

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

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Issue Date: 2025-08-21

Revised Date: N/A

1.0 Test Summary

Wall mount Luminaire					
Requirement Category		Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		955
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	112.4
			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 ANSI C82-77-10:2020	N/A	120V	7.31
				277V	43.84
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.985
				277V	0.800
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3559
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.0
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		81
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		88
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		26.6%
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		8.1

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-10	V1-18B @8W3500K	-	250728006-S1
2	Goniophotometer Test	2025-08-10	V1-18B @8W3500K	-	250728006-S1
3	THD and PF Test	2025-08-10	V1-18B @8W3500K	-	250728006-S1

Remark (If any):

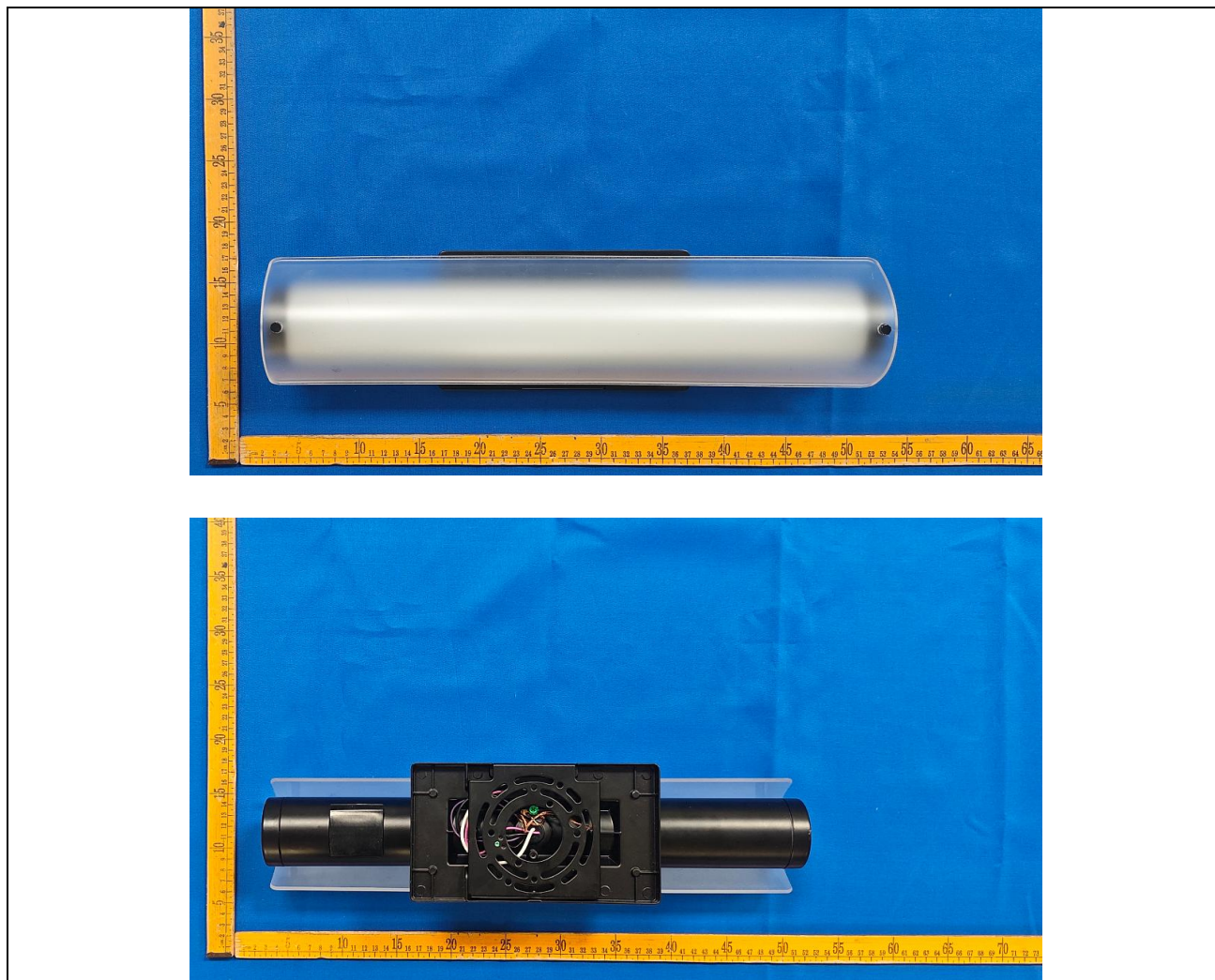
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3.0 Product Description

Luminaire Description: Model No. V1-18B @8W3500K, 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 @8W3500K	Sample ID	250728006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

