

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		906
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	106.6
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		8.5
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	7.30
		ANSI C82-77-10:2020		277V	43.35
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	0.985
		ANSI C82-77-10:2020		277V	0.801
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3045±175	3058
			4 steps	3045±100	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.5
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		73
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%		-3%
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-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		0.069
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		8.5
(Goniophotometer – Section 4.2)			Non-Worst Case		8.2

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-10	V1-18B @8W3000K	-	250728006-S1
2	Goniophotometer Test	2025-08-10	V1-18B @8W3000K	-	250728006-S1
3	THD and PF Test	2025-08-10	V1-18B @8W3000K	-	250728006-S1

Remark (If any):

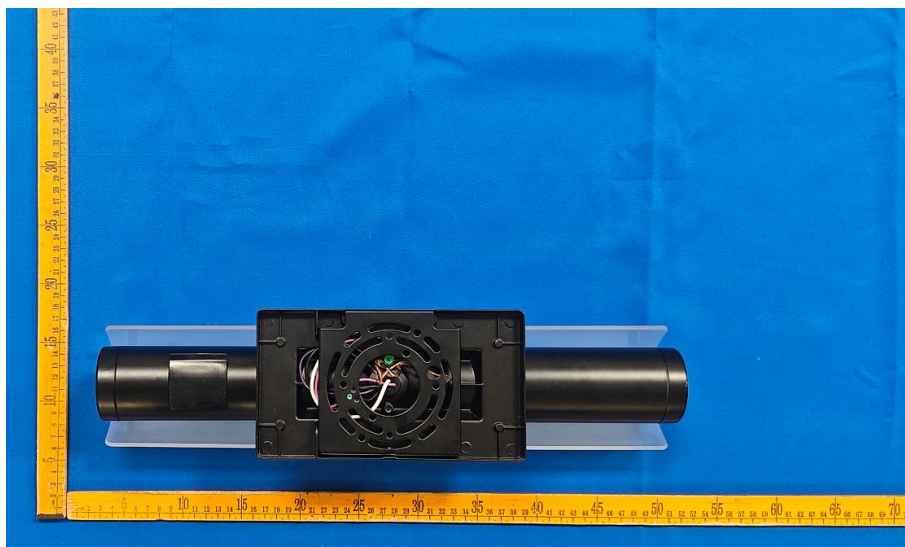
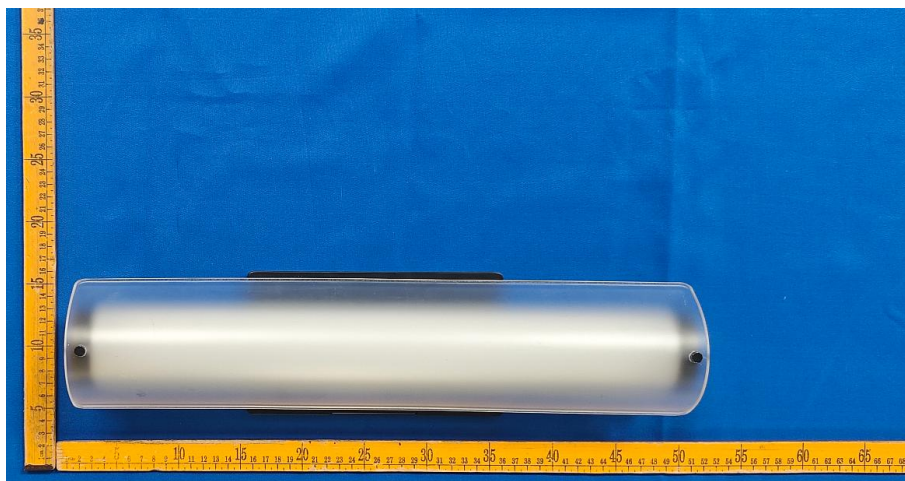
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-18B @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.	V1-18B @8W3000K	Sample ID	250728006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

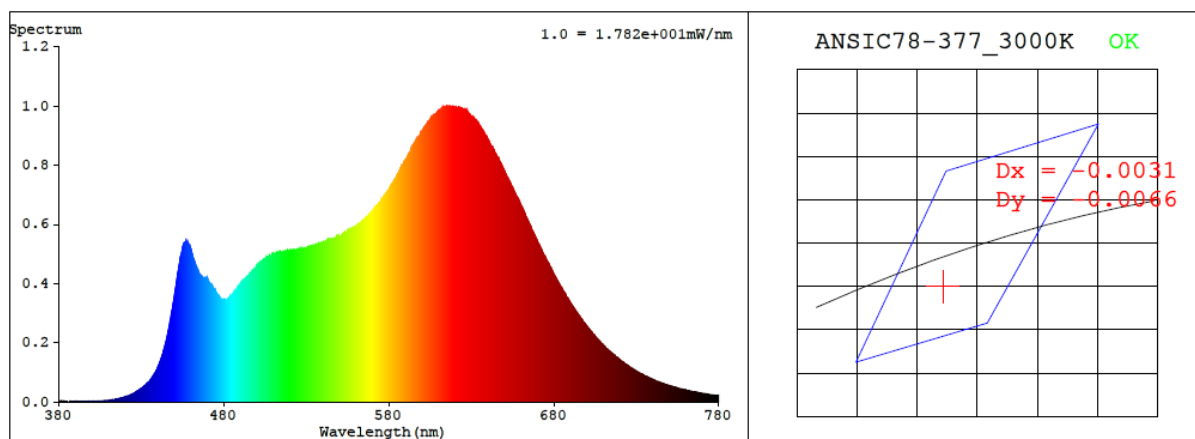
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.069	8.2	0.985
277.0	60	0.038	8.5	0.801

