

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		2192
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	110.7
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		19.8
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	5.42
				277V	13.33
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.997
				277V	0.971
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3045±175	2995
			4 steps	3045±100	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.1
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		68
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		26.5%
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		0.165
(Goniophotometer – Section 4.2)			Non-Worst Case		0.073
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		19.8
(Goniophotometer – Section 4.2)			Non-Worst Case		19.7

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-29	V1-24 @20W3000K	-	250728007-S1
2	Goniophotometer Test	2025-07-29	V1-24 @20W3000K	-	250728007-S1
3	THD and PF Test	2025-07-29	V1-24 @20W3000K	-	250728007-S1

Remark (If any):

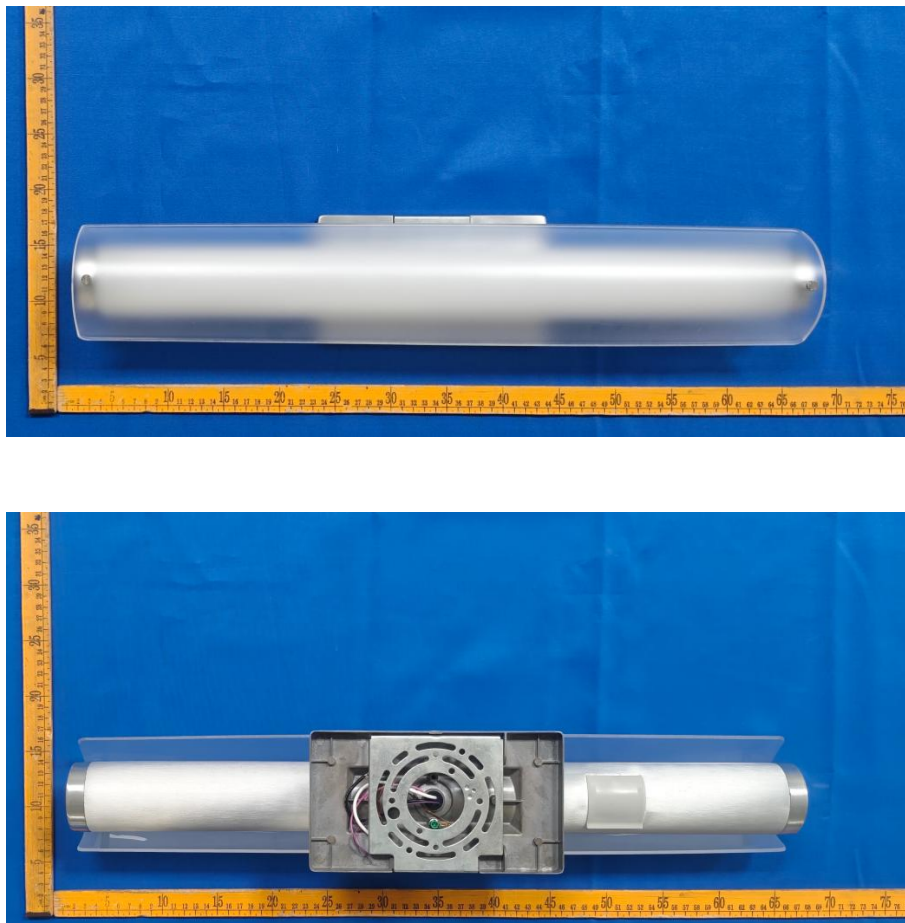
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24 @20W3000K, 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 @20W3000K	Sample ID	250728007-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

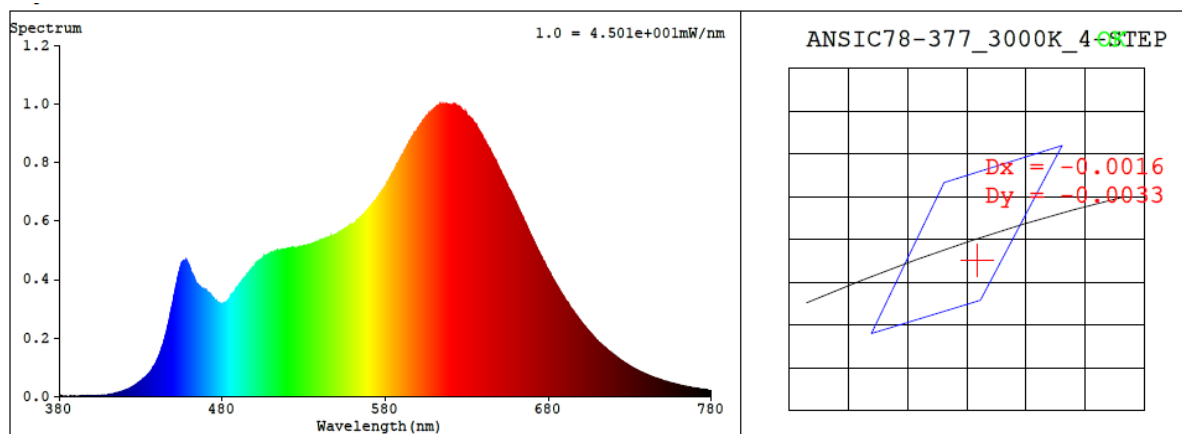
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.165	19.8	0.997
277.0	60	0.073	19.7	0.971