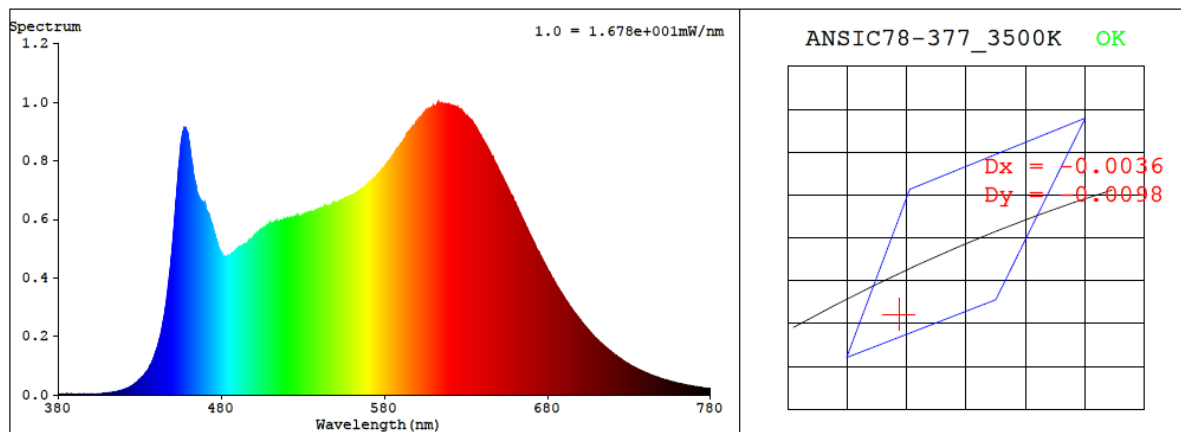
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	8.1	0.985
277.0	60	0.038	8.5	0.800

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3559	92.0	81	-0.0036	5.4	88	96	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3985$ $y = 0.3792$ / $u' = 0.2360$ $v' = 0.5054$ ($duv = -3.60e-03$)

CCT= 3559K Prcp WL: Ld=582.4nm Purity=33.4%

Peak WL: Lp=613nm FWHM: =183.3nm Ratio:R=22.7% G=72.4% B=4.9%

Render Index: Ra = 92.0 AvgR = 91.0 TM30:Rf=90 Rg=98

EEL: 0.12235 A+

R1 =96 R2 =94 R3 =92 R4 =94 R5 =95 R6 =89 R7 =89

R8 =88 R9 =81 R10=87 R11=97 R12=77 R13=95 R14=96 R15=97

4.1 Integrating Sphere Test

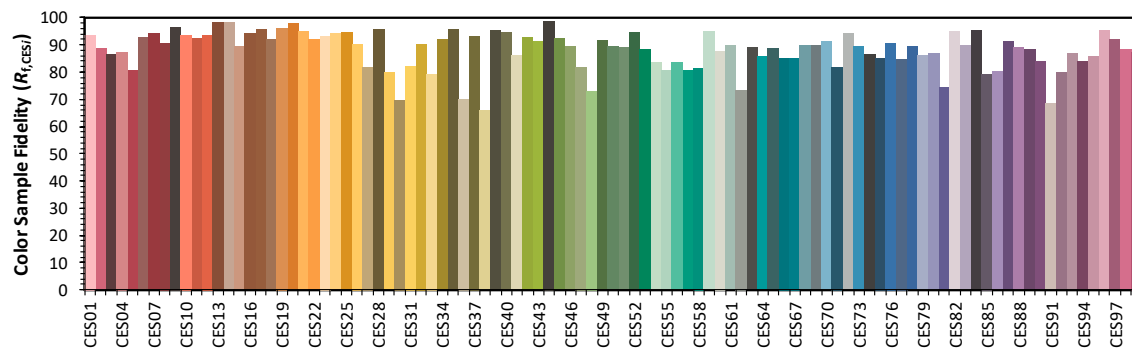
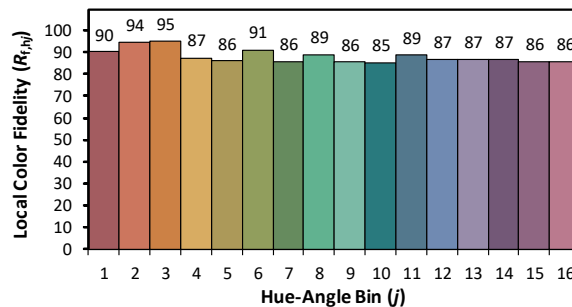
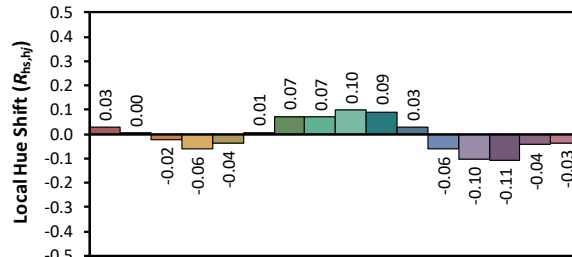
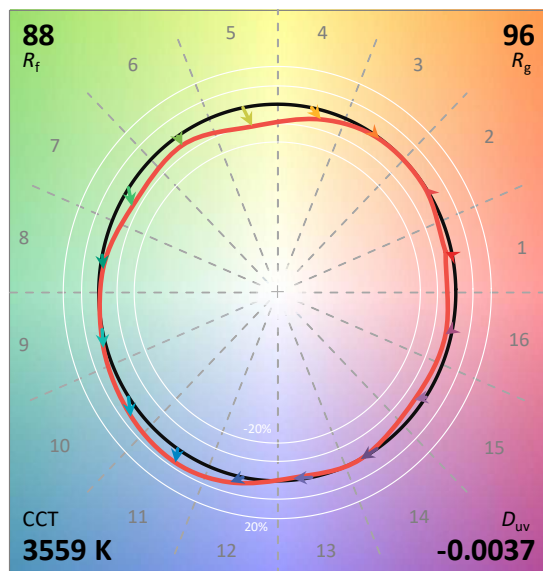
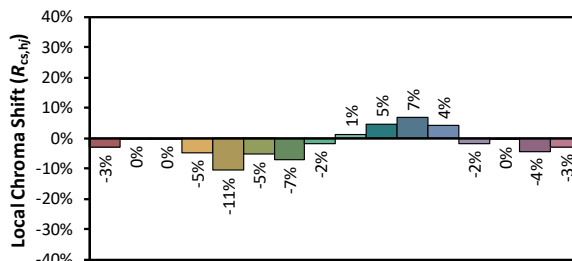
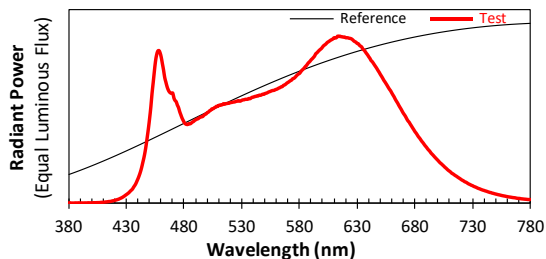
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/21