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3058	92.5	73	-0.0022	3.1	90	97	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4297$ $y = 0.3960$ / $u' = 0.2494$ $v' = 0.5171$ ($duv = -2.23e-03$)

CCT= 3058K Prcp WL: $L_d = 583.4\text{nm}$ Purity=47.9%

Peak WL: $L_p = 615\text{nm}$ FWHM: $= 163.3\text{nm}$ Ratio: $R = 25.1\%$ $G = 70.9\%$ $B = 3.9\%$

Render Index: $R_a = 92.5$ $AvgR = 91.1$ $TM30:R_f = 91$ $R_g = 98$

EEL: 0.12765 A+

R1 =98 R2 =95 R3 =92 R4 =96 R5 =96 R6 =89 R7 =89

R8 =85 R9 =73 R10=89 R11=96 R12=81 R13=96 R14=96 R15=95

4.1 Integrating Sphere Test

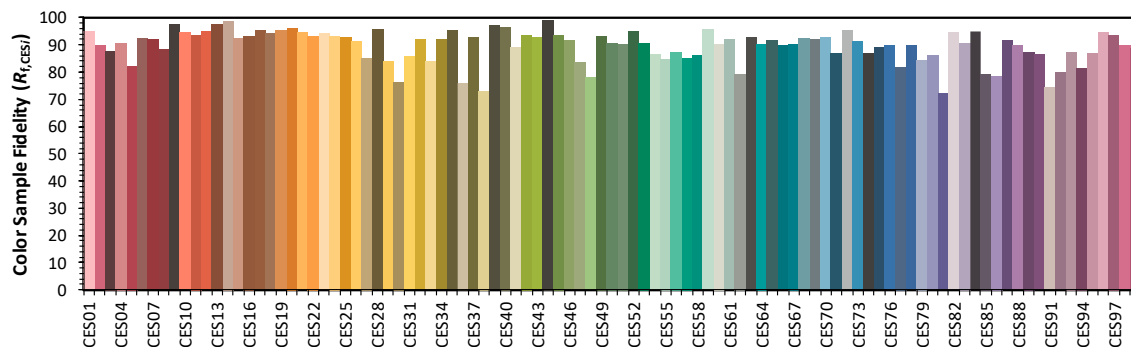
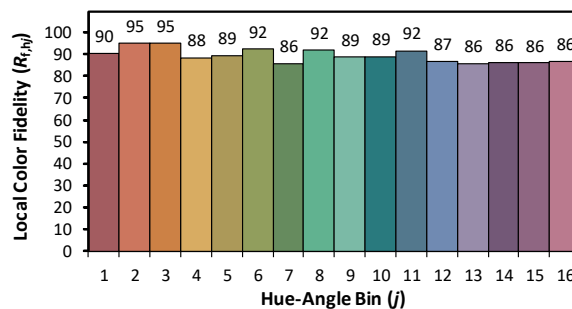
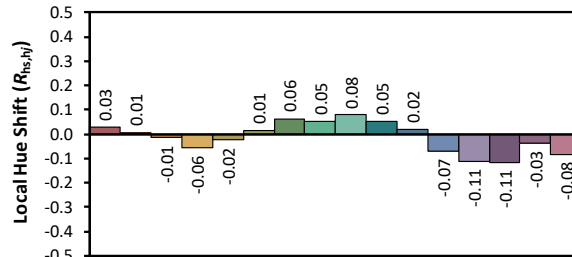
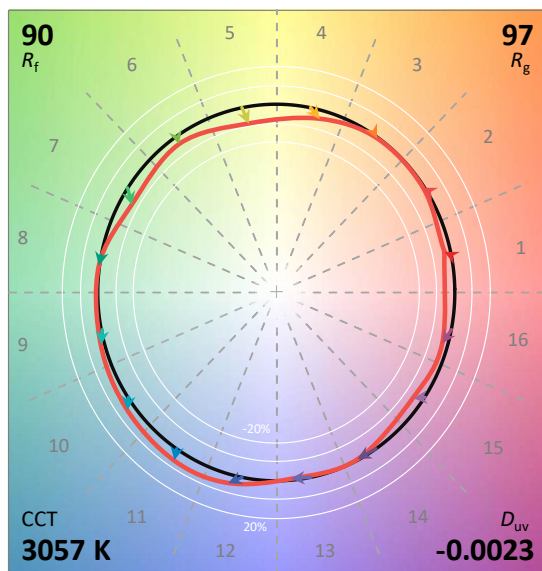
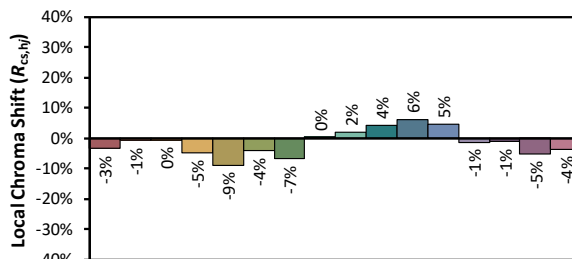
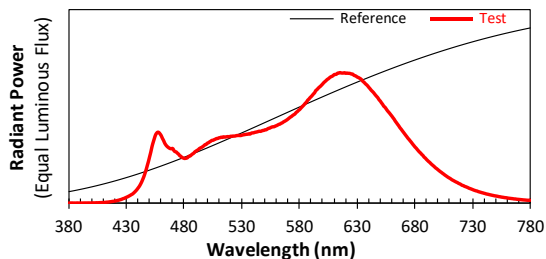
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/21

