

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

Address: 408 W 14th St New York, NY 10014

Prepared By

Dongguan New Testing Centre Co., Ltd.

Address: 3F No. 1 the 1st North Industry Road, Songshan Lake Science & Technology Park, Dongguan, Guangdong, China

Prepare by:

Alan Wang

Engineer: Alan Wang

Date: 2025-08-21

Review by:

Vincent Yuan

Technical Lead: Vincent Yuan

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		1024
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	119.1
			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	7.29
				277V	43.44
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.985
				277V	0.803
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4974
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		90.9
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		76
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%		-4%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.7%
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		0.039
(Goniophotometer – Section 4.2)			Non-Worst Case		0.069
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		8.6
(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 @8W5000K	-	250728006-S1
2	Goniophotometer Test	2025-08-10	V1-18B @8W5000K	-	250728006-S1
3	THD and PF Test	2025-08-10	V1-18B @8W5000K	-	250728006-S1

Remark (If any):

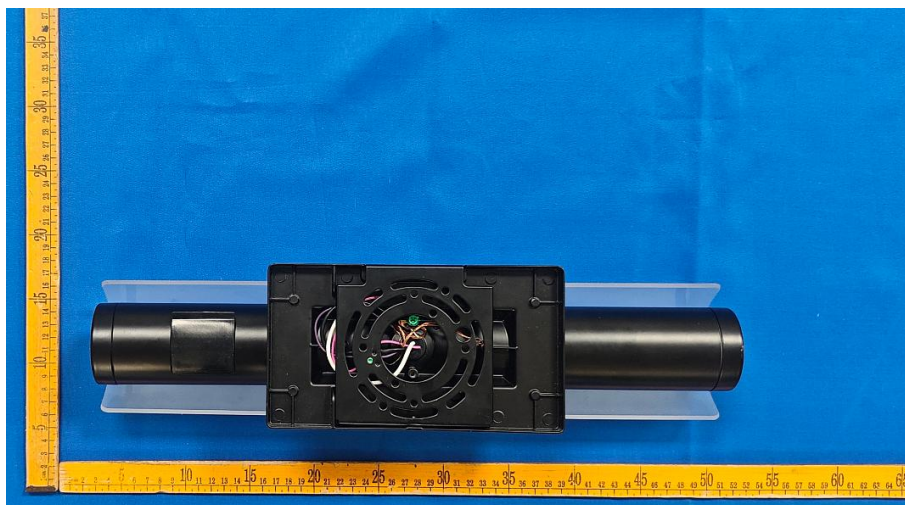
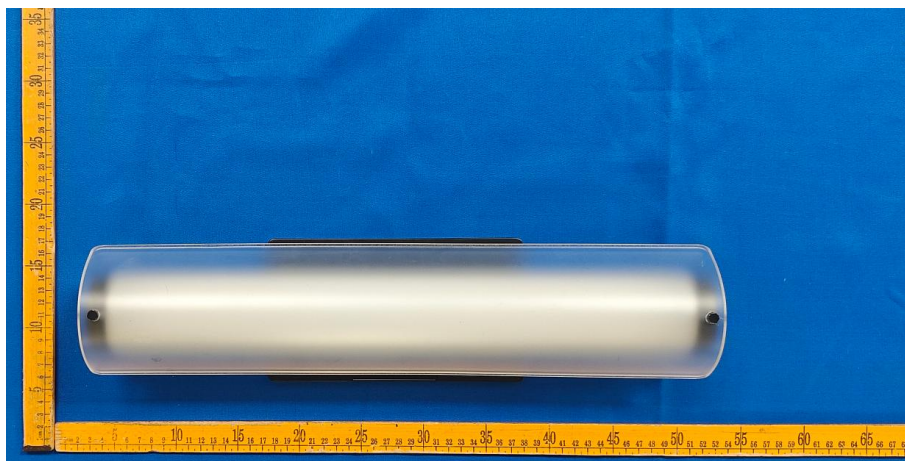
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-18B @8W5000K, 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 @8W5000K	Sample ID	250728006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

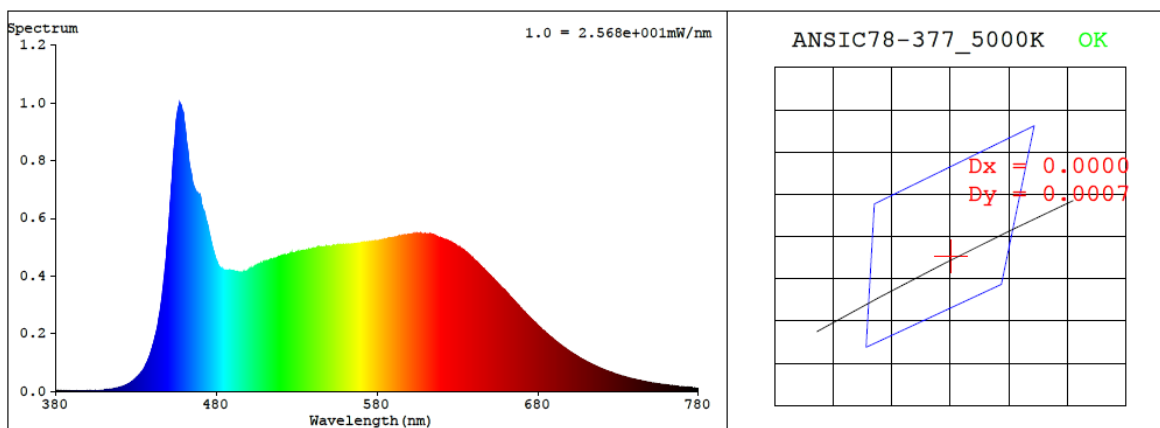
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.039	8.6	0.803