Model: V1-18B @8W3500K



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

x 0.3985
 y 0.3791
 u' 0.2361
 v' 0.5053

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 81

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	3.00E-06	447	3.51E-04	514	5.95E-04	581	7.85E-04	648	7.93E-04	715	1.66E-04
381	2.90E-06	448	4.02E-04	515	5.92E-04	582	7.94E-04	649	7.83E-04	716	1.62E-04
382	1.50E-06	449	4.53E-04	516	5.95E-04	583	8.00E-04	650	7.70E-04	717	1.57E-04
383	1.60E-06	450	5.12E-04	517	5.96E-04	584	8.08E-04	651	7.59E-04	718	1.52E-04
384	1.40E-06	451	5.76E-04	518	5.97E-04	585	8.17E-04	652	7.48E-04	719	1.48E-04
385	2.10E-06	452	6.55E-04	519	5.98E-04	586	8.23E-04	653	7.35E-04	720	1.43E-04
386	2.40E-06	453	7.19E-04	520	6.02E-04	587	8.33E-04	654	7.25E-04	721	1.38E-04
387	1.90E-06	454	7.85E-04	521	6.02E-04	588	8.41E-04	655	7.14E-04	722	1.35E-04
388	2.70E-06	455	8.46E-04	522	6.04E-04	589	8.48E-04	656	7.03E-04	723	1.30E-04
389	2.50E-06	456	8.86E-04	523	6.05E-04	590	8.57E-04	657	6.91E-04	724	1.27E-04
390	1.80E-06	457	9.08E-04	524	6.06E-04	591	8.63E-04	658	6.81E-04	725	1.23E-04
391	2.30E-06	458	9.12E-04	525	6.09E-04	592	8.71E-04	659	6.71E-04	726	1.18E-04
392	1.90E-06	459	8.99E-04	526	6.10E-04	593	8.79E-04	660	6.58E-04	727	1.15E-04
393	1.90E-06	460	8.72E-04	527	6.13E-04	594	8.93E-04	661	6.47E-04	728	1.12E-04
394	2.40E-06	461	8.34E-04	528	6.10E-04	595	8.98E-04	662	6.35E-04	729	1.08E-04
395	2.00E-06	462	7.97E-04	529	6.11E-04	596	9.06E-04	663	6.22E-04	730	1.05E-04
396	2.70E-06	463	7.52E-04	530	6.15E-04	597	9.13E-04	664	6.10E-04	731	1.01E-04
397	3.10E-06	464	7.25E-04	531	6.18E-04	598	9.19E-04	665	5.99E-04	732	9.84E-05
398	2.70E-06	465	6.98E-04	532	6.18E-04	599	9.25E-04	666	5.86E-04	733	9.56E-05
399	2.90E-06	466	6.79E-04	533	6.21E-04	600	9.34E-04	667	5.74E-04	734	9.21E-05
400	2.50E-06	467	6.66E-04	534	6.21E-04	601	9.42E-04	668	5.63E-04	735	8.90E-05
401	3.40E-06	468	6.59E-04	535	6.22E-04	602	9.47E-04	669	5.50E-04	736	8.68E-05
402	3.50E-06	469	6.56E-04	536	6.26E-04	603	9.53E-04	670	5.38E-04	737	8.38E-05
403	3.40E-06	470	6.58E-04	537	6.24E-04	604	9.60E-04	671	5.28E-04	738	8.11E-05
404	3.80E-06	471	6.29E-04	538	6.29E-04	605	9.65E-04	672	5.17E-04	739	7.86E-05
405	4.10E-06	472	6.14E-04	539	6.33E-04	606	9.70E-04	673	5.04E-04	740	7.67E-05
406	4.20E-06	473	6.06E-04	540	6.34E-04	607	9.74E-04	674	4.92E-04	741	7.40E-05
407	4.60E-06	474	5.86E-04	541	6.38E-04	608	9.78E-04	675	4.84E-04	742	7.23E-05
408	5.70E-06	475	5.72E-04	542	6.38E-04	609	9.82E-04	676	4.73E-04	743	6.96E-05
409	5.40E-06	476	5.48E-04	543	6.42E-04	610	9.89E-04	677	4.62E-04	744	6.73E-05
410	6.70E-06	477	5.29E-04	544	6.41E-04	611	9.87E-04	678	4.51E-04	745	6.49E-05
411	7.10E-06	478	5.10E-04	545	6.46E-04	612	9.89E-04	679	4.40E-04	746	6.37E-05
412	8.20E-06	479	4.96E-04	546	6.45E-04	613	9.98E-04	680	4.29E-04	747	6.08E-05
413	8.70E-06	480	4.82E-04	547	6.48E-04	614	9.96E-04	681	4.20E-04	748	5.95E-05
414	1.00E-05	481	4.74E-04	548	6.52E-04	615	9.98E-04	682	4.09E-04	749	5.72E-05
415	1.08E-05	482	4.71E-04	549	6.51E-04	616	9.95E-04	683	3.98E-04	750	5.55E-05
416	1.12E-05	483	4.71E-04	550	6.56E-04	617	9.95E-04	684	3.90E-04	751	5.38E-05
417	1.32E-05	484	4.76E-04	551	6.57E-04	618	9.92E-04	685	3.80E-04	752	5.19E-05
418	1.48E-05	485	4.75E-04	552	6.60E-04	619	9.93E-04	686	3.70E-04	753	5.05E-05
419	1.60E-05	486	4.79E-04	553	6.64E-04	620	9.89E-04	687	3.62E-04	754	4.89E-05
420	1.87E-05	487	4.85E-04	554	6.67E-04	621	9.89E-04	688	3.52E-04	755	4.71E-05
421	1.99E-05	488	4.89E-04	555	6.69E-04	622	9.88E-04	689	3.43E-04	756	4.56E-05
422	2.25E-05	489	4.95E-04	556	6.72E-04	623	9.86E-04	690	3.35E-04	757	4.42E-05
423	2.44E-05	490	4.99E-04	557	6.74E-04	624	9.85E-04	691	3.25E-04	758	4.30E-05
424	2.78E-05	491	5.03E-04	558	6.75E-04	625	9.82E-04	692	3.18E-04	759	4.14E-05
425	3.09E-05	492	5.05E-04	559	6.79E-04	626	9.77E-04	693	3.10E-04	760	4.00E-05
426	3.42E-05	493	5.11E-04	560	6.81E-04	627	9.70E-04	694	3.00E-04	761	3.87E-05
427	3.85E-05	494	5.14E-04	561	6.84E-04	628	9.65E-04	695	2.93E-04	762	3.76E-05
428	4.30E-05	495	5.17E-04	562	6.88E-04	629	9.61E-04	696	2.86E-04	763	3.66E-05
429	4.83E-05	496	5.18E-04	563	6.91E-04	630	9.54E-04	697	2.78E-04	764	3.54E-05
430	5.32E-05	497	5.26E-04	564	6.96E-04	631	9.53E-04	698	2.70E-04	765	3.42E-05
431	5.84E-05	498	5.31E-04	565	6.97E-04	632	9.43E-04	699	2.63E-04	766	3.34E-05
432	6.39E-05	499	5.34E-04	566	7.04E-04	633	9.38E-04	700	2.56E-04	767	3.26E-05
433	7.13E-05	500	5.42E-04	567	7.07E-04	634	9.32E-04	701	2.48E-04	768	3.09E-05
434	7.80E-05	501	5.45E-04	568	7.12E-04	635	9.19E-04	702	2.41E-04	769	2.98E-05
435	8.44E-05	502	5.53E-04	569	7.18E-04	636	9.15E-04	703	2.36E-04	770	2.92E-05
436	9.59E-05	503	5.56E-04	570	7.22E-04	637	9.05E-04	704	2.29E-04	771	2.88E-05
437	1.06E-04	504	5.65E-04	571	7.27E-04	638	8.95E-04	705	2.23E-04	772	2.71E-05
438	1.18E-04	505	5.64E-04	572	7.32E-04	639	8.86E-04	706	2.16E-04	773	2.65E-05
439	1.34E-04	506	5.71E-04	573	7.36E-04	640	8.75E-04	707	2.10E-04	774	2.56E-05
440	1.49E-04	507	5.74E-04	574	7.44E-04	641	8.65E-04	708	2.03E-04	775	2.49E-05
441	1.68E-04	508	5.80E-04	575	7.46E-04	642	8.53E-04	709	1.97E-04	776	2.43E-05
442	1.89E-04	509	5.78E-04	576	7.52E-04	643	8.46E-04	710	1.92E-04	777	2.36E-05
443	2.14E-04	510	5.86E-04	577	7.59E-04	644	8.36E-04	711	1.87E-04	778	2.26E-05
444	2.43E-04	511	5.85E-04	578	7.67E-04	645	8.26E-04	712	1.80E-04	779	2.25E-05
445	2.73E-04	512	5.89E-04	579	7.72E-04	646	8.15E-04	713	1.76E-04	780	2.26E-05
446	3.08E-04	513	5.88E-04	580	7.76E-04	647	8.05E-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 @8W3500K	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	0.800
NON-WORST CASE	120.0	60	0.069	8.1	0.985

