

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

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Prepared By

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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		1900
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	121.0
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	6.61
		ANSI C82-77-10:2020		277V	15.22
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	0.994
		ANSI C82-77-10:2020		277V	0.950
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4021
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.1
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		80
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		87
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		95
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		27.0%
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		0.132
(Goniophotometer – Section 4.2)			Non-Worst Case		0.059
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.7
(Goniophotometer – Section 4.2)			Non-Worst Case		15.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-28	V1-18 @16W4000K	-	250728005-S1
2	Goniophotometer Test	2025-07-28	V1-18 @16W4000K	-	250728005-S1
3	THD and PF Test	2025-07-28	V1-18 @16W4000K	-	250728005-S1

Remark (If any):

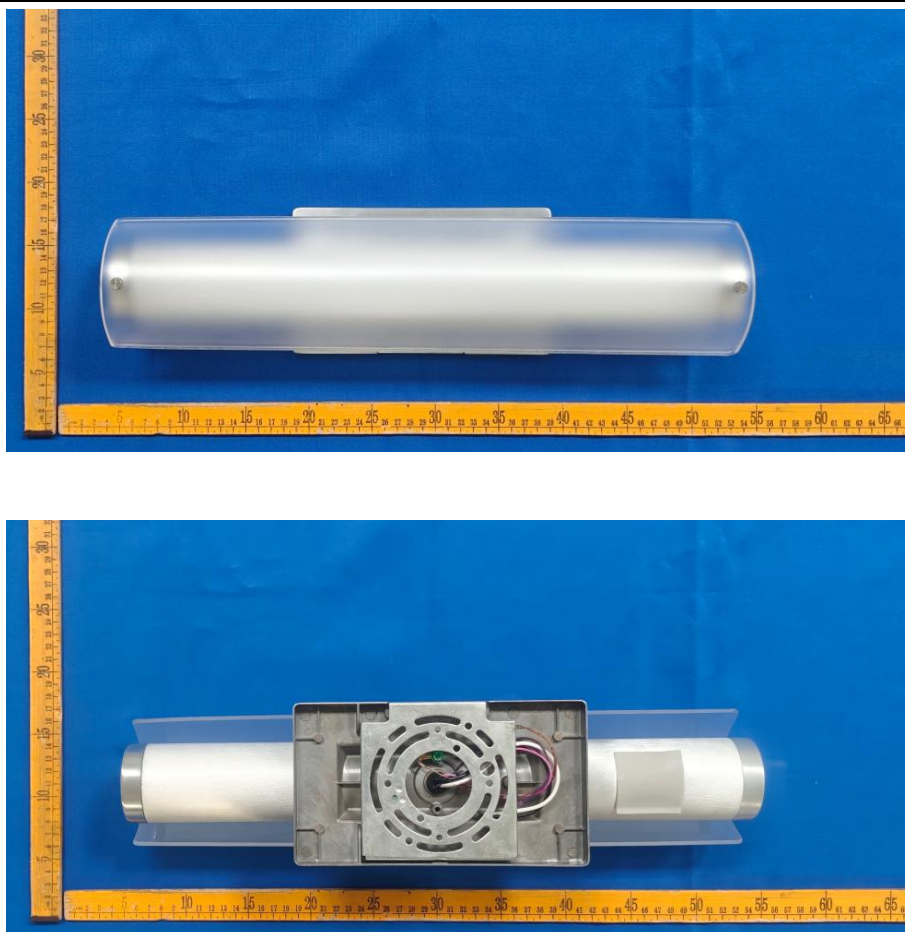
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-18 @16W4000K, 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 @16W4000K	Sample ID	250728005-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

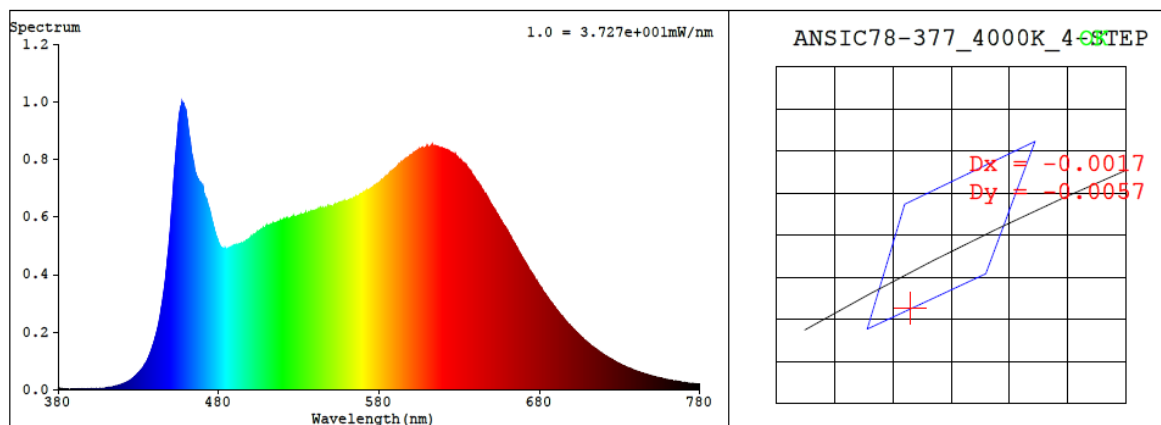
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm 1^{\circ}\text{C}$.</p> <p>The sample measurements 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	0.132	15.7	0.994
277.0	60	0.059	15.6	0.950