Model: V1-18B @8W3000K



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

x 0.4298
 y 0.3960
 u' 0.2494
 v' 0.5171

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 73

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	1.50E-06	447	2.59E-04	514	5.08E-04	581	7.27E-04	648	8.05E-04	715	1.66E-04
381	1.60E-06	448	2.91E-04	515	5.06E-04	582	7.36E-04	649	7.91E-04	716	1.61E-04
382	1.60E-06	449	3.23E-04	516	5.07E-04	583	7.45E-04	650	7.82E-04	717	1.57E-04
383	1.80E-06	450	3.58E-04	517	5.09E-04	584	7.55E-04	651	7.68E-04	718	1.51E-04
384	1.10E-06	451	3.93E-04	518	5.10E-04	585	7.66E-04	652	7.57E-04	719	1.48E-04
385	1.40E-06	452	4.33E-04	519	5.08E-04	586	7.74E-04	653	7.43E-04	720	1.43E-04
386	1.00E-06	453	4.65E-04	520	5.12E-04	587	7.88E-04	654	7.35E-04	721	1.37E-04
387	2.00E-06	454	4.94E-04	521	5.12E-04	588	7.96E-04	655	7.23E-04	722	1.35E-04
388	1.50E-06	455	5.21E-04	522	5.14E-04	589	8.07E-04	656	7.10E-04	723	1.30E-04
389	1.30E-06	456	5.36E-04	523	5.14E-04	590	8.16E-04	657	7.00E-04	724	1.27E-04
390	1.70E-06	457	5.43E-04	524	5.14E-04	591	8.25E-04	658	6.89E-04	725	1.23E-04
391	1.10E-06	458	5.41E-04	525	5.17E-04	592	8.37E-04	659	6.78E-04	726	1.19E-04
392	1.40E-06	459	5.30E-04	526	5.18E-04	593	8.45E-04	660	6.67E-04	727	1.15E-04
393	1.60E-06	460	5.17E-04	527	5.19E-04	594	8.62E-04	661	6.55E-04	728	1.12E-04
394	1.90E-06	461	4.97E-04	528	5.18E-04	595	8.69E-04	662	6.43E-04	729	1.08E-04
395	1.70E-06	462	4.81E-04	529	5.18E-04	596	8.79E-04	663	6.28E-04	730	1.05E-04
396	1.90E-06	463	4.60E-04	530	5.21E-04	597	8.87E-04	664	6.16E-04	731	1.01E-04
397	2.00E-06	464	4.46E-04	531	5.23E-04	598	8.95E-04	665	6.04E-04	732	9.77E-05
398	1.90E-06	465	4.36E-04	532	5.25E-04	599	9.04E-04	666	5.92E-04	733	9.47E-05
399	1.80E-06	466	4.28E-04	533	5.26E-04	600	9.13E-04	667	5.78E-04	734	9.28E-05
400	2.20E-06	467	4.22E-04	534	5.28E-04	601	9.23E-04	668	5.68E-04	735	8.88E-05
401	2.50E-06	468	4.18E-04	535	5.28E-04	602	9.31E-04	669	5.56E-04	736	8.63E-05
402	2.30E-06	469	4.17E-04	536	5.31E-04	603	9.39E-04	670	5.44E-04	737	8.37E-05
403	2.70E-06	470	4.19E-04	537	5.29E-04	604	9.47E-04	671	5.32E-04	738	8.08E-05
404	3.40E-06	471	4.03E-04	538	5.36E-04	605	9.53E-04	672	5.20E-04	739	7.87E-05
405	3.10E-06	472	3.95E-04	539	5.38E-04	606	9.61E-04	673	5.09E-04	740	7.60E-05
406	3.70E-06	473	3.92E-04	540	5.39E-04	607	9.67E-04	674	4.97E-04	741	7.38E-05
407	4.30E-06	474	3.83E-04	541	5.42E-04	608	9.71E-04	675	4.87E-04	742	7.07E-05
408	4.60E-06	475	3.76E-04	542	5.44E-04	609	9.76E-04	676	4.76E-04	743	6.92E-05
409	4.70E-06	476	3.65E-04	543	5.46E-04	610	9.84E-04	677	4.65E-04	744	6.70E-05
410	5.30E-06	477	3.59E-04	544	5.48E-04	611	9.86E-04	678	4.53E-04	745	6.47E-05
411	6.30E-06	478	3.50E-04	545	5.51E-04	612	9.88E-04	679	4.43E-04	746	6.29E-05
412	7.00E-06	479	3.47E-04	546	5.50E-04	613	9.96E-04	680	4.31E-04	747	6.07E-05
413	8.20E-06	480	3.43E-04	547	5.53E-04	614	9.96E-04	681	4.23E-04	748	5.89E-05
414	8.50E-06	481	3.43E-04	548	5.57E-04	615	1.00E-03	682	4.12E-04	749	5.69E-05
415	1.02E-05	482	3.45E-04	549	5.57E-04	616	9.97E-04	683	4.01E-04	750	5.55E-05
416	1.11E-05	483	3.50E-04	550	5.62E-04	617	9.96E-04	684	3.91E-04	751	5.40E-05
417	1.27E-05	484	3.59E-04	551	5.62E-04	618	9.97E-04	685	3.83E-04	752	5.22E-05
418	1.41E-05	485	3.61E-04	552	5.68E-04	619	9.99E-04	686	3.73E-04	753	5.00E-05
419	1.51E-05	486	3.69E-04	553	5.73E-04	620	9.95E-04	687	3.65E-04	754	4.89E-05
420	1.70E-05	487	3.76E-04	554	5.75E-04	621	9.96E-04	688	3.53E-04	755	4.68E-05
421	1.87E-05	488	3.81E-04	555	5.79E-04	622	9.95E-04	689	3.46E-04	756	4.57E-05
422	2.09E-05	489	3.92E-04	556	5.83E-04	623	9.94E-04	690	3.36E-04	757	4.42E-05
423	2.27E-05	490	3.98E-04	557	5.85E-04	624	9.93E-04	691	3.27E-04	758	4.27E-05
424	2.56E-05	491	4.04E-04	558	5.86E-04	625	9.89E-04	692	3.18E-04	759	4.20E-05
425	2.79E-05	492	4.09E-04	559	5.91E-04	626	9.88E-04	693	3.11E-04	760	4.04E-05
426	3.12E-05	493	4.18E-04	560	5.94E-04	627	9.80E-04	694	3.02E-04	761	3.87E-05
427	3.49E-05	494	4.23E-04	561	5.99E-04	628	9.76E-04	695	2.94E-04	762	3.76E-05
428	3.76E-05	495	4.27E-04	562	6.03E-04	629	9.72E-04	696	2.86E-04	763	3.65E-05
429	4.21E-05	496	4.33E-04	563	6.06E-04	630	9.66E-04	697	2.79E-04	764	3.54E-05
430	4.60E-05	497	4.40E-04	564	6.12E-04	631	9.62E-04	698	2.70E-04	765	3.45E-05
431	5.01E-05	498	4.48E-04	565	6.15E-04	632	9.57E-04	699	2.64E-04	766	3.26E-05
432	5.48E-05	499	4.50E-04	566	6.22E-04	633	9.51E-04	700	2.56E-04	767	3.25E-05
433	5.95E-05	500	4.60E-04	567	6.27E-04	634	9.43E-04	701	2.49E-04	768	3.09E-05
434	6.51E-05	501	4.63E-04	568	6.32E-04	635	9.32E-04	702	2.42E-04	769	2.98E-05
435	6.99E-05	502	4.70E-04	569	6.38E-04	636	9.25E-04	703	2.36E-04	770	2.91E-05
436	7.73E-05	503	4.75E-04	570	6.45E-04	637	9.15E-04	704	2.29E-04	771	2.82E-05
437	8.58E-05	504	4.81E-04	571	6.52E-04	638	9.07E-04	705	2.23E-04	772	2.72E-05
438	9.49E-05	505	4.82E-04	572	6.59E-04	639	8.99E-04	706	2.16E-04	773	2.63E-05
439	1.05E-04	506	4.87E-04	573	6.64E-04	640	8.87E-04	707	2.10E-04	774	2.53E-05
440	1.17E-04	507	4.90E-04	574	6.72E-04	641	8.77E-04	708	2.03E-04	775	2.47E-05
441	1.29E-04	508	4.95E-04	575	6.78E-04	642	8.66E-04	709	1.97E-04	776	2.40E-05
442	1.45E-04	509	4.95E-04	576	6.83E-04	643	8.57E-04	710	1.92E-04	777	2.30E-05
443	1.62E-04	510	5.00E-04	577	6.94E-04	644	8.48E-04	711	1.87E-04	778	2.26E-05
444	1.83E-04	511	5.02E-04	578	7.01E-04	645	8.37E-04	712	1.80E-04	779	2.25E-05
445	2.05E-04	512	5.05E-04	579	7.10E-04	646	8.26E-04	713	1.75E-04	780	2.26E-05
446	2.31E-04	513	5.03E-04	580	7.17E-04	647	8.16E-04	714	1.71E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18B @8W3000K	Sample ID	250728006-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.9	Humidity (%RH)	42.6

