

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		2128
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	106.9
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		19.9
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	5.08
		ANSI C82-77-10:2020		277V	13.28
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	0.997
		ANSI C82-77-10:2020		277V	0.971
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	2725±145	2777
			4 steps	2725±83	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.6
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		62
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		91
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%		-4%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.6%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U4-G2
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		120.0
(Goniophotometer – Section 4.2)			Non-Worst Case		277.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.166
(Goniophotometer – Section 4.2)			Non-Worst Case		0.073
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		19.9
(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 @20W2700K	-	250728007-S1
2	Goniophotometer Test	2025-07-29	V1-24 @20W2700K	-	250728007-S1
3	THD and PF Test	2025-07-29	V1-24 @20W2700K	-	250728007-S1

Remark (If any):

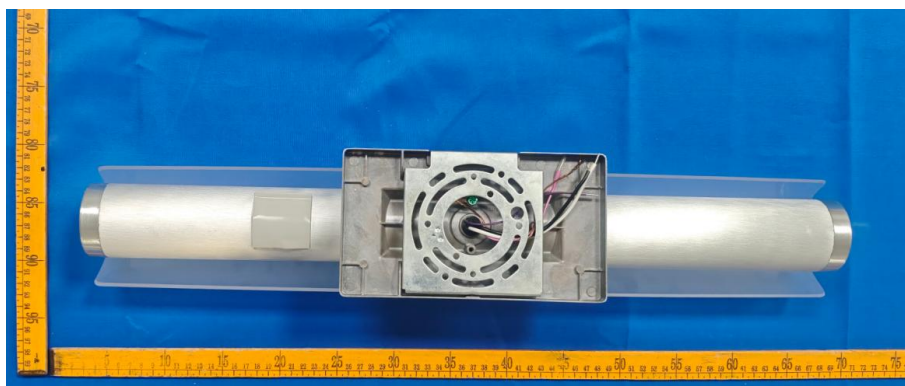
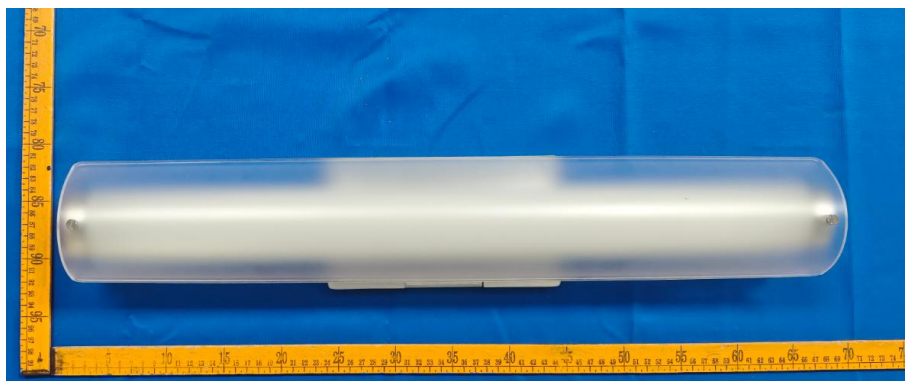
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-24 @20W2700K, 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 @20W2700K	Sample ID	250728007-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

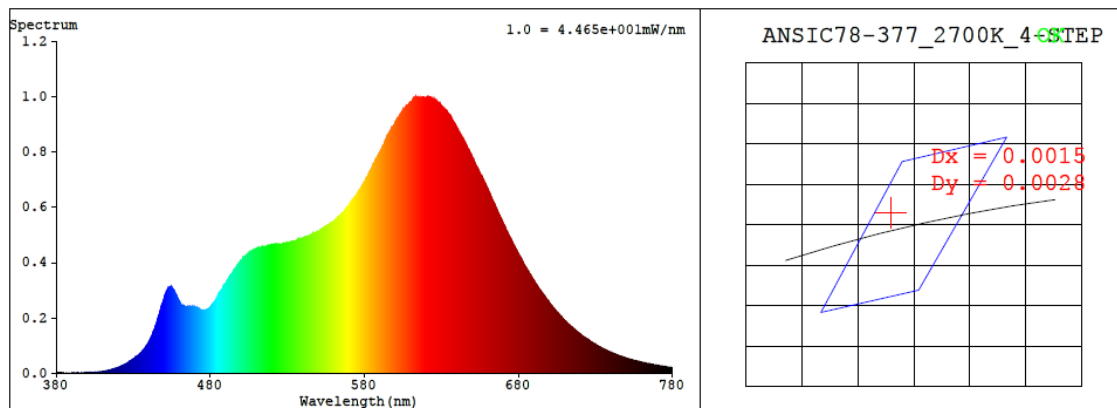
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm 1^{\circ}\text{C}$.</p> <p>The sample measurements 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	0.166	19.9	0.997
277.0	60	0.073	19.7	0.971

