.49E-04	544	5.48E-04	611	9.85E-04	678	4.53E-04	745	6.40E-05
411	6.50E-06	478	3.43E-04	545	5.51E-04	612	9.91E-04	679	4.43E-04	746	6.27E-05
412	7.00E-06	479	3.40E-04	546	5.51E-04	613	9.97E-04	680	4.31E-04	747	6.03E-05
413	8.00E-06	480	3.36E-04	547	5.54E-04	614	9.93E-04	681	4.20E-04	748	5.83E-05
414	8.60E-06	481	3.38E-04	548	5.56E-04	615	9.95E-04	682	4.10E-04	749	5.65E-05
415	1.01E-05	482	3.37E-04	549	5.60E-04	616	9.94E-04	683	4.00E-04	750	5.46E-05
416	1.08E-05	483	3.42E-04	550	5.61E-04	617	9.98E-04	684	3.91E-04	751	5.35E-05
417	1.25E-05	484	3.50E-04	551	5.63E-04	618	9.99E-04	685	3.81E-04	752	5.18E-05
418	1.46E-05	485	3.58E-04	552	5.68E-04	619	9.95E-04	686	3.71E-04	753	4.97E-05
419	1.61E-05	486	3.65E-04	553	5.73E-04	620	9.95E-04	687	3.60E-04	754	4.84E-05
420	1.72E-05	487	3.73E-04	554	5.76E-04	621	9.94E-04	688	3.54E-04	755	4.68E-05
421	1.91E-05	488	3.77E-04	555	5.78E-04	622	9.93E-04	689	3.44E-04	756	4.51E-05
422	2.12E-05	489	3.89E-04	556	5.81E-04	623	9.95E-04	690	3.35E-04	757	4.39E-05
423	2.34E-05	490	3.94E-04	557	5.85E-04	624	9.93E-04	691	3.25E-04	758	4.24E-05
424	2.60E-05	491	3.99E-04	558	5.85E-04	625	9.91E-04	692	3.20E-04	759	4.11E-05
425	2.92E-05	492	4.09E-04	559	5.91E-04	626	9.83E-04	693	3.09E-04	760	4.01E-05
426	3.17E-05	493	4.16E-04	560	5.93E-04	627	9.79E-04	694	3.01E-04	761	3.86E-05
427	3.49E-05	494	4.19E-04	561	5.96E-04	628	9.76E-04	695	2.93E-04	762	3.73E-05
428	3.82E-05	495	4.26E-04	562	6.01E-04	629	9.73E-04	696	2.85E-04	763	3.64E-05
429	4.29E-05	496	4.32E-04	563	6.08E-04	630	9.64E-04	697	2.78E-04	764	3.48E-05
430	4.68E-05	497	4.38E-04	564	6.12E-04	631	9.57E-04	698	2.71E-04	765	3.41E-05
431	5.13E-05	498	4.44E-04	565	6.17E-04	632	9.53E-04	699	2.62E-04	766	3.28E-05
432	5.48E-05	499	4.52E-04	566	6.21E-04	633	9.50E-04	700	2.56E-04	767	3.21E-05
433	6.03E-05	500	4.57E-04	567	6.27E-04	634	9.40E-04	701	2.48E-04	768	3.09E-05
434	6.57E-05	501	4.65E-04	568	6.32E-04	635	9.34E-04	702	2.42E-04	769	2.99E-05
435	7.05E-05	502	4.71E-04	569	6.39E-04	636	9.27E-04	703	2.34E-04	770	2.90E-05
436	7.84E-05	503	4.73E-04	570	6.46E-04	637	9.14E-04	704	2.27E-04	771	2.78E-05
437	8.62E-05	504	4.81E-04	571	6.51E-04	638	9.04E-04	705	2.22E-04	772	2.70E-05
438	9.46E-05	505	4.83E-04	572	6.59E-04	639	8.97E-04	706	2.15E-04	773	2.64E-05
439	1.04E-04	506	4.88E-04	573	6.66E-04	640	8.87E-04	707	2.08E-04	774	2.56E-05
440	1.16E-04	507	4.91E-04	574	6.72E-04	641	8.73E-04	708	2.03E-04	775	2.48E-05
441	1.28E-04	508	4.94E-04	575	6.82E-04	642	8.63E-04	709	1.97E-04	776	2.41E-05
442	1.43E-04	509	4.96E-04	576	6.87E-04	643	8.57E-04	710	1.91E-04	777	2.28E-05
443	1.60E-04	510	4.99E-04	577	6.94E-04	644	8.46E-04	711	1.86E-04	778	2.24E-05
444	1.78E-04	511	5.00E-04	578	7.04E-04	645	8.34E-04	712	1.81E-04	779	2.23E-05
445	1.99E-04	512	5.04E-04	579	7.09E-04	646	8.23E-04	713	1.75E-04	780	2.24E-05
446	2.24E-04	513	5.03E-04	580	7.16E-04	647	8.13E-04	714	1.70E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24 @10W3000K	Sample ID	250728007-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	0.047	10.9	0.846
NON-WORST CASE	120.0	60	0.085	10.1	0.989