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
2995	93.1	68	-0.0011	2.1	90	97	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4357$ $y = 0.4009$ / $u' = 0.2511$ $v' = 0.5199$ ($duv = -1.09e-03$)

CCT= 2995K Prcp WL: $L_d = 583.2nm$ Purity=51.1%

Peak WL: $L_p = 617nm$ FWHM: $= 156.2nm$ Ratio: R=25.3% G=71.0% B=3.7%

Render Index: $R_a = 93.1$ AvgR = 91.5 TM30: $R_f = 91$ $R_g = 98$

EEL: 0.12734 A+

R1 =99 R2 =96 R3 =93 R4 =96 R5 =97 R6 =90 R7 =89

R8 =84 R9 =68 R10=92 R11=96 R12=84 R13=98 R14=97 R15=94

4.1 Integrating Sphere Test

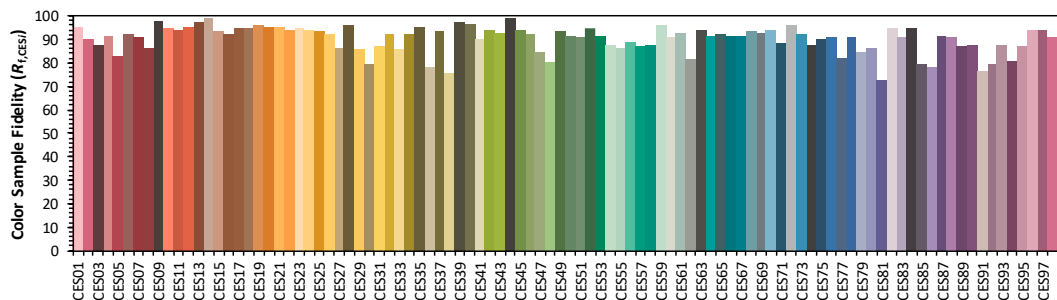
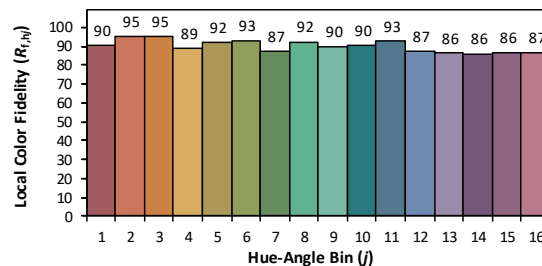
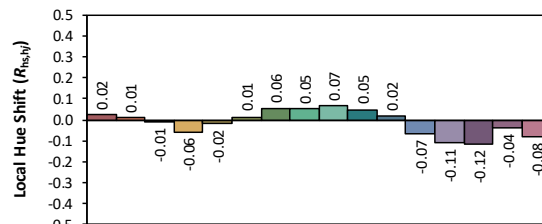
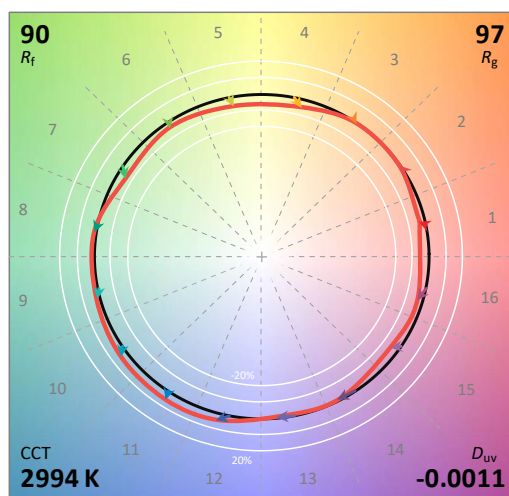
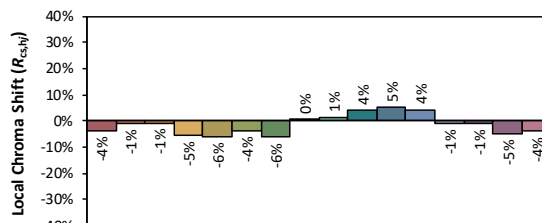
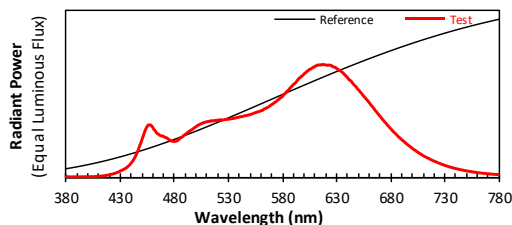
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/21