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
2777	93.6	62	0.0009	2.4	91	96	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4552$ $y = 0.4119$ / $u' = 0.2589$ $v' = 0.5271$ ($duv=8.91e-04$)

CCT= 2777K Prcp WL: $L_d=583.5nm$ Purity=60.3%

Peak WL: $L_p=621nm$ FWHM: $=128.5nm$ Ratio:R=26.6% G=70.2% B=3.1%

Render Index: $R_a = 93.6$ AvgR = 91.8 TM30:Rf=91 Rg=96

EEL: 0.13527 A+

R1 =98 R2 =98 R3 =94 R4 =97 R5 =99 R6 =92 R7 =90

R8 =81 R9 =62 R10=95 R11=95 R12=89 R13=99 R14=97 R15=91

4.1 Integrating Sphere Test

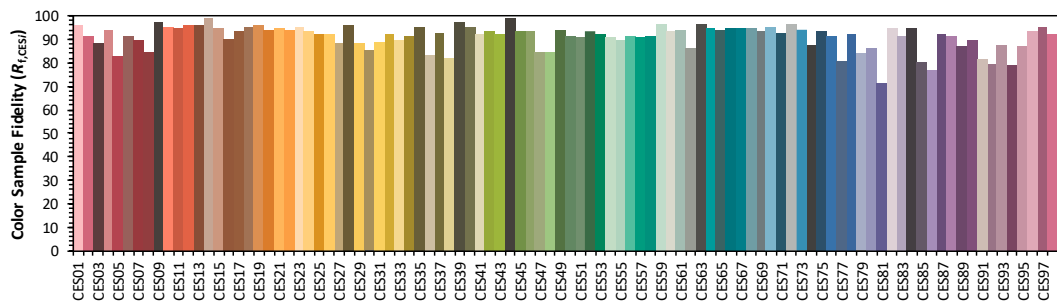
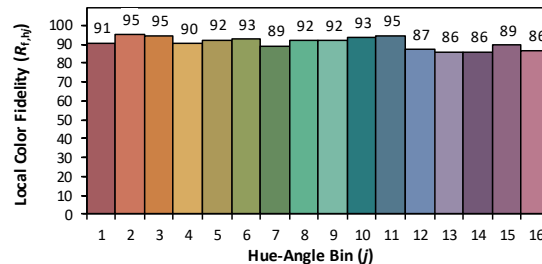
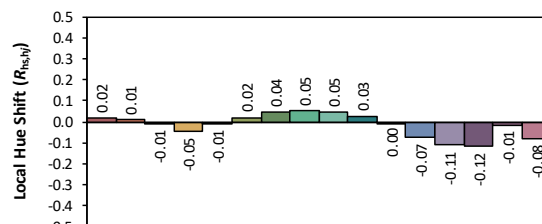
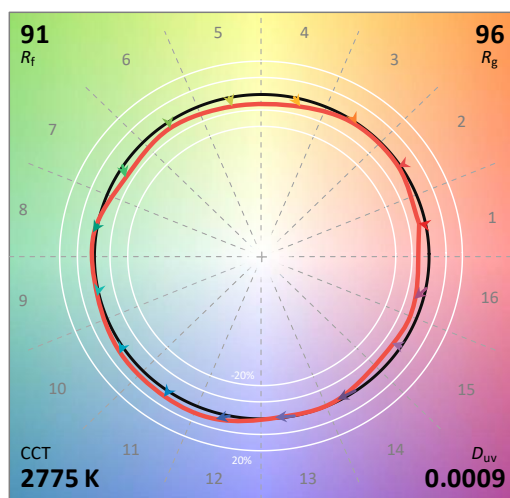
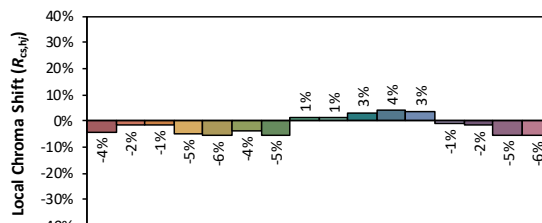
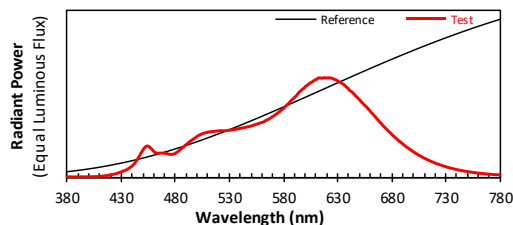
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/21

