

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		1739
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	109.4
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.9
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.77
				277V	14.80
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.994
				277V	0.953
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3045±175	3007
			4 steps	3045±100	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.0
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		69
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		26.9%
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		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		0.133
(Goniophotometer – Section 4.2)			Non-Worst Case		0.060
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.9
(Goniophotometer – Section 4.2)			Non-Worst Case		15.8

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-28	V1-18 @16W3000K	-	250728005-S1
2	Goniophotometer Test	2025-07-28	V1-18 @16W3000K	-	250728005-S1
3	THD and PF Test	2025-07-28	V1-18 @16W3000K	-	250728005-S1

Remark (If any):

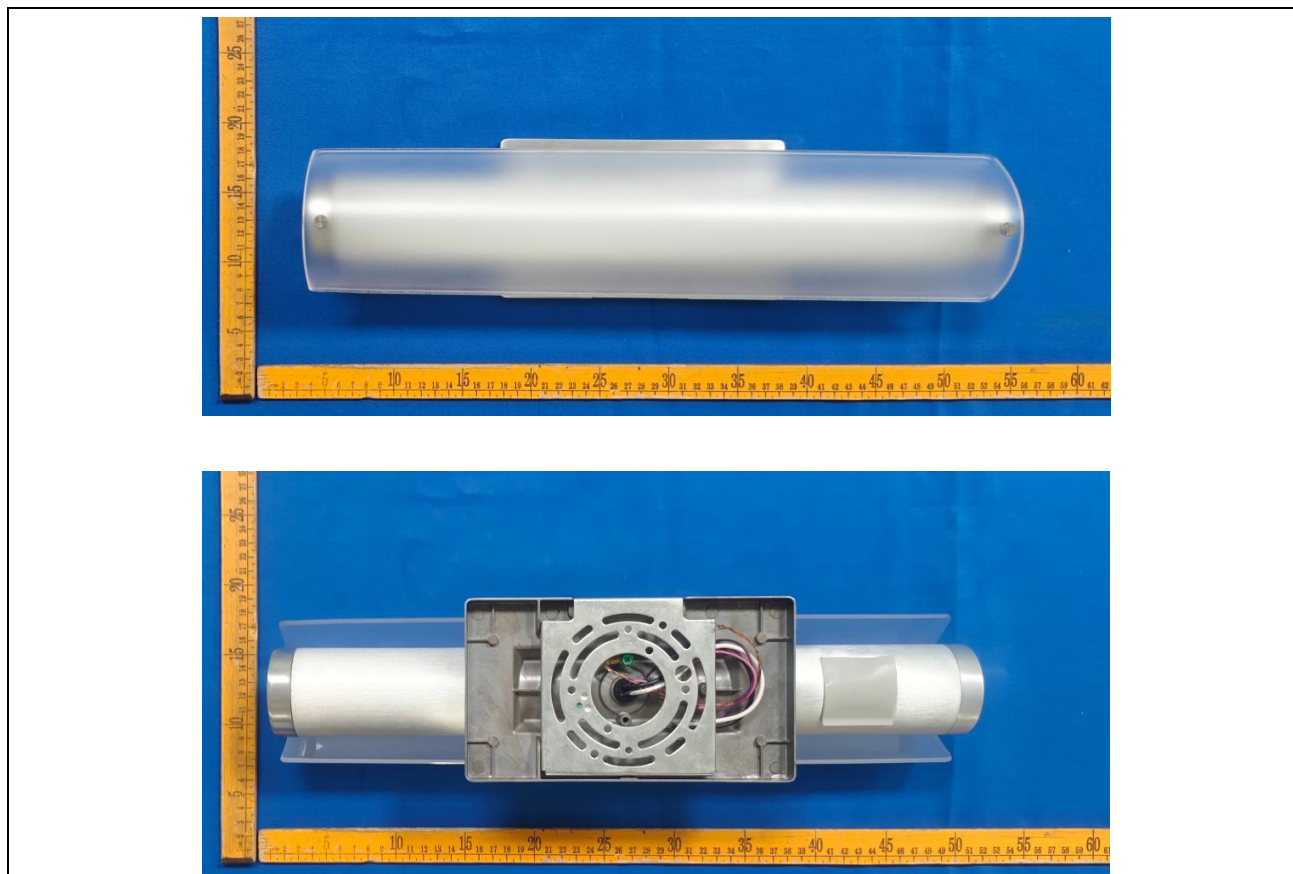
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3.0 Product Description

Luminaire Description: Model No. V1-18 @16W3000K, 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 @16W3000K	Sample ID	250728005-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