Model: V1-24 @20W3000K



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

x 0.4357
 y 0.4008
 u' 0.2512
 v' 0.5199

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	2.60E-06	447	2.53E-04	514	5.01E-04	581	7.30E-04	648	8.03E-04	715	1.67E-04
381	3.80E-06	448	2.81E-04	515	4.98E-04	582	7.39E-04	649	7.88E-04	716	1.61E-04
382	2.10E-06	449	3.05E-04	516	5.01E-04	583	7.48E-04	650	7.78E-04	717	1.56E-04
383	1.60E-06	450	3.33E-04	517	5.01E-04	584	7.59E-04	651	7.67E-04	718	1.52E-04
384	1.00E-06	451	3.61E-04	518	5.03E-04	585	7.68E-04	652	7.55E-04	719	1.47E-04
385	2.00E-06	452	3.88E-04	519	5.02E-04	586	7.78E-04	653	7.45E-04	720	1.43E-04
386	1.80E-06	453	4.15E-04	520	5.06E-04	587	7.91E-04	654	7.32E-04	721	1.39E-04
387	2.30E-06	454	4.36E-04	521	5.07E-04	588	7.99E-04	655	7.21E-04	722	1.35E-04
388	1.90E-06	455	4.52E-04	522	5.07E-04	589	8.11E-04	656	7.09E-04	723	1.31E-04
389	2.10E-06	456	4.63E-04	523	5.09E-04	590	8.22E-04	657	6.99E-04	724	1.26E-04
390	1.00E-06	457	4.63E-04	524	5.06E-04	591	8.28E-04	658	6.86E-04	725	1.23E-04
391	2.00E-06	458	4.62E-04	525	5.07E-04	592	8.37E-04	659	6.77E-04	726	1.19E-04
392	1.60E-06	459	4.53E-04	526	5.09E-04	593	8.49E-04	660	6.65E-04	727	1.15E-04
393	2.10E-06	460	4.41E-04	527	5.10E-04	594	8.61E-04	661	6.51E-04	728	1.12E-04
394	2.50E-06	461	4.24E-04	528	5.12E-04	595	8.74E-04	662	6.38E-04	729	1.08E-04
395	2.50E-06	462	4.15E-04	529	5.12E-04	596	8.81E-04	663	6.27E-04	730	1.04E-04
396	2.10E-06	463	3.99E-04	530	5.15E-04	597	8.90E-04	664	6.16E-04	731	1.01E-04
397	2.70E-06	464	3.89E-04	531	5.14E-04	598	8.98E-04	665	6.03E-04	732	9.83E-05
398	2.60E-06	465	3.83E-04	532	5.17E-04	599	9.05E-04	666	5.90E-04	733	9.49E-05
399	2.70E-06	466	3.74E-04	533	5.19E-04	600	9.16E-04	667	5.79E-04	734	9.18E-05
400	2.60E-06	467	3.69E-04	534	5.19E-04	601	9.25E-04	668	5.67E-04	735	8.93E-05
401	2.80E-06	468	3.65E-04	535	5.22E-04	602	9.31E-04	669	5.54E-04	736	8.60E-05
402	3.10E-06	469	3.65E-04	536	5.23E-04	603	9.42E-04	670	5.43E-04	737	8.37E-05
403	3.20E-06	470	3.61E-04	537	5.27E-04	604	9.47E-04	671	5.32E-04	738	8.08E-05
404	4.00E-06	471	3.54E-04	538	5.29E-04	605	9.56E-04	672	5.18E-04	739	7.85E-05
405	3.50E-06	472	3.51E-04	539	5.30E-04	606	9.59E-04	673	5.07E-04	740	7.63E-05
406	4.50E-06	473	3.47E-04	540	5.34E-04	607	9.65E-04	674	4.97E-04	741	7.34E-05
407	4.80E-06	474	3.39E-04	541	5.36E-04	608	9.73E-04	675	4.85E-04	742	7.15E-05
408	5.60E-06	475	3.33E-04	542	5.35E-04	609	9.76E-04	676	4.76E-04	743	6.90E-05
409	6.40E-06	476	3.27E-04	543	5.38E-04	610	9.84E-04	677	4.62E-04	744	6.70E-05
410	6.70E-06	477	3.20E-04	544	5.41E-04	611	9.86E-04	678	4.53E-04	745	6.48E-05
411	7.90E-06	478	3.19E-04	545	5.44E-04	612	9.93E-04	679	4.41E-04	746	6.33E-05
412	8.40E-06	479	3.16E-04	546	5.45E-04	613	9.96E-04	680	4.31E-04	747	6.13E-05
413	9.30E-06	480	3.15E-04	547	5.48E-04	614	9.94E-04	681	4.21E-04	748	5.90E-05
414	1.04E-05	481	3.19E-04	548	5.49E-04	615	9.97E-04	682	4.09E-04	749	5.71E-05
415	1.22E-05	482	3.20E-04	549	5.53E-04	616	9.95E-04	683	3.99E-04	750	5.54E-05
416	1.31E-05	483	3.25E-04	550	5.55E-04	617	1.00E-03	684	3.91E-04	751	5.36E-05
417	1.56E-05	484	3.32E-04	551	5.57E-04	618	9.99E-04	685	3.82E-04	752	5.21E-05
418	1.69E-05	485	3.42E-04	552	5.61E-04	619	9.97E-04	686	3.72E-04	753	5.05E-05
419	1.81E-05	486	3.50E-04	553	5.65E-04	620	9.96E-04	687	3.61E-04	754	4.88E-05
420	2.11E-05	487	3.55E-04	554	5.69E-04	621	9.94E-04	688	3.53E-04	755	4.72E-05
421	2.35E-05	488	3.61E-04	555	5.72E-04	622	9.93E-04	689	3.44E-04	756	4.57E-05
422	2.54E-05	489	3.73E-04	556	5.75E-04	623	9.95E-04	690	3.36E-04	757	4.45E-05
423	2.73E-05	490	3.78E-04	557	5.79E-04	624	9.92E-04	691	3.26E-04	758	4.27E-05
424	3.05E-05	491	3.85E-04	558	5.80E-04	625	9.92E-04	692	3.20E-04	759	4.16E-05
425	3.34E-05	492	3.94E-04	559	5.84E-04	626	9.83E-04	693	3.10E-04	760	3.99E-05
426	3.69E-05	493	4.02E-04	560	5.89E-04	627	9.80E-04	694	3.02E-04	761	3.87E-05
427	4.07E-05	494	4.08E-04	561	5.90E-04	628	9.76E-04	695	2.93E-04	762	3.72E-05
428	4.44E-05	495	4.14E-04	562	5.96E-04	629	9.74E-04	696	2.86E-04	763	3.66E-05
429	4.89E-05	496	4.19E-04	563	6.04E-04	630	9.64E-04	697	2.79E-04	764	3.54E-05
430	5.35E-05	497	4.27E-04	564	6.08E-04	631	9.58E-04	698	2.71E-04	765	3.42E-05
431	5.84E-05	498	4.33E-04	565	6.13E-04	632	9.52E-04	699	2.63E-04	766	3.32E-05
432	6.26E-05	499	4.41E-04	566	6.18E-04	633	9.48E-04	700	2.56E-04	767	3.23E-05
433	6.77E-05	500	4.47E-04	567	6.23E-04	634	9.40E-04	701	2.49E-04	768	3.06E-05
434	7.31E-05	501	4.55E-04	568	6.29E-04	635	9.32E-04	702	2.42E-04	769	3.00E-05
435	7.79E-05	502	4.61E-04	569	6.37E-04	636	9.26E-04	703	2.36E-04	770	2.91E-05
436	8.60E-05	503	4.65E-04	570	6.44E-04	637	9.14E-04	704	2.28E-04	771	2.87E-05
437	9.40E-05	504	4.70E-04	571	6.49E-04	638	9.04E-04	705	2.22E-04	772	2.73E-05
438	1.03E-04	505	4.74E-04	572	6.57E-04	639	8.96E-04	706	2.15E-04	773	2.64E-05
439	1.12E-04	506	4.79E-04	573	6.64E-04	640	8.85E-04	707	2.10E-04	774	2.56E-05
440	1.24E-04	507	4.83E-04	574	6.70E-04	641	8.72E-04	708	2.04E-04	775	2.52E-05
441	1.37E-04	508	4.85E-04	575	6.79E-04	642	8.62E-04	709	1.97E-04	776	2.42E-05
442	1.50E-04	509	4.88E-04	576	6.86E-04	643	8.56E-04	710	1.91E-04	777	2.36E-05
443	1.68E-04	510	4.92E-04	577	6.94E-04	644	8.46E-04	711	1.85E-04	778	2.29E-05
444	1.85E-04	511	4.92E-04	578	7.03E-04	645	8.33E-04	712	1.81E-04	779	2.28E-05
445	2.07E-04	512	4.96E-04	579	7.09E-04	646	8.21E-04	713	1.75E-04	780	2.28E-05
446	2.29E-04	513	4.95E-04	580	7.16E-04	647	8.11E-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 @20W3000K	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	120.0	60	0.165	19.8	0.997
NON-WORST CASE	277.0	60	0.073	19.7	0.971