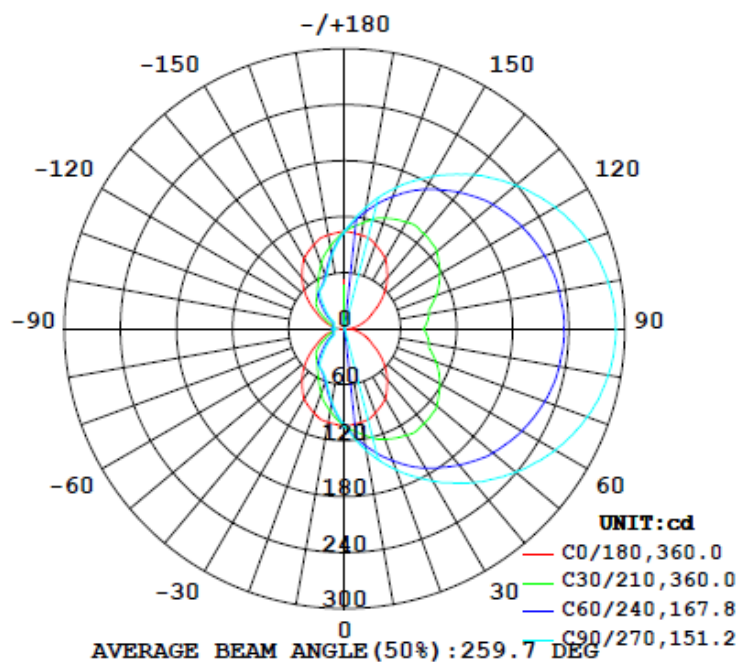
Test Result

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°)	
1179	91.1	155.5	180.0	98.0	108.1	26.7%	B0-U3-G1

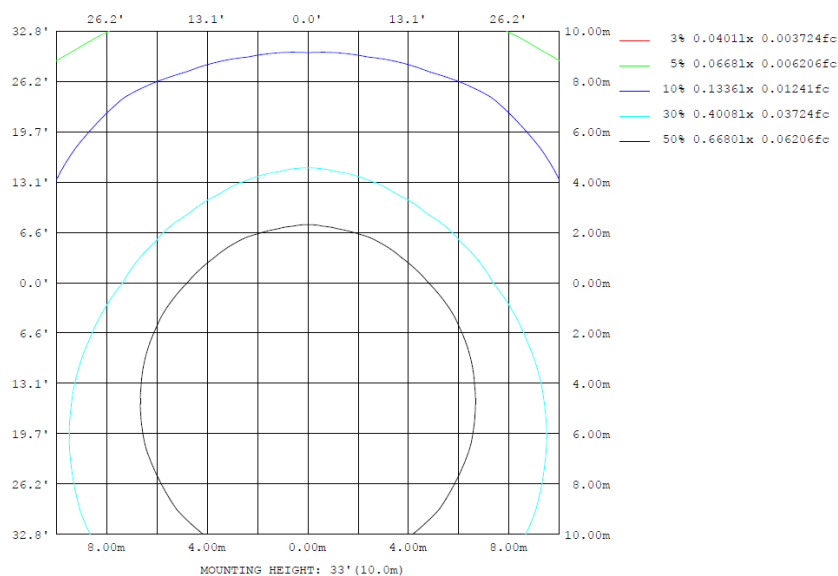
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