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4021	92.1	80	-0.0022	3.6	87	95	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3779$ $y = 0.3705$ / $u' = 0.2259$ $v' = 0.4984$ ($duv = -2.23e-03$)

CCT= 4021K Prcp WL: $L_d = 580.3\text{nm}$ Purity=24.6%

Peak WL: $L_p = 457\text{nm}$ FWHM: $= 32.4\text{nm}$ Ratio: $R = 20.7\%$ $G = 73.8\%$ $B = 5.4\%$

Render Index: $R_a = 92.1$ AvgR = 91.0 TM30: $R_f = 89$ $R_g = 97$

EEL: 0.11642 A+

R1 =97 R2 =95 R3 =93 R4 =91 R5 =94 R6 =91 R7 =88

R8 =87 R9 =80 R10=90 R11=95 R12=74 R13=97 R14=97 R15=95

4.1 Integrating Sphere Test

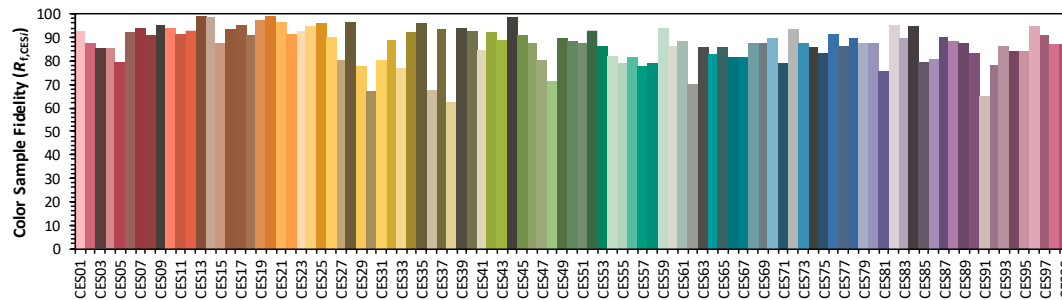
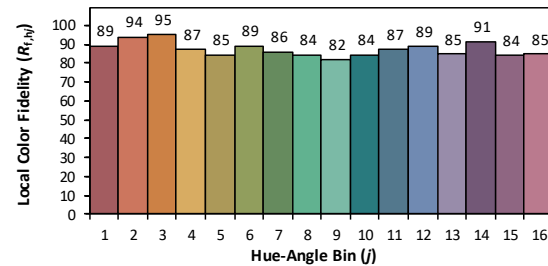
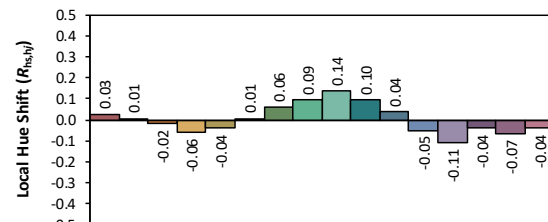
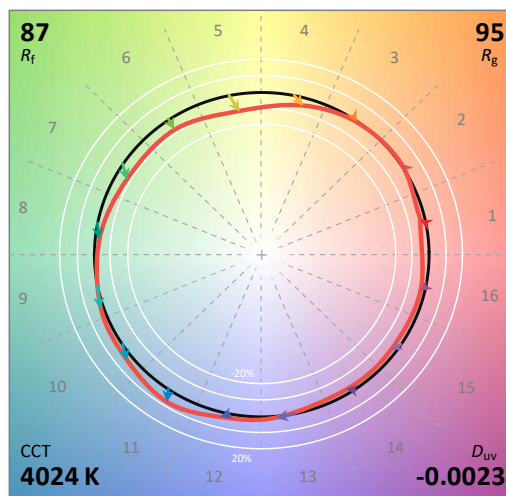
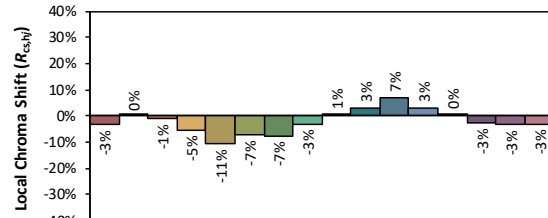
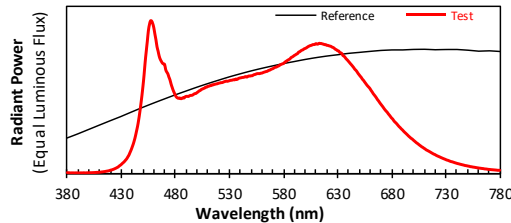
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/21