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	8.5	0.801
NON-WORST CASE	120.0	60	0.069	8.2	0.985

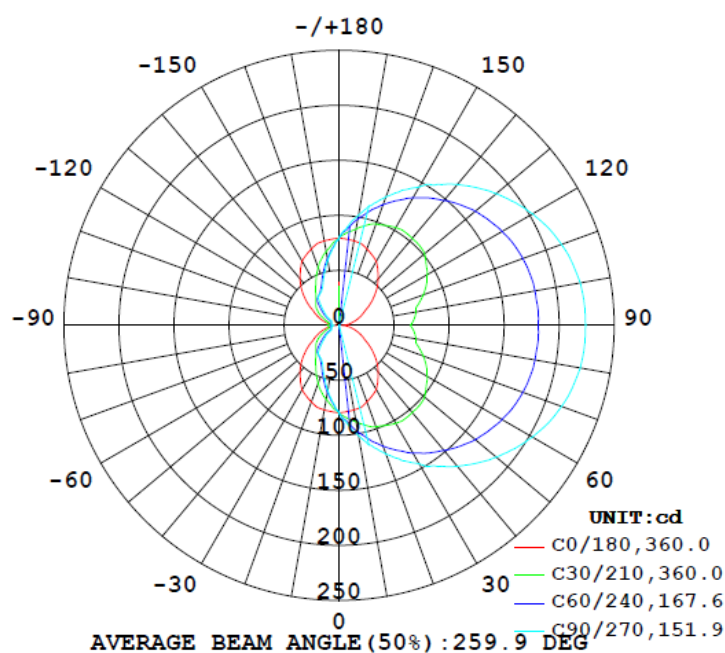
Test Result

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°)	
906	88.7	156.0	180.0	97.8	106.6	26.6%	B0-U3-G1