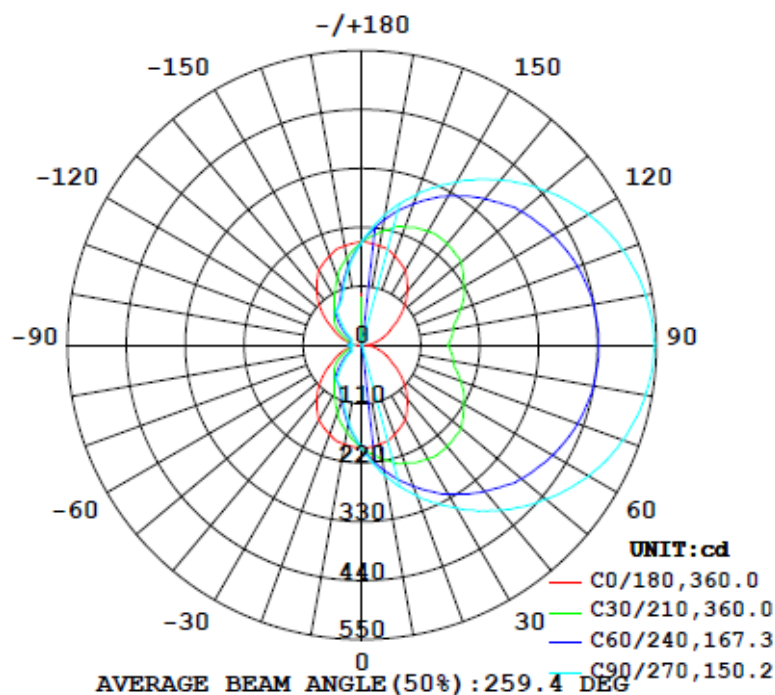
Test Result

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°)	
2192	89.0	155.2	180.0	98.2	110.7	26.5%	B0-U4-G2

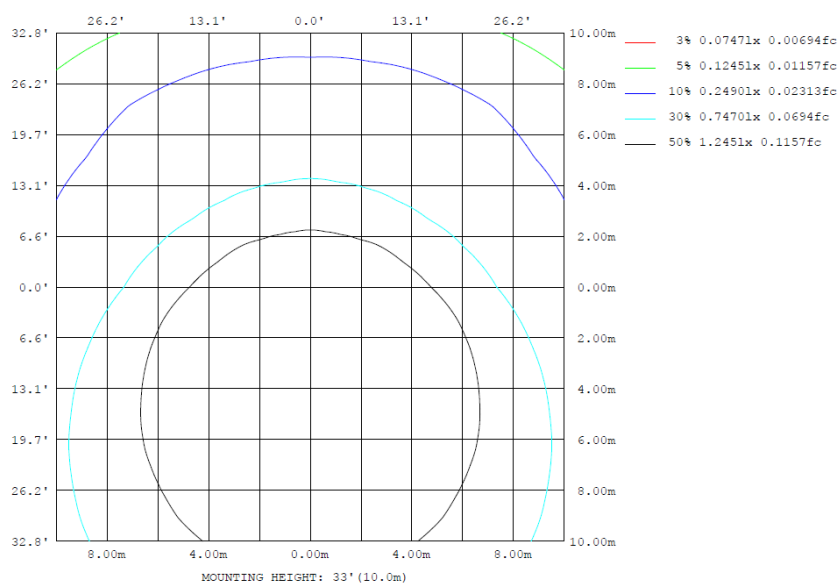
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