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4974	90.9	76	0.0003	1.9	87	95	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3459$ $y = 0.3529$ / $u' = 0.2114$ $v' = 0.4854$ ($duv=3.33e-04$)

CCT= 4974K Prcp WL: $L_d=572.7nm$ Purity=9.7%

Peak WL: $L_p=457nm$ FWHM: $=28.4nm$ Ratio: R=17.9% G=75.6% B=6.5%

Render Index: $R_a = 90.9$ AvgR = 89.3 TM30: $R_f=89$ $R_g=96$

EEL: 0.11720 A+

R1 =96 R2 =96 R3 =93 R4 =86 R5 =92 R6 =94 R7 =86

R8 =85 R9 =76 R10=94 R11=89 R12=67 R13=98 R14=97 R15=92

4.1 Integrating Sphere Test

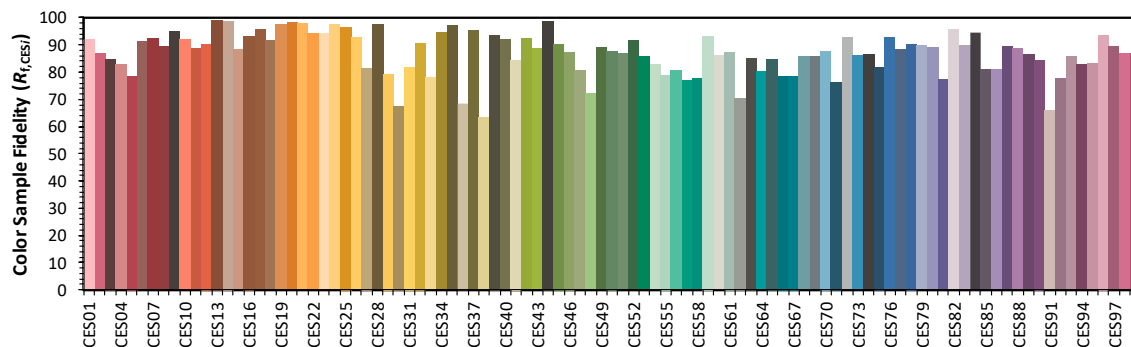
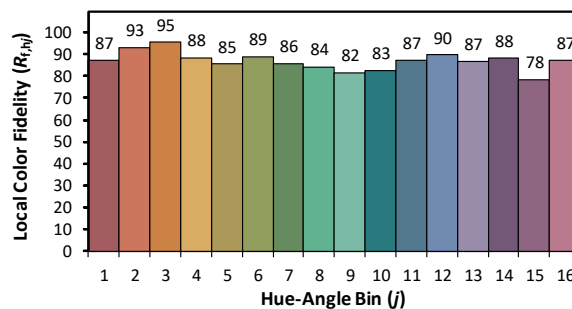
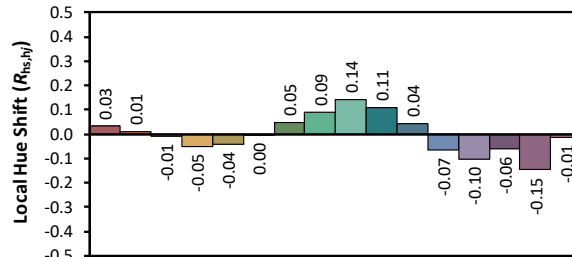
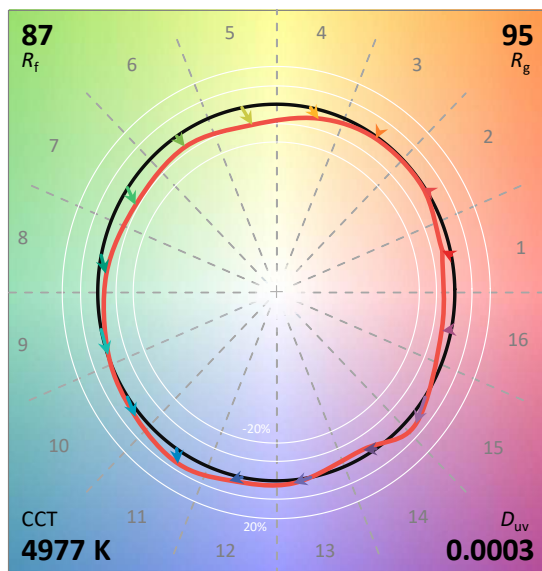
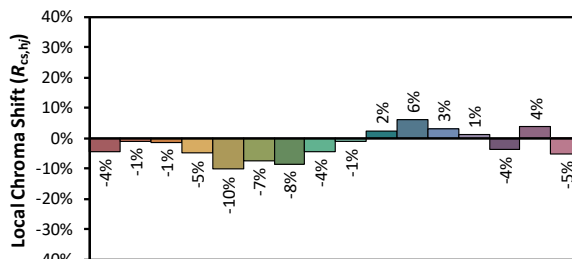
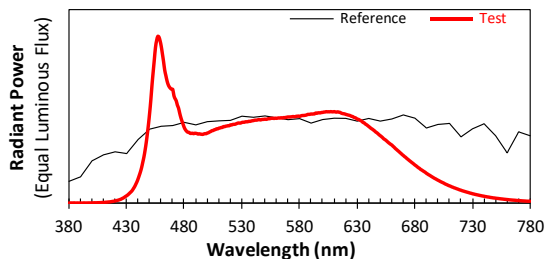
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/21