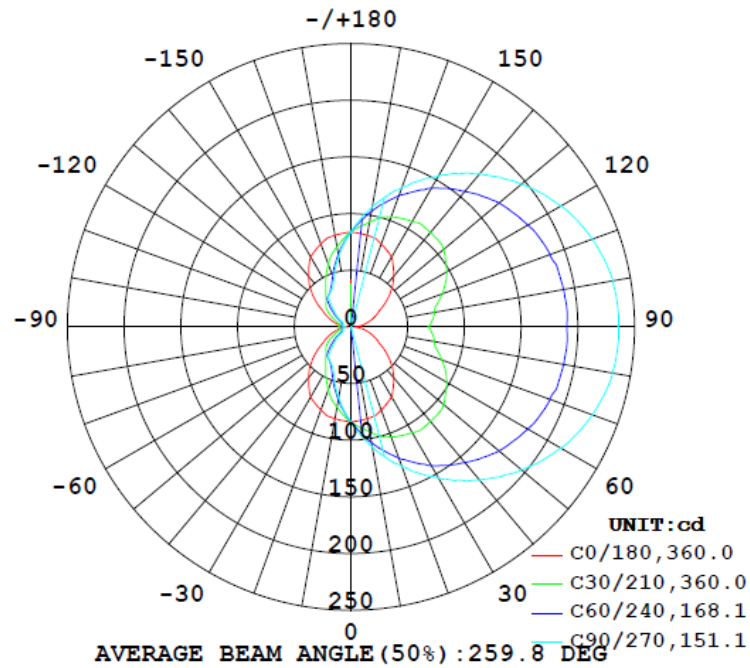
Test Result

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°)	
955	88.9	155.9	180.0	97.7	112.4	26.6%	B0-U3-G1

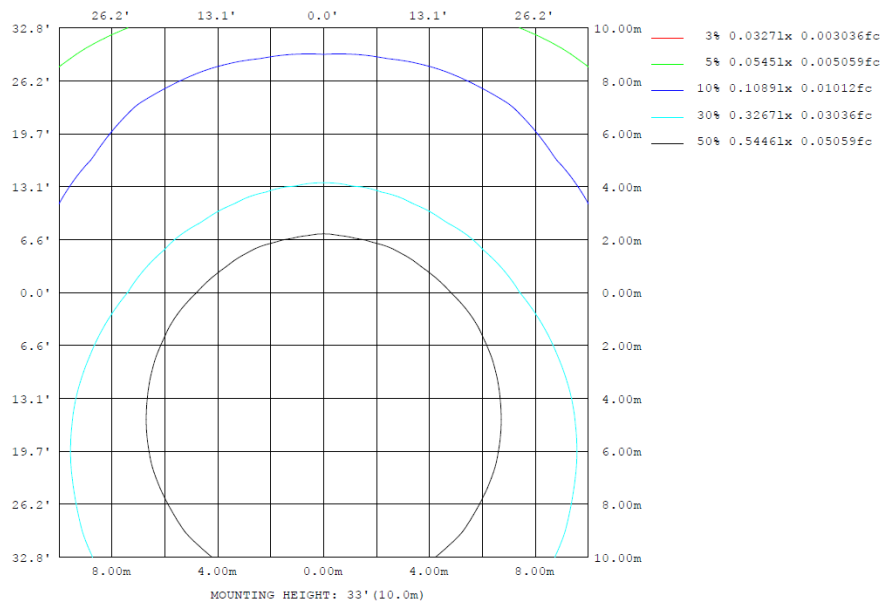
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