Model: V1-24 @20W2700K



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

x 0.4552
 y 0.4118
 u' 0.2590
 v' 0.5271

CIE 13.3-1995
(CRI)
 R_a 94
 R_g 62

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	1.80E-06	447	2.18E-04	514	4.59E-04	581	7.02E-04	648	8.05E-04	715	1.66E-04
381	2.20E-06	448	2.39E-04	515	4.58E-04	582	7.11E-04	649	7.91E-04	716	1.60E-04
382	1.60E-06	449	2.53E-04	516	4.59E-04	583	7.24E-04	650	7.81E-04	717	1.56E-04
383	3.00E-06	450	2.72E-04	517	4.60E-04	584	7.33E-04	651	7.70E-04	718	1.51E-04
384	1.00E-06	451	2.88E-04	518	4.63E-04	585	7.43E-04	652	7.56E-04	719	1.47E-04
385	8.00E-07	452	2.98E-04	519	4.62E-04	586	7.57E-04	653	7.45E-04	720	1.42E-04
386	1.30E-06	453	3.09E-04	520	4.65E-04	587	7.69E-04	654	7.34E-04	721	1.37E-04
387	9.00E-07	454	3.11E-04	521	4.65E-04	588	7.77E-04	655	7.23E-04	722	1.33E-04
388	9.00E-07	455	3.10E-04	522	4.65E-04	589	7.88E-04	656	7.12E-04	723	1.30E-04
389	1.60E-06	456	3.02E-04	523	4.67E-04	590	7.98E-04	657	7.02E-04	724	1.26E-04
390	1.80E-06	457	2.91E-04	524	4.64E-04	591	8.09E-04	658	6.89E-04	725	1.22E-04
391	8.00E-07	458	2.81E-04	525	4.65E-04	592	8.18E-04	659	6.79E-04	726	1.18E-04
392	1.80E-06	459	2.68E-04	526	4.65E-04	593	8.33E-04	660	6.66E-04	727	1.14E-04
393	1.80E-06	460	2.57E-04	527	4.67E-04	594	8.45E-04	661	6.51E-04	728	1.11E-04
394	2.20E-06	461	2.47E-04	528	4.68E-04	595	8.59E-04	662	6.42E-04	729	1.08E-04
395	1.70E-06	462	2.44E-04	529	4.69E-04	596	8.66E-04	663	6.28E-04	730	1.05E-04
396	1.80E-06	463	2.40E-04	530	4.71E-04	597	8.77E-04	664	6.16E-04	731	1.00E-04
397	1.50E-06	464	2.39E-04	531	4.71E-04	598	8.87E-04	665	6.04E-04	732	9.74E-05
398	2.20E-06	465	2.41E-04	532	4.75E-04	599	8.95E-04	666	5.91E-04	733	9.45E-05
399	2.60E-06	466	2.40E-04	533	4.76E-04	600	9.06E-04	667	5.78E-04	734	9.15E-05
400	2.70E-06	467	2.41E-04	534	4.77E-04	601	9.17E-04	668	5.67E-04	735	8.86E-05
401	2.70E-06	468	2.40E-04	535	4.78E-04	602	9.21E-04	669	5.55E-04	736	8.60E-05
402	3.20E-06	469	2.40E-04	536	4.80E-04	603	9.32E-04	670	5.42E-04	737	8.38E-05
403	3.20E-06	470	2.39E-04	537	4.83E-04	604	9.39E-04	671	5.32E-04	738	8.08E-05
404	3.40E-06	471	2.37E-04	538	4.86E-04	605	9.49E-04	672	5.17E-04	739	7.81E-05
405	3.90E-06	472	2.36E-04	539	4.86E-04	606	9.53E-04	673	5.07E-04	740	7.58E-05
406	4.20E-06	473	2.32E-04	540	4.89E-04	607	9.60E-04	674	4.96E-04	741	7.30E-05
407	4.40E-06	474	2.29E-04	541	4.92E-04	608	9.69E-04	675	4.85E-04	742	7.09E-05
408	5.40E-06	475	2.28E-04	542	4.94E-04	609	9.74E-04	676	4.75E-04	743	6.87E-05
409	5.70E-06	476	2.27E-04	543	4.95E-04	610	9.81E-04	677	4.63E-04	744	6.67E-05
410	6.70E-06	477	2.28E-04	544	4.97E-04	611	9.84E-04	678	4.53E-04	745	6.45E-05
411	7.70E-06	478	2.31E-04	545	5.00E-04	612	9.94E-04	679	4.42E-04	746	6.28E-05
412	8.00E-06	479	2.34E-04	546	5.02E-04	613	9.97E-04	680	4.31E-04	747	6.05E-05
413	9.60E-06	480	2.39E-04	547	5.06E-04	614	9.94E-04	681	4.20E-04	748	5.82E-05