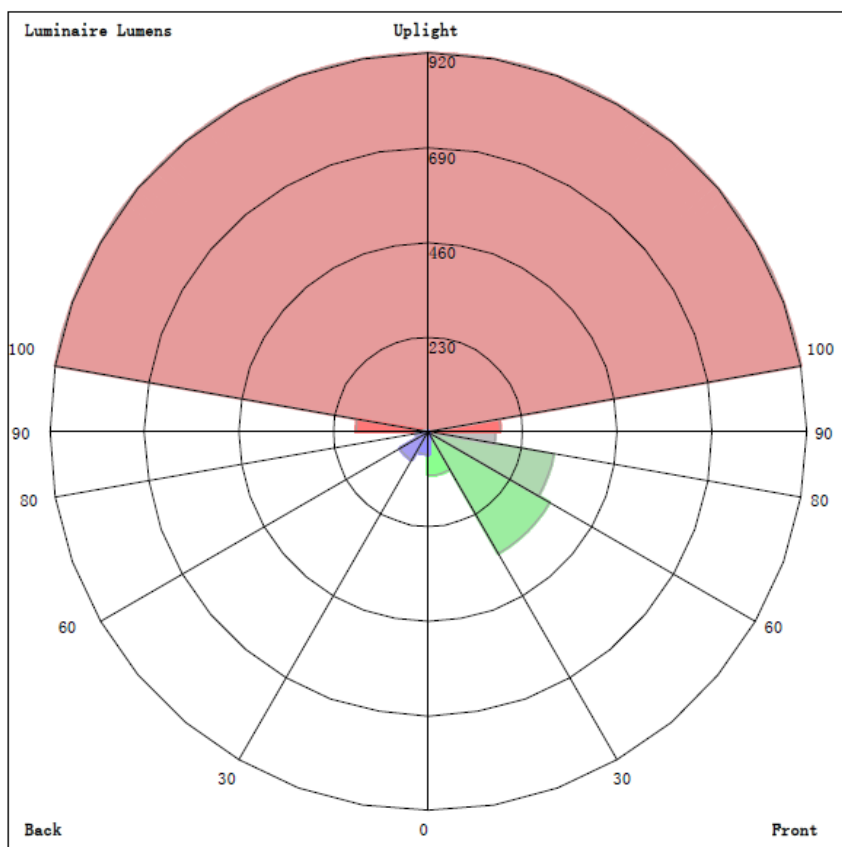
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	188.3	227.7	247.0	227.7	188.3	156.6	146.6	156.6	0- 10	18.37	18.37	0.84,0.84
20	177.7	262.2	298.6	262.2	177.7	121.4	104.8	121.4	10- 20	54.29	72.66	3.32,3.32
30	161.7	285.8	350.8	285.8	161.7	91.25	86.11	91.25	20- 30	87.66	160.3	7.32,7.32
40	131.4	309.5	401.9	309.5	131.4	78.23	67.71	78.23	30- 40	118.9	279.3	12.7,12.7
50	98.90	319.5	447.7	319.5	98.90	60.59	41.21	60.59	40- 50	143.4	422.6	19.3,19.3
60	64.20	325.4	489.2	325.4	64.20	37.04	22.17	37.04	50- 60	158.5	581.1	26.5,26.5
70	42.19	325.8	518.7	325.8	42.19	23.40	21.12	23.40	60- 70	167.2	748.3	34.1,34.1
80	22.24	319.8	537.5	319.8	22.24	23.33	21.36	23.33	70- 80	172.2	920.5	42,42
90	4.347	316.0	546.9	316.0	4.347	27.16	24.83	27.16	80- 90	175.3	1096	50,50
100	22.24	319.8	537.5	319.8	22.24	23.33	21.36	23.33	90-100	175.3	1271	58,58
110	42.19	325.8	518.7	325.8	42.19	23.40	21.12	23.40	100-110	172.2	1443	65.9,65.9
120	64.20	325.4	489.2	325.4	64.20	37.04	22.17	37.04	110-120	167.2	1611	73.5,73.5
130	98.90	319.5	447.7	319.5	98.90	60.59	41.21	60.59	120-130	158.5	1769	80.7,80.7
140	131.4	309.5	401.9	309.5	131.4	78.23	67.71	78.23	130-140	143.4	1912	87.3,87.3
150	161.7	285.8	350.8	285.8	161.7	91.25	86.11	91.25	140-150	118.9	2031	92.7,92.7
160	177.7	262.2	298.6	262.2	177.7	121.4	104.8	121.4	150-160	87.66	2119	96.7,96.7
170	188.3	227.7	247.0	227.7	188.3	156.6	146.6	156.6	160-170	54.29	2173	99.2,99.2
180	193.7	193.7	193.7	193.7	193.7	193.7	193.7	193.7	170-180	18.37	2192	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	18.37	0-10	18.37	0.85%
10-20	54.29	0-20	72.66	3.34%
20-30	87.66	0-30	160.32	7.38%
30-40	118.94	0-40	279.26	12.85%
40-50	143.39	0-50	422.65	19.45%
50-60	158.45	0-60	581.10	26.74%
60-70	167.19	0-70	748.29	34.43%
70-80	172.20	0-80	920.49	42.36%
80-90	175.31	0-90	1095.80	50.42%
90-100	175.31	0-100	1271.11	58.49%
100-110	172.20	0-110	1443.31	66.41%
110-120	167.19	0-120	1610.50	74.11%
120-130	158.45	0-130	1768.95	81.40%
130-140	143.39	0-140	1912.34	88.00%
140-150	118.94	0-150	2031.28	93.47%
150-160	87.66	0-160	2118.94	97.50%
160-170	54.29	0-170	2173.23	100.00%
170-180	18.37	0-180	2191.60	100.85%