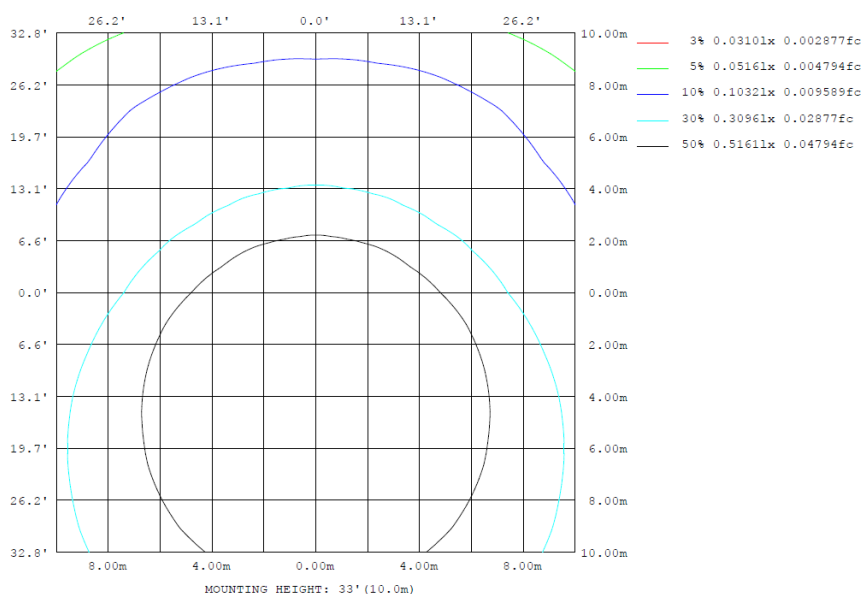
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