Model: V1-18B @8W5000K



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

x 0.3458
 y 0.3528
 u' 0.2115
 v' 0.4853

CIE 13.3-1995
(CRI)

R_a 91
 R_g 77

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	1.90E-06	447	3.63E-04	514	4.58E-04	581	5.22E-04	648	4.15E-04	715	9.08E-05
381	2.20E-06	448	4.17E-04	515	4.58E-04	582	5.24E-04	649	4.09E-04	716	8.77E-05
382	2.40E-06	449	4.76E-04	516	4.61E-04	583	5.24E-04	650	4.04E-04	717	8.55E-05
383	2.20E-06	450	5.43E-04	517	4.62E-04	584	5.25E-04	651	3.98E-04	718	8.27E-05
384	2.50E-06	451	6.19E-04	518	4.63E-04	585	5.26E-04	652	3.92E-04	719	8.01E-05
385	2.60E-06	452	7.07E-04	519	4.63E-04	586	5.27E-04	653	3.85E-04	720	7.80E-05
386	1.50E-06	453	7.84E-04	520	4.68E-04	587	5.31E-04	654	3.81E-04	721	7.53E-05
387	2.40E-06	454	8.57E-04	521	4.68E-04	588	5.31E-04	655	3.75E-04	722	7.34E-05
388	2.00E-06	455	9.30E-04	522	4.71E-04	589	5.32E-04	656	3.69E-04	723	7.12E-05
389	2.00E-06	456	9.72E-04	523	4.72E-04	590	5.33E-04	657	3.63E-04	724	6.91E-05
390	2.20E-06	457	9.96E-04	524	4.72E-04	591	5.33E-04	658	3.58E-04	725	6.71E-05
391	1.80E-06	458	9.93E-04	525	4.75E-04	592	5.34E-04	659	3.52E-04	726	6.52E-05
392	1.90E-06	459	9.70E-04	526	4.78E-04	593	5.34E-04	660	3.48E-04	727	6.32E-05
393	2.60E-06	460	9.38E-04	527	4.80E-04	594	5.39E-04	661	3.41E-04	728	6.10E-05
394	2.20E-06	461	8.93E-04	528	4.79E-04	595	5.38E-04	662	3.35E-04	729	5.94E-05
395	2.10E-06	462	8.47E-04	529	4.80E-04	596	5.40E-04	663	3.28E-04	730	5.71E-05
396	2.20E-06	463	7.96E-04	530	4.83E-04	597	5.40E-04	664	3.22E-04	731	5.58E-05
397	2.50E-06	464	7.63E-04	531	4.84E-04	598	5.40E-04	665	3.16E-04	732	5.37E-05
398	2.50E-06	465	7.32E-04	532	4.84E-04	599	5.42E-04	666	3.10E-04	733	5.24E-05
399	2.50E-06	466	7.09E-04	533	4.87E-04	600	5.43E-04	667	3.03E-04	734	5.07E-05
400	2.60E-06	467	6.95E-04	534	4.87E-04	601	5.45E-04	668	2.98E-04	735	4.94E-05
401	2.80E-06	468	6.87E-04	535	4.87E-04	602	5.45E-04	669	2.91E-04	736	4.76E-05
402	3.40E-06	469	6.81E-04	536	4.90E-04	603	5.47E-04	670	2.86E-04	737	4.63E-05
403	3.20E-06	470	6.80E-04	537	4.89E-04	604	5.46E-04	671	2.79E-04	738	4.47E-05
404	3.30E-06	471	6.43E-04	538	4.91E-04	605	5.47E-04	672	2.74E-04	739	4.34E-05
405	3.70E-06	472	6.25E-04	539	4.93E-04	606	5.46E-04	673	2.68E-04	740	4.23E-05
406	3.80E-06	473	6.12E-04	540	4.94E-04	607	5.47E-04	674	2.62E-04	741	4.06E-05
407	4.10E-06	474	5.86E-04	541	4.96E-04	608	5.46E-04	675	2.56E-04	742	3.96E-05
408	4.50E-06	475	5.69E-04	542	4.97E-04	609	5.46E-04	676	2.51E-04	743	3.82E-05
409	4.90E-06	476	5.39E-04	543	4.97E-04	610	5.47E-04	677	2.46E-04	744	3.74E-05
410	5.30E-06	477	5.12E-04	544	4.99E-04	611	5.46E-04	678	2.40E-04	745	3.59E-05
411	5.70E-06	478	4.91E-04	545	5.00E-04	612	5.45E-04	679	2.35E-04	746	3.47E-05
412	6.70E-06	479	4.71E-04	546	4.98E-04	613	5.46E-04	680	2.29E-04	747	3.38E-05
413	7.00E-06	480	4.52E-04	547	5.00E-04	614	5.44E-04	681	2.24E-04	748	3.24E-05
414	8.00E-06	481	4.39E-04	548	5.01E-04	615	5.43E-04	682	2.18E-04	749	3.19E-05
415	8.40E-06	482	4.31E-04	549	5.01E-04	616	5.39E-04	683	2.13E-04	750	3.07E-05
416	9.30E-06	483	4.25E-04	550	5.03E-04	617	5.36E-04	684	2.09E-04	751	2.98E-05
417	1.06E-05	484	4.24E-04	551	5.01E-04	618	5.35E-04	685	2.02E-04	752	2.91E-05
418	1.18E-05	485	4.18E-04	552	5.03E-04	619	5.34E-04	686	1.99E-04	753	2.82E-05
419	1.28E-05	486	4.17E-04	553	5.06E-04	620	5.31E-04	687	1.94E-04	754	2.72E-05
420	1.44E-05	487	4.19E-04	554	5.05E-04	621	5.29E-04	688	1.89E-04	755	2.64E-05
421	1.61E-05	488	4.16E-04	555	5.07E-04	622	5.27E-04	689	1.85E-04	756	2.57E-05
422	1.77E-05	489	4.18E-04	556	5.08E-04	623	5.26E-04	690	1.79E-04	757	2.48E-05
423	1.96E-05	490	4.18E-04	557	5.08E-04	624	5.23E-04	691	1.75E-04	758	2.40E-05
424	2.21E-05	491	4.16E-04	558	5.07E-04	625	5.20E-04	692	1.70E-04	759	2.33E-05
425	2.45E-05	492	4.13E-04	559	5.08E-04	626	5.18E-04	693	1.67E-04	760	2.25E-05
426	2.83E-05	493	4.15E-04	560	5.07E-04	627	5.14E-04	694	1.62E-04	761	2.19E-05
427	3.16E-05	494	4.13E-04	561	5.09E-04	628	5.11E-04	695	1.58E-04	762	2.09E-05
428	3.59E-05	495	4.12E-04	562	5.10E-04	629	5.08E-04	696	1.54E-04	763	2.04E-05
429	4.09E-05	496	4.12E-04	563	5.09E-04	630	5.03E-04	697	1.49E-04	764	1.97E-05
430	4.53E-05	497	4.14E-04	564	5.11E-04	631	5.01E-04	698	1.46E-04	765	1.92E-05
431	5.05E-05	498	4.16E-04	565	5.10E-04	632	4.97E-04	699	1.42E-04	766	1.87E-05
432	5.68E-05	499	4.16E-04	566	5.12E-04	633	4.94E-04	700	1.38E-04	767	1.82E-05
433	6.35E-05	500	4.20E-04	567	5.12E-04	634	4.90E-04	701	1.35E-04	768	1.74E-05
434	7.00E-05	501	4.22E-04	568	5.13E-04	635	4.83E-04	702	1.31E-04	769	1.69E-05
435	7.82E-05	502	4.26E-04	569	5.14E-04	636	4.80E-04	703	1.27E-04	770	1.64E-05
436	8.93E-05	503	4.29E-04	570	5.16E-04	637	4.74E-04	704	1.24E-04	771	1.58E-05
437	1.00E-04	504	4.34E-04	571	5.15E-04	638	4.70E-04	705	1.21E-04	772	1.54E-05
438	1.15E-04	505	4.34E-04	572	5.16E-04	639	4.64E-04	706	1.17E-04	773	1.48E-05
439	1.30E-04	506	4.39E-04	573	5.16E-04	640	4.59E-04	707	1.14E-04	774	1.43E-05
440	1.47E-04	507	4.40E-04	574	5.18E-04	641	4.53E-04	708	1.11E-04	775	1.40E-05
441	1.68E-04	508	4.45E-04	575	5.18E-04	642	4.47E-04	709	1.07E-04	776	1.35E-05
442	1.89E-04	509	4.45E-04	576	5.16E-04	643	4.43E-04	710	1.04E-04	777	1.30E-05
443	2.14E-04	510	4.49E-04	577	5.19E-04	644	4.38E-04	711	1.02E-04	778	1.27E-05
444	2.45E-04	511	4.50E-04	578	5.20E-04	645	4.33E-04	712	9.81E-05	779	1.27E-05
445	2.77E-04	512	4.53E-04	579	5.21E-04	646	4.26E-04	713	9.60E-05	780	1.27E-05
446	3.17E-04	513	4.53E-04	580	5.19E-04	647	4.21E-04	714	9.27E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18B @8W5000K	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	0.039	8.6	0.803
NON-WORST CASE	120.0	60	0.069	8.2	0.985

