

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		1323
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	113.1
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		11.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.33
				277V	27.35
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.990
				277V	0.880
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3508
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.2
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		79
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-U4-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		0.048
(Goniophotometer – Section 4.2)			Non-Worst Case		0.098
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		11.7
(Goniophotometer – Section 4.2)			Non-Worst Case		11.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-10	V1-18B @12W3500K	-	250728006-S1
2	Goniophotometer Test	2025-08-10	V1-18B @12W3500K	-	250728006-S1
3	THD and PF Test	2025-08-10	V1-18B @12W3500K	-	250728006-S1

Remark (If any):

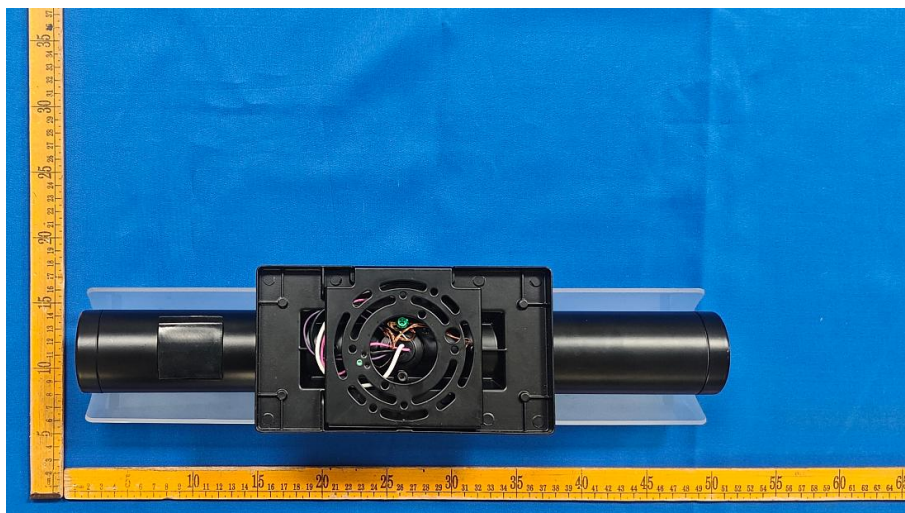
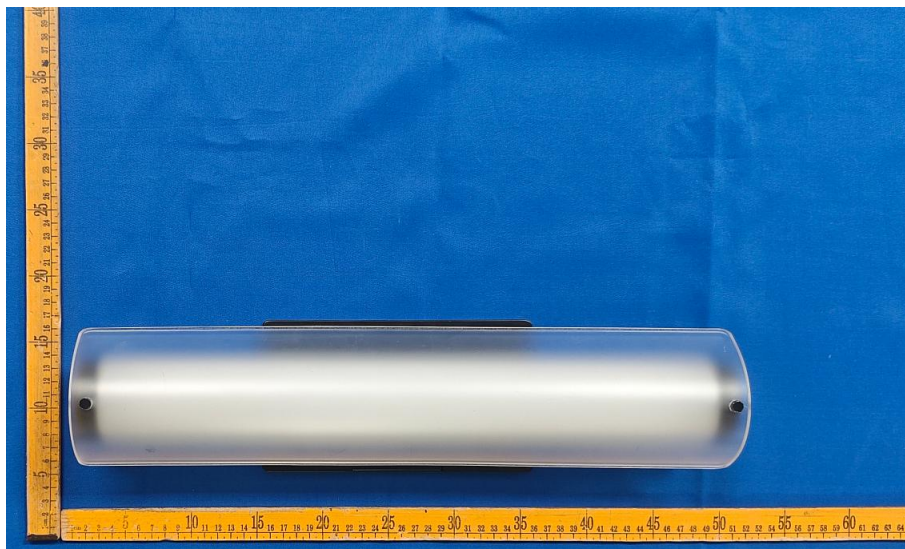
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. V1-18B @12W3500K, 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 @12W3500K	Sample ID	250728006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