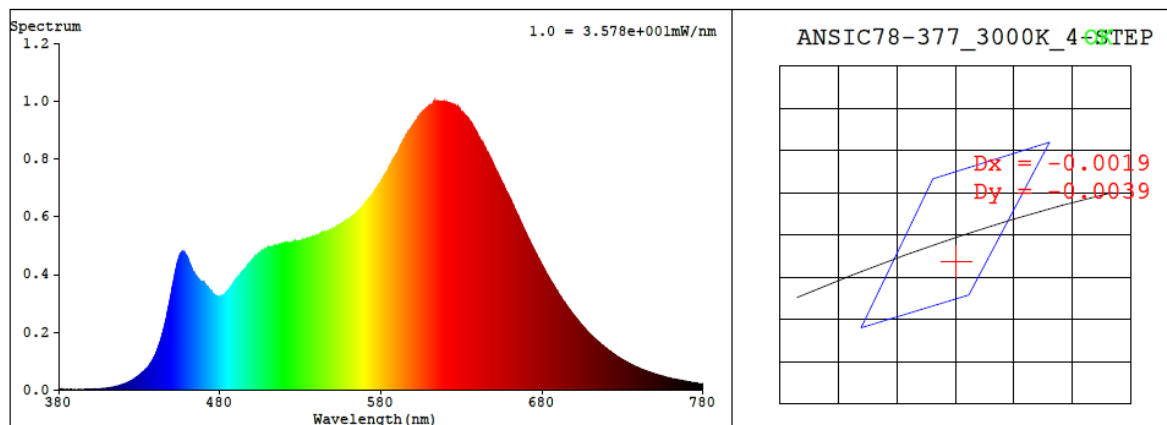
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.133	15.9	0.994
277.0	60	0.060	15.8	0.953

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3007	93.0	69	-0.0013	2.0	90	97	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4346$ $y = 0.4000$ / $u' = 0.2508$ $v' = 0.5194$ ($duv = -1.30e-03$)

CCT= 3007K Prcp WL: $L_d = 583.3\text{nm}$ Purity=50.5%

Peak WL: $L_p = 615\text{nm}$ FWHM: $= 157.3\text{nm}$ Ratio: $R = 25.3\%$ $G = 71.0\%$ $B = 3.7\%$

Render Index: $R_a = 93.0$ $\text{Avg}R = 91.5$ $\text{TM}30:R_f = 91$ $R_g = 98$

EEL: 0.12875 A+

R1 =98 R2 =96 R3 =93 R4 =96 R5 =97 R6 =90 R7 =89

R8 =84 R9 =69 R10=91 R11=96 R12=84 R13=98 R14=97 R15=94

4.1 Integrating Sphere Test

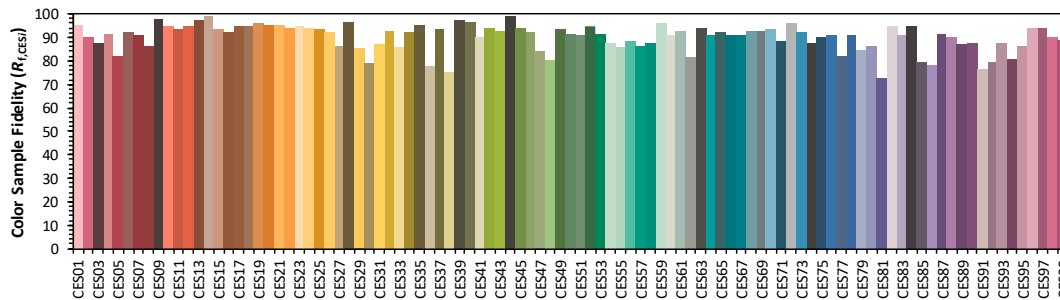
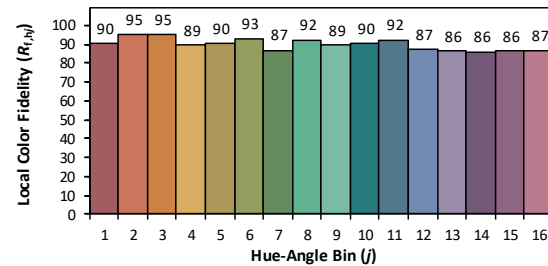
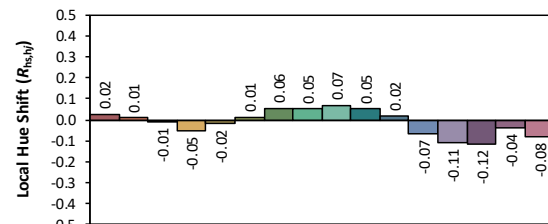
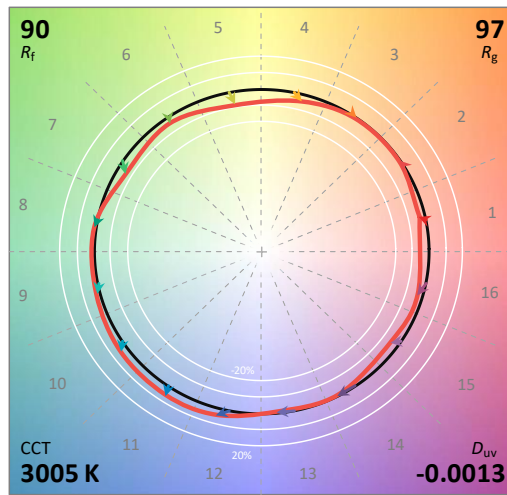
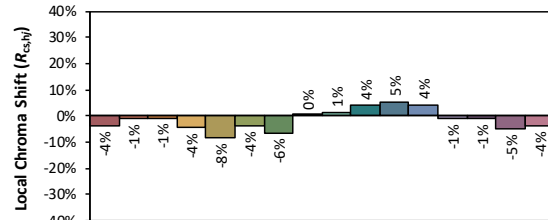
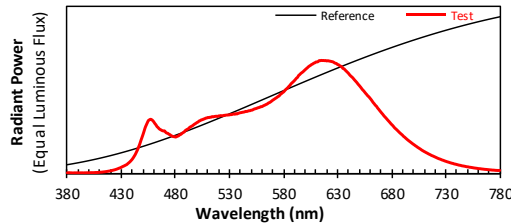
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/21