4.2 Goniophotometer Test

LCS/BUG

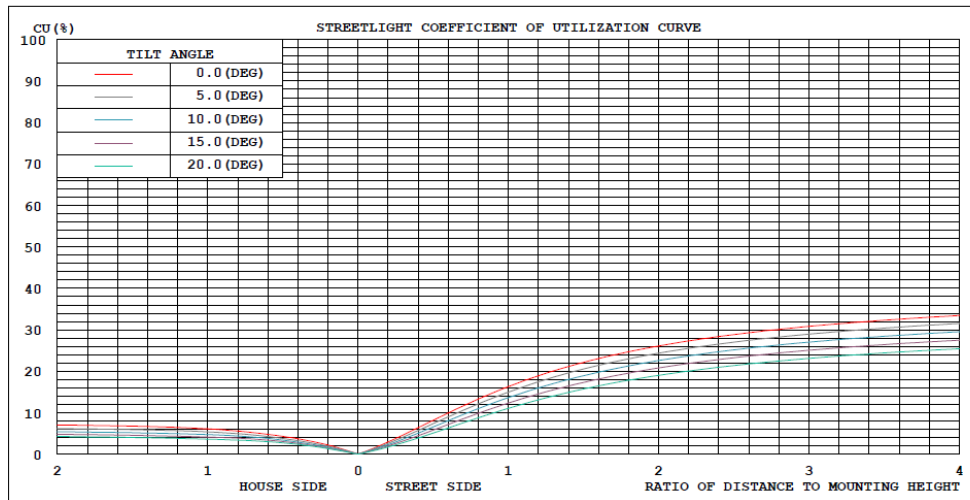


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

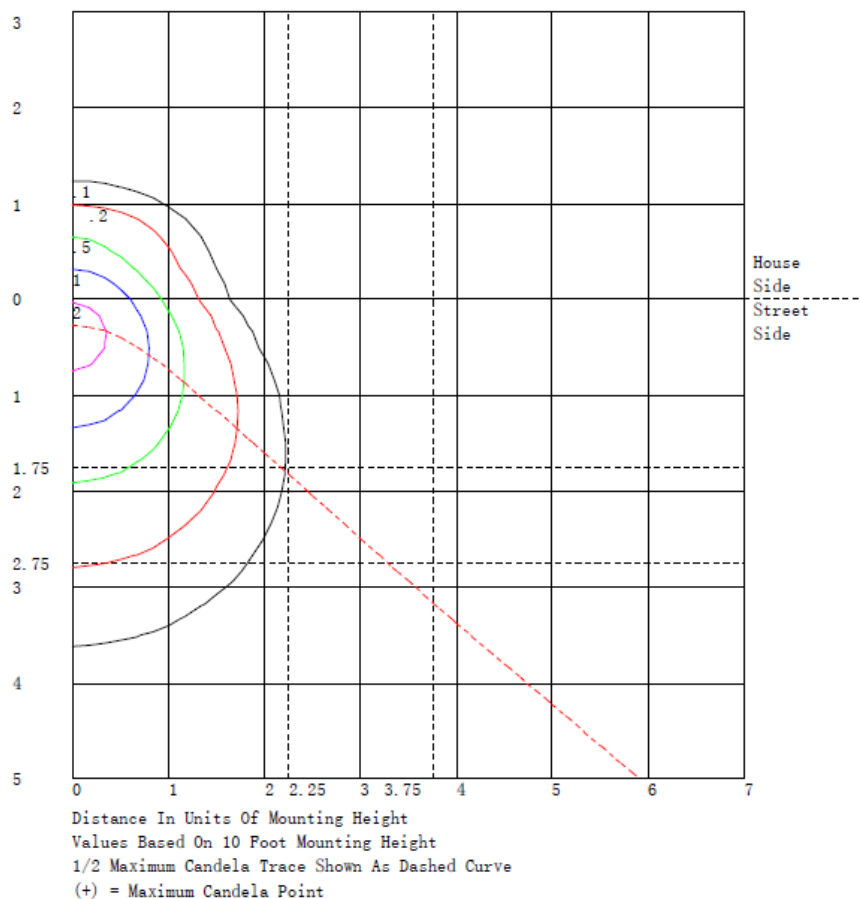
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	105.7	N.A.	4.8
FM - Front-Medium (30-60)	341.7	N.A.	15.6
FH - Front-High (60-80)	310.3	N.A.	14.2
FVH - Front-Very High (80-90)	163.0	N.A.	7.4
BL - Back-Low (0-30)	54.6	N.A.	2.5
BM - Back-Medium (30-60)	79.1	N.A.	3.6
BH - Back-High (60-80)	29.1	N.A.	1.3
BVH - Back-Very High (80-90)	12.3	N.A.	0.6
UL - Uplight-Low (90-100)	175.3	N.A.	8.0
UH - Uplight-High (100-180)	920.5	N.A.	42.0
Total	2191.6	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 (DBG) γ (DBG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194
5	191	198	204	210	215	218	219	218	215	210	204	198	191	185	179	174	171	169	169
10	188	202	216	228	238	244	247	244	238	228	216	202	188	176	165	157	150	147	147
15	186	206	227	245	259	270	274	270	259	245	227	206	186	168	151	138	129	124	124
20	178	207	235	262	281	294	299	294	281	262	235	207	178	154	135	121	110	105	105
25	170	205	242	274	301	319	325	319	301	274	242	205	170	141	118	104	96.0	91.9	92.0
30	162	203	246	286	321	343	351	343	321	286	246	203	162	128	104	91.3	86.7	85.4	86.1
35	147	196	248	298	340	367	379	367	340	298	248	196	147	112	90.9	82.5	82.1	82.6	83.0
40	131	188	247	310	356	391	402	391	356	310	247	188	131	96.3	80.6	78.2	76.7	70.3	67.7
45	116	178	244	315	373	413	427	413	373	315	244	178	116	82.6	73.1	72.1	62.5	55.5	53.0
50	98.9	162	241	319	389	432	448	432	389	319	241	162	98.9	71.4	67.5	60.6	49.4	43.3	41.2
55	81.6	144	231	325	400	451	470	451	400	325	231	144	81.6	61.8	59.4	47.6	38.4	33.0	31.3
60	64.2	124	220	325	411	468	489	468	411	325	220	124	64.2	53.5	49.1	37.0	28.0	23.4	22.2
65	53.2	109	210	327	421	484	505	484	421	327	210	109	53.2	45.3	38.4	27.6	22.8	21.5	21.1
70	42.2	93.4	196	326	429	496	519	496	429	326	196	93.4	42.2	36.6	30.5	23.4	22.6	21.5	21.1