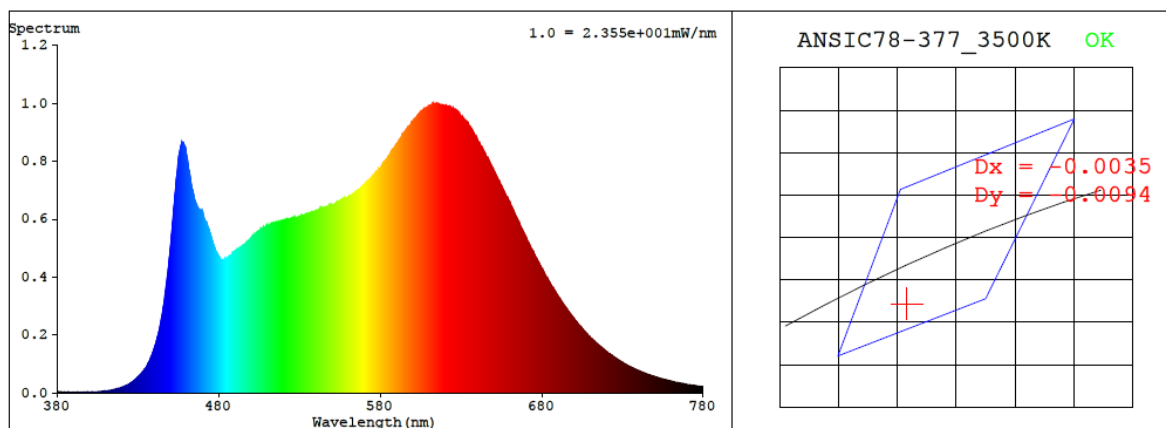
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.098	11.6	0.990
277.0	60	0.048	11.7	0.880

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3508	92.2	79	-0.0034	4.5	88	96	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4014$ $y = 0.3811$ / $u' = 0.2371$ $v' = 0.5066$ ($duv = -3.40e-03$)

CCT= 3508K Prcp WL: $L_d = 582.5\text{nm}$ Purity=34.8%

Peak WL: $L_p = 615\text{nm}$ FWHM: $=180.7\text{nm}$ Ratio: R=22.9% G=72.3% B=4.8%

Render Index: $R_a = 92.2$ AvgR = 91.2 TM30: $R_f = 90$ $R_g = 98$

EEL: 0.12892 A+

R1 =97 R2 =94 R3 =92 R4 =94 R5 =95 R6 =89 R7 =89

R8 =87 R9 =79 R10=88 R11=97 R12=77 R13=96 R14=96 R15=96

4.1 Integrating Sphere Test

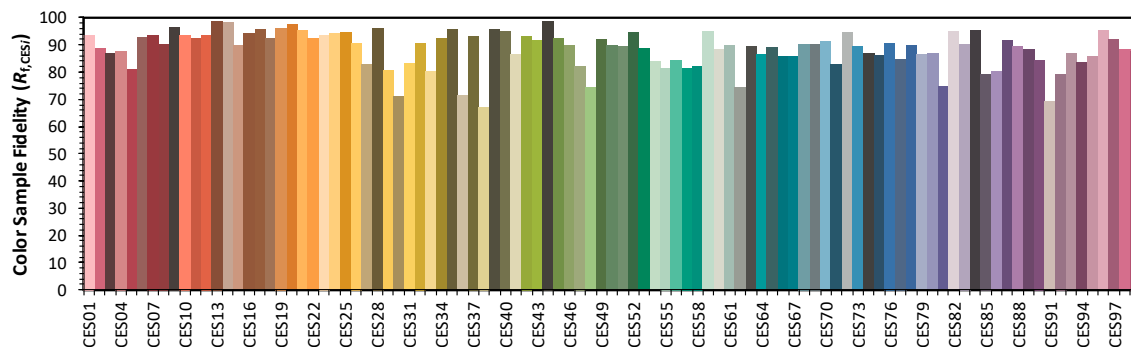
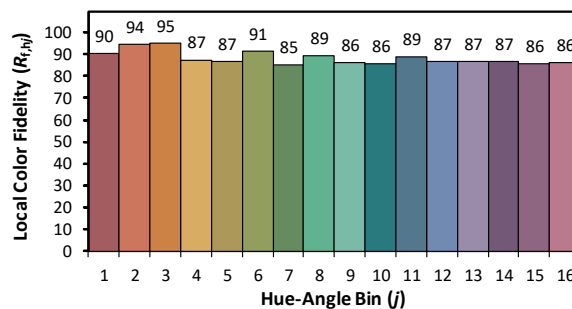
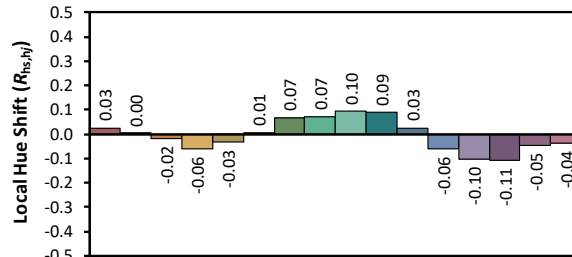
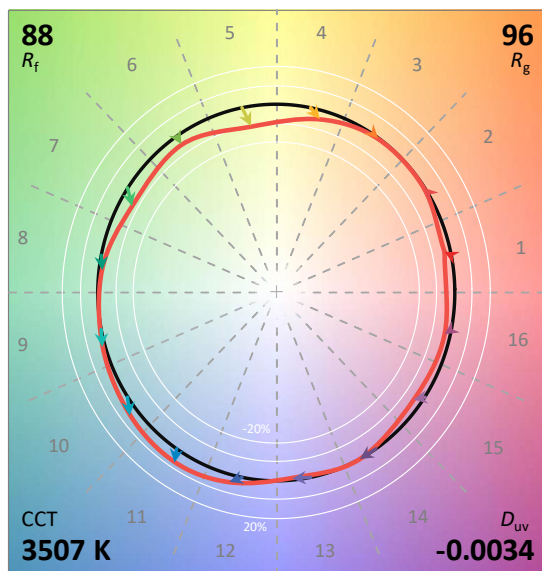
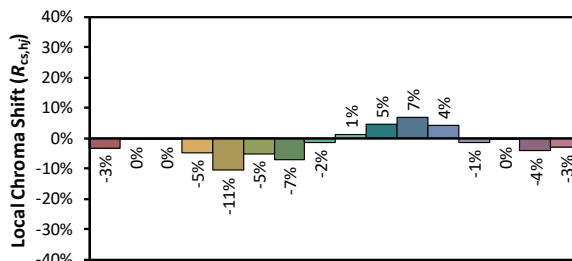
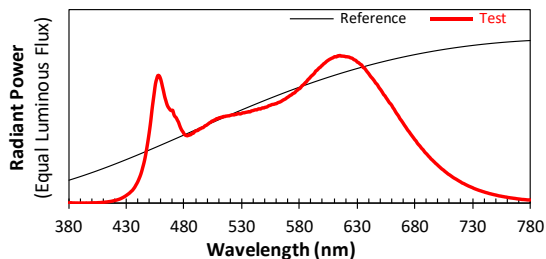
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/21