Model: V1-18 @16W3000K



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

x 0.4346
 y 0.3999
 u' 0.2509
 v' 0.5194

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	2.00E-06	447	2.56E-04	514	5.01E-04	581	7.29E-04	648	8.02E-04	715	1.66E-04
381	2.70E-06	448	2.86E-04	515	4.99E-04	582	7.41E-04	649	7.89E-04	716	1.62E-04
382	2.90E-06	449	3.13E-04	516	5.02E-04	583	7.49E-04	650	7.78E-04	717	1.56E-04
383	1.80E-06	450	3.41E-04	517	5.03E-04	584	7.58E-04	651	7.67E-04	718	1.52E-04
384	1.70E-06	451	3.71E-04	518	5.04E-04	585	7.69E-04	652	7.54E-04	719	1.48E-04
385	8.00E-07	452	4.02E-04	519	5.02E-04	586	7.79E-04	653	7.41E-04	720	1.44E-04
386	1.20E-06	453	4.25E-04	520	5.07E-04	587	7.92E-04	654	7.31E-04	721	1.39E-04
387	1.90E-06	454	4.46E-04	521	5.07E-04	588	8.01E-04	655	7.20E-04	722	1.34E-04
388	1.30E-06	455	4.66E-04	522	5.10E-04	589	8.10E-04	656	7.08E-04	723	1.30E-04
389	1.90E-06	456	4.72E-04	523	5.08E-04	590	8.20E-04	657	6.97E-04	724	1.26E-04
390	1.80E-06	457	4.77E-04	524	5.10E-04	591	8.30E-04	658	6.85E-04	725	1.23E-04
391	1.30E-06	458	4.73E-04	525	5.12E-04	592	8.42E-04	659	6.77E-04	726	1.19E-04
392	1.70E-06	459	4.66E-04	526	5.13E-04	593	8.50E-04	660	6.65E-04	727	1.15E-04
393	1.80E-06	460	4.54E-04	527	5.15E-04	594	8.66E-04	661	6.53E-04	728	1.12E-04
394	2.00E-06	461	4.40E-04	528	5.15E-04	595	8.74E-04	662	6.39E-04	729	1.08E-04
395	1.00E-06	462	4.28E-04	529	5.15E-04	596	8.84E-04	663	6.26E-04	730	1.05E-04
396	2.10E-06	463	4.12E-04	530	5.16E-04	597	8.91E-04	664	6.15E-04	731	1.01E-04
397	1.90E-06	464	4.04E-04	531	5.19E-04	598	8.98E-04	665	6.02E-04	732	9.83E-05
398	2.40E-06	465	3.93E-04	532	5.19E-04	599	9.07E-04	666	5.93E-04	733	9.56E-05
399	2.40E-06	466	3.86E-04	533	5.22E-04	600	9.16E-04	667	5.78E-04	734	9.21E-05
400	2.10E-06	467	3.81E-04	534	5.24E-04	601	9.25E-04	668	5.67E-04	735	8.93E-05
401	2.80E-06	468	3.76E-04	535	5.22E-04	602	9.33E-04	669	5.54E-04	736	8.65E-05
402	3.50E-06	469	3.74E-04	536	5.27E-04	603	9.43E-04	670	5.43E-04	737	8.45E-05
403	3.40E-06	470	3.74E-04	537	5.25E-04	604	9.50E-04	671	5.31E-04	738	8.06E-05
404	3.20E-06	471	3.62E-04	538	5.29E-04	605	9.56E-04	672	5.20E-04	739	7.90E-05
405	3.70E-06	472	3.55E-04	539	5.33E-04	606	9.63E-04	673	5.07E-04	740	7.64E-05
406	4.50E-06	473	3.52E-04	540	5.35E-04	607	9.68E-04	674	4.97E-04	741	7.40E-05
407	4.70E-06	474	3.44E-04	541	5.37E-04	608	9.75E-04	675	4.86E-04	742	7.10E-05
408	4.90E-06	475	3.40E-04	542	5.39E-04	609	9.78E-04	676	4.75E-04	743	6.92E-05
409	5.70E-06	476	3.32E-04	543	5.41E-04	610	9.85E-04	677	4.64E-04	744	6.75E-05
410	6.50E-06	477	3.28E-04	544	5.43E-04	611	9.86E-04	678	4.54E-04	745	6.43E-05
411	7.70E-06	478	3.23E-04	545	5.47E-04	612	9.89E-04	679	4.42E-04	746	6.29E-05
412	7.80E-06	479	3.24E-04	546	5.46E-04	613	9.98E-04	680	4.32E-04	747	6.12E-05