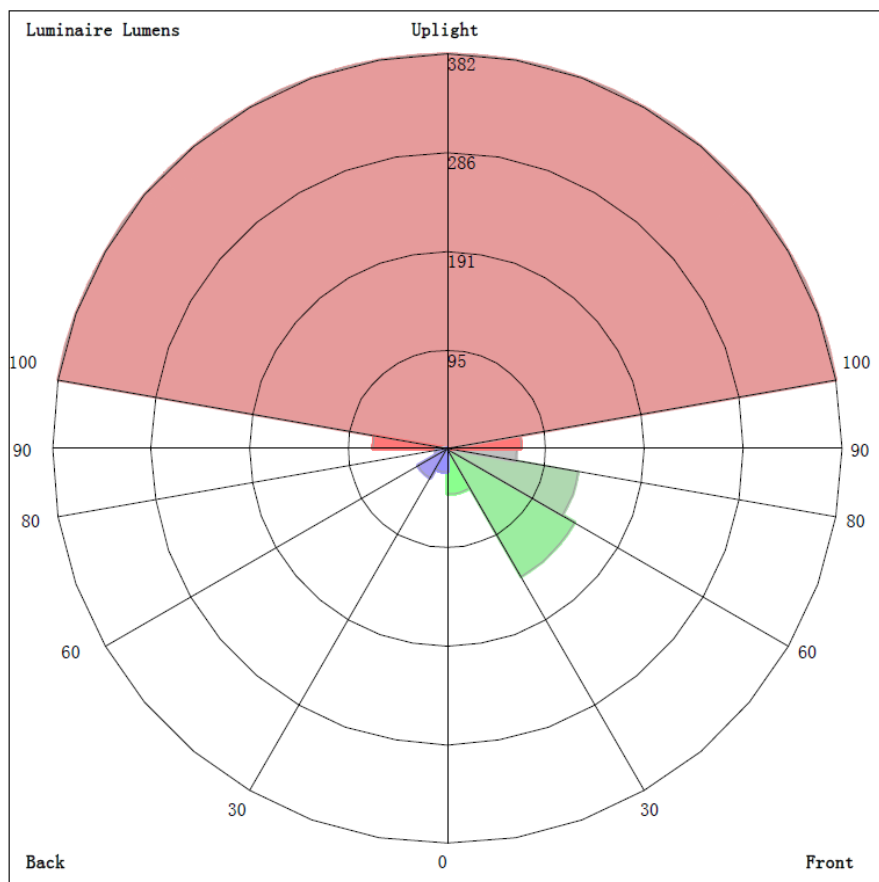
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	± zone	± total	±lum, lamp
10	78.00	94.38	101.8	94.38	78.00	64.33	60.18	64.33	0- 10	7.585	7.585	0.84, 0.84
20	74.04	109.1	124.4	109.1	74.04	49.89	42.35	49.89	10- 20	22.47	30.06	3.32, 3.32
30	67.65	119.3	145.2	119.3	67.65	37.02	33.98	37.02	20- 30	36.32	66.37	7.32, 7.32
40	55.22	127.7	167.2	127.7	55.22	31.57	27.88	31.57	30- 40	49.34	115.7	12.8, 12.8
50	41.90	133.4	186.3	133.4	41.90	24.98	16.59	24.98	40- 50	59.67	175.4	19.3, 19.3
60	27.68	135.6	203.0	135.6	27.68	15.08	8.068	15.08	50- 60	66.00	241.4	26.6, 26.6
70	18.53	134.8	215.1	134.8	18.53	8.645	7.408	8.645	60- 70	69.34	310.7	34.3, 34.3
80	10.24	131.2	222.5	131.2	10.24	8.528	6.431	8.528	70- 80	70.91	381.6	42.1, 42.1
90	2.796	128.6	224.0	128.6	2.796	9.284	7.380	9.284	80- 90	71.59	453.2	50.5, 50.5
100	10.24	131.2	222.5	131.2	10.24	8.528	6.431	8.528	90-100	71.59	524.8	57.9, 57.9
110	18.53	134.8	215.1	134.8	18.53	8.645	7.408	8.645	100-110	70.91	595.7	65.7, 65.7
120	27.68	135.6	203.0	135.6	27.68	15.08	8.068	15.08	110-120	69.34	665.1	73.4, 73.4
130	41.90	133.4	186.3	133.4	41.90	24.98	16.59	24.98	120-130	66.00	731.1	80.7, 80.7
140	55.22	127.7	167.2	127.7	55.22	31.57	27.88	31.57	130-140	59.67	790.7	87.2, 87.2
150	67.65	119.3	145.2	119.3	67.65	37.02	33.98	37.02	140-150	49.34	840.1	92.7, 92.7
160	74.04	109.1	124.4	109.1	74.04	49.89	42.35	49.89	150-160	36.32	876.4	96.7, 96.7
170	78.00	94.38	101.8	94.38	78.00	64.33	60.18	64.33	160-170	22.47	898.9	99.2, 99.2
180	79.51	79.51	79.51	79.51	79.51	79.51	79.51	79.51	170-180	7.585	906.5	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	7.58	0-10	7.58	0.84%
10-20	22.47	0-20	30.05	3.34%
20-30	36.32	0-30	66.37	7.38%
30-40	49.34	0-40	115.71	12.87%
40-50	59.67	0-50	175.38	19.51%
50-60	66.00	0-60	241.38	26.85%
60-70	69.34	0-70	310.72	34.57%
70-80	70.91	0-80	381.63	42.46%
80-90	71.59	0-90	453.22	50.42%
90-100	71.59	0-100	524.81	58.39%
100-110	70.91	0-110	595.72	66.28%
110-120	69.34	0-120	665.06	73.99%
120-130	66.00	0-130	731.06	81.33%
130-140	59.67	0-140	790.73	87.97%
140-150	49.34	0-150	840.07	93.46%
150-160	36.32	0-160	876.39	97.50%
160-170	22.47	0-170	898.86	100.00%
170-180	7.58	0-180	906.44	100.84%