414	1.06E-05	481	2.47E-04	548	5.06E-04	615	9.96E-04	682	4.11E-04	749	5.68E-05
415	1.25E-05	482	2.53E-04	549	5.11E-04	616	9.93E-04	683	4.01E-04	750	5.49E-05
416	1.39E-05	483	2.61E-04	550	5.12E-04	617	9.97E-04	684	3.90E-04	751	5.34E-05
417	1.50E-05	484	2.71E-04	551	5.15E-04	618	9.98E-04	685	3.81E-04	752	5.14E-05
418	1.73E-05	485	2.83E-04	552	5.20E-04	619	9.96E-04	686	3.71E-04	753	4.98E-05
419	1.92E-05	486	2.91E-04	553	5.24E-04	620	9.97E-04	687	3.60E-04	754	4.82E-05
420	2.07E-05	487	2.99E-04	554	5.28E-04	621	9.97E-04	688	3.54E-04	755	4.70E-05
421	2.27E-05	488	3.06E-04	555	5.31E-04	622	9.97E-04	689	3.44E-04	756	4.55E-05
422	2.55E-05	489	3.20E-04	556	5.34E-04	623	9.97E-04	690	3.36E-04	757	4.41E-05
423	2.85E-05	490	3.25E-04	557	5.38E-04	624	9.95E-04	691	3.25E-04	758	4.26E-05
424	3.06E-05	491	3.34E-04	558	5.42E-04	625	9.93E-04	692	3.19E-04	759	4.10E-05
425	3.34E-05	492	3.45E-04	559	5.45E-04	626	9.87E-04	693	3.09E-04	760	4.02E-05
426	3.67E-05	493	3.54E-04	560	5.49E-04	627	9.83E-04	694	3.01E-04	761	3.86E-05
427	4.03E-05	494	3.61E-04	561	5.51E-04	628	9.78E-04	695	2.93E-04	762	3.71E-05
428	4.51E-05	495	3.70E-04	562	5.56E-04	629	9.75E-04	696	2.86E-04	763	3.61E-05
429	4.81E-05	496	3.76E-04	563	5.65E-04	630	9.66E-04	697	2.78E-04	764	3.54E-05
430	5.21E-05	497	3.85E-04	564	5.69E-04	631	9.61E-04	698	2.70E-04	765	3.41E-05
431	5.68E-05	498	3.91E-04	565	5.75E-04	632	9.55E-04	699	2.63E-04	766	3.29E-05
432	6.04E-05	499	4.00E-04	566	5.81E-04	633	9.51E-04	700	2.55E-04	767	3.20E-05
433	6.44E-05	500	4.08E-04	567	5.85E-04	634	9.42E-04	701	2.48E-04	768	3.06E-05
434	6.98E-05	501	4.15E-04	568	5.94E-04	635	9.35E-04	702	2.41E-04	769	3.01E-05
435	7.34E-05	502	4.21E-04	569	6.01E-04	636	9.28E-04	703	2.35E-04	770	2.89E-05
436	8.12E-05	503	4.26E-04	570	6.08E-04	637	9.17E-04	704	2.28E-04	771	2.82E-05
437	8.75E-05	504	4.30E-04	571	6.14E-04	638	9.07E-04	705	2.20E-04	772	2.71E-05
438	9.53E-05	505	4.35E-04	572	6.24E-04	639	8.99E-04	706	2.15E-04	773	2.61E-05
439	1.03E-04	506	4.40E-04	573	6.30E-04	640	8.88E-04	707	2.09E-04	774	2.53E-05
440	1.13E-04	507	4.42E-04	574	6.37E-04	641	8.74E-04	708	2.03E-04	775	2.48E-05
441	1.23E-04	508	4.46E-04	575	6.46E-04	642	8.65E-04	709	1.96E-04	776	2.38E-05
442	1.35E-04	509	4.47E-04	576	6.55E-04	643	8.59E-04	710	1.91E-04	777	2.31E-05
443	1.49E-04	510	4.52E-04	577	6.62E-04	644	8.48E-04	711	1.86E-04	778	2.26E-05
444	1.64E-04	511	4.53E-04	578	6.73E-04	645	8.37E-04	712	1.80E-04	779	2.26E-05
445	1.81E-04	512	4.55E-04	579	6.81E-04	646	8.25E-04	713	1.75E-04	780	2.26E-05
446	1.99E-04	513	4.55E-04	580	6.88E-04	647	8.12E-04	714	1.69E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-24 @20W2700K	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 $25\pm1^{\circ}\text{C}$, 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	0.166	19.9	0.997
NON-WORST CASE	277.0	60	0.073	19.7	0.971