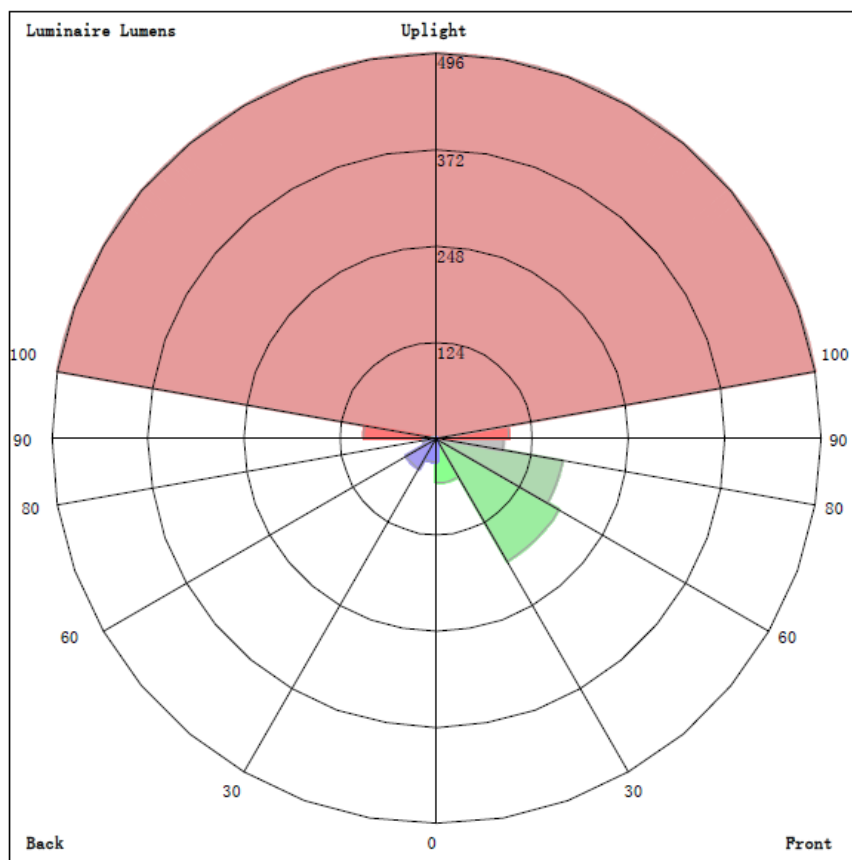
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	%lum, lamp
10	101.9	122.1	132.1	122.1	101.9	84.98	79.42	84.98	0- 10	9.907	9.907	0.84,0.84
20	96.12	140.6	160.9	140.6	96.12	66.48	58.41	66.48	10- 20	29.29	39.20	3.33,3.33
30	87.23	153.7	188.8	153.7	87.23	51.98	50.53	51.98	20- 30	47.56	86.76	7.36,7.36
40	70.86	164.6	215.6	164.6	70.86	46.31	37.22	46.31	30- 40	64.59	151.4	12.8,12.8
50	53.46	171.0	239.0	171.0	53.46	33.63	23.39	33.63	40- 50	77.44	228.8	19.4,19.4
60	35.05	173.5	260.4	173.5	35.05	21.02	12.81	21.02	50- 60	85.36	314.2	26.7,26.7
70	23.19	173.2	276.3	173.2	23.19	13.54	12.30	13.54	60- 70	89.71	403.9	34.3,34.3
80	12.35	169.8	286.4	169.8	12.35	13.15	11.41	13.15	70- 80	92.10	496.0	42.1,42.1
90	2.543	167.0	290.0	167.0	2.543	14.51	13.41	14.51	80- 90	93.36	589.3	50,50
100	12.35	169.8	286.4	169.8	12.35	13.15	11.41	13.15	90-100	93.36	682.7	57.9,57.9
110	23.19	173.2	276.3	173.2	23.19	13.54	12.30	13.54	100-110	92.10	774.8	65.7,65.7
120	35.05	173.5	260.4	173.5	35.05	21.02	12.81	21.02	110-120	89.71	864.5	73.3,73.3
130	53.46	171.0	239.0	171.0	53.46	33.63	23.39	33.63	120-130	85.36	949.9	80.6,80.6
140	70.86	164.6	215.6	164.6	70.86	46.31	37.22	46.31	130-140	77.44	1027	87.2,87.2
150	87.23	153.7	188.8	153.7	87.23	51.98	50.53	51.98	140-150	64.59	1092	92.6,92.6
160	96.12	140.6	160.9	140.6	96.12	66.48	58.41	66.48	150-160	47.56	1139	96.7,96.7
170	101.9	122.1	132.1	122.1	101.9	84.98	79.42	84.98	160-170	29.29	1169	99.2,99.2
180	104.6	104.6	104.6	104.6	104.6	104.6	104.6	104.6	170-180	9.907	1179	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	9.91	0-10	9.91	0.85%
10-20	29.29	0-20	39.20	3.35%
20-30	47.56	0-30	86.76	7.42%
30-40	64.59	0-40	151.35	12.95%
40-50	77.44	0-50	228.79	19.58%
50-60	85.36	0-60	314.15	26.88%
60-70	89.71	0-70	403.86	34.56%
70-80	92.10	0-80	495.96	42.44%
80-90	93.36	0-90	589.32	50.42%
90-100	93.36	0-100	682.68	58.41%
100-110	92.10	0-110	774.78	66.29%
110-120	89.71	0-120	864.49	73.97%
120-130	85.36	0-130	949.85	81.27%
130-140	77.44	0-140	1027.29	87.90%
140-150	64.59	0-150	1091.88	93.42%
150-160	47.56	0-160	1139.44	97.49%
160-170	29.29	0-170	1168.73	100.00%
170-180	9.91	0-180	1178.64	100.85%