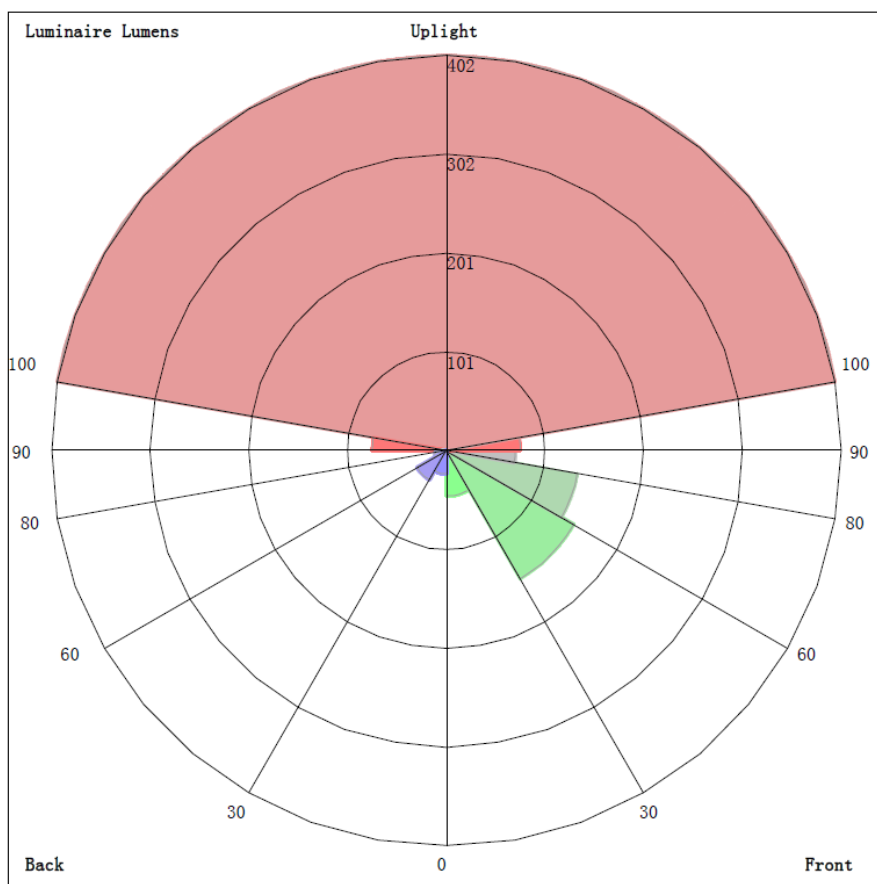
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	82.18	99.58	107.5	99.58	82.18	68.22	63.34	68.22	0- 10	8.000	8.000	0.84,0.84
20	78.06	114.6	131.0	114.6	78.06	52.91	44.89	52.91	10- 20	23.70	31.70	3.32,3.32
30	71.53	125.5	153.6	125.5	71.53	38.92	36.01	38.92	20- 30	38.29	69.99	7.33,7.33
40	58.46	135.2	176.5	135.2	58.46	32.99	29.38	32.99	30- 40	51.99	122.0	12.8,12.8
50	44.26	140.2	196.3	140.2	44.26	26.30	17.64	26.30	40- 50	62.88	184.9	19.4,19.4
60	28.95	142.8	213.7	142.8	28.95	15.91	8.503	15.91	50- 60	69.52	254.4	26.6,26.6
70	19.35	141.9	226.4	141.9	19.35	9.043	7.755	9.043	60- 70	73.01	327.4	34.3,34.3
80	10.67	138.0	234.3	138.0	10.67	8.928	6.807	8.928	70- 80	74.65	402.0	42.1,42.1
90	2.909	134.9	235.7	134.9	2.909	9.820	7.484	9.820	80- 90	75.34	477.4	50,50
100	10.67	138.0	234.3	138.0	10.67	8.928	6.807	8.928	90-100	75.34	552.7	57.9,57.9
110	19.35	141.9	226.4	141.9	19.35	9.043	7.755	9.043	100-110	74.65	627.4	65.7,65.7
120	28.95	142.8	213.7	142.8	28.95	15.91	8.503	15.91	110-120	73.01	700.4	73.4,73.4
130	44.26	140.2	196.3	140.2	44.26	26.30	17.64	26.30	120-130	69.52	769.9	80.6,80.6
140	58.46	135.2	176.5	135.2	58.46	32.99	29.38	32.99	130-140	62.88	832.8	87.2,87.2
150	71.53	125.5	153.6	125.5	71.53	38.92	36.01	38.92	140-150	51.99	884.8	92.7,92.7
160	78.06	114.6	131.0	114.6	78.06	52.91	44.89	52.91	150-160	38.29	923.1	96.7,96.7
170	82.18	99.58	107.5	99.58	82.18	68.22	63.34	68.22	160-170	23.70	946.8	99.2,99.2
180	83.89	83.89	83.89	83.89	83.89	83.89	83.89	83.89	170-180	8.000	954.8	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	8.00	0-10	8.00	0.84%
10-20	23.70	0-20	31.70	3.35%
20-30	38.29	0-30	69.99	7.39%
30-40	51.99	0-40	121.98	12.88%
40-50	62.88	0-50	184.86	19.53%
50-60	69.52	0-60	254.38	26.87%
60-70	73.01	0-70	327.39	34.58%
70-80	74.65	0-80	402.04	42.46%
80-90	75.34	0-90	477.38	50.42%
90-100	75.34	0-100	552.72	58.38%
100-110	74.65	0-110	627.37	66.26%
110-120	73.01	0-120	700.38	73.98%
120-130	69.52	0-130	769.90	81.32%
130-140	62.88	0-140	832.78	87.96%
140-150	51.99	0-150	884.77	93.45%
150-160	38.29	0-160	923.06	97.50%
160-170	23.70	0-170	946.76	100.00%
170-180	8.00	0-180	954.76	100.84%