Model: V1-18B @12W3500K



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

x 0.4014
 y 0.3810
 u' 0.2372
 v' 0.5066

CIE 13.3-1995
(CRI)

R_a 92
 R_g 79

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	3.70E-06	447	3.51E-04	514	5.88E-04	581	7.83E-04	648	7.95E-04	715	1.67E-04
381	3.70E-06	448	3.97E-04	515	5.86E-04	582	7.94E-04	649	7.81E-04	716	1.62E-04
382	3.90E-06	449	4.47E-04	516	5.90E-04	583	8.00E-04	650	7.72E-04	717	1.57E-04
383	2.70E-06	450	5.02E-04	517	5.90E-04	584	8.07E-04	651	7.60E-04	718	1.52E-04
384	2.70E-06	451	5.62E-04	518	5.92E-04	585	8.16E-04	652	7.48E-04	719	1.48E-04
385	2.60E-06	452	6.32E-04	519	5.92E-04	586	8.23E-04	653	7.35E-04	720	1.43E-04
386	2.10E-06	453	6.93E-04	520	5.95E-04	587	8.34E-04	654	7.27E-04	721	1.38E-04
387	2.50E-06	454	7.51E-04	521	5.97E-04	588	8.42E-04	655	7.14E-04	722	1.35E-04
388	1.80E-06	455	8.08E-04	522	5.99E-04	589	8.50E-04	656	7.03E-04	723	1.31E-04
389	2.10E-06	456	8.39E-04	523	5.98E-04	590	8.59E-04	657	6.91E-04	724	1.27E-04
390	2.40E-06	457	8.63E-04	524	6.00E-04	591	8.66E-04	658	6.80E-04	725	1.23E-04
391	2.10E-06	458	8.64E-04	525	6.01E-04	592	8.73E-04	659	6.72E-04	726	1.19E-04
392	2.40E-06	459	8.51E-04	526	6.05E-04	593	8.81E-04	660	6.61E-04	727	1.15E-04
393	2.10E-06	460	8.26E-04	527	6.06E-04	594	8.94E-04	661	6.47E-04	728	1.12E-04
394	1.80E-06	461	7.91E-04	528	6.05E-04	595	8.99E-04	662	6.36E-04	729	1.09E-04
395	2.90E-06	462	7.58E-04	529	6.05E-04	596	9.07E-04	663	6.22E-04	730	1.06E-04
396	1.90E-06	463	7.22E-04	530	6.09E-04	597	9.16E-04	664	6.10E-04	731	1.01E-04
397	2.30E-06	464	6.95E-04	531	6.12E-04	598	9.21E-04	665	5.99E-04	732	9.85E-05
398	2.30E-06	465	6.68E-04	532	6.12E-04	599	9.29E-04	666	5.88E-04	733	9.53E-05
399	3.20E-06	466	6.51E-04	533	6.14E-04	600	9.36E-04	667	5.73E-04	734	9.25E-05
400	3.10E-06	467	6.40E-04	534	6.16E-04	601	9.44E-04	668	5.63E-04	735	8.96E-05
401	3.30E-06	468	6.30E-04	535	6.17E-04	602	9.49E-04	669	5.52E-04	736	8.68E-05
402	3.80E-06	469	6.28E-04	536	6.20E-04	603	9.57E-04	670	5.40E-04	737	8.45E-05
403	3.50E-06	470	6.28E-04	537	6.18E-04	604	9.63E-04	671	5.27E-04	738	8.19E-05
404	3.80E-06	471	6.00E-04	538	6.24E-04	605	9.68E-04	672	5.17E-04	739	7.92E-05
405	4.40E-06	472	5.86E-04	539	6.26E-04	606	9.73E-04	673	5.04E-04	740	7.70E-05
406	4.80E-06	473	5.79E-04	540	6.28E-04	607	9.77E-04	674	4.93E-04	741	7.41E-05
407	4.80E-06	474	5.62E-04	541	6.31E-04	608	9.82E-04	675	4.84E-04	742	7.21E-05
408	5.70E-06	475	5.48E-04	542	6.33E-04	609	9.84E-04	676	4.72E-04	743	7.00E-05
409	6.30E-06	476	5.26E-04	543	6.32E-04	610	9.90E-04	677	4.62E-04	744	6.75E-05
410	6.90E-06	477	5.07E-04	544	6.37E-04	611	9.92E-04	678	4.51E-04	745	6.53E-05
411	7.80E-06	478	4.92E-04	545	6.39E-04	612	9.90E-04	679	4.41E-04	746	6.36E-05
412	8.70E-06	479	4.81E-04	546	6.38E-04	613	9.98E-04	680	4.30E-04	747	6.15E-05
