

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: 2025-08-20

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		954
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	110.9
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		8.6
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	7.01
				277V	41.05
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.986
				277V	0.811
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3045±175	3060
			4 steps	3045±100	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.6
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		72
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		90
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		96
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-3%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.9%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U3-G1
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		277.0
(Goniophotometer – Section 4.2)			Non-Worst Case		120.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.038
(Goniophotometer – Section 4.2)			Non-Worst Case		0.070
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		8.6
(Goniophotometer – Section 4.2)			Non-Worst Case		8.3

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-06	V1-18 @8W3000K	-	250728005-S1
2	Goniophotometer Test	2025-08-06	V1-18 @8W3000K	-	250728005-S1
3	THD and PF Test	2025-08-06	V1-18 @8W3000K	-	250728005-S1

Remark (If any):

1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
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 @8W3000K, 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 @8W3000K	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	0.070	8.3	0.986
277.0	60	0.038	8.6	0.811

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3060	92.6	72	-0.0018	2.6	90	96	-3%

4.1 Integrating Sphere Test

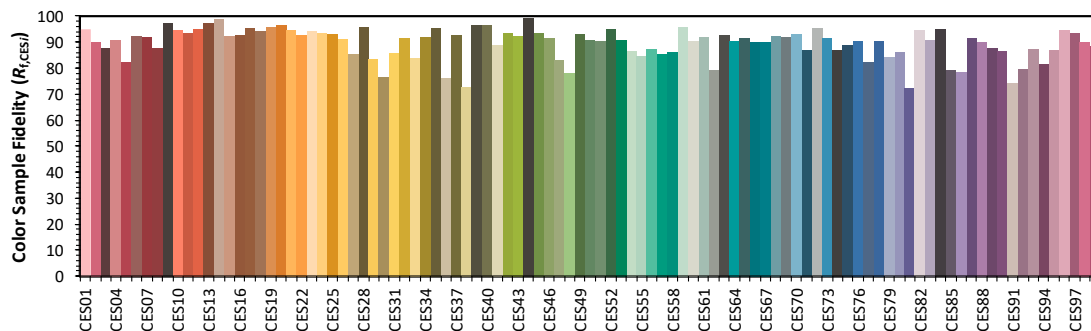
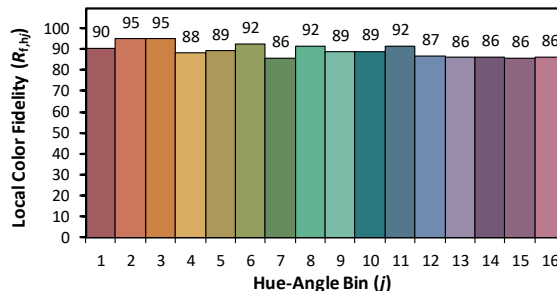
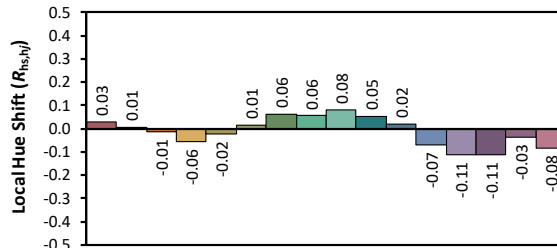
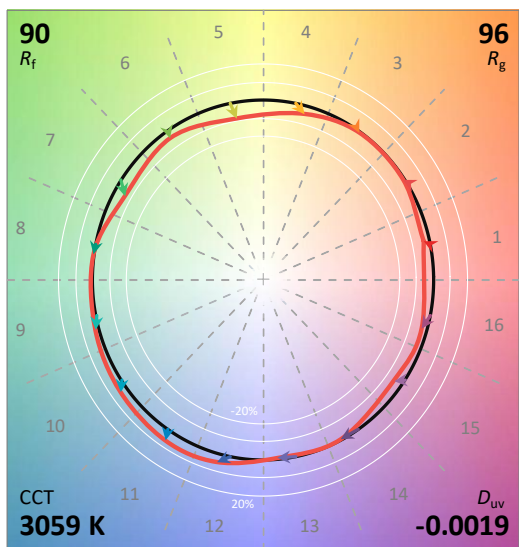
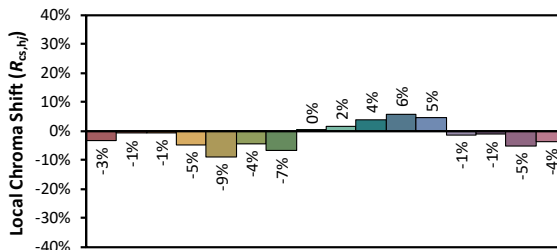
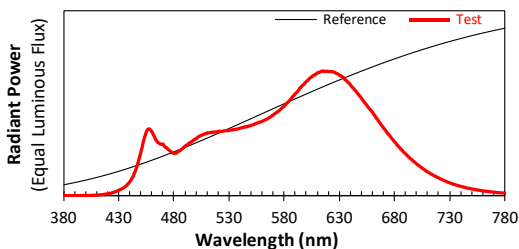
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/20