413	9.50E-06	480	3.19E-04	547	5.49E-04	614	9.97E-04	681	4.22E-04	748	5.94E-05
414	1.03E-05	481	3.22E-04	548	5.53E-04	615	1.00E-03	682	4.11E-04	749	5.70E-05
415	1.16E-05	482	3.27E-04	549	5.53E-04	616	9.98E-04	683	3.99E-04	750	5.54E-05
416	1.30E-05	483	3.31E-04	550	5.58E-04	617	9.99E-04	684	3.91E-04	751	5.43E-05
417	1.45E-05	484	3.39E-04	551	5.59E-04	618	9.98E-04	685	3.82E-04	752	5.17E-05
418	1.63E-05	485	3.43E-04	552	5.64E-04	619	9.98E-04	686	3.73E-04	753	5.08E-05
419	1.78E-05	486	3.51E-04	553	5.68E-04	620	9.95E-04	687	3.63E-04	754	4.93E-05
420	1.98E-05	487	3.59E-04	554	5.71E-04	621	9.97E-04	688	3.54E-04	755	4.77E-05
421	2.16E-05	488	3.64E-04	555	5.74E-04	622	9.95E-04	689	3.45E-04	756	4.57E-05
422	2.44E-05	489	3.75E-04	556	5.78E-04	623	9.93E-04	690	3.37E-04	757	4.43E-05
423	2.66E-05	490	3.82E-04	557	5.81E-04	624	9.91E-04	691	3.26E-04	758	4.30E-05
424	2.91E-05	491	3.88E-04	558	5.84E-04	625	9.88E-04	692	3.19E-04	759	4.18E-05
425	3.22E-05	492	3.93E-04	559	5.89E-04	626	9.86E-04	693	3.10E-04	760	4.00E-05
426	3.55E-05	493	4.03E-04	560	5.89E-04	627	9.79E-04	694	3.02E-04	761	3.88E-05
427	3.93E-05	494	4.10E-04	561	5.95E-04	628	9.74E-04	695	2.94E-04	762	3.82E-05
428	4.33E-05	495	4.15E-04	562	6.00E-04	629	9.72E-04	696	2.86E-04	763	3.66E-05
429	4.67E-05	496	4.21E-04	563	6.04E-04	630	9.63E-04	697	2.79E-04	764	3.55E-05
430	5.13E-05	497	4.29E-04	564	6.09E-04	631	9.61E-04	698	2.71E-04	765	3.44E-05
431	5.65E-05	498	4.36E-04	565	6.13E-04	632	9.53E-04	699	2.64E-04	766	3.30E-05
432	6.09E-05	499	4.42E-04	566	6.21E-04	633	9.48E-04	700	2.56E-04	767	3.22E-05
433	6.53E-05	500	4.49E-04	567	6.25E-04	634	9.41E-04	701	2.50E-04	768	3.15E-05
434	7.08E-05	501	4.53E-04	568	6.31E-04	635	9.28E-04	702	2.43E-04	769	3.04E-05
435	7.51E-05	502	4.62E-04	569	6.38E-04	636	9.25E-04	703	2.36E-04	770	2.94E-05
436	8.40E-05	503	4.65E-04	570	6.46E-04	637	9.15E-04	704	2.29E-04	771	2.83E-05
437	9.17E-05	504	4.72E-04	571	6.52E-04	638	9.05E-04	705	2.23E-04	772	2.77E-05
438	1.01E-04	505	4.73E-04	572	6.59E-04	639	8.96E-04	706	2.17E-04	773	2.62E-05
439	1.11E-04	506	4.79E-04	573	6.66E-04	640	8.86E-04	707	2.10E-04	774	2.60E-05
440	1.22E-04	507	4.81E-04	574	6.72E-04	641	8.74E-04	708	2.03E-04	775	2.52E-05
441	1.35E-04	508	4.87E-04	575	6.80E-04	642	8.63E-04	709	1.98E-04	776	2.41E-05
442	1.51E-04	509	4.88E-04	576	6.85E-04	643	8.55E-04	710	1.92E-04	777	2.35E-05
443	1.67E-04	510	4.93E-04	577	6.97E-04	644	8.46E-04	711	1.87E-04	778	2.30E-05
444	1.87E-04	511	4.92E-04	578	7.04E-04	645	8.35E-04	712	1.81E-04	779	2.30E-05
445	2.08E-04	512	4.95E-04	579	7.13E-04	646	8.23E-04	713	1.77E-04	780	2.31E-05
446	2.32E-04	513	4.96E-04	580	7.19E-04	647	8.13E-04	714	1.71E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18 @16W3000K	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	120.0	60	0.133	15.9	0.994
NON-WORST CASE	277.0	60	0.060	15.8	0.953