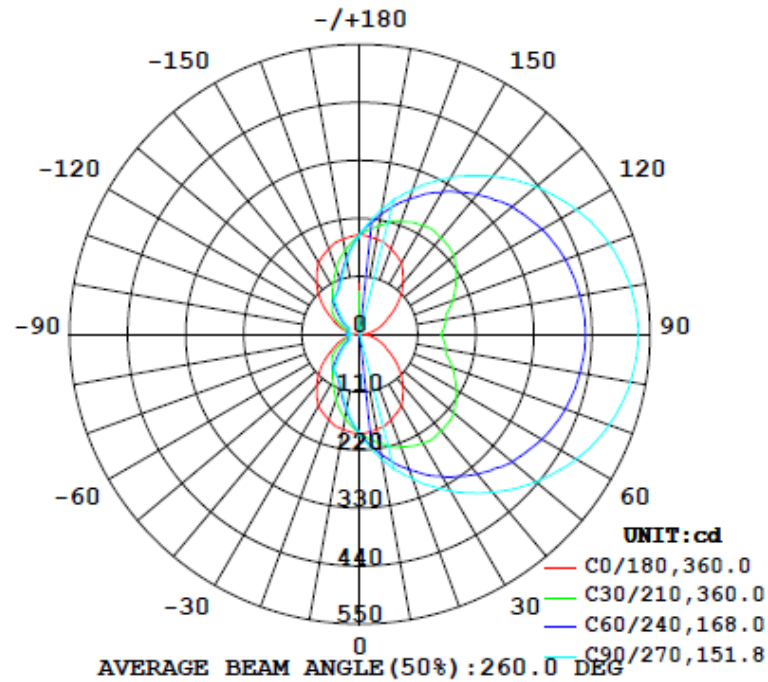
Test Result

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°)	
2128	90.5	155.1	180.0	98.2	106.9	26.6%	B0-U4-G2

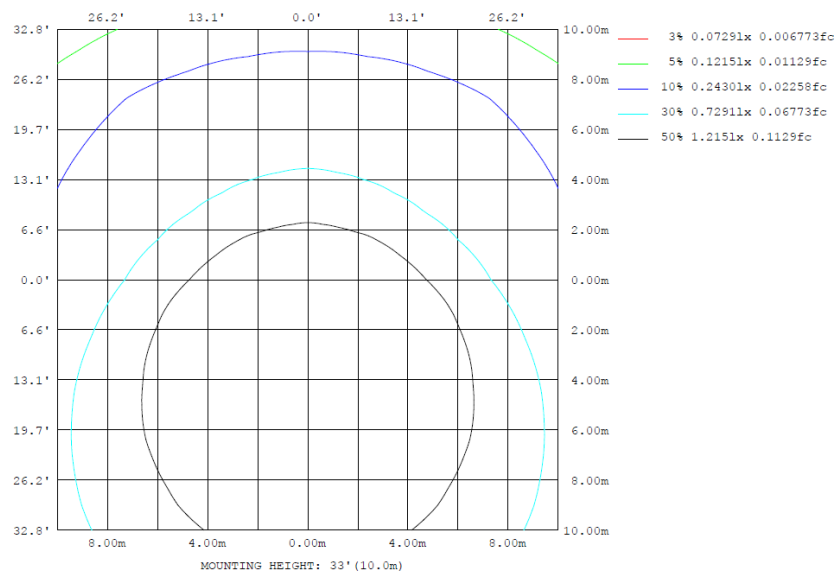
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