413	9.30E-06	480	4.67E-04	547	6.42E-04	614	9.97E-04	681	4.22E-04	748	5.98E-05
414	1.07E-05	481	4.61E-04	548	6.46E-04	615	1.00E-03	682	4.09E-04	749	5.78E-05
415	1.17E-05	482	4.58E-04	549	6.45E-04	616	9.96E-04	683	3.99E-04	750	5.62E-05
416	1.29E-05	483	4.57E-04	550	6.49E-04	617	9.96E-04	684	3.90E-04	751	5.44E-05
417	1.42E-05	484	4.64E-04	551	6.50E-04	618	9.95E-04	685	3.81E-04	752	5.23E-05
418	1.61E-05	485	4.63E-04	552	6.53E-04	619	9.94E-04	686	3.70E-04	753	5.04E-05
419	1.79E-05	486	4.67E-04	553	6.59E-04	620	9.91E-04	687	3.63E-04	754	4.92E-05
420	1.95E-05	487	4.73E-04	554	6.61E-04	621	9.91E-04	688	3.53E-04	755	4.78E-05
421	2.15E-05	488	4.75E-04	555	6.64E-04	622	9.90E-04	689	3.43E-04	756	4.62E-05
422	2.38E-05	489	4.85E-04	556	6.68E-04	623	9.89E-04	690	3.35E-04	757	4.51E-05
423	2.62E-05	490	4.89E-04	557	6.69E-04	624	9.84E-04	691	3.27E-04	758	4.32E-05
424	2.90E-05	491	4.92E-04	558	6.70E-04	625	9.83E-04	692	3.18E-04	759	4.24E-05
425	3.23E-05	492	4.94E-04	559	6.73E-04	626	9.79E-04	693	3.10E-04	760	4.07E-05
426	3.62E-05	493	5.02E-04	560	6.75E-04	627	9.72E-04	694	3.00E-04	761	3.92E-05
427	4.02E-05	494	5.04E-04	561	6.80E-04	628	9.69E-04	695	2.94E-04	762	3.81E-05
428	4.48E-05	495	5.10E-04	562	6.83E-04	629	9.65E-04	696	2.86E-04	763	3.68E-05
429	4.96E-05	496	5.11E-04	563	6.85E-04	630	9.55E-04	697	2.78E-04	764	3.60E-05
430	5.49E-05	497	5.17E-04	564	6.89E-04	631	9.52E-04	698	2.70E-04	765	3.48E-05
431	6.08E-05	498	5.24E-04	565	6.94E-04	632	9.45E-04	699	2.64E-04	766	3.37E-05
432	6.63E-05	499	5.27E-04	566	6.99E-04	633	9.39E-04	700	2.56E-04	767	3.29E-05
433	7.32E-05	500	5.33E-04	567	7.03E-04	634	9.34E-04	701	2.49E-04	768	3.14E-05
434	8.09E-05	501	5.39E-04	568	7.08E-04	635	9.19E-04	702	2.42E-04	769	3.03E-05
435	8.77E-05	502	5.45E-04	569	7.14E-04	636	9.16E-04	703	2.35E-04	770	2.94E-05
436	9.79E-05	503	5.49E-04	570	7.19E-04	637	9.07E-04	704	2.29E-04	771	2.85E-05
437	1.09E-04	504	5.56E-04	571	7.25E-04	638	8.96E-04	705	2.23E-04	772	2.74E-05
438	1.23E-04	505	5.56E-04	572	7.30E-04	639	8.86E-04	706	2.16E-04	773	2.62E-05
439	1.36E-04	506	5.63E-04	573	7.34E-04	640	8.76E-04	707	2.10E-04	774	2.60E-05
440	1.52E-04	507	5.66E-04	574	7.41E-04	641	8.65E-04	708	2.04E-04	775	2.52E-05
441	1.71E-04	508	5.73E-04	575	7.45E-04	642	8.54E-04	709	1.97E-04	776	2.46E-05
442	1.90E-04	509	5.72E-04	576	7.50E-04	643	8.46E-04	710	1.93E-04	777	2.36E-05
443	2.14E-04	510	5.78E-04	577	7.59E-04	644	8.36E-04	711	1.87E-04	778	2.30E-05
444	2.44E-04	511	5.78E-04	578	7.65E-04	645	8.26E-04	712	1.81E-04	779	2.30E-05
445	2.73E-04	512	5.82E-04	579	7.72E-04	646	8.13E-04	713	1.76E-04	780	2.30E-05
446	3.08E-04	513	5.82E-04	580	7.76E-04	647	8.06E-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 @12W3500K	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	0.048	11.7	0.880
NON-WORST CASE	120.0	60	0.098	11.6	0.990