Model: V1-18 @16W4000K



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

x 0.3779
 y 0.3703
 u' 0.2260
 v' 0.4983

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 80

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	4.20E-06	447	3.95E-04	514	5.78E-04	581	7.24E-04	648	6.64E-04	715	1.42E-04
381	3.30E-06	448	4.48E-04	515	5.77E-04	582	7.29E-04	649	6.52E-04	716	1.38E-04
382	2.90E-06	449	5.06E-04	516	5.81E-04	583	7.34E-04	650	6.43E-04	717	1.33E-04
383	2.10E-06	450	5.70E-04	517	5.82E-04	584	7.39E-04	651	6.34E-04	718	1.29E-04
384	2.60E-06	451	6.41E-04	518	5.84E-04	585	7.43E-04	652	6.26E-04	719	1.25E-04
385	2.40E-06	452	7.25E-04	519	5.85E-04	586	7.47E-04	653	6.14E-04	720	1.23E-04
386	2.40E-06	453	7.95E-04	520	5.89E-04	587	7.56E-04	654	6.07E-04	721	1.18E-04
387	2.10E-06	454	8.61E-04	521	5.89E-04	588	7.59E-04	655	5.97E-04	722	1.14E-04
388	2.50E-06	455	9.31E-04	522	5.92E-04	589	7.64E-04	656	5.87E-04	723	1.11E-04
389	2.20E-06	456	9.72E-04	523	5.92E-04	590	7.69E-04	657	5.78E-04	724	1.08E-04
390	2.30E-06	457	9.96E-04	524	5.94E-04	591	7.73E-04	658	5.69E-04	725	1.05E-04
391	1.90E-06	458	9.94E-04	525	5.97E-04	592	7.78E-04	659	5.62E-04	726	1.02E-04
392	2.30E-06	459	9.78E-04	526	6.00E-04	593	7.82E-04	660	5.53E-04	727	9.87E-05
393	2.50E-06	460	9.52E-04	527	6.02E-04	594	7.91E-04	661	5.42E-04	728	9.55E-05
394	2.30E-06	461	9.10E-04	528	6.01E-04	595	7.93E-04	662	5.32E-04	729	9.28E-05
395	3.00E-06	462	8.72E-04	529	6.03E-04	596	8.00E-04	663	5.20E-04	730	8.98E-05
396	2.70E-06	463	8.26E-04	530	6.05E-04	597	8.04E-04	664	5.11E-04	731	8.65E-05
397	2.20E-06	464	7.98E-04	531	6.07E-04	598	8.07E-04	665	5.02E-04	732	8.47E-05
398	2.90E-06	465	7.65E-04	532	6.08E-04	599	8.12E-04	666	4.92E-04	733	8.19E-05
399	3.00E-06	466	7.45E-04	533	6.09E-04	600	8.15E-04	667	4.81E-04	734	7.89E-05
400	3.40E-06	467	7.31E-04	534	6.11E-04	601	8.19E-04	668	4.72E-04	735	7.63E-05
401	3.50E-06	468	7.19E-04	535	6.10E-04	602	8.23E-04	669	4.61E-04	736	7.49E-05
402	3.50E-06	469	7.14E-04	536	6.16E-04	603	8.28E-04	670	4.52E-04	737	7.26E-05
403	3.90E-06	470	7.12E-04	537	6.12E-04	604	8.31E-04	671	4.43E-04	738	7.01E-05
404	4.10E-06	471	6.78E-04	538	6.18E-04	605	8.34E-04	672	4.33E-04	739	6.78E-05
405	4.50E-06	472	6.61E-04	539	6.21E-04	606	8.36E-04	673	4.23E-04	740	6.57E-05
406	4.90E-06	473	6.50E-04	540	6.23E-04	607	8.40E-04	674	4.14E-04	741	6.34E-05
407	5.60E-06	474	6.28E-04	541	6.24E-04	608	8.41E-04	675	4.06E-04	742	6.19E-05
408	5.70E-06	475	6.10E-04	542	6.26E-04	609	8.42E-04	676	3.98E-04	743	5.98E-05
409	6.30E-06	476	5.83E-04	543	6.26E-04	610	8.47E-04	677	3.88E-04	744	5.80E-05
410	6.70E-06	477	5.61E-04	544	6.29E-04	611	8.44E-04	678	3.80E-04	745	5.62E-05
411	7.60E-06	478	5.41E-04	545	6.32E-04	612	8.44E-04	679	3.70E-04	746	5.45E-05
412	8.60E-06	479	5.25E-04	546	6.28E-04	613	8.49E-04	680	3.61E-04	747	5.27E-05