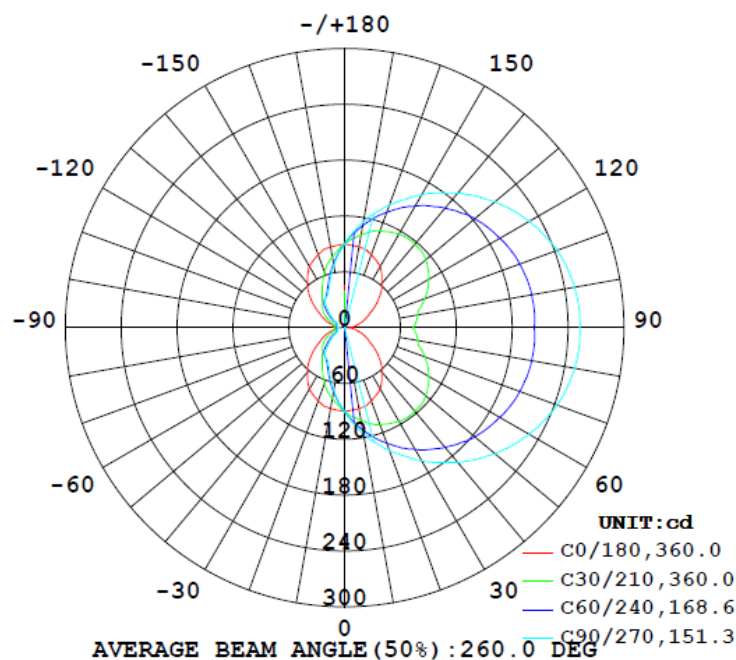
Test Result

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°)	
1024	89.1	156.6	180.0	98.3	119.1	26.7%	B0-U3-G1