4.2 Goniophotometer Test

LCS/BUG

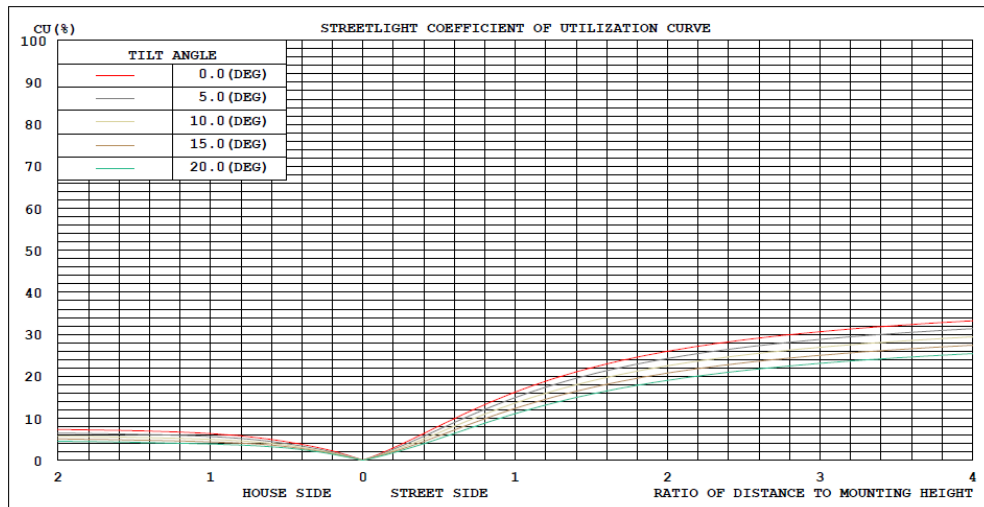


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

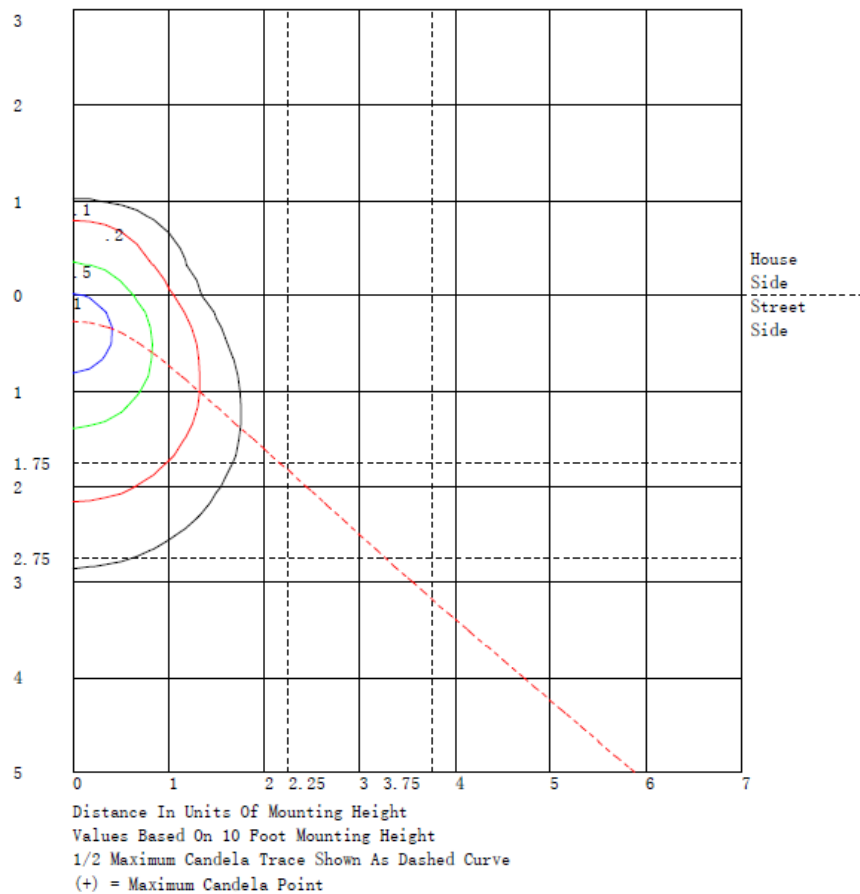
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	56.7	N.A.	4.8
FM - Front-Medium (30-60)	182.7	N.A.	15.5
FH - Front-High (60-80)	165.1	N.A.	14.0
FVH - Front-Very High (80-90)	86.6	N.A.	7.3
BL - Back-Low (0-30)	30.0	N.A.	2.5
BM - Back-Medium (30-60)	44.7	N.A.	3.8
BH - Back-High (60-80)	16.7	N.A.	1.4
BVH - Back-Very High (80-90)	6.7	N.A.	0.6
UL - Uplight-Low (90-100)	93.4	N.A.	7.9
UH - Uplight-High (100-180)	496.0	N.A.	42.1
Total	1178.6	N.A.	100.0
BUG Rating	B0-U3-G1		