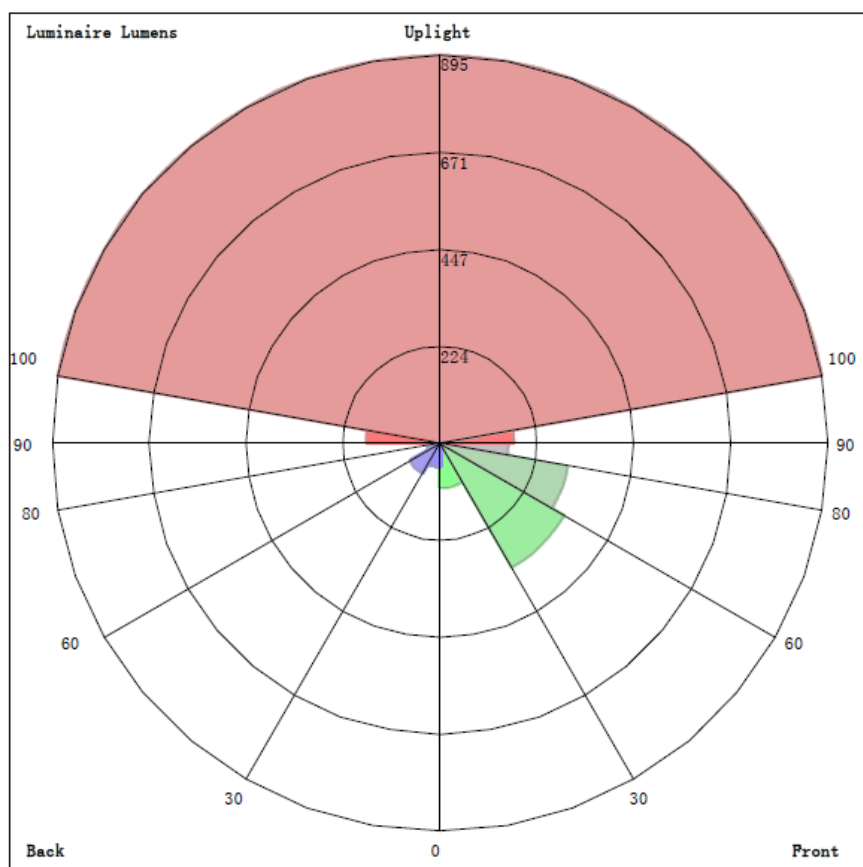
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	183.6	221.8	242.3	221.8	183.6	153.4	143.5	153.4	0- 10	17.94	17.94	0.84, 0.84
20	172.8	254.2	292.0	254.2	172.8	118.8	105.0	118.8	10- 20	52.94	70.88	3.33, 3.33
30	157.5	278.2	342.8	278.2	157.5	91.60	89.37	91.60	20- 30	85.75	156.6	7.36, 7.36
40	127.2	298.8	391.1	298.8	127.2	80.95	67.29	80.95	30- 40	116.4	273.0	12.8, 12.8
50	95.18	310.3	436.3	310.3	95.18	59.52	41.54	59.52	40- 50	139.6	412.7	19.4, 19.4
60	61.43	314.0	473.0	314.0	61.43	36.69	22.72	36.69	50- 60	153.8	566.5	26.6, 26.6
70	40.19	313.8	502.8	313.8	40.19	23.56	21.61	23.56	60- 70	161.7	728.2	34.2, 34.2
80	20.85	307.4	520.7	307.4	20.85	22.87	21.88	22.87	70- 80	166.3	894.6	42, 42
90	3.410	304.7	527.3	304.7	3.410	27.12	24.40	27.12	80- 90	169.3	1064	50, 50
100	20.85	307.4	520.7	307.4	20.85	22.87	21.88	22.87	90-100	169.3	1233	58, 58
110	40.19	313.8	502.8	313.8	40.19	23.56	21.61	23.56	100-110	166.3	1400	65.8, 65.8
120	61.43	314.0	473.0	314.0	61.43	36.69	22.72	36.69	110-120	161.7	1561	73.4, 73.4
130	95.18	310.3	436.3	310.3	95.18	59.52	41.54	59.52	120-130	153.8	1715	80.6, 80.6
140	127.2	298.8	391.1	298.8	127.2	80.95	67.29	80.95	130-140	139.6	1855	87.2, 87.2
150	157.5	278.2	342.8	278.2	157.5	91.60	89.37	91.60	140-150	116.4	1971	92.6, 92.6
160	172.8	254.2	292.0	254.2	172.8	118.8	105.0	118.8	150-160	85.75	2057	96.7, 96.7
170	183.6	221.8	242.3	221.8	183.6	153.4	143.5	153.4	160-170	52.94	2110	99.2, 99.2
180	189.9	189.9	189.9	189.9	189.9	189.9	189.9	189.9	170-180	17.94	2128	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	17.94	0-10	17.94	0.85%
10-20	52.94	0-20	70.88	3.36%
20-30	85.75	0-30	156.63	7.42%
30-40	116.42	0-40	273.05	12.94%
40-50	139.64	0-50	412.69	19.56%
50-60	153.81	0-60	566.50	26.85%
60-70	161.73	0-70	728.23	34.52%
70-80	166.34	0-80	894.57	42.40%
80-90	169.31	0-90	1063.88	50.43%
90-100	169.31	0-100	1233.19	58.45%
100-110	166.34	0-110	1399.53	66.33%
110-120	161.73	0-120	1561.26	74.00%
120-130	153.81	0-130	1715.07	81.29%
130-140	139.64	0-140	1854.71	87.91%
140-150	116.42	0-150	1971.13	93.43%
150-160	85.75	0-160	2056.88	97.49%
160-170	52.94	0-170	2109.82	100.00%
170-180	17.94	0-180	2127.76	100.85%