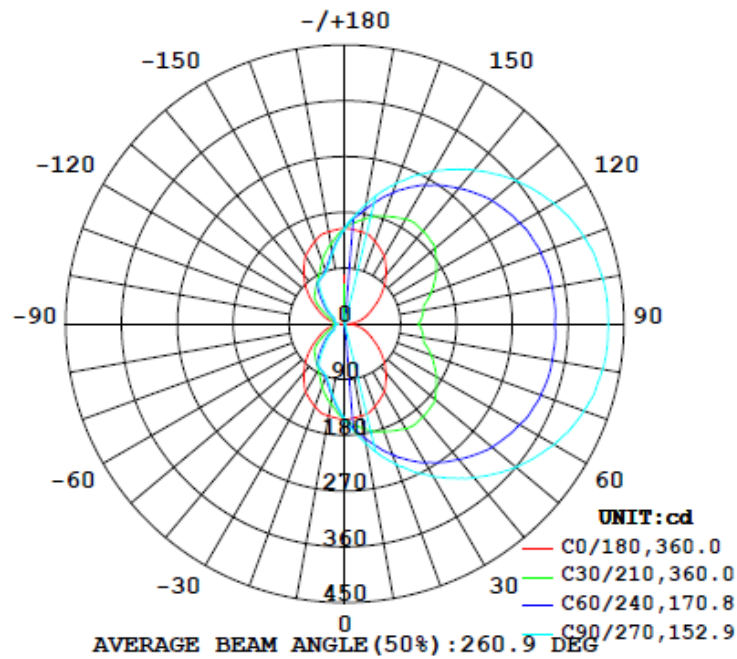
Test Result

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°)	
1739	92.6	156.6	180.0	96.6	109.4	26.9%	B0-U4-G2

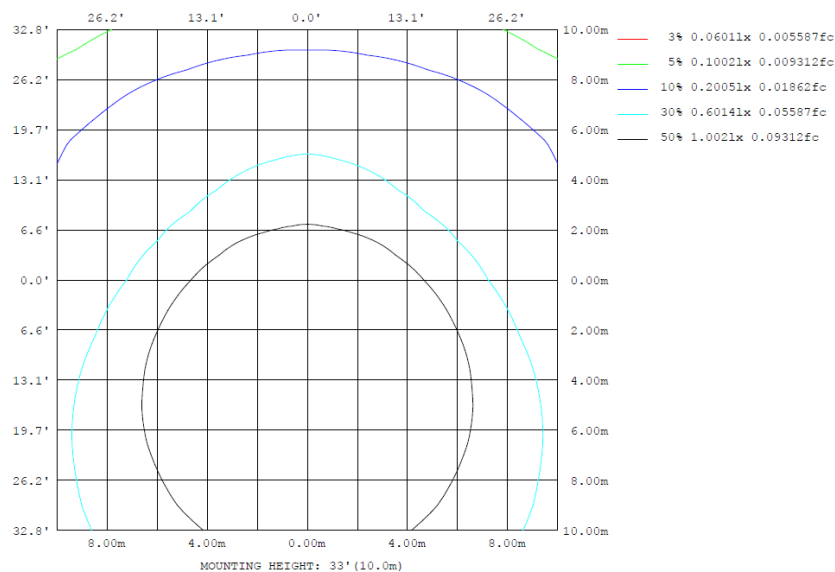
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