4.2 Goniophotometer Test

Coefficients of Utilization



Isolines



4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
5	103	107	110	113	115	117	118	117	115	113	110	107	103	100	97.2	94.9	93.2	92.3	92.2
10	102	109	115	122	127	130	132	130	127	122	115	109	102	95.5	89.7	85.0	81.5	79.6	79.4
15	101	111	122	131	139	145	147	145	139	131	122	111	101	91.0	82.4	75.3	70.4	68.0	67.9
20	96.1	110	126	141	151	158	161	158	151	141	126	110	96.1	83.8	73.8	66.5	61.1	58.6	58.4
25	91.7	110	129	147	162	171	175	171	162	147	129	110	91.7	76.4	64.9	57.9	54.4	52.8	52.9
30	87.2	109	132	154	173	184	189	184	173	154	132	109	87.2	69.5	57.5	52.0	50.6	50.3	50.5
35	79.0	105	134	160	182	196	202	196	182	160	134	105	79.0	61.1	51.3	48.3	48.6	47.8	46.8
40	70.9	100	133	165	191	208	216	208	191	165	133	100	70.9	53.2	46.3	46.3	43.1	38.5	37.2
45	62.7	95.3	131	168	199	220	227	220	199	168	131	95.3	62.7	46.2	42.9	41.6	34.5	31.1	29.6
50	53.5	86.8	129	171	207	231	239	231	207	171	129	86.8	53.5	40.6	39.9	33.6	27.8	24.5	23.4
55	44.3	76.9	123	173	213	241	250	241	213	173	123	76.9	44.3	35.8	34.6	26.8	21.9	18.9	18.1
60	35.1	66.5	117	174	219	250	260	250	219	174	117	66.5	35.1	31.4	27.9	21.0	16.2	13.7	12.8
65	29.1	58.3	111	173	224	258	269	258	224	173	111	58.3	29.1	26.5	21.6	15.8	13.3	12.6	12.5
70	23.2	49.9	104	173	228	264	276	264	228	173	104	49.9	23.2	21.2	17.3	13.5	13.2	12.5	12.3
75	17.3	41.0	96.2	172	231	269	282	269	231	172	96.2	41.0	17.3	15.7	13.5	13.3	13.2	12.6	12.2
80	12.4	38.8	91.7	170	233	273	286	273	233	170	91.7	38.8	12.4	14.3	12.5	13.1	13.0	12.6	11.4
85	7.45	37.0	88.8	170	235	276	289	276	235	170	88.8	37.0	7.45	13.4	13.1	13.8	13.4	11.2	10.3
90	2.54	35.0	84.6	167	235	276	290	276	235	167	84.6	35.0	2.54	12.6	13.6	14.5	14.3	11.6	13.4
95	7.45	37.0	88.8	170	235	276	289	276	235	170	88.8	37.0	7.45	13.4	13.1	13.8	13.4	11.2	10.3
100	12.4	38.8	91.7	170	233	273	286	273	233	170	91.7	38.8	12.4	14.3	12.5	13.1	13.0	12.6	11.4
105	17.3	41.0	96.2	172	231	269	282	269	231	172	96.2	41.0	17.3	15.7	13.5	13.3	13.2	12.6	12.2
110	23.2	49.9	104	173	228	264	276	264	228	173	104	49.9	23.2	21.2	17.3	13.5	13.2	12.5	12.3
115	29.1	58.3	111	173	224	258	269	258	224	173	111	58.3	29.1	26.5	21.6	15.8	13.3	12.6	12.5
120	35.1	66.5	117	174	219	250	260	250	219	174	117	66.5	35.1	31.4	27.9	21.0	16.2	13.7	12.8
125	44.3	76.9	123	173	213	241	250	241	213	173	123	76.9	44.3	35.8	34.6	26.8	21.9	18.9	18.1
130	53.5	86.8	129	171	207	231	239	231	207	171	129	86.8	53.5	40.6	39.9	33.6	27.8	24.5	23.4
135	62.7	95.3	131	168	199	220	227	220	199	168	131	95.3	62.7	46.2	42.9	41.6	34.5	31.1	29.6