4.2 Goniophotometer Test

LCS/BUG

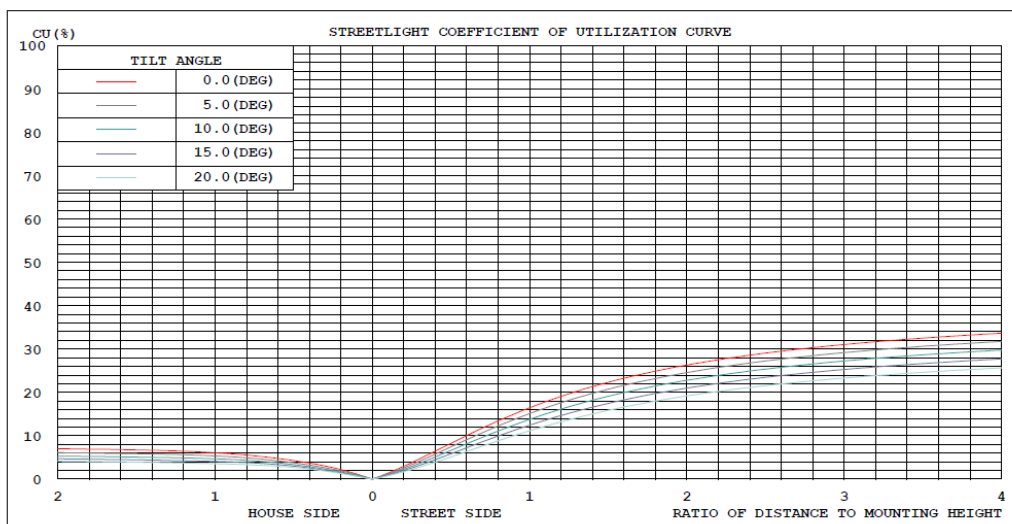


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

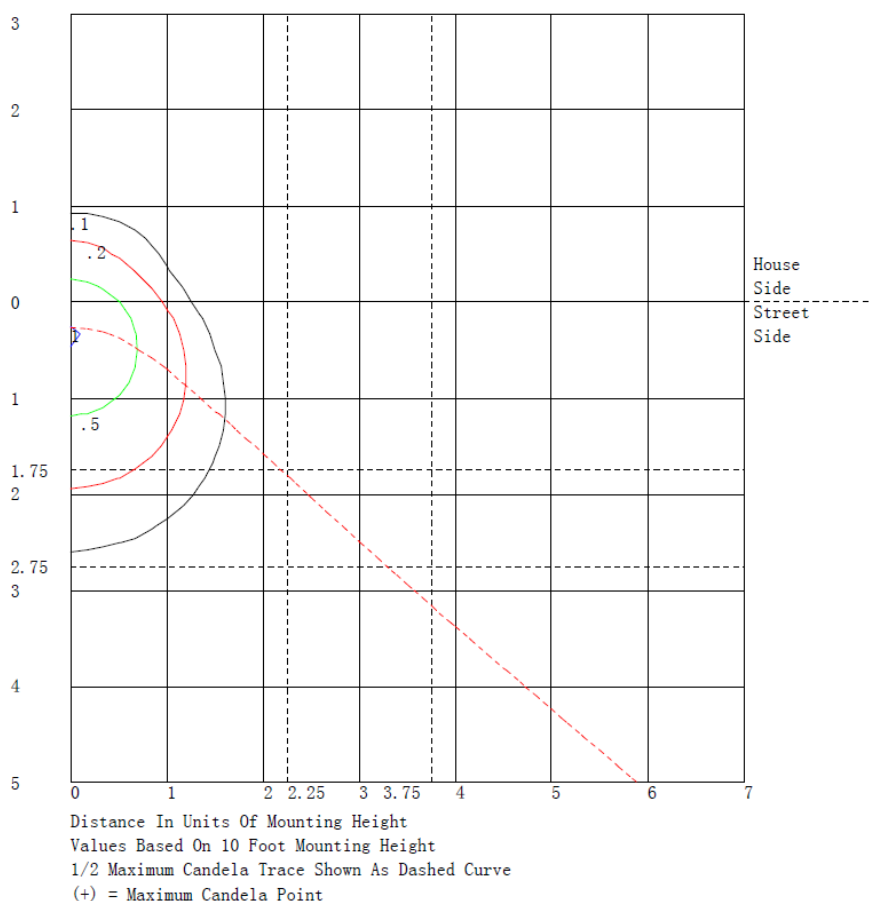
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	43.9	N.A.	4.8
FM - Front-Medium (30-60)	142.5	N.A.	15.7
FH - Front-High (60-80)	128.7	N.A.	14.2
FVH - Front-Very High (80-90)	67.0	N.A.	7.4
BL - Back-Low (0-30)	22.5	N.A.	2.5
BM - Back-Medium (30-60)	32.5	N.A.	3.6
BH - Back-High (60-80)	11.5	N.A.	1.3
BVH - Back-Very High (80-90)	4.6	N.A.	0.5
UL - Uplight-Low (90-100)	71.6	N.A.	7.9
UH - Uplight-High (100-180)	381.6	N.A.	42.1
Total	906.4	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) y (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5
5	78.8	81.9	84.7	86.6	88.2	89.5	90.1	89.5	88.2	86.6	84.7	81.9	78.8	76.4	74.2	71.9	70.5	70.0	70.1
10	78.0	84.0	88.9	94.4	98.1	101	102	101	98.1	94.4	88.9	84.0	78.0	73.0	68.1	64.3	61.7	60.3	60.2
15	77.2	86.2	94.2	102	107	112	113	112	107	102	94.2	86.2	77.2	69.4	62.4	57.2	53.2	50.8	50.5
20	74.0	85.6	98.1	109	117	122	124	122	117	109	98.1	85.6	74.0	63.8	56.0	49.9	45.2	42.7	42.3
25	70.8	85.3	100	115	125	132	136	132	125	115	100	85.3	70.8	58.6	49.2	42.7	38.9	36.8	36.7
30	67.7	84.8	103	119	134	142	145	142	134	119	103	84.8	67.7	53.2	42.7	37.0	34.8	34.0	34.0
35	61.4	82.0	104	124	142	152	157	152	142	124	104	82.0	61.4	46.5	37.2	33.3	32.9	32.9	32.8
40	55.2	78.5	103	128	148	163	167	163	148	128	103	78.5	55.2	40.1	32.8	31.6	31.1	29.0	27.9
45	49.0	75.1	103	132	155	172	177	172	155	132	103	75.1	49.0	34.2	29.8	29.3	25.9	22.7	21.5
50	41.9	68.6	101	133	162	180	186	180	162	133	101	68.6	41.9	29.7	27.6	25.0	20.2	17.6	16.6
55	34.8	61.1	96.7	135	166	187	195	187	166	135	96.7	61.1	34.8	25.8	24.4	19.5	15.6	13.3	12.7
60	27.7	53.0	92.4	136	171	194	203	194	171	136	92.4	53.0	27.7	22.3	20.5	15.1	10.9	8.73	8.07
65	23.1	46.4	87.6	136	175	200	210	200	175	136	87.6	46.4	23.1	19.0	16.0	10.7	8.10	7.78	7.60
70	18.5	39.5	81.5	135	178	205	215	205	178	135	81.5	39.5	18.5	15.8	12.7	8.65	8.01	7.60	7.41
75	14.0	32.4	74.5	133	180	209	219	209	180	133	74.5	32.4	14.0	12.4	9.70	8.49	7.93	7.33	7.06
80	10.2	30.6	71.0	131	181	212	223	212	181	131	71.0	30.6	10.2	11.4	9.13	8.53	7.70	6.92	6.43
85	6.52	29.1	68.5	131	181	213	224	213	181	131	68.5	29.1	6.52	10.8	9.90	8.84	7.80	6.71	5.81
90	2.80	27.3	64.9	129	181	214	224	214	181	129	64.9	27.3	2.80	10.3	10.7	9.28	8.27	7.35	7.38
95	6.52	29.1	68.5	131	181	213	224	213	181	131	68.5	29.1	6.52	10.8	9.90	8.84	7.80	6.71	5.81
100	10.2	30.6	71.0	131	181	212	223	212	181	131	71.0	30.6	10.2	11.4	9.13	8.53	7.70	6.92	6.43
105	14.0	32.4	74.5	133	180	209	219	209	180	133	74.5	32.4	14.0	12.4	9.70	8.49	7.93	7.33	7.06
110	18.5	39.5	81.5	135	178	205	215	205	178	135	81.5	39.5	18.5	15.8	12.7	8.65	8.01	7.60	7.41
115	23.1	46.4	87.6	136	175	200	210	200	175	136	87.6	46.4	23.1	19.0	16.0	10.7	8.10	7.78	7.60
120	27.7	53.0	92.4	136	171	194	203	194	171	136	92.4	53.0	27.7	22.3	20.5	15.1	10.9	8.73	8.07