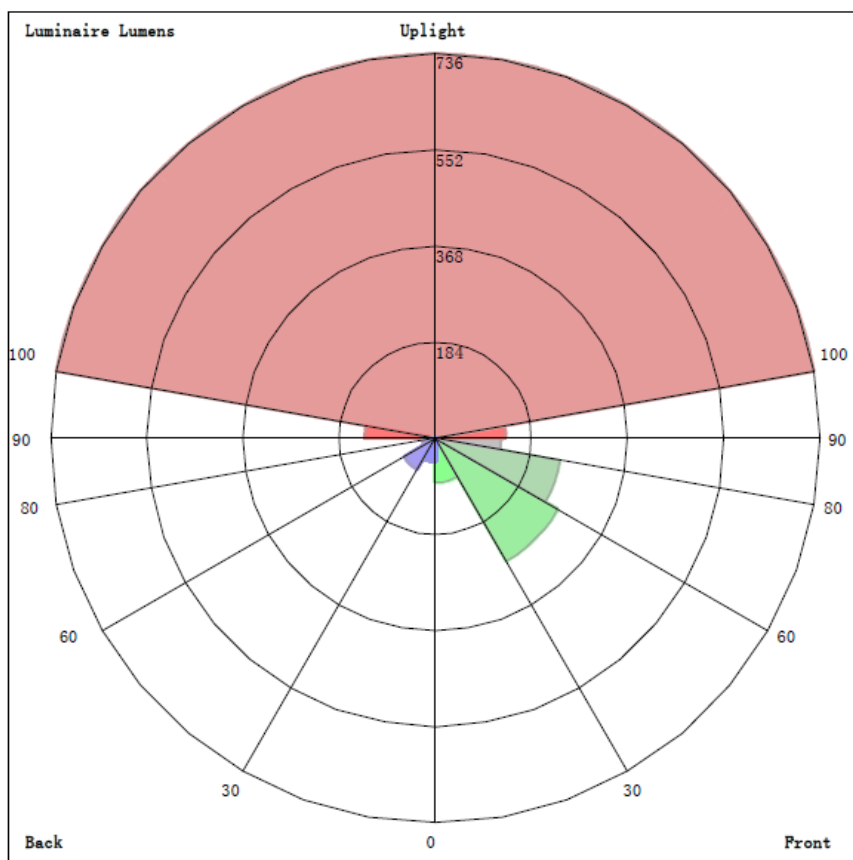
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total	%lum, lamp
10	151.1	179.7	195.8	179.7	151.1	123.7	116.2	123.7	0- 10	14.63	14.63	0.84, 0.84
20	141.8	208.9	241.1	208.9	141.8	98.18	89.91	98.18	10- 20	43.29	57.91	3.33, 3.33
30	126.9	229.2	284.5	229.2	126.9	81.58	83.12	81.58	20- 30	71.16	129.1	7.42, 7.42
40	102.9	246.6	323.9	246.6	102.9	75.01	56.64	75.01	30- 40	96.91	226.0	13, 13
50	78.25	253.7	360.0	253.7	78.25	50.05	35.86	50.05	40- 50	115.7	341.7	19.6, 19.6
60	53.00	255.2	389.3	255.2	53.00	30.87	19.60	30.87	50- 60	127.1	468.7	26.9, 26.9
70	36.60	251.8	410.0	251.8	36.60	19.24	17.93	19.24	60- 70	132.4	601.2	34.6, 34.6
80	20.32	242.5	422.3	242.5	20.32	17.96	15.52	17.96	70- 80	134.4	735.6	42.3, 42.3
90	4.164	235.3	424.5	235.3	4.164	16.73	15.24	16.73	80- 90	134.1	869.7	50, 50
100	20.32	242.5	422.3	242.5	20.32	17.96	15.52	17.96	90-100	134.1	1004	57.7, 57.7
110	36.60	251.8	410.0	251.8	36.60	19.24	17.93	19.24	100-110	134.4	1138	65.4, 65.4
120	53.00	255.2	389.3	255.2	53.00	30.87	19.60	30.87	110-120	132.4	1271	73.1, 73.1
130	78.25	253.7	360.0	253.7	78.25	50.05	35.86	50.05	120-130	127.1	1398	80.4, 80.4
140	102.9	246.6	323.9	246.6	102.9	75.01	56.64	75.01	130-140	115.7	1513	87, 87
150	126.9	229.2	284.5	229.2	126.9	81.58	83.12	81.58	140-150	96.91	1610	92.6, 92.6
160	141.8	208.9	241.1	208.9	141.8	98.18	89.91	98.18	150-160	71.16	1682	96.7, 96.7
170	151.1	179.7	195.8	179.7	151.1	123.7	116.2	123.7	160-170	43.29	1725	99.2, 99.2
180	154.7	154.7	154.7	154.7	154.7	154.7	154.7	154.7	170-180	14.63	1739	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

	Zonal (lm)		Total (lm)	Percent
0-10	14.63	0-10	14.63	0.85%
10-20	43.29	0-20	57.92	3.36%
20-30	71.16	0-30	129.08	7.48%
30-40	96.91	0-40	225.99	13.10%
40-50	115.70	0-50	341.69	19.81%
50-60	127.06	0-60	468.75	27.18%
60-70	132.41	0-70	601.16	34.85%
70-80	134.42	0-80	735.58	42.65%
80-90	134.12	0-90	869.70	50.42%
90-100	134.12	0-100	1003.82	58.20%
100-110	134.42	0-110	1138.24	65.99%
110-120	132.41	0-120	1270.65	73.67%
120-130	127.06	0-130	1397.71	81.04%
130-140	115.70	0-140	1513.41	87.75%
140-150	96.91	0-150	1610.32	93.36%
150-160	71.16	0-160	1681.48	97.49%
160-170	43.29	0-170	1724.77	100.00%
170-180	14.63	0-180	1739.40	100.85%