4.2 Goniophotometer Test

LCS/BUG

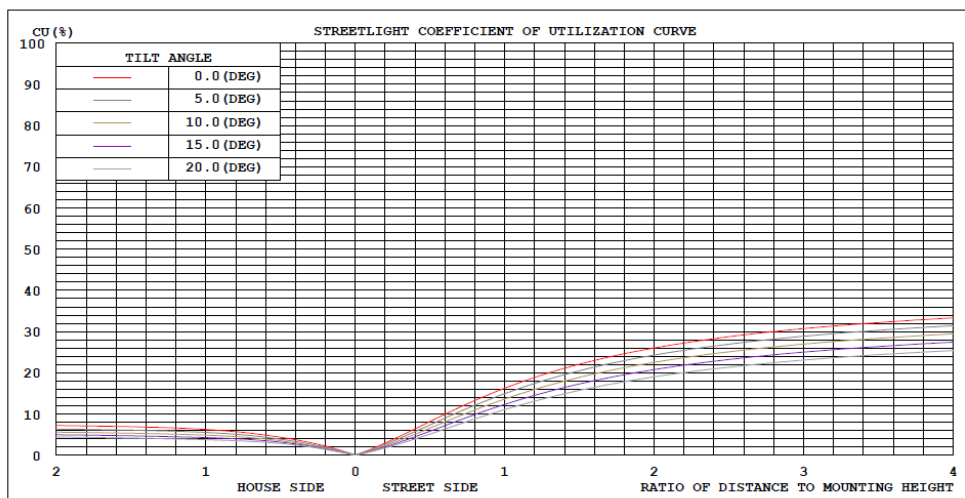


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

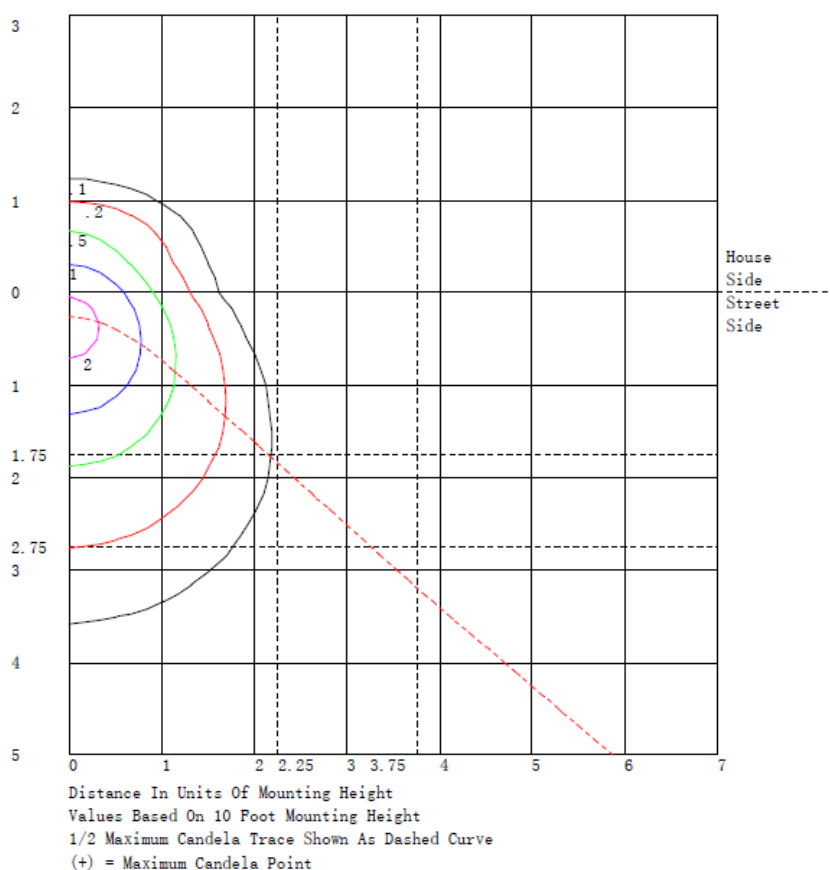
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	102.8	N.A.	4.8
FM - Front-Medium (30-60)	330.9	N.A.	15.6
FH - Front-High (60-80)	299.1	N.A.	14.1
FVH - Front-Very High (80-90)	157.2	N.A.	7.4
BL - Back-Low (0-30)	53.8	N.A.	2.5
BM - Back-Medium (30-60)	79.0	N.A.	3.7
BH - Back-High (60-80)	28.9	N.A.	1.4
BVH - Back-Very High (80-90)	12.1	N.A.	0.6
UL - Uplight-Low (90-100)	169.3	N.A.	8.0
UH - Uplight-High (100-180)	894.6	N.A.	42.0
Total	2127.7	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) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190
5	187	193	199	205	210	213	215	213	210	205	199	193	187	180	175	171	168	166	166
10	184	196	210	222	231	238	242	238	231	222	210	196	184	172	162	153	147	144	144
15	180	201	221	238	253	263	268	263	253	238	221	201	180	163	148	135	127	123	122
20	173	200	227	254	273	285	292	285	273	254	227	200	173	151	132	119	109	105	105
25	165	199	234	267	294	309	318	309	294	267	234	199	165	137	116	103	96.3	93.4	94.0
30	157	197	239	278	312	334	343	334	312	278	239	197	157	124	103	91.6	88.9	88.3	89.4
35	142	189	242	289	329	357	367	357	329	289	242	189	142	109	91.2	85.1	84.9	84.9	84.7
40	127	180	240	299	346	379	391	379	346	299	240	180	127	94.5	81.5	81.0	76.8	69.3	67.3
45	112	171	237	304	360	400	415	400	360	304	237	171	112	81.3	75.0	73.1	61.5	55.2	53.0
50	95.2	156	232	310	377	419	436	419	377	310	232	156	95.2	70.9	69.5	59.5	49.0	43.2	41.5
55	78.3	137	222	314	387	437	455	437	387	314	222	137	78.3	61.8	60.0	46.8	38.2	33.3	32.4
60	61.4	118	211	314	398	453	473	453	398	314	211	118	61.4	53.5	48.6	36.7	28.2	23.9	22.7
65	50.8	104	199	314	407	469	490	469	407	314	199	104	50.8	45.0	37.4	27.7	23.2	22.1	21.8
70	40.2	89.3	187	314	414	479	503	479	414	314	187	89.3	40.2	35.9	29.9	23.6	23.0	22.0	21.6
75	29.6	73.5	173	311	420	489	513	489	420	311	173	73.5	29.6	26.5	23.5	23.0	23.1	22.1	21.7
80	20.8	69.7	166	307	423	496	521	496	423	307	166	69.7	20.8	24.7	22.1	22.9	22.6	22.0	21.9
85	12.1	66.5	161	308	427	501	526	501	427	308	161	66.5	12.1	23.8	23.6	25.0	24.0	19.5	18.9
90	3.41	62.8	154	305	427	503	527	503	427	305	154	62.8	3.41	23.1	25.1	27.1	27.2	20.5	24.4
95	12.1	66.5	161	309	427	501	526	501	427	309	161	66.5	12.1	23.8	23.6	25.0	24.0	19.5	18.9
100	20.8	69.7	166	307	423	496	521	496	423	307	166	69.7	20.8	24.7	22.1	22.9	22.6	22.0	21.9
105	29.6	73.5	173	311	420	489	513	489	420	311	173	73.5	29.6	26.5	23.5	23.0	23.1	22.1	21.7
110	40.2	89.3	187	314	414	479	503	479	414	314	187	89.3	40.2	35.9	29.9	23.6	23.0	22.0	21.6
115	50.8	104	199	314	407	469	490	469	407	314	199	104	50.8	45.0	37.4	27.7	23.2	22.1	21.8
120	61.4	118	211	314	398	453	473	453	398	314	211	118	61.4	53.5	48.6	36.7	28.2	23.9	22.7