Model: V1-18 @8W3000K



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

x 0.4302
 y 0.3971
 u' 0.2492
 v' 0.5176

CIE 13.3-1995
(CRI)
 R_a 93
 R_9 72

4.1 Integrating Sphere Test

Spectral Distribution over Visible Wavelength											
WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)
380	1.70E-06	447	2.57E-04	514	5.11E-04	581	7.29E-04	648	8.03E-04	715	1.65E-04
381	1.50E-06	448	2.91E-04	515	5.08E-04	582	7.39E-04	649	7.92E-04	716	1.61E-04
382	2.30E-06	449	3.22E-04	516	5.10E-04	583	7.47E-04	650	7.81E-04	717	1.56E-04
383	1.80E-06	450	3.57E-04	517	5.11E-04	584	7.57E-04	651	7.68E-04	718	1.51E-04
384	1.50E-06	451	3.91E-04	518	5.12E-04	585	7.66E-04	652	7.57E-04	719	1.47E-04
385	2.40E-06	452	4.31E-04	519	5.12E-04	586	7.76E-04	653	7.44E-04	720	1.43E-04
386	1.30E-06	453	4.63E-04	520	5.15E-04	587	7.89E-04	654	7.36E-04	721	1.38E-04
387	1.40E-06	454	4.91E-04	521	5.16E-04	588	7.98E-04	655	7.23E-04	722	1.34E-04
388	1.90E-06	455	5.17E-04	522	5.16E-04	589	8.08E-04	656	7.10E-04	723	1.30E-04
389	1.50E-06	456	5.31E-04	523	5.16E-04	590	8.18E-04	657	6.99E-04	724	1.26E-04
390	1.50E-06	457	5.36E-04	524	5.17E-04	591	8.26E-04	658	6.90E-04	725	1.22E-04
391	1.60E-06	458	5.32E-04	525	5.19E-04	592	8.35E-04	659	6.78E-04	726	1.18E-04
392	1.20E-06	459	5.23E-04	526	5.20E-04	593	8.45E-04	660	6.68E-04	727	1.15E-04
393	1.50E-06	460	5.10E-04	527	5.22E-04	594	8.62E-04	661	6.55E-04	728	1.11E-04
394	1.40E-06	461	4.92E-04	528	5.23E-04	595	8.69E-04	662	6.43E-04	729	1.07E-04
395	1.90E-06	462	4.75E-04	529	5.21E-04	596	8.80E-04	663	6.29E-04	730	1.04E-04
396	1.80E-06	463	4.54E-04	530	5.25E-04	597	8.88E-04	664	6.17E-04	731	1.01E-04
397	2.40E-06	464	4.43E-04	531	5.27E-04	598	8.95E-04	665	6.05E-04	732	9.76E-05
398	2.50E-06	465	4.29E-04	532	5.26E-04	599	9.07E-04	666	5.92E-04	733	9.46E-05
399	2.60E-06	466	4.24E-04	533	5.29E-04	600	9.14E-04	667	5.80E-04	734	9.11E-05
400	2.60E-06	467	4.17E-04	534	5.29E-04	601	9.23E-04	668	5.68E-04	735	8.91E-05
401	2.40E-06	468	4.13E-04	535	5.31E-04	602	9.31E-04	669	5.56E-04	736	8.60E-05
402	2.10E-06	469	4.12E-04	536	5.34E-04	603	9.41E-04	670	5.43E-04	737	8.31E-05
403	3.20E-06	470	4.14E-04	537	5.33E-04	604	9.49E-04	671	5.33E-04	738	8.04E-05
404	2.50E-06	471	3.97E-04	538	5.37E-04	605	9.54E-04	672	5.22E-04	739	7.78E-05
405	3.00E-06	472	3.90E-04	539	5.39E-04	606	9.61E-04	673	5.08E-04	740	7.56E-05
406	3.40E-06	473	3.87E-04	540	5.42E-04	607	9.66E-04	674	4.97E-04	741	7.31E-05
407	3.90E-06	474	3.75E-04	541	5.44E-04	608	9.71E-04	675	4.88E-04	742	7.11E-05
408	4.70E-06	475	3.70E-04	542	5.46E-04	609	9.76E-04	676	4.77E-04	743	6.87E-05
409	5.00E-06	476	3.61E-04	543	5.48E-04	610	9.85E-04	677	4.64E-04	744	6.71E-05
410	5.60E-06	477	3.54E-04	544	5.50E-04	611	9.86E-04	678	4.54E-04	745	6.43E-05
411	5.80E-06	478	3.47E-04	545	5.56E-04	612	9.88E-04	679	4.43E-04	746	6.23E-05
412	7.10E-06	479	3.43E-04	546	5.52E-04	613	9.96E-04	680	4.32E-04	747	6.05E-05