4.2 Goniophotometer Test

LCS/BUG

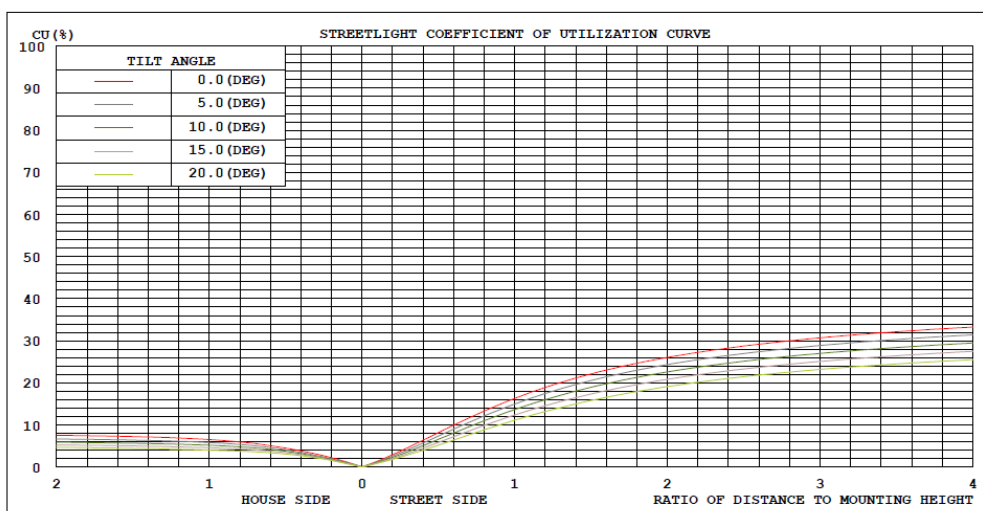


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

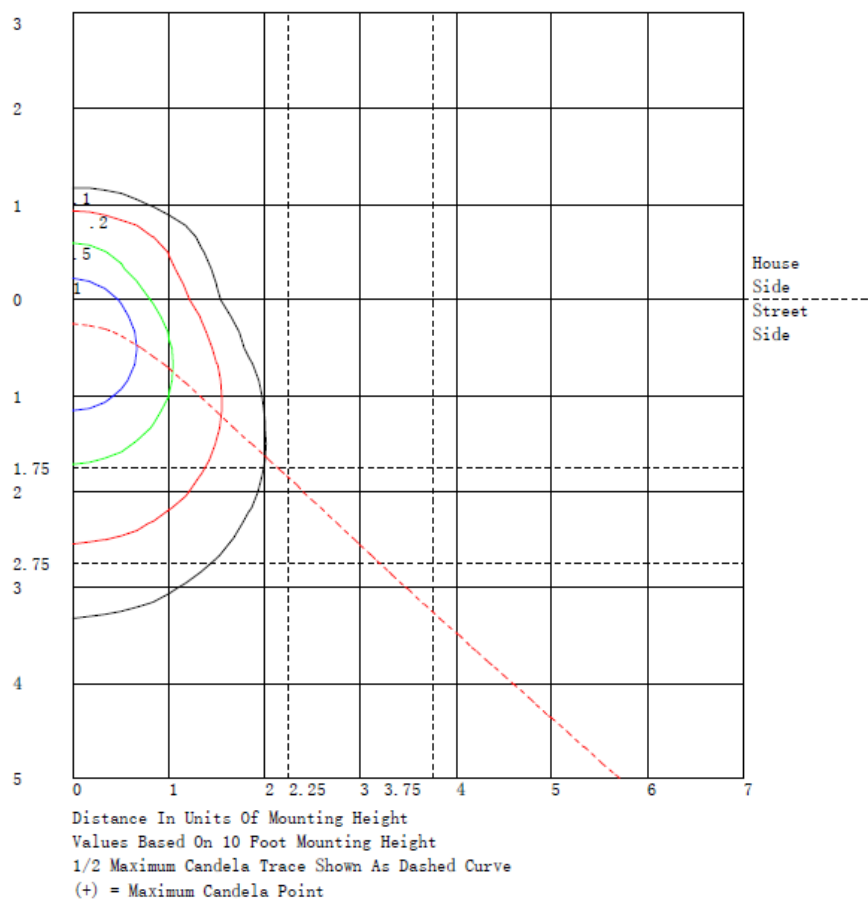
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	84.2	N.A.	4.8
FM - Front-Medium (30-60)	271.3	N.A.	15.6
FH - Front-High (60-80)	242.1	N.A.	13.9
FVH - Front-Very High (80-90)	125.4	N.A.	7.2
BL - Back-Low (0-30)	44.8	N.A.	2.6
BM - Back-Medium (30-60)	68.3	N.A.	3.9
BH - Back-High (60-80)	24.7	N.A.	1.4
BVH - Back-Very High (80-90)	8.8	N.A.	0.5
UL - Uplight-Low (90-100)	134.1	N.A.	7.7
UH - Uplight-High (100-180)	735.6	N.A.	42.3
Total	1739.3	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	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155
5	153	158	164	168	171	174	175	174	171	168	164	158	153	148	143	139	136	135	135
10	151	161	171	180	188	193	196	193	188	180	171	161	151	140	131	124	119	116	116
15	149	165	179	193	206	215	219	215	206	193	179	165	149	133	120	110	103	100	99.9
20	142	163	185	209	224	236	241	236	224	209	185	163	142	122	108	98.2	92.0	89.5	89.9
25	134	161	190	219	243	256	263	256	243	219	190	161	134	111	95.5	88.1	85.2	84.4	85.2
30	127	158	195	229	259	276	284	276	259	229	195	158	127	101	86.1	81.6	81.9	81.9	83.1
35	115	152	198	238	273	295	304	295	273	238	198	152	115	89.8	79.2	78.3	77.4	72.1	70.7
40	103	144	196	247	286	314	324	314	286	247	196	144	103	79.5	73.6	75.0	64.4	58.1	56.6
45	90.9	137	194	250	298	331	342	331	298	250	194	137	90.9	70.5	68.7	62.7	51.8	46.5	44.7
50	78.3	124	190	254	310	346	360	346	310	254	190	124	78.3	63.2	63.3	50.0	41.4	37.1	35.9
55	65.6	110	180	258	318	360	375	360	318	258	180	110	65.6	56.7	53.1	39.5	32.8	29.3	28.4
60	53.0	94.1	170	255	325	371	389	371	325	255	170	94.1	53.0	50.6	41.3	30.9	24.2	20.6	19.6
65	44.8	82.9	159	254	332	383	401	383	332	254	159	82.9	44.8	42.3	31.7	23.1	19.4	18.8	18.8
70	36.6	71.6	148	252	336	391	410	391	336	252	148	71.6	36.6	33.1	25.6	19.2	18.8	18.2	17.9
75	28.4	59.4	136	247	339	397	418	397	339	247	136	59.4	28.4	23.4	20.2	18.5	18.1	17.4	17.6
80	20.3	56.7	129	242	339	401	422	401	339	242	129	56.7	20.3	20.4	18.2	18.0	16.3	16.0	15.5
85	12.2	54.8	125	240	340	403	425	403	340	240	125	54.8	12.2	18.4	18.1	17.3	15.4	13.5	13.2
90	4.16	52.6	119	235	339	403	424	403	339	235	119	52.6	4.16	16.5	18.0	16.7	15.7	13.8	15.2
95	12.2	54.8	125	240	340	403	425	403	340	240	125	54.8	12.2	18.4	18.1	17.3	15.4	13.5	13.2
100	20.3	56.7	129	242	339	401	422	401	339	242	129	56.7	20.3	20.4	18.2	18.0	16.3	16.0	15.5
105	28.4	59.4	136	247	339	397	418	397	339	247	136	59.4	28.4	23.4	20.2	18.5	18.1	17.4	17.6
110	36.6	71.6	148	252	336	391	410	391	336	252	148	71.6	36.6	33.1	25.6	19.2	18.8	18.2	17.9
115	44.8	82.9	159	254	332	383	401	383	332	254	159	82.9	44.8	42.3	31.7	23.1	19.4	18.8	18.8
120	53.0	94.1	170	255	325	371	389	371	325	255	170	94.1	53.0	50.6	41.3	30.9	24.2	20.6	19.6