75	31.2	76.7	183	323	435	505	530	505	435	323	183	76.7	31.2	27.8	23.6	23.1	22.8	21.5	21.2
80	22.2	72.6	174	320	439	514	538	514	439	320	174	72.6	22.2	25.9	22.3	23.3	22.8	21.7	21.4
85	13.3	69.2	168	320	441	518	544	518	441	320	168	69.2	13.3	25.0	24.2	25.2	24.3	19.8	19.4
90	4.35	65.3	160	316	442	521	547	521	442	316	160	65.3	4.35	24.2	26.0	27.2	27.1	21.3	24.8
95	13.3	69.2	168	320	441	518	544	518	441	320	168	69.2	13.3	25.0	24.2	25.2	24.3	19.8	19.4
100	22.2	72.6	174	320	439	514	538	514	439	320	174	72.6	22.2	25.9	22.3	23.3	22.8	21.7	21.4
105	31.2	76.7	183	323	435	505	530	505	435	323	183	76.7	31.2	27.8	23.6	23.1	22.8	21.5	21.2
110	42.2	93.4	196	326	429	496	519	496	429	326	196	93.4	42.2	36.6	30.5	23.4	22.6	21.5	21.1
115	53.2	109	210	327	421	484	505	484	421	327	210	109	53.2	45.3	38.4	27.6	22.8	21.5	21.1
120	64.2	124	220	325	411	468	489	468	411	325	220	124	64.2	53.5	49.1	37.0	28.0	23.4	22.2
125	81.6	144	231	325	400	451	470	451	400	325	231	144	81.6	61.8	59.4	47.6	38.4	33.0	31.3
130	98.9	162	241	319	389	432	448	432	389	319	241	162	98.9	71.4	67.5	60.6	49.4	43.3	41.2
135	116	178	244	315	373	413	427	413	373	315	244	178	116	82.6	73.1	72.1	62.5	55.5	53.0
140	131	188	247	310	356	391	402	391	356	310	247	188	131	96.3	80.6	78.2	76.7	70.3	67.7
145	147	196	248	298	340	367	379	367	340	298	248	196	147	112	90.9	82.5	82.1	82.6	83.0
150	162	203	246	286	321	343	351	343	321	286	246	203	162	128	104	91.3	86.7	85.4	86.1
155	170	205	242	274	301	319	325	319	301	274	242	205	170	141	118	104	96.0	91.9	92.0
160	178	207	235	262	281	294	299	294	281	262	235	207	178	154	135	121	110	105	105
165	186	206	227	245	259	270	274	270	259	245	227	206	186	168	151	138	129	124	124
170	188	202	216	228	238	244	247	244	238	228	216	202	188	176	165	157	150	147	147
175	191	198	204	210	215	218	219	218	215	210	204	198	191	185	179	174	171	169	169
180	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194