413	7.90E-06	480	3.39E-04	547	5.56E-04	614	9.97E-04	681	4.24E-04	748	5.88E-05
414	8.60E-06	481	3.41E-04	548	5.60E-04	615	1.00E-03	682	4.11E-04	749	5.69E-05
415	9.70E-06	482	3.44E-04	549	5.60E-04	616	9.96E-04	683	4.00E-04	750	5.53E-05
416	1.04E-05	483	3.48E-04	550	5.65E-04	617	9.96E-04	684	3.92E-04	751	5.29E-05
417	1.23E-05	484	3.57E-04	551	5.67E-04	618	9.98E-04	685	3.82E-04	752	5.15E-05
418	1.36E-05	485	3.60E-04	552	5.70E-04	619	9.98E-04	686	3.72E-04	753	4.97E-05
419	1.48E-05	486	3.66E-04	553	5.75E-04	620	9.94E-04	687	3.64E-04	754	4.82E-05
420	1.65E-05	487	3.75E-04	554	5.78E-04	621	9.96E-04	688	3.53E-04	755	4.74E-05
421	1.77E-05	488	3.80E-04	555	5.82E-04	622	9.95E-04	689	3.44E-04	756	4.54E-05
422	2.03E-05	489	3.90E-04	556	5.85E-04	623	9.94E-04	690	3.36E-04	757	4.38E-05
423	2.18E-05	490	3.97E-04	557	5.89E-04	624	9.93E-04	691	3.27E-04	758	4.29E-05
424	2.47E-05	491	4.04E-04	558	5.89E-04	625	9.89E-04	692	3.17E-04	759	4.11E-05
425	2.74E-05	492	4.08E-04	559	5.94E-04	626	9.88E-04	693	3.11E-04	760	3.95E-05
426	3.05E-05	493	4.17E-04	560	5.96E-04	627	9.80E-04	694	3.01E-04	761	3.83E-05
427	3.33E-05	494	4.23E-04	561	6.02E-04	628	9.78E-04	695	2.94E-04	762	3.70E-05
428	3.71E-05	495	4.28E-04	562	6.05E-04	629	9.73E-04	696	2.86E-04	763	3.63E-05
429	4.12E-05	496	4.34E-04	563	6.10E-04	630	9.66E-04	697	2.78E-04	764	3.51E-05
430	4.52E-05	497	4.41E-04	564	6.14E-04	631	9.63E-04	698	2.71E-04	765	3.38E-05
431	4.93E-05	498	4.48E-04	565	6.18E-04	632	9.55E-04	699	2.64E-04	766	3.32E-05
432	5.38E-05	499	4.52E-04	566	6.25E-04	633	9.52E-04	700	2.56E-04	767	3.22E-05
433	5.83E-05	500	4.59E-04	567	6.29E-04	634	9.44E-04	701	2.48E-04	768	3.08E-05
434	6.33E-05	501	4.64E-04	568	6.35E-04	635	9.30E-04	702	2.42E-04	769	2.98E-05
435	6.86E-05	502	4.73E-04	569	6.42E-04	636	9.25E-04	703	2.36E-04	770	2.89E-05
436	7.63E-05	503	4.77E-04	570	6.47E-04	637	9.17E-04	704	2.28E-04	771	2.80E-05
437	8.43E-05	504	4.82E-04	571	6.55E-04	638	9.07E-04	705	2.22E-04	772	2.69E-05
438	9.37E-05	505	4.85E-04	572	6.62E-04	639	9.00E-04	706	2.16E-04	773	2.55E-05
439	1.03E-04	506	4.89E-04	573	6.67E-04	640	8.88E-04	707	2.09E-04	774	2.53E-05
440	1.15E-04	507	4.92E-04	574	6.75E-04	641	8.76E-04	708	2.03E-04	775	2.43E-05
441	1.28E-04	508	4.97E-04	575	6.80E-04	642	8.66E-04	709	1.96E-04	776	2.41E-05
442	1.43E-04	509	4.97E-04	576	6.87E-04	643	8.58E-04	710	1.91E-04	777	2.30E-05
443	1.60E-04	510	5.04E-04	577	6.97E-04	644	8.46E-04	711	1.86E-04	778	2.22E-05
444	1.83E-04	511	5.03E-04	578	7.05E-04	645	8.38E-04	712	1.81E-04	779	2.22E-05
445	2.03E-04	512	5.05E-04	579	7.13E-04	646	8.25E-04	713	1.76E-04	780	2.22E-05
446	2.28E-04	513	5.06E-04	580	7.18E-04	647	8.14E-04	714	1.70E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18 @8W3000K	Sample ID	250728005-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	25.0	Humidity (%RH)	41.9

Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using a type C goniophotometer and software.</p> <p>The ambient temperature shall be maintained at $25 \pm 1^\circ\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.</p> <p>The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1.0° vertical intervals and 15° horizontal intervals.</p>

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	277.0	60	0.038	8.6	0.811
NON-WORST CASE	120.0	60	0.070	8.3	0.987

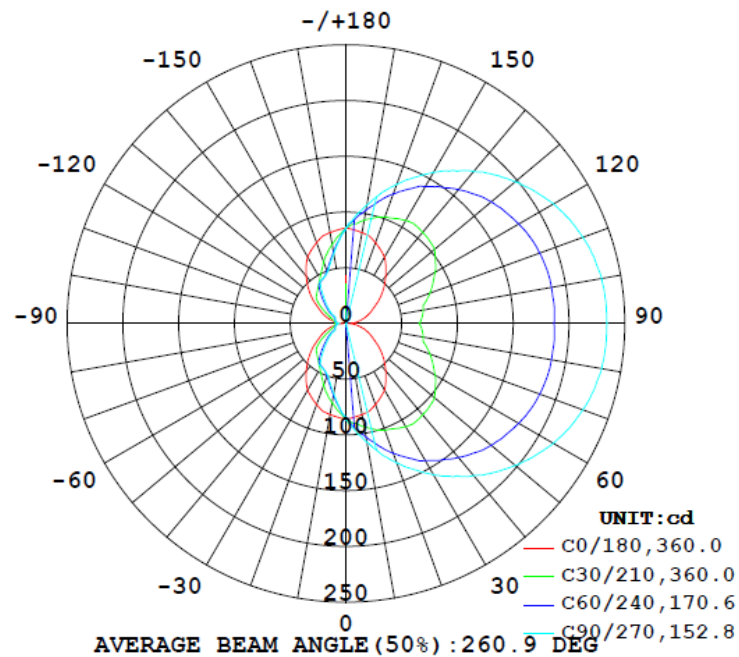
Test Result

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°)	
954	93.6	156.7	180.0	96.1	110.9	26.9%	B0-U3-G1

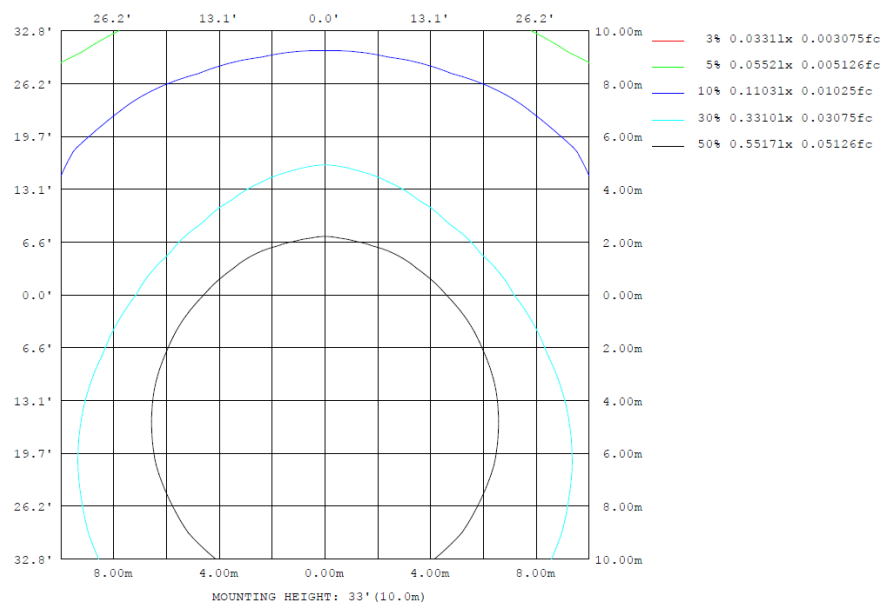
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