4.2 Goniophotometer Test

LCS/BUG

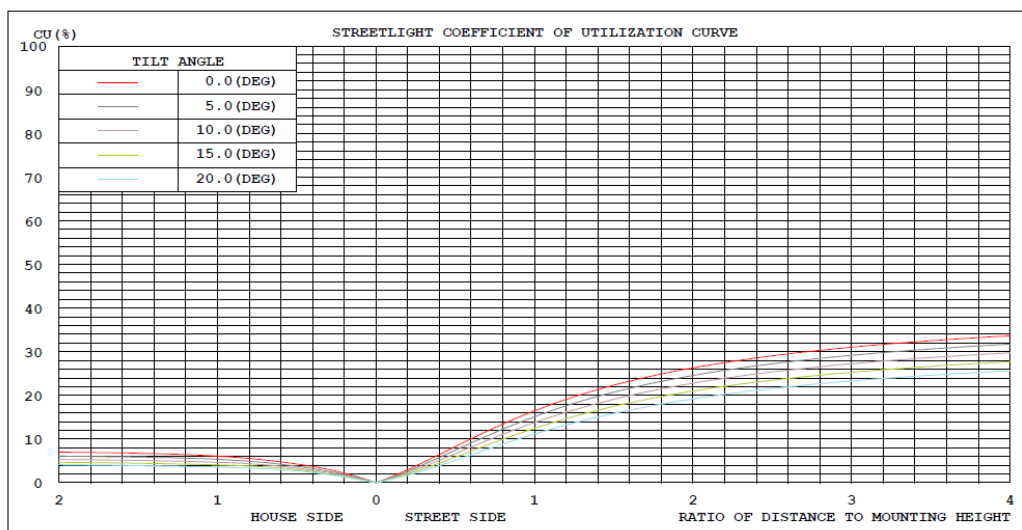


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

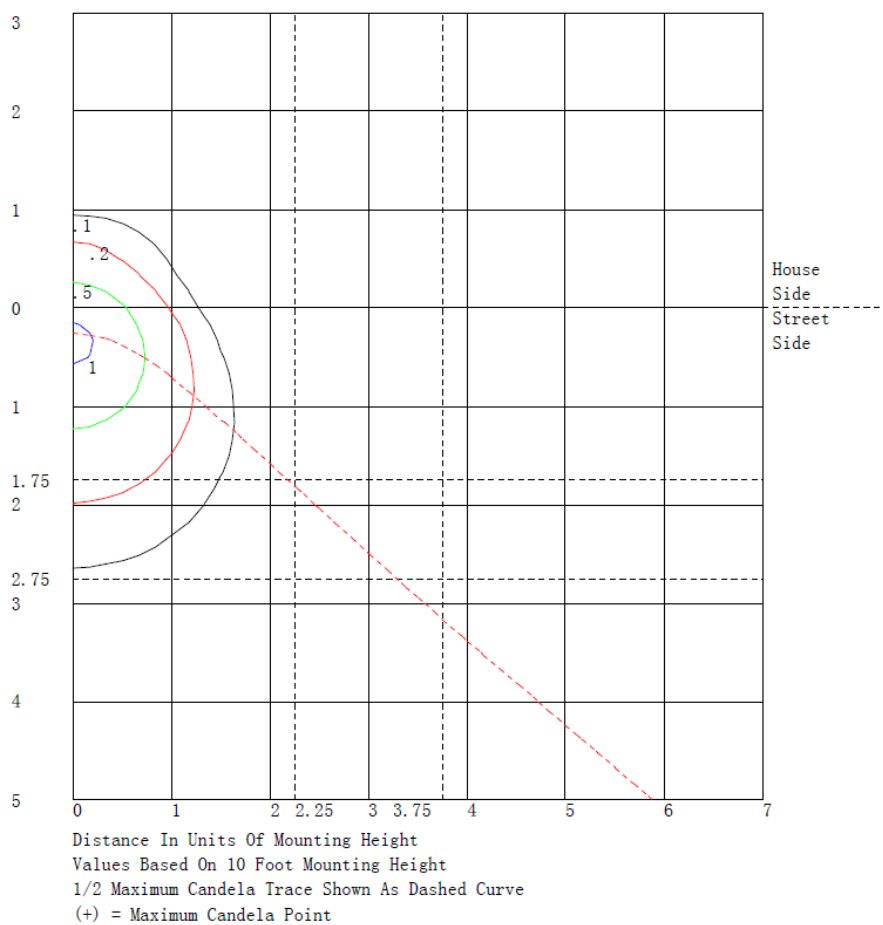
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	46.3	N.A.	4.8
FM - Front-Medium (30-60)	150.2	N.A.	15.7
FH - Front-High (60-80)	135.5	N.A.	14.2
FVH - Front-Very High (80-90)	70.5	N.A.	7.4
BL - Back-Low (0-30)	23.7	N.A.	2.5
BM - Back-Medium (30-60)	34.2	N.A.	3.6
BH - Back-High (60-80)	12.1	N.A.	1.3
BVH - Back-Very High (80-90)	4.8	N.A.	0.5
UL - Uplight-Low (90-100)	75.3	N.A.	7.9
UH - Uplight-High (100-180)	402.0	N.A.	42.1
Total	954.6	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	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
5	83.0	86.2	89.0	91.4	93.3	95.0	95.7	95.0	93.3	91.4	89.0	86.2	83.0	80.6	78.2	76.1	74.5	73.7	73.6
10	82.2	88.1	94.1	99.6	104	106	107	106	104	99.6	94.1	88.1	82.2	76.8	72.1	68.2	65.1	63.6	63.3
15	81.3	90.1	99.6	107	113	117	119	117	113	107	99.6	90.1	81.3	73.1	66.3	60.2	56.1	54.0	53.7
20	78.1	90.3	103	115	123	128	131	128	123	115	103	90.3	78.1	67.7	59.2	52.9	47.6	45.1	44.9
25	74.8	90.0	106	121	132	139	142	139	132	121	106	90.0	74.8	61.8	51.7	44.9	40.9	39.0	39.0
30	71.5	89.4	108	126	141	150	154	150	141	126	108	89.4	71.5	56.0	45.1	38.9	36.8	35.9	36.0
35	65.0	86.5	110	130	149	161	165	161	149	130	110	86.5	65.0	48.9	39.3	35.0	34.5	34.6	34.7
40	58.5	83.0	109	135	156	171	177	171	156	135	109	83.0	58.5	42.2	34.6	33.0	32.8	30.6	29.4
45	51.9	79.3	109	138	163	181	187	181	163	138	109	79.3	51.9	36.0	31.5	30.9	27.2	23.9	22.7
50	44.3	72.4	107	140	170	189	196	189	170	140	107	72.4	44.3	31.2	29.2	26.3	21.3	18.6	17.6
55	36.6	64.3	102	143	175	198	206	198	175	143	102	64.3	36.6	27.1	25.8	20.7	16.4	14.1	13.4
60	29.0	55.7	97.4	143	180	205	214	205	180	143	97.4	55.7	29.0	23.5	21.5	15.9	11.5	9.12	8.50
65	24.2	48.9	91.9	143	184	211	221	211	184	143	91.9	48.9	24.2	20.3	16.9	11.2	8.76	8.22	8.03
70	19.4	41.8	85.3	142	187	217	226	217	187	142	85.3	41.8	19.4	16.8	13.4	9.04	8.46	8.04	7.76