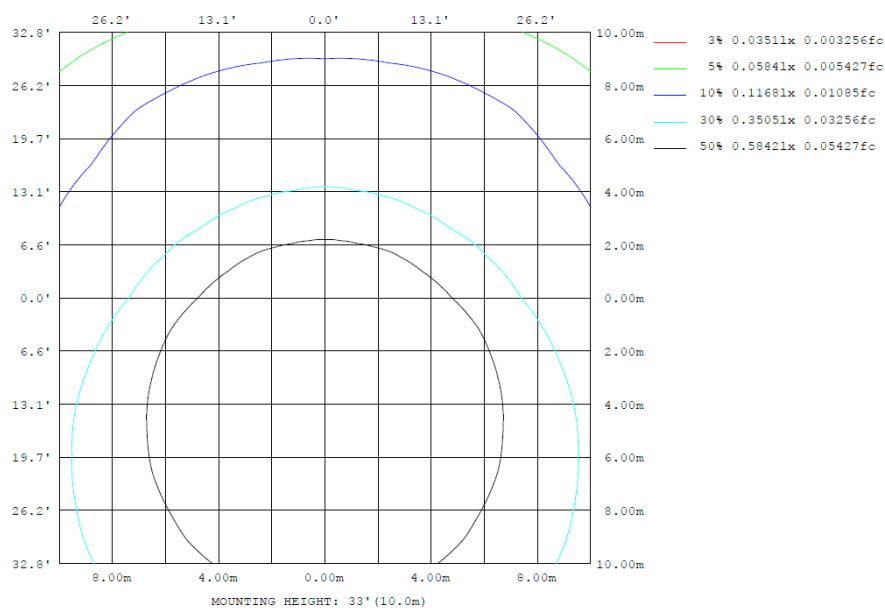
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

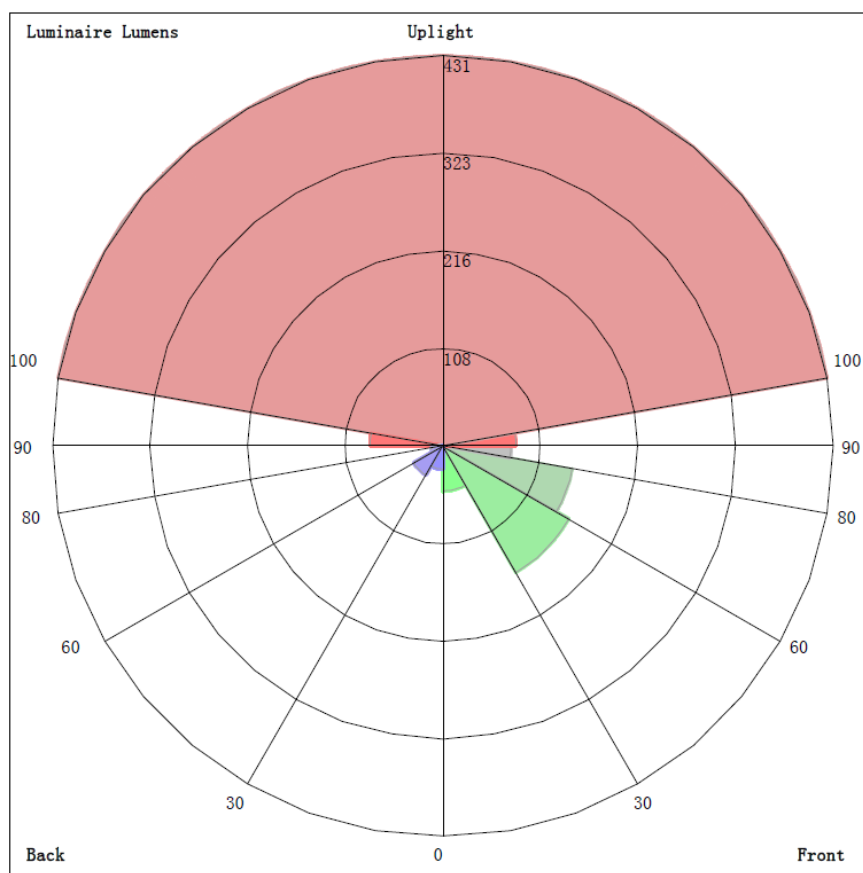
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	ϕ lum, lamp
10	88.10	107.1	116.0	107.1	88.10	73.14	68.26	73.14	0- 10	8.601	8.601	0.84,0.84
20	83.59	123.8	139.8	123.8	83.59	56.94	48.11	56.94	10- 20	25.47	34.07	3.33,3.33
30	76.37	135.0	164.9	135.0	76.37	42.09	38.89	42.09	20- 30	41.16	75.23	7.35,7.35
40	62.49	144.5	188.8	144.5	62.49	35.74	31.61	35.74	30- 40	55.84	131.1	12.8,12.8
50	47.46	150.7	210.5	150.7	47.46	28.32	18.90	28.32	40- 50	67.48	198.6	19.4,19.4
60	31.26	152.5	228.8	152.5	31.26	17.08	9.217	17.08	50- 60	74.54	273.1	26.7,26.7
70	20.92	151.8	242.7	151.8	20.92	9.682	8.237	9.682	60- 70	78.21	351.3	34.3,34.3
80	11.56	147.8	250.7	147.8	11.56	9.547	7.245	9.547	70- 80	79.93	431.2	42.1,42.1
90	3.179	144.4	252.3	144.4	3.179	10.36	8.451	10.36	80- 90	80.67	511.9	50,50
100	11.56	147.8	250.7	147.8	11.56	9.547	7.245	9.547	90-100	80.67	592.6	57.9,57.9
110	20.92	151.8	242.7	151.8	20.92	9.682	8.237	9.682	100-110	79.93	672.5	65.7,65.7
120	31.26	152.5	228.8	152.5	31.26	17.08	9.217	17.08	110-120	78.21	750.7	73.3,73.3
130	47.46	150.7	210.5	150.7	47.46	28.32	18.90	28.32	120-130	74.54	825.3	80.6,80.6
140	62.49	144.5	188.8	144.5	62.49	35.74	31.61	35.74	130-140	67.48	892.7	87.2,87.2
150	76.37	135.0	164.9	135.0	76.37	42.09	38.89	42.09	140-150	55.84	948.6	92.7,92.7
160	83.59	123.8	139.8	123.8	83.59	56.94	48.11	56.94	150-160	41.16	989.7	96.7,96.7
170	88.10	107.1	116.0	107.1	88.10	73.14	68.26	73.14	160-170	25.47	1015	99.2,99.2
180	89.90	89.90	89.90	89.90	89.90	89.90	89.90	89.90	170-180	8.601	1024	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	8.60	0-10	8.60	0.85%
10-20	25.47	0-20	34.07	3.36%
20-30	41.16	0-30	75.23	7.41%
30-40	55.84	0-40	131.07	12.91%
40-50	67.48	0-50	198.55	19.56%
50-60	74.54	0-60	273.09	26.90%
60-70	78.21	0-70	351.30	34.60%
70-80	79.93	0-80	431.23	42.48%
80-90	80.67	0-90	511.90	50.42%
90-100	80.67	0-100	592.57	58.37%
100-110	79.93	0-110	672.50	66.24%
110-120	78.21	0-120	750.71	73.95%
120-130	74.54	0-130	825.25	81.29%
130-140	67.48	0-140	892.73	87.94%
140-150	55.84	0-150	948.57	93.44%
150-160	41.16	0-160	989.73	97.49%
160-170	25.47	0-170	1015.20	100.00%
170-180	8.60	0-180	1023.80	100.85%