125	65.6	110	180	258	318	360	375	360	318	258	180	110	65.6	56.7	53.1	39.5	32.8	29.3	28.4
130	78.3	124	190	254	310	346	360	346	310	254	190	124	78.3	63.2	63.3	50.0	41.4	37.1	35.9
135	90.9	137	194	250	298	331	342	331	298	250	194	137	90.9	70.5	68.7	62.7	51.8	46.5	44.7
140	103	144	196	247	286	314	324	314	286	247	196	144	103	79.5	73.6	75.0	64.4	58.1	56.6
145	115	152	198	238	273	295	304	295	273	238	198	152	115	89.8	79.2	78.3	77.4	72.1	70.7
150	127	158	195	229	259	276	284	276	259	229	195	158	127	101	86.1	81.6	81.9	81.9	83.1
155	134	161	190	219	243	256	263	256	243	219	190	161	134	111	95.5	88.1	85.2	84.4	85.2
160	142	163	185	209	224	236	241	236	224	209	185	163	142	122	108	98.2	92.0	89.5	89.9
165	149	165	179	193	206	215	219	215	206	193	179	165	149	133	120	110	103	100	99.9
170	151	161	171	180	188	193	196	193	188	180	171	161	151	140	131	124	119	116	116
175	153	158	164	168	171	174	175	174	171	168	164	158	153	148	143	139	136	135	135
180	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	155	155	155	155	155														
5	135	136	139	143	148														
10	116	119	124	131	140														
15	100	103	110	120	133														
20	89.5	92.0	98.2	108	122														
25	84.4	85.2	88.1	95.5	111														
30	81.9	81.9	81.6	86.1	101														
35	72.1	77.4	78.3	79.2	89.8														
40	58.1	64.4	75.0	73.6	79.5														
45	46.5	51.8	62.7	68.7	70.5														
50	37.1	41.4	50.0	63.3	63.2														
55	29.3	32.8	39.5	53.1	56.7														
60	20.6	24.2	30.9	41.3	50.6														
65	18.8	19.4	23.1	31.7	42.3														
70	18.2	18.8	19.2	25.6	33.1														
75	17.4	18.1	18.5	20.2	23.4														
80	16.0	16.3	18.0	18.2	20.4														
85	13.5	15.4	17.3	18.1	18.4														
90	13.8	15.7	16.7	18.0	16.5														
95	13.5	15.4	17.3	18.1	18.4														
100	16.0	16.3	18.0	18.2	20.4														
105	17.4	18.1	18.5	20.2	23.4														
110	18.2	18.8	19.2	25.6	33.1														
115	18.8	19.4	23.1	31.7	42.3														
120	20.6	24.2	30.9	41.3	50.6														
125	29.3	32.8	39.5	53.1	56.7														
130	37.1	41.4	50.0	63.3	63.2														
135	46.5	51.8	62.7	68.7	70.5														
140	58.1	64.4	75.0	73.6	79.5														
145	72.1	77.4	78.3	79.2	89.8														
150	81.9	81.9	81.6	86.1	101														
155	84.4	85.2	88.1	95.5	111														
160	89.5	92.0	98.2	108	122														
165	100	103	110	120	133														
170	116	119	124	131	140														
175	135	136	139	143	148														
180	155	155	155	155	155														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18 @16W3000K	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	0.133	15.9	0.994	6.77
277.0	60	0.060	15.8	0.953	14.80

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*****