413	9.40E-06	480	5.08E-04	547	6.32E-04	614	8.47E-04	681	3.54E-04	748	5.06E-05
414	1.06E-05	481	4.97E-04	548	6.36E-04	615	8.48E-04	682	3.44E-04	749	4.96E-05
415	1.15E-05	482	4.92E-04	549	6.35E-04	616	8.45E-04	683	3.35E-04	750	4.81E-05
416	1.31E-05	483	4.89E-04	550	6.37E-04	617	8.43E-04	684	3.29E-04	751	4.66E-05
417	1.42E-05	484	4.92E-04	551	6.37E-04	618	8.40E-04	685	3.21E-04	752	4.52E-05
418	1.57E-05	485	4.87E-04	552	6.41E-04	619	8.41E-04	686	3.13E-04	753	4.30E-05
419	1.73E-05	486	4.89E-04	553	6.45E-04	620	8.36E-04	687	3.05E-04	754	4.24E-05
420	2.02E-05	487	4.94E-04	554	6.46E-04	621	8.35E-04	688	2.98E-04	755	4.07E-05
421	2.17E-05	488	4.91E-04	555	6.49E-04	622	8.33E-04	689	2.90E-04	756	3.97E-05
422	2.42E-05	489	4.99E-04	556	6.51E-04	623	8.31E-04	690	2.84E-04	757	3.86E-05
423	2.68E-05	490	5.02E-04	557	6.51E-04	624	8.29E-04	691	2.76E-04	758	3.73E-05
424	3.00E-05	491	5.03E-04	558	6.51E-04	625	8.24E-04	692	2.68E-04	759	3.60E-05
425	3.32E-05	492	5.02E-04	559	6.54E-04	626	8.21E-04	693	2.62E-04	760	3.49E-05
426	3.71E-05	493	5.06E-04	560	6.54E-04	627	8.16E-04	694	2.55E-04	761	3.36E-05
427	4.10E-05	494	5.09E-04	561	6.57E-04	628	8.10E-04	695	2.48E-04	762	3.29E-05
428	4.72E-05	495	5.09E-04	562	6.60E-04	629	8.07E-04	696	2.41E-04	763	3.18E-05
429	5.22E-05	496	5.11E-04	563	6.62E-04	630	8.01E-04	697	2.35E-04	764	3.09E-05
430	5.78E-05	497	5.16E-04	564	6.65E-04	631	7.99E-04	698	2.29E-04	765	3.01E-05
431	6.49E-05	498	5.20E-04	565	6.66E-04	632	7.90E-04	699	2.24E-04	766	2.85E-05
432	7.08E-05	499	5.21E-04	566	6.71E-04	633	7.87E-04	700	2.18E-04	767	2.79E-05
433	7.80E-05	500	5.27E-04	567	6.73E-04	634	7.82E-04	701	2.11E-04	768	2.72E-05
434	8.67E-05	501	5.32E-04	568	6.76E-04	635	7.69E-04	702	2.05E-04	769	2.59E-05
435	9.49E-05	502	5.38E-04	569	6.81E-04	636	7.65E-04	703	1.99E-04	770	2.51E-05
436	1.07E-04	503	5.41E-04	570	6.83E-04	637	7.57E-04	704	1.94E-04	771	2.45E-05
437	1.19E-04	504	5.47E-04	571	6.87E-04	638	7.47E-04	705	1.89E-04	772	2.36E-05
438	1.35E-04	505	5.50E-04	572	6.92E-04	639	7.40E-04	706	1.83E-04	773	2.30E-05
439	1.51E-04	506	5.54E-04	573	6.93E-04	640	7.32E-04	707	1.78E-04	774	2.24E-05
440	1.71E-04	507	5.56E-04	574	6.96E-04	641	7.24E-04	708	1.73E-04	775	2.18E-05
441	1.91E-04	508	5.63E-04	575	7.00E-04	642	7.15E-04	709	1.69E-04	776	2.11E-05
442	2.14E-04	509	5.63E-04	576	7.03E-04	643	7.07E-04	710	1.63E-04	777	2.05E-05
443	2.42E-04	510	5.68E-04	577	7.09E-04	644	6.99E-04	711	1.59E-04	778	1.94E-05
444	2.74E-04	511	5.69E-04	578	7.11E-04	645	6.90E-04	712	1.53E-04	779	1.93E-05
445	3.07E-04	512	5.73E-04	579	7.15E-04	646	6.80E-04	713	1.50E-04	780	1.94E-05
446	3.48E-04	513	5.72E-04	580	7.17E-04	647	6.73E-04	714	1.46E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18 @16W4000K	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	0.132	15.7	0.994
NON-WORST CASE	277.0	60	0.059	15.6	0.950