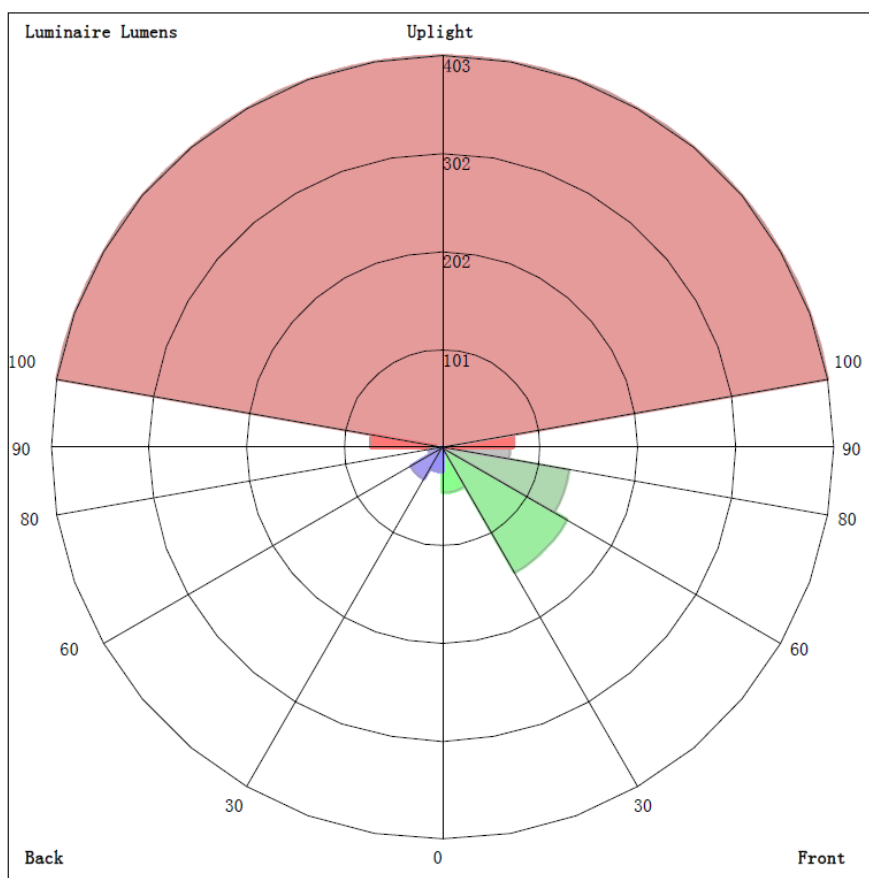
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total	lum, lamp
10	82.91	98.92	108.0	98.92	82.91	67.92	63.60	67.92	0- 10	8.061	8.061	0.84,0.84
20	77.32	114.4	133.0	114.4	77.32	53.58	48.94	53.58	10- 20	23.77	31.83	3.34,3.34
30	69.15	125.7	156.7	125.7	69.15	44.21	45.13	44.21	20- 30	38.96	70.79	7.42,7.42
40	55.57	134.5	178.1	134.5	55.57	40.55	31.57	40.55	30- 40	53.01	123.8	13,13
50	42.13	138.7	198.1	138.7	42.13	27.32	20.21	27.32	40- 50	63.31	187.1	19.6,19.6
60	28.82	139.8	214.8	139.8	28.82	16.79	11.07	16.79	50- 60	69.54	256.7	26.9,26.9
70	19.77	137.9	226.0	137.9	19.77	10.94	10.14	10.94	60- 70	72.54	329.2	34.5,34.5
80	11.02	132.8	232.8	132.8	11.02	10.04	8.472	10.04	70- 80	73.85	403.0	42.2,42.2
90	2.556	129.9	233.9	129.9	2.556	9.542	8.639	9.542	80- 90	73.98	477.0	50,50
100	11.02	132.8	232.8	132.8	11.02	10.04	8.472	10.04	90-100	73.98	551.0	57.8,57.8
110	19.77	137.9	226.0	137.9	19.77	10.94	10.14	10.94	100-110	73.85	624.9	65.5,65.5
120	28.82	139.8	214.8	139.8	28.82	16.79	11.07	16.79	110-120	72.54	697.4	73.1,73.1
130	42.13	138.7	198.1	138.7	42.13	27.32	20.21	27.32	120-130	69.54	766.9	80.4,80.4
140	55.57	134.5	178.1	134.5	55.57	40.55	31.57	40.55	130-140	63.31	830.2	87,87
150	69.15	125.7	156.7	125.7	69.15	44.21	45.13	44.21	140-150	53.01	883.3	92.6,92.6
160	77.32	114.4	133.0	114.4	77.32	53.58	48.94	53.58	150-160	38.96	922.2	96.7,96.7
170	82.91	98.92	108.0	98.92	82.91	67.92	63.60	67.92	160-170	23.77	946.0	99.2,99.2
180	85.93	85.93	85.93	85.93	85.93	85.93	85.93	85.93	170-180	8.061	954.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	8.06	0-10	8.06	0.85%
10-20	23.77	0-20	31.83	3.36%
20-30	38.96	0-30	70.79	7.48%
30-40	53.01	0-40	123.80	13.09%
40-50	63.31	0-50	187.11	19.78%
50-60	69.54	0-60	256.65	27.13%
60-70	72.54	0-70	329.19	34.80%
70-80	73.85	0-80	403.04	42.61%
80-90	73.98	0-90	477.02	50.43%
90-100	73.98	0-100	551.00	58.25%
100-110	73.85	0-110	624.85	66.05%
110-120	72.54	0-120	697.39	73.72%
120-130	69.54	0-130	766.93	81.07%
130-140	63.31	0-140	830.24	87.77%
140-150	53.01	0-150	883.25	93.37%
150-160	38.96	0-160	922.21	97.49%
160-170	23.77	0-170	945.98	100.00%
170-180	8.06	0-180	954.04	100.85%