125	78.3	137	222	314	387	437	455	437	387	314	222	137	78.3	61.8	60.0	46.8	38.2	33.3	32.4
130	95.2	156	232	310	377	419	436	419	377	310	232	156	95.2	70.9	69.5	59.5	49.0	43.2	41.5
135	112	171	237	304	360	400	415	400	360	304	237	171	112	81.3	75.0	73.1	61.5	55.2	53.0
140	127	180	240	299	346	379	391	379	346	299	240	180	127	94.5	81.5	81.0	76.8	69.3	67.3
145	142	189	242	289	329	357	367	357	329	289	242	189	142	109	91.2	85.1	84.9	84.9	84.7
150	157	197	239	278	312	334	343	334	312	278	239	197	157	124	103	91.6	88.9	88.3	89.4
155	165	199	234	267	294	309	318	309	294	267	234	199	165	137	116	103	96.3	93.4	94.0
160	173	200	227	254	273	285	292	285	273	254	227	200	173	151	132	119	109	105	105
165	180	201	221	238	253	263	268	263	253	238	221	201	180	163	148	135	127	123	122
170	184	196	210	222	231	238	242	238	231	222	210	196	184	172	162	153	147	144	144
175	187	193	199	205	210	213	215	213	210	205	199	193	187	180	175	171	168	166	166
180	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	190	190	190	190	190														
5	166	168	171	175	180														
10	144	147	153	162	172														
15	123	127	135	148	163														
20	105	109	119	132	151														
25	93.4	96.3	103	116	137														
30	88.3	88.9	91.6	103	124														
35	84.9	84.9	85.1	91.2	109														
40	69.3	76.8	81.0	81.5	94.5														
45	55.2	61.5	73.1	75.0	81.3														
50	43.2	49.0	59.5	69.5	70.9														
55	33.3	38.2	46.8	60.0	61.8														
60	23.9	28.2	36.7	48.6	53.5														
65	22.1	23.2	27.7	37.4	45.0														
70	22.0	23.0	23.6	29.9	35.9														
75	22.1	23.1	23.0	23.5	26.5														
80	22.0	22.6	22.9	22.1	24.7														
85	19.5	24.0	25.0	23.6	23.8														
90	20.5	27.2	27.1	25.1	23.1														
95	19.5	24.0	25.0	23.6	23.8														
100	22.0	22.6	22.9	22.1	24.7														
105	22.1	23.1	23.0	23.5	26.5														
110	22.0	23.0	23.6	29.9	35.9														
115	22.1	23.2	27.7	37.4	45.0														
120	23.9	28.2	36.7	48.6	53.5														
125	33.3	38.2	46.8	60.0	61.8														
130	43.2	49.0	59.5	69.5	70.9														
135	55.2	61.5	73.1	75.0	81.3														
140	69.3	76.8	81.0	81.5	94.5														
145	84.9	84.9	85.1	91.2	109														
150	88.3	88.9	91.6	103	124														
155	93.4	96.3	103	116	137														
160	105	109	119	132	151														
165	123	127	135	148	163														
170	144	147	153	162	172														
175	166	168	171	175	180														
180	190	190	190	190	190														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-24 @20W2700K	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	0.166	19.9	0.997	5.08
277.0	60	0.073	19.7	0.971	13.28

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*****