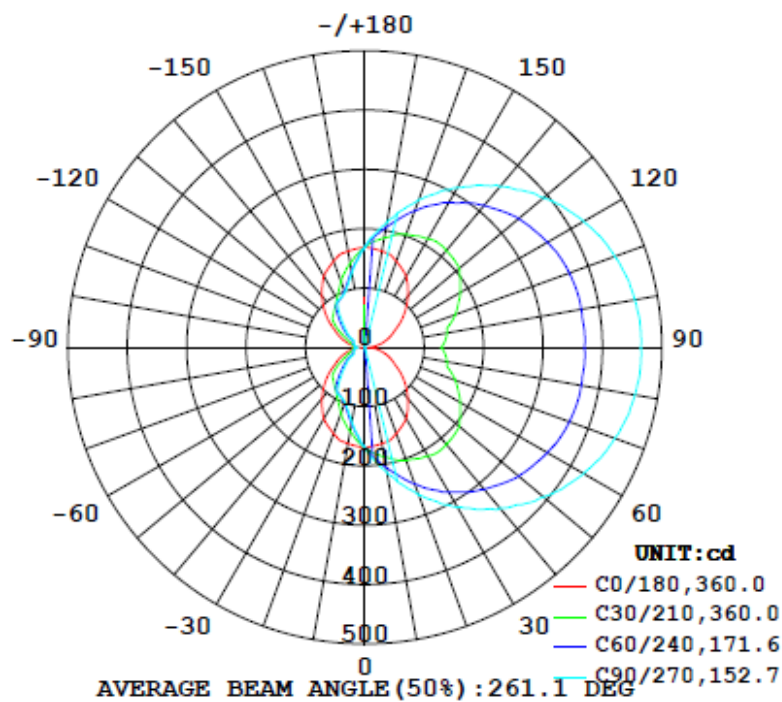
Test Result

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°)	
1900	92.9	156.3	180.0	96.4	121.0	27.0%	B0-U4-G2

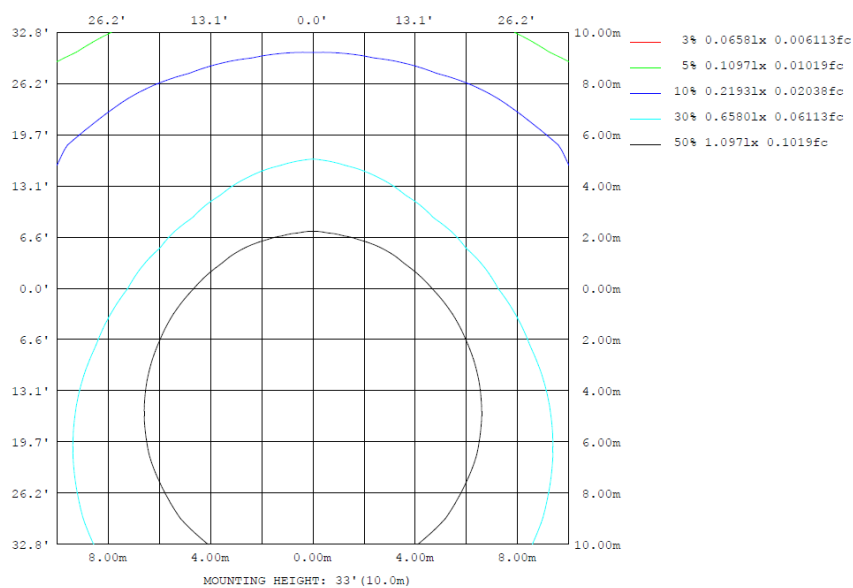
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