4.2 Goniophotometer Test

LCS/BUG

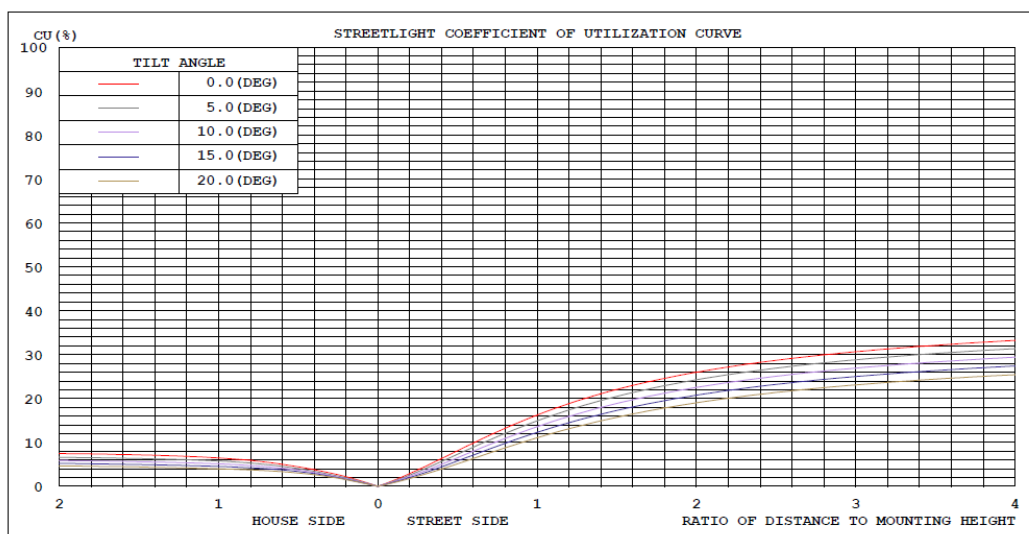


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

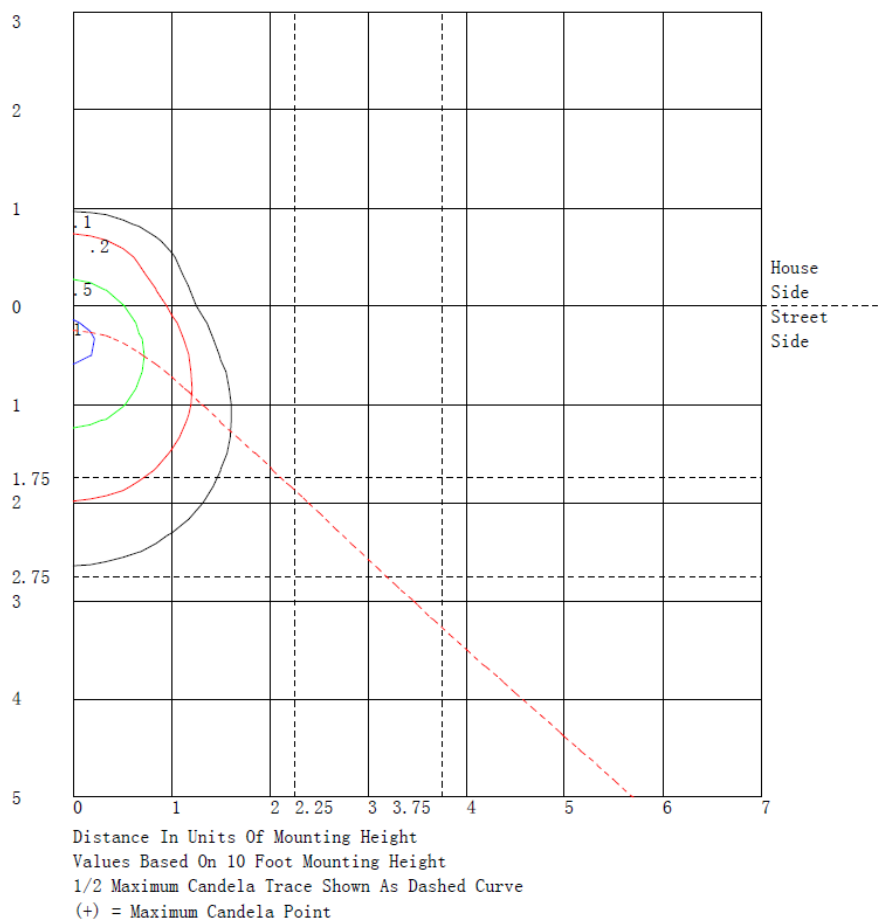
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	46.3	N.A.	4.9
FM - Front-Medium (30-60)	148.6	N.A.	15.6
FH - Front-High (60-80)	132.8	N.A.	13.9
FVH - Front-Very High (80-90)	69.1	N.A.	7.2
BL - Back-Low (0-30)	24.5	N.A.	2.6
BM - Back-Medium (30-60)	37.3	N.A.	3.9
BH - Back-High (60-80)	13.6	N.A.	1.4
BVH - Back-Very High (80-90)	4.9	N.A.	0.5
UL - Uplight-Low (90-100)	74.0	N.A.	7.8
UH - Uplight-High (100-180)	403.0	N.A.	42.2
Total	954.1	N.A.	100.0
BUG Rating	B0-U3-G1		