4.2 Goniophotometer Test

LCS/BUG

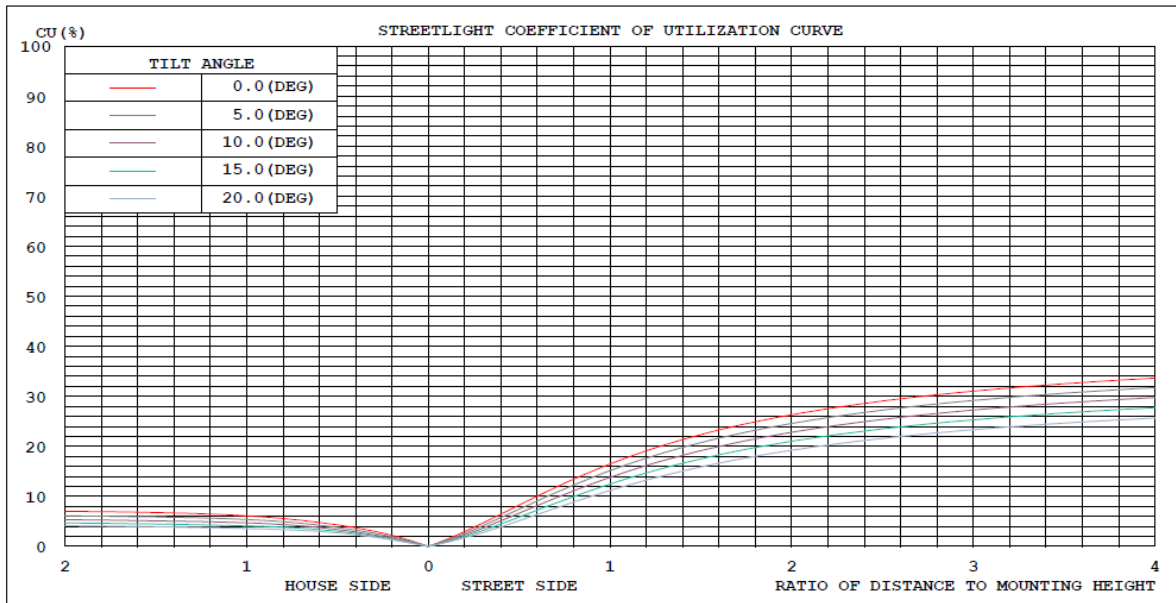


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

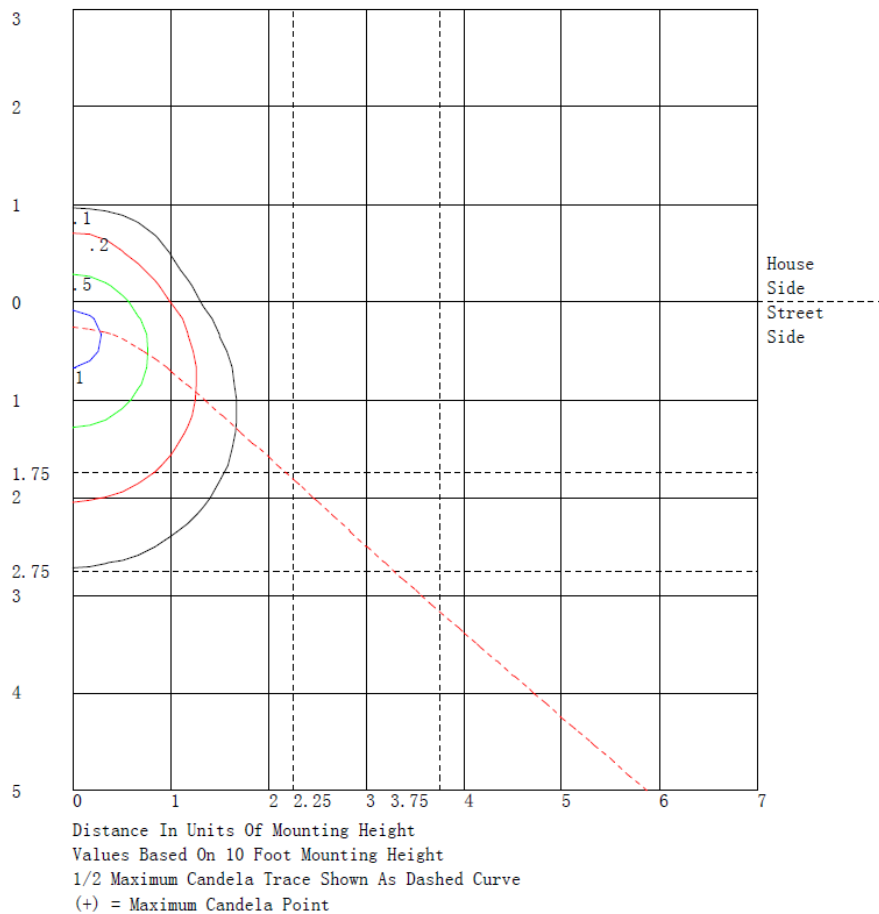
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	49.7	N.A.	4.9
FM - Front-Medium (30-60)	161.0	N.A.	15.7
FH - Front-High (60-80)	145.1	N.A.	14.2
FVH - Front-Very High (80-90)	75.5	N.A.	7.4
BL - Back-Low (0-30)	25.5	N.A.	2.5
BM - Back-Medium (30-60)	36.8	N.A.	3.6
BH - Back-High (60-80)	13.0	N.A.	1.3
BVH - Back-Very High (80-90)	5.2	N.A.	0.5
UL - Uplight-Low (90-100)	80.7	N.A.	7.9
UH - Uplight-High (100-180)	431.2	N.A.	42.1
Total	1023.7	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	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
5	89.0	92.8	96.0	98.7	101	102	103	102	101	98.7	96.0	92.8	89.0	86.6	83.6	81.5	80.1	79.3	79.2
10	88.1	95.0	101	107	111	115	116	115	111	107	101	95.0	88.1	82.4	77.4	73.1	70.0	68.4	68.3
15	87.2	96.9	107	115	122	126	128	126	122	115	107	96.9	87.2	78.5	71.2	64.9	60.3	57.9	57.6
20	83.6	97.2	111	124	132	138	140	138	132	124	111	97.2	83.6	72.6	63.6	56.9	51.5	48.6	48.1
25	80.0	96.9	114	129	142	149	152	149	142	129	114	96.9	80.0	66.5	55.7	48.5	44.3	42.1	41.8
30	76.4	96.5	116	135	151	161	165	161	151	135	116	96.5	76.4	60.3	48.5	42.1	39.8	38.8	38.9
35	69.4	93.1	118	141	160	172	177	172	160	141	118	93.1	69.4	52.7	42.3	37.9	37.4	37.4	37.4
40	62.5	88.9	117	145	168	183	189	183	168	145	117	88.9	62.5	45.2	37.5	35.7	35.3	32.7	31.6
45	55.6	84.7	117	148	175	194	200	194	175	148	117	84.7	55.6	38.8	33.8	33.3	29.2	25.7	24.4
50	47.5	77.4	114	151	182	203	210	203	182	151	114	77.4	47.5	33.7	31.3	28.3	23.0	19.9	18.9
55	39.4	68.8	109	152	188	212	220	212	188	152	109	68.8	39.4	29.3	27.6	22.2	17.7	15.1	14.3
60	31.3	60.2	104	152	192	219	229	219	192	152	104	60.2	31.3	25.5	23.1	17.1	12.3	9.87	9.22
65	26.1	52.6	98.6	152	197	227	236	227	197	152	98.6	52.6	26.1	21.9	18.2	12.2	9.40	8.88	8.57
70	20.9	44.7	91.7	152	200	232	243	232	200	152	91.7	44.7	20.9	18.1	14.4	9.68	9.12	8.66	8.24