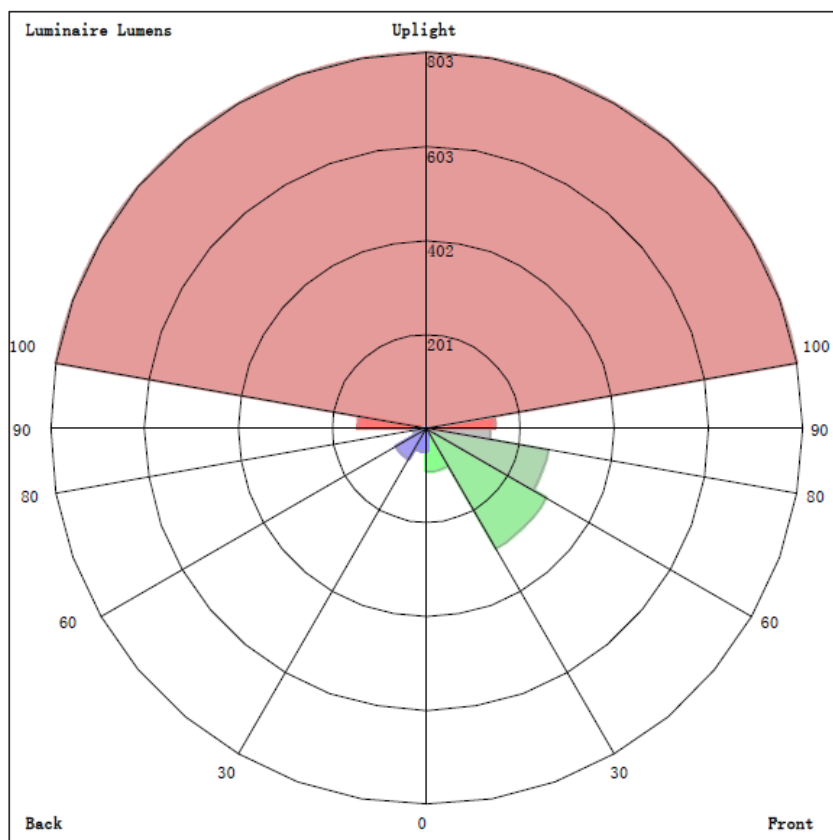
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	164.8	197.6	214.0	197.6	164.8	136.1	128.0	136.1	0- 10	16.04	16.04	0.84,0.84
20	154.8	226.3	264.7	226.3	154.8	107.5	99.09	107.5	10- 20	47.35	63.40	3.34,3.34
30	139.2	249.3	311.4	249.3	139.2	89.81	91.30	89.81	20- 30	77.78	141.2	7.43,7.43
40	112.8	268.9	353.6	268.9	112.8	82.14	62.27	82.14	30- 40	105.9	247.1	13,13
50	85.91	276.9	392.4	276.9	85.91	55.06	39.53	55.06	40- 50	126.5	373.6	19.7,19.7
60	58.65	278.0	425.3	278.0	58.65	34.02	21.44	34.02	50- 60	138.8	512.4	27,27
70	40.30	273.6	447.9	273.6	40.30	21.19	19.76	21.19	60- 70	144.5	656.9	34.6,34.6
80	22.22	263.5	461.5	263.5	22.22	19.91	16.99	19.91	70- 80	146.6	803.5	42.3,42.3
90	4.419	256.5	464.2	256.5	4.419	18.41	16.89	18.41	80- 90	146.4	949.9	50,50
100	22.22	263.5	461.5	263.5	22.22	19.91	16.99	19.91	90-100	146.4	1096	57.7,57.7
110	40.30	273.6	447.9	273.6	40.30	21.19	19.76	21.19	100-110	146.6	1243	65.4,65.4
120	58.65	278.0	425.3	278.0	58.65	34.02	21.44	34.02	110-120	144.5	1387	73,73
130	85.91	276.9	392.4	276.9	85.91	55.06	39.53	55.06	120-130	138.8	1526	80.3,80.3
140	112.8	268.9	353.6	268.9	112.8	82.14	62.27	82.14	130-140	126.5	1653	87,87
150	139.2	249.3	311.4	249.3	139.2	89.81	91.30	89.81	140-150	105.9	1759	92.6,92.6
160	154.8	226.3	264.7	226.3	154.8	107.5	99.09	107.5	150-160	77.78	1836	96.7,96.7
170	164.8	197.6	214.0	197.6	164.8	136.1	128.0	136.1	160-170	47.35	1884	99.2,99.2
180	169.3	169.3	169.3	169.3	169.3	169.3	169.3	169.3	170-180	16.04	1900	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	16.04	0-10	16.04	0.85%
10-20	47.35	0-20	63.39	3.37%
20-30	77.78	0-30	141.17	7.49%
30-40	105.95	0-40	247.12	13.12%
40-50	126.47	0-50	373.59	19.83%
50-60	138.77	0-60	512.36	27.20%
60-70	144.49	0-70	656.85	34.87%
70-80	146.63	0-80	803.48	42.66%
80-90	146.36	0-90	949.84	50.43%
90-100	146.36	0-100	1096.20	58.20%
100-110	146.63	0-110	1242.83	65.98%
110-120	144.49	0-120	1387.32	73.65%
120-130	138.77	0-130	1526.09	81.02%
130-140	126.47	0-140	1652.56	87.73%
140-150	105.95	0-150	1758.51	93.36%
150-160	77.78	0-160	1836.29	97.49%
160-170	47.35	0-170	1883.64	100.00%
170-180	16.04	0-180	1899.68	100.85%