4.2 Goniophotometer Test

Coefficients of Utilization



Isolines



4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
5	84.4	87.3	89.9	92.0	94.4	95.9	96.7	95.9	94.4	92.0	89.9	87.3	84.4	81.4	79.0	76.9	75.2	74.4	74.4
10	82.9	88.5	94.2	98.9	103	107	108	107	103	98.9	94.2	88.5	82.9	77.3	72.1	67.9	65.3	63.8	63.6
15	81.4	90.1	98.2	106	114	118	121	118	114	106	98.2	90.1	81.4	73.0	65.7	60.2	56.8	55.1	55.1
20	77.3	88.9	102	114	124	130	133	130	124	114	102	88.9	77.3	66.8	58.8	53.6	50.3	49.0	48.9
25	73.2	87.9	104	121	133	141	144	141	133	121	104	87.9	73.2	60.6	52.2	48.0	46.1	45.8	46.2
30	69.2	86.9	107	126	142	152	157	152	142	126	107	86.9	69.2	54.7	46.9	44.2	44.4	44.5	45.1
35	62.4	82.7	108	131	149	162	168	162	149	131	108	82.7	62.4	48.4	43.0	42.3	42.2	39.8	39.4
40	55.6	78.3	107	134	157	173	178	173	157	134	107	78.3	55.6	43.0	39.9	40.5	35.4	32.1	31.6
45	48.8	73.7	106	137	164	182	189	182	164	137	106	73.7	48.8	38.3	37.3	34.2	28.4	25.8	25.2
50	42.1	66.7	104	139	170	190	198	190	170	139	104	66.7	42.1	34.3	34.6	27.3	22.8	20.6	20.2
55	35.5	58.7	97.8	141	175	198	207	198	175	141	97.8	58.7	35.5	30.6	28.7	21.7	18.1	16.2	15.9
60	28.8	50.1	92.2	140	179	205	215	205	179	140	92.2	50.1	28.8	27.2	22.4	16.8	13.2	11.5	11.1
65	24.3	44.3	86.0	139	183	211	221	211	183	139	86.0	44.3	24.3	22.6	17.4	12.9	11.0	10.6	10.5
70	19.8	38.5	80.1	138	185	215	226	215	185	138	80.1	38.5	19.8	17.6	14.0	10.9	10.6	10.1	10.1
75	15.2	32.3	73.6	135	187	219	230	219	187	135	73.6	32.3	15.2	12.6	11.2	10.5	10.1	9.75	9.96
80	11.0	31.1	70.3	133	187	221	233	221	187	133	70.3	31.1	11.0	11.1	10.1	10.0	9.18	8.80	8.47
85	6.79	30.4	68.5	132	187	222	234	222	187	132	68.5	30.4	6.79	9.99	10.0	9.79	8.71	7.70	7.63
90	2.56	29.4	65.8	130	187	222	234	222	187	130	65.8	29.4	2.56	8.97	9.88	9.54	8.76	7.94	8.64
95	6.79	30.4	68.5	132	187	222	234	222	187	132	68.5	30.4	6.79	9.99	10.0	9.79	8.71	7.70	7.63
100	11.0	31.1	70.3	133	187	221	233	221	187	133	70.3	31.1	11.0	11.1	10.1	10.0	9.18	8.80	8.47
105	15.2	32.3	73.6	135	187	219	230	219	187	135	73.6	32.3	15.2	12.6	11.2	10.5	10.1	9.75	9.96
110	19.8	38.5	80.1	138	185	215	226	215	185	138	80.1	38.5	19.8	17.6	14.0	10.9	10.6	10.1	10.1
115	24.3	44.3	86.0	139	183	211	221	211	183	139	86.0	44.3	24.3	22.6	17.4	12.9	11.0	10.6	10.5
120	28.8	50.1	92.2	140	179	205	215	205	179	140	92.2	50.1	28.8	27.2	22.4	16.8	13.2	11.5	11.1
125	35.5	58.7	97.8	141	175	198	207	198	175	141	97.8	58.7	35.5	30.6	28.7	21.7	18.1	16.2	15.9
130	42.1	66.7	104	139	170	190	198	190	170	139	104	66.7	42.1	34.3	34.6	27.3	22.8	20.6	20.2
135	48.8	73.7	106	137	164	182	189	182	164	137	106	73.7	48.8	38.3	37.3	34.2	28.4	25.8	25.2
140	55.6	78.3	107	134	157	173	178	173	157	134	107	78.3	55.6	43.0	39.9	40.5	35.4	32.1	31.6
145	62.4	82.7	108	131	149	162	168	162	149	131	108	82.7	62.4	48.4	43.0	42.3	42.2	39.8	39.4
150	69.2	86.9	107	126	142	152	157	152	142	126	107	86.9	69.2	54.7	46.9	44.2	44.4	44.5	45.1
155	73.2	87.9	104	121	133	141	144	141	133	121	104	87.9	73.2	60.6	52.2	48.0	46.1	45.8	46.2
160	77.3	88.9	102	114	124	130	133	130	124	114	102	88.9	77.3	66.8	58.8	53.6	50.3	49.0	48.9
165	81.4	90.1	98.2	106	114	118	121	118	114	106	98.2	90.1	81.4	73.0	65.7	60.2	56.8	55.1	55.1
170	82.9	88.5	94.2	98.9	103	107	108	107	103	98.9	94.2	88.5	82.9	77.3	72.1	67.9	65.3	63.8	63.6
175	84.4	87.3	89.9	92.0	94.4	95.9	96.7	95.9	94.4	92.0	89.9	87.3	84.4	81.4	79.0	76.9	75.2	74.4	74.4
180	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9