75	14.6	34.1	78.6	140	189	221	231	221	189	140	78.6	34.1	14.6	13.2	10.3	8.85	8.39	7.61	7.39
80	10.7	32.1	74.8	138	190	223	234	223	190	138	74.8	32.1	10.7	12.1	9.69	8.93	8.13	7.31	6.81
85	6.79	30.5	72.1	137	191	224	236	224	191	137	72.1	30.5	6.79	11.4	10.5	9.38	8.23	7.09	6.23
90	2.91	28.7	68.3	135	190	225	236	225	190	135	68.3	28.7	2.91	10.8	11.2	9.82	8.68	7.68	7.48
95	6.79	30.5	72.1	137	191	224	236	224	191	137	72.1	30.5	6.79	11.4	10.5	9.38	8.23	7.09	6.23
100	10.7	32.1	74.8	138	190	223	234	223	190	138	74.8	32.1	10.7	12.1	9.69	8.93	8.13	7.31	6.81
105	14.6	34.1	78.6	140	189	221	231	221	189	140	78.6	34.1	14.6	13.2	10.3	8.85	8.39	7.61	7.39
110	19.4	41.8	85.3	142	187	217	226	217	187	142	85.3	41.8	19.4	16.8	13.4	9.04	8.46	8.04	7.76
115	24.2	48.9	91.9	143	184	211	221	211	184	143	91.9	48.9	24.2	20.3	16.9	11.2	8.76	8.22	8.03
120	29.0	55.7	97.4	143	180	205	214	205	180	143	97.4	55.7	29.0	23.5	21.5	15.9	11.5	9.12	8.50
125	36.6	64.3	102	143	175	198	206	198	175	143	102	64.3	36.6	27.1	25.8	20.7	16.4	14.1	13.4
130	44.3	72.4	107	140	170	189	196	189	170	140	107	72.4	44.3	31.2	29.2	26.3	21.3	18.6	17.6
135	51.9	79.3	109	138	163	181	187	181	163	138	109	79.3	51.9	36.0	31.5	30.9	27.2	23.9	22.7
140	58.5	83.0	109	135	156	171	177	171	156	135	109	83.0	58.5	42.2	34.6	33.0	32.8	30.6	29.4
145	65.0	86.5	110	130	149	161	165	161	149	130	110	86.5	65.0	48.9	39.3	35.0	34.5	34.6	34.7
150	71.5	89.4	108	126	141	150	154	150	141	126	108	89.4	71.5	56.0	45.1	38.9	36.8	35.9	36.0
155	74.8	90.0	106	121	132	139	142	139	132	121	106	90.0	74.8	61.8	51.7	44.9	40.9	39.0	39.0
160	78.1	90.3	103	115	123	128	131	128	123	115	103	90.3	78.1	67.7	59.2	52.9	47.6	45.1	44.9
165	81.3	90.1	99.6	107	113	117	119	117	113	107	99.6	90.1	81.3	73.1	66.3	60.2	56.1	54.0	53.7
170	82.2	88.1	94.1	99.6	104	106	107	106	104	99.6	94.1	88.1	82.2	76.8	72.1	68.2	65.1	63.6	63.3
175	83.0	86.2	89.0	91.4	93.3	95.0	95.7	95.0	93.3	91.4	89.0	86.2	83.0	80.6	78.2	76.1	74.5	73.7	73.6
180	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9