4.2 Goniophotometer Test

LCS/BUG

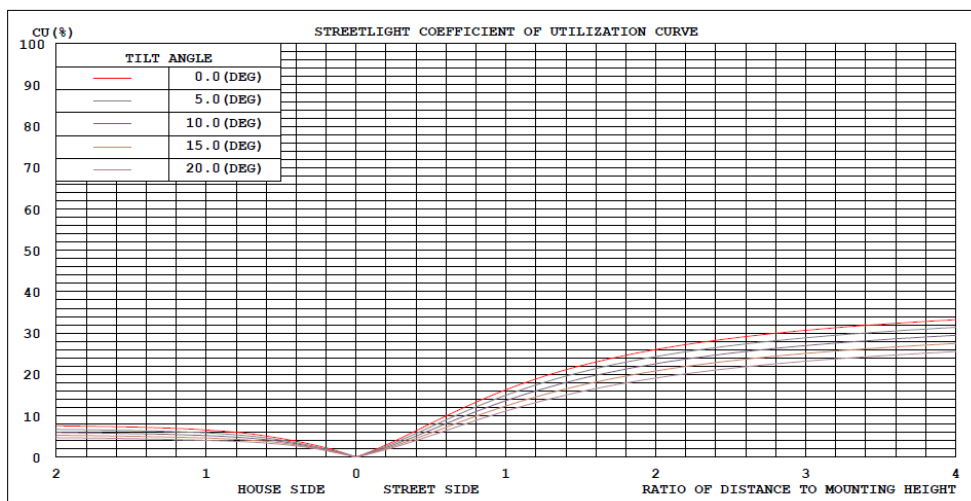


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

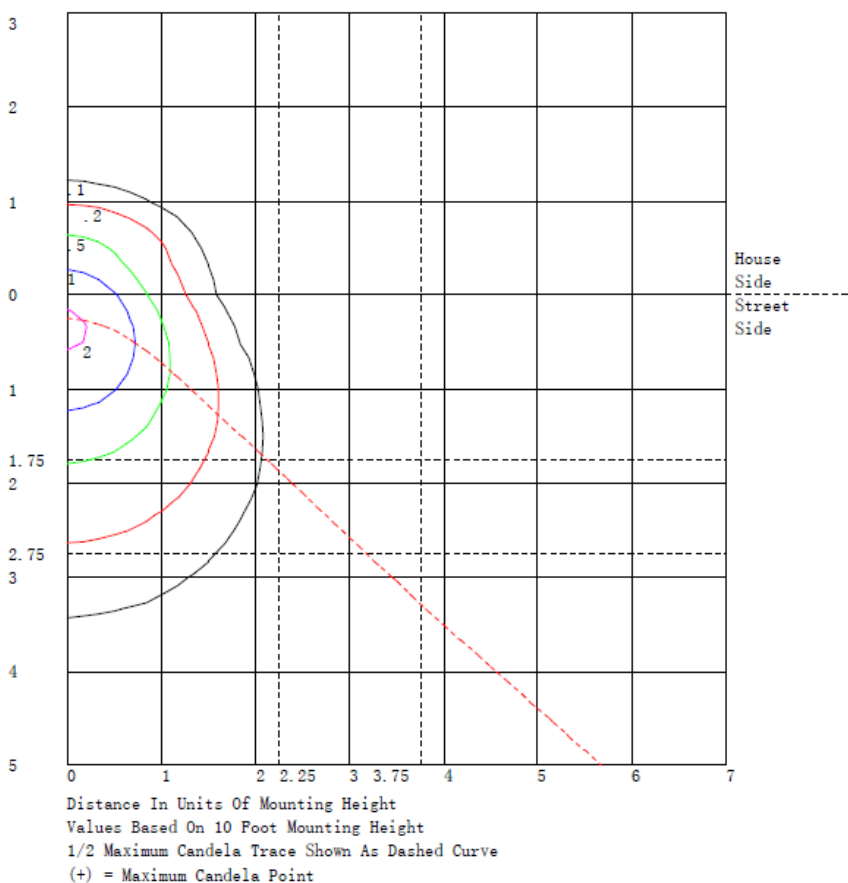
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	92.0	N.A.	4.8
FM - Front-Medium (30-60)	296.1	N.A.	15.6
FH - Front-High (60-80)	264.0	N.A.	13.9
FVH - Front-Very High (80-90)	136.8	N.A.	7.2
BL - Back-Low (0-30)	49.2	N.A.	2.6
BM - Back-Medium (30-60)	75.1	N.A.	4.0
BH - Back-High (60-80)	27.2	N.A.	1.4
BVH - Back-Very High (80-90)	9.6	N.A.	0.5
UL - Uplight-Low (90-100)	146.4	N.A.	7.7
UH - Uplight-High (100-180)	803.5	N.A.	42.3
Total	1899.9	N.A.	100.0
BUG Rating	B0-U4-G2		