Table--2

UNIT: cd

C (DBG) γ (DBG)	285	300	315	330	345														
0	194	194	194	194	194														
5	169	171	174	179	185														
10	147	150	157	165	176														
15	124	129	138	151	168														
20	105	110	121	135	154														
25	91.9	96.0	104	118	141														
30	85.4	86.7	91.3	104	128														
35	82.6	82.1	82.5	90.9	112														
40	70.3	76.7	78.2	80.6	96.3														
45	55.5	62.5	72.1	73.1	82.6														
50	43.3	49.4	60.6	67.5	71.4														
55	33.0	38.4	47.6	59.4	61.8														
60	23.4	28.0	37.0	49.1	53.5														
65	21.5	22.8	27.6	38.4	45.3														
70	21.5	22.6	23.4	30.5	36.6														
75	21.5	22.8	23.1	23.6	27.8														
80	21.7	22.8	23.3	22.3	25.9														
85	19.8	24.3	25.2	24.2	25.0														
90	21.3	27.1	27.2	26.0	24.2														
95	19.8	24.3	25.2	24.2	25.0														
100	21.7	22.8	23.3	22.3	25.9														
105	21.5	22.8	23.1	23.6	27.8														
110	21.5	22.6	23.4	30.5	36.6														
115	21.5	22.8	27.6	38.4	45.3														
120	23.4	28.0	37.0	49.1	53.5														
125	33.0	38.4	47.6	59.4	61.8														
130	43.3	49.4	60.6	67.5	71.4														
135	55.5	62.5	72.1	73.1	82.6														
140	70.3	76.7	78.2	80.6	96.3														
145	82.6	82.1	82.5	90.9	112														
150	85.4	86.7	91.3	104	128														
155	91.9	96.0	104	118	141														
160	105	110	121	135	154														
165	124	129	138	151	168														
170	147	150	157	165	176														
175	169	171	174	179	185														
180	194	194	194	194	194														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24 @20W3000K	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	0.165	19.8	0.997	5.42
277.0	60	0.073	19.7	0.971	13.33

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*****