125	34.8	61.1	96.7	135	166	187	195	187	166	135	96.7	61.1	34.8	25.8	24.4	19.5	15.6	13.3	12.7
130	41.9	68.6	101	133	162	180	186	180	162	133	101	68.6	41.9	29.7	27.6	25.0	20.2	17.6	16.6
135	49.0	75.1	103	132	155	172	177	172	155	132	103	75.1	49.0	34.2	29.8	29.3	25.9	22.7	21.5
140	55.2	78.5	103	128	148	163	167	163	148	128	103	78.5	55.2	40.1	32.8	31.6	31.1	29.0	27.9
145	61.4	82.0	104	124	142	152	157	152	142	124	104	82.0	61.4	46.5	37.2	33.3	32.9	32.9	32.8
150	67.7	84.8	103	119	134	142	145	142	134	119	103	84.8	67.7	53.2	42.7	37.0	34.8	34.0	34.0
155	70.8	85.3	100	115	125	132	136	132	125	115	100	85.3	70.8	58.6	49.2	42.7	38.9	36.8	36.7
160	74.0	85.6	98.1	109	117	122	124	122	117	109	98.1	85.6	74.0	63.8	56.0	49.9	45.2	42.7	42.3
165	77.2	86.2	94.2	102	107	112	113	112	107	102	94.2	86.2	77.2	69.4	62.4	57.2	53.2	50.8	50.5
170	78.0	84.0	88.9	94.4	98.1	101	102	101	98.1	94.4	88.9	84.0	78.0	73.0	68.1	64.3	61.7	60.3	60.2
175	78.8	81.9	84.7	86.6	88.2	89.5	90.1	89.5	88.2	86.6	84.7	81.9	78.8	76.4	74.2	71.9	70.5	70.0	70.1
180	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	79.5	79.5	79.5	79.5	79.5														
5	70.0	70.5	71.9	74.2	76.4														
10	60.3	61.7	64.3	68.1	73.0														
15	50.8	53.2	57.2	62.4	69.4														
20	42.7	45.2	49.9	56.0	63.8														
25	36.8	38.9	42.7	49.2	58.6														
30	34.0	34.8	37.0	42.7	53.2														
35	32.9	32.9	33.3	37.2	46.5														
40	29.0	31.1	31.6	32.8	40.1														
45	22.7	25.9	29.3	29.8	34.2														
50	17.6	20.2	25.0	27.6	29.7														
55	13.3	15.6	19.5	24.4	25.8														
60	8.73	10.9	15.1	20.5	22.3														
65	7.78	8.10	10.7	16.0	19.0														
70	7.60	8.01	8.65	12.7	15.8														
75	7.33	7.93	8.49	9.70	12.4														
80	6.92	7.70	8.53	9.13	11.4														
85	6.71	7.80	8.84	9.90	10.8														
90	7.35	8.27	9.28	10.7	10.3														
95	6.71	7.80	8.84	9.90	10.8														
100	6.92	7.70	8.53	9.13	11.4														
105	7.33	7.93	8.49	9.70	12.4														
110	7.60	8.01	8.65	12.7	15.8														
115	7.78	8.10	10.7	16.0	19.0														
120	8.73	10.9	15.1	20.5	22.3														
125	13.3	15.6	19.5	24.4	25.8														
130	17.6	20.2	25.0	27.6	29.7														
135	22.7	25.9	29.3	29.8	34.2														
140	29.0	31.1	31.6	32.8	40.1														
145	32.9	32.9	33.3	37.2	46.5														
150	34.0	34.8	37.0	42.7	53.2														
155	36.8	38.9	42.7	49.2	58.6														
160	42.7	45.2	49.9	56.0	63.8														
165	50.8	53.2	57.2	62.4	69.4														
170	60.3	61.7	64.3	68.1	73.0														
175	70.0	70.5	71.9	74.2	76.4														
180	79.5	79.5	79.5	79.5	79.5														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18B @8W3000K	Sample ID	250728006-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	0.069	8.2	0.985	7.30
277.0	60	0.038	8.5	0.801	43.35

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*****