140	70.9	100	133	165	191	208	216	208	191	165	133	100	70.9	53.2	46.3	46.3	43.1	38.5	37.2
145	79.0	105	134	160	182	196	202	196	182	160	134	105	79.0	61.1	51.3	48.3	48.6	47.8	46.8
150	87.2	109	132	154	173	184	189	184	173	154	132	109	87.2	69.5	57.5	52.0	50.6	50.3	50.5
155	91.7	110	129	147	162	171	175	171	162	147	129	110	91.7	76.4	64.9	57.9	54.4	52.8	52.9
160	96.1	110	126	141	151	158	161	158	151	141	126	110	96.1	83.8	73.8	66.5	61.1	58.6	58.4
165	101	111	122	131	139	145	147	145	139	131	122	111	101	91.0	82.4	75.3	70.4	68.0	67.9
170	102	109	115	122	127	130	132	130	127	122	115	109	102	95.5	89.7	85.0	81.5	79.6	79.4
175	103	107	110	113	115	117	118	117	115	113	110	107	103	100	97.2	94.9	93.2	92.3	92.2
180	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	105	105	105	105	105														
5	92.3	93.2	94.9	97.2	100														
10	79.6	81.5	85.0	89.7	95.5														
15	68.0	70.4	75.3	82.4	91.0														
20	58.6	61.1	66.5	73.8	83.8														
25	52.8	54.4	57.9	64.9	76.4														
30	50.3	50.6	52.0	57.5	69.5														
35	47.8	48.6	48.3	51.3	61.1														
40	38.5	43.1	46.3	46.3	53.2														
45	31.1	34.5	41.6	42.9	46.2														
50	24.5	27.8	33.6	39.9	40.6														
55	18.9	21.9	26.8	34.6	35.8														
60	13.7	16.2	21.0	27.9	31.4														
65	12.6	13.3	15.8	21.6	26.5														
70	12.5	13.2	13.5	17.3	21.2														
75	12.6	13.2	13.3	13.5	15.7														
80	12.6	13.0	13.1	12.5	14.3														
85	11.2	13.4	13.8	13.1	13.4														
90	11.6	14.3	14.5	13.6	12.6														
95	11.2	13.4	13.8	13.1	13.4														
100	12.6	13.0	13.1	12.5	14.3														
105	12.6	13.2	13.3	13.5	15.7														
110	12.5	13.2	13.5	17.3	21.2														
115	12.6	13.3	15.8	21.6	26.5														
120	13.7	16.2	21.0	27.9	31.4														
125	18.9	21.9	26.8	34.6	35.8														
130	24.5	27.8	33.6	39.9	40.6														
135	31.1	34.5	41.6	42.9	46.2														
140	38.5	43.1	46.3	46.3	53.2														
145	47.8	48.6	48.3	51.3	61.1														
150	50.3	50.6	52.0	57.5	69.5														
155	52.8	54.4	57.9	64.9	76.4														
160	58.6	61.1	66.5	73.8	83.8														
165	68.0	70.4	75.3	82.4	91.0														
170	79.6	81.5	85.0	89.7	95.5														
175	92.3	93.2	94.9	97.2	100														
180	105	105	105	105	105														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24 @10W3000K	Sample ID	250728007-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	0.085	10.1	0.989	8.63
277.0	60	0.047	10.9	0.846	32.49

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*****