75	15.7	36.4	84.0	150	203	236	247	236	203	150	84.0	36.4	15.7	14.1	11.1	9.60	9.02	8.15	7.83
80	11.6	34.4	79.9	148	204	239	251	239	204	148	79.9	34.4	11.6	12.9	10.4	9.55	8.70	7.74	7.25
85	7.37	32.8	77.2	147	204	241	252	241	204	147	77.2	32.8	7.37	12.2	11.1	9.93	8.79	7.56	6.51
90	3.18	30.9	73.3	144	204	240	252	240	204	144	73.3	30.9	3.18	11.6	11.9	10.4	9.30	8.22	8.45
95	7.37	32.8	77.2	147	204	241	252	241	204	147	77.2	32.8	7.37	12.2	11.1	9.93	8.79	7.56	6.51
100	11.6	34.4	79.9	148	204	239	251	239	204	148	79.9	34.4	11.6	12.9	10.4	9.55	8.70	7.74	7.25
105	15.7	36.4	84.0	150	203	236	247	236	203	150	84.0	36.4	15.7	14.1	11.1	9.60	9.02	8.15	7.83
110	20.9	44.7	91.7	152	200	232	243	232	200	152	91.7	44.7	20.9	18.1	14.4	9.68	9.12	8.66	8.24
115	26.1	52.6	98.6	152	197	227	236	227	197	152	98.6	52.6	26.1	21.9	18.2	12.2	9.40	8.88	8.57
120	31.3	60.2	104	152	192	219	229	219	192	152	104	60.2	31.3	25.5	23.1	17.1	12.3	9.87	9.22
125	39.4	68.8	109	152	188	212	220	212	188	152	109	68.8	39.4	29.3	27.6	22.2	17.7	15.1	14.3
130	47.5	77.4	114	151	182	203	210	203	182	151	114	77.4	47.5	33.7	31.3	28.3	23.0	19.9	18.9
135	55.6	84.7	117	148	175	194	200	194	175	148	117	84.7	55.6	38.8	33.8	33.3	29.2	25.7	24.4
140	62.5	88.9	117	145	168	183	189	183	168	145	117	88.9	62.5	45.2	37.5	35.7	35.3	32.7	31.6
145	69.4	93.1	118	141	160	172	177	172	160	141	118	93.1	69.4	52.7	42.3	37.9	37.4	37.4	37.4
150	76.4	96.5	116	135	151	161	165	161	151	135	116	96.5	76.4	60.3	48.5	42.1	39.8	38.8	38.9
155	80.0	96.9	114	129	142	149	152	149	142	129	114	96.9	80.0	66.5	55.7	48.5	44.3	42.1	41.8
160	83.6	97.2	111	124	132	138	140	138	132	124	111	97.2	83.6	72.6	63.6	56.9	51.5	48.6	48.1
165	87.2	96.9	107	115	122	126	128	126	122	115	107	96.9	87.2	78.5	71.2	64.9	60.3	57.9	57.6
170	88.1	95.0	101	107	111	115	116	115	111	107	101	95.0	88.1	82.4	77.4	73.1	70.0	68.4	68.3
175	89.0	92.8	96.0	98.7	101	102	103	102	101	98.7	96.0	92.8	89.0	86.6	83.6	81.5	80.1	79.3	79.2
180	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9