4.2 Goniophotometer Test

Coefficients of Utilization



Isolines



4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) y (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169
5	167	174	180	184	188	191	192	191	188	184	180	174	167	162	157	152	149	148	148
10	165	177	188	198	205	211	214	211	205	198	188	177	165	154	144	136	131	128	128
15	163	179	196	212	225	235	239	235	225	212	196	179	163	146	131	121	113	110	110
20	155	178	203	226	245	258	265	258	245	226	203	178	155	134	118	108	101	98.5	99.1
25	147	175	207	239	264	280	287	280	264	239	207	175	147	122	105	96.5	93.5	92.7	93.2
30	139	174	212	249	282	302	311	302	282	249	212	174	139	111	94.8	89.8	89.6	90.2	91.3
35	126	166	215	260	297	323	334	323	297	260	215	166	126	98.2	86.9	85.8	85.1	79.2	77.7
40	113	158	213	269	313	342	354	342	313	269	213	158	113	87.1	81.0	82.1	70.9	64.0	62.3
45	99.5	149	211	273	325	362	375	362	325	273	211	149	99.5	77.2	76.1	69.0	56.9	51.1	49.3
50	85.9	136	207	277	338	377	392	377	338	277	207	136	85.9	69.1	70.6	55.1	45.5	40.8	39.5
55	72.3	120	196	280	347	392	410	392	347	280	196	120	72.3	62.1	58.3	43.4	36.2	32.2	31.5
60	58.6	102	185	278	355	405	425	405	355	278	185	102	58.6	55.9	45.3	34.0	26.6	22.7	21.4
65	49.5	89.9	173	277	362	417	439	417	362	277	173	89.9	49.5	46.6	34.7	25.4	21.4	20.7	20.6
70	40.3	77.6	162	274	366	426	448	426	366	274	162	77.6	40.3	36.3	28.0	21.2	20.6	19.9	19.8
75	31.1	64.6	148	269	369	433	456	433	369	269	148	64.6	31.1	25.8	22.2	20.5	19.7	19.1	19.3
80	22.2	61.8	140	263	370	437	461	437	370	263	140	61.8	22.2	22.5	20.1	19.9	17.8	17.2	17.0
85	13.3	59.6	136	262	370	439	465	439	370	262	136	59.6	13.3	20.2	19.9	19.2	16.9	14.8	14.4
90	4.42	56.9	129	257	370	440	464	440	370	257	129	56.9	4.42	18.0	19.8	18.4	17.2	15.0	16.9
95	13.3	59.6	136	262	370	439	465	439	370	262	136	59.6	13.3	20.2	19.9	19.2	16.9	14.8	14.4
100	22.2	61.8	140	263	370	437	461	437	370	263	140	61.8	22.2	22.5	20.1	19.9	17.8	17.2	17.0
105	31.1	64.6	148	269	369	433	456	433	369	269	148	64.6	31.1	25.8	22.2	20.5	19.7	19.1	19.3
110	40.3	77.6	162	274	366	426	448	426	366	274	162	77.6	40.3	36.3	28.0	21.2	20.6	19.9	19.8
115	49.5	89.9	173	277	362	417	439	417	362	277	173	89.9	49.5	46.6	34.7	25.4	21.4	20.7	20.6
120	58.6	102	185	278	355	405	425	405	355	278	185	102	58.6	55.9	45.3	34.0	26.6	22.7	21.4
125	72.3	120	196	280	347	392	410	392	347	280	196	120	72.3	62.1	58.3	43.4	36.2	32.2	31.5
130	85.9	136	207	277	338	377	392	377	338	277	207	136	85.9	69.1	70.6	55.1	45.5	40.8	39.5
135	99.5	149	211	273	325	362	375	362	325	273	211	149	99.5	77.2	76.1	69.0	56.9	51.1	49.3
140	113	158	213	269	313	342	354	342	313	269	213	158	113	87.1	81.0	82.1	70.9	64.0	62.3
145	126	166	215	260	297	323	334	323	297	260	215	166	126	98.2	86.9	85.8	85.1	79.2	77.7
150	139	174	212	249	282	302	311	302	282	249	212	174	139	111	94.8	89.8	89.6	90.2	91.3
155	147	175	207	239	264	280	287	280	264	239	207	175	147	122	105	96.5	93.5	92.7	93.2
160	155	178	203	226	245	258	265	258	245	226	203	178	155	134	118	108	101	98.5	99.1
165	163	179	196	212	225	235	239	235	225	212	196	179	163	146	131	121	113	110	110
170	165	177	188	198	205	211	214	211	205	198	188	177	165	154	144	136	131	128	128
175	167	174	180	184	188	191	192	191	188	184	180	174	167	162	157	152	149	148	148
180	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	169	169	169	169	169														
5	148	149	152	157	162														
10	128	131	136	144	154														
15	110	113	121	131	146														
20	98.5	101	108	118	134														
25	92.7	93.5	96.5	105	122														
30	90.2	89.6	89.8	94.8	111														
35	79.2	85.1	85.8	86.9	98.2														
40	64.0	70.9	82.1	81.0	87.1														
45	51.1	56.9	69.0	76.1	77.2														
50	40.8	45.5	55.1	70.6	69.1														
55	32.2	36.2	43.4	58.3	62.1														
60	22.7	26.6	34.0	45.3	55.9														
65	20.7	21.4	25.4	34.7	46.6														
70	19.9	20.6	21.2	28.0	36.3														
75	19.1	19.7	20.5	22.2	25.8														
80	17.2	17.8	19.9	20.1	22.5														
85	14.8	16.9	19.2	19.9	20.2														
90	15.0	17.2	18.4	19.8	18.0														
95	14.8	16.9	19.2	19.9	20.2														
100	17.2	17.8	19.9	20.1	22.5														
105	19.1	19.7	20.5	22.2	25.8														
110	19.9	20.6	21.2	28.0	36.3														
115	20.7	21.4	25.4	34.7	46.6														
120	22.7	26.6	34.0	45.3	55.9														
125	32.2	36.2	43.4	58.3	62.1														
130	40.8	45.5	55.1	70.6	69.1														
135	51.1	56.9	69.0	76.1	77.2														
140	64.0	70.9	82.1	81.0	87.1														
145	79.2	85.1	85.8	86.9	98.2														
150	90.2	89.6	89.8	94.8	111														
155	92.7	93.5	96.5	105	122														
160	98.5	101	108	118	134														
165	110	113	121	131	146														
170	128	131	136	144	154														
175	148	149	152	157	162														
180	169	169	169	169	169														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18 @16W4000K	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	0.132	15.7	0.994	6.61
277.0	60	0.059	15.6	0.950	15.22

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*****