Table--2

UNIT: cd

C (DEG)	285	300	315	330	345														
0	85.9	85.9	85.9	85.9	85.9														
5	74.4	75.2	76.9	79.0	81.4														
10	63.8	65.3	67.9	72.1	77.3														
15	55.1	56.8	60.2	65.7	73.0														
20	49.0	50.3	53.6	58.8	66.8														
25	45.8	46.1	48.0	52.2	60.6														
30	44.5	44.4	44.2	46.9	54.7														
35	39.8	42.2	42.3	43.0	48.4														
40	32.1	35.4	40.5	39.9	43.0														
45	25.8	28.4	34.2	37.3	38.3														
50	20.6	22.8	27.3	34.6	34.3														
55	16.2	18.1	21.7	28.7	30.6														
60	11.5	13.2	16.8	22.4	27.2														
65	10.6	11.0	12.9	17.4	22.6														
70	10.1	10.6	10.9	14.0	17.6														
75	9.75	10.1	10.5	11.2	12.6														
80	8.80	9.18	10.0	10.1	11.1														
85	7.70	8.71	9.79	10.0	9.99														
90	7.94	8.76	9.54	9.88	9.97														
95	7.70	8.71	9.79	10.0	9.99														
100	8.80	9.18	10.0	10.1	11.1														
105	9.75	10.1	10.5	11.2	12.6														
110	10.1	10.6	10.9	14.0	17.6														
115	10.6	11.0	12.9	17.4	22.6														
120	11.5	13.2	16.8	22.4	27.2														
125	16.2	18.1	21.7	28.7	30.6														
130	20.6	22.8	27.3	34.6	34.3														
135	25.8	28.4	34.2	37.3	38.3														
140	32.1	35.4	40.5	39.9	43.0														
145	39.8	42.2	42.3	43.0	48.4														
150	44.5	44.4	44.2	46.9	54.7														
155	45.8	46.1	48.0	52.2	60.6														
160	49.0	50.3	53.6	58.8	66.8														
165	55.1	56.8	60.2	65.7	73.0														
170	63.8	65.3	67.9	72.1	77.3														
175	74.4	75.2	76.9	79.0	81.4														
180	85.9	85.9	85.9	85.9	85.9														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18 @8W3000K	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	0.070	8.3	0.986	7.01
277.0	60	0.038	8.6	0.811	41.05

5.0 Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTC-F01-001	Goniophotometer System	2024-11-07	2025-11-06
NTC-F01-006	2.0 meter Integrating Sphere	2024-11-07	2025-11-06
NTC-F01-012	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-013	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-031	Digital Power Meter	2025-08-04	2026-08-03
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

*****End of Report*****