Table--2

UNIT: cd

C (DEG) y	285	300	315	330	345														
0	83.9	83.9	83.9	83.9	83.9														
5	73.7	74.5	76.1	78.2	80.6														
10	63.6	65.1	68.2	72.1	76.8														
15	54.0	56.1	60.2	66.3	73.1														
20	45.1	47.6	52.9	59.2	67.7														
25	39.0	40.9	44.9	51.7	61.8														
30	35.9	36.8	38.9	45.1	56.0														
35	34.6	34.5	35.0	39.3	48.9														
40	30.6	32.8	33.0	34.6	42.2														
45	23.9	27.2	30.9	31.5	36.0														
50	18.6	21.3	26.3	29.2	31.2														
55	14.1	16.4	20.7	25.8	27.1														
60	9.12	11.5	15.9	21.5	23.5														
65	8.22	8.76	11.2	16.9	20.3														
70	8.04	8.46	9.04	13.4	16.8														
75	7.61	8.39	8.85	10.3	13.2														
80	7.31	8.13	8.93	9.69	12.1														
85	7.09	8.23	9.38	10.5	11.4														
90	7.68	8.68	9.82	11.2	10.8														
95	7.09	8.23	9.38	10.5	11.4														
100	7.31	8.13	8.93	9.69	12.1														
105	7.61	8.39	8.85	10.3	13.2														
110	8.04	8.46	9.04	13.4	16.8														
115	8.22	8.76	11.2	16.9	20.3														
120	9.12	11.5	15.9	21.5	23.5														
125	14.1	16.4	20.7	25.8	27.1														
130	18.6	21.3	26.3	29.2	31.2														
135	23.9	27.2	30.9	31.5	36.0														
140	30.6	32.8	33.0	34.6	42.2														
145	34.6	34.5	35.0	39.3	48.9														
150	35.9	36.8	38.9	45.1	56.0														
155	39.0	40.9	44.9	51.7	61.8														
160	45.1	47.6	52.9	59.2	67.7														
165	54.0	56.1	60.2	66.3	73.1														
170	63.6	65.1	68.2	72.1	76.8														
175	73.7	74.5	76.1	78.2	80.6														
180	83.9	83.9	83.9	83.9	83.9														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18B @8W3500K	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	8.1	0.985	7.31
277.0	60	0.038	8.5	0.800	43.84

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*****