Table--2

UNIT: cd

C (DEG) y	285	300	315	330	345														
0	89.9	89.9	89.9	89.9	89.9														
5	79.3	80.1	81.5	83.6	86.6														
10	68.4	70.0	73.1	77.4	82.4														
15	57.9	60.3	64.9	71.2	78.5														
20	48.6	51.5	56.9	63.6	72.6														
25	42.1	44.3	48.5	55.7	66.5														
30	38.8	39.8	42.1	48.5	60.3														
35	37.4	37.4	37.9	42.3	52.7														
40	32.7	35.3	35.7	37.5	45.2														
45	25.7	29.2	33.3	33.8	38.8														
50	19.9	23.0	28.3	31.3	33.7														
55	15.1	17.7	22.2	27.6	29.3														
60	9.87	12.3	17.1	23.1	25.5														
65	8.88	9.40	12.2	18.2	21.9														
70	8.66	9.12	9.68	14.4	18.1														
75	8.15	9.02	9.60	11.1	14.1														
80	7.74	8.70	9.55	10.4	12.9														
85	7.56	8.79	9.93	11.1	12.2														
90	8.22	9.30	10.4	11.9	11.6														
95	7.56	8.79	9.93	11.1	12.2														
100	7.74	8.70	9.55	10.4	12.9														
105	8.15	9.02	9.60	11.1	14.1														
110	8.66	9.12	9.68	14.4	18.1														
115	8.88	9.40	12.2	18.2	21.9														
120	9.87	12.3	17.1	23.1	25.5														
125	15.1	17.7	22.2	27.6	29.3														
130	19.9	23.0	28.3	31.3	33.7														
135	25.7	29.2	33.3	33.8	38.8														
140	32.7	35.3	35.7	37.5	45.2														
145	37.4	37.4	37.9	42.3	52.7														
150	38.8	39.8	42.1	48.5	60.3														
155	42.1	44.3	48.5	55.7	66.5														
160	48.6	51.5	56.9	63.6	72.6														
165	57.9	60.3	64.9	71.2	78.5														
170	68.4	70.0	73.1	77.4	82.4														
175	79.3	80.1	81.5	83.6	86.6														
180	89.9	89.9	89.9	89.9	89.9														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18B @8W5000K	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	7.29
277.0	60	0.039	8.6	0.803	43.44

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*****