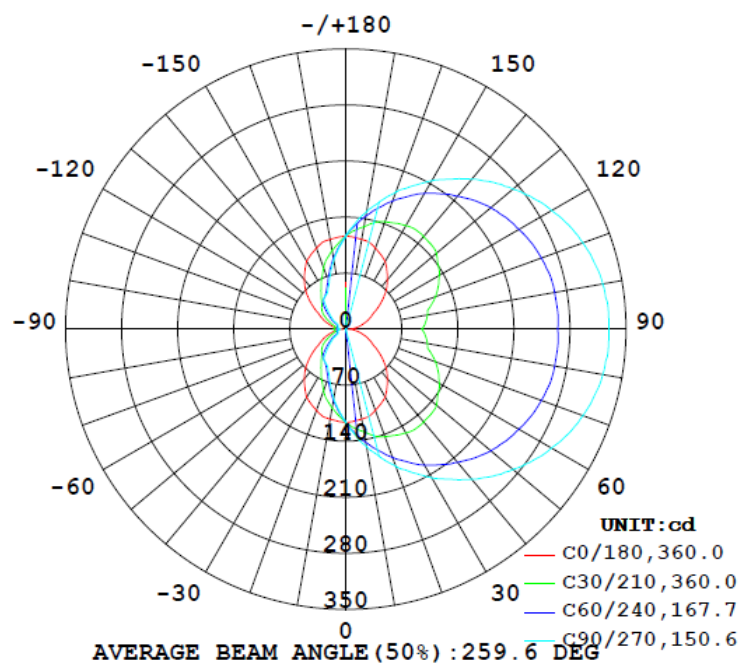
Test Result

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°)	
1323	88.0	156.2	180.0	98.1	113.1	26.6%	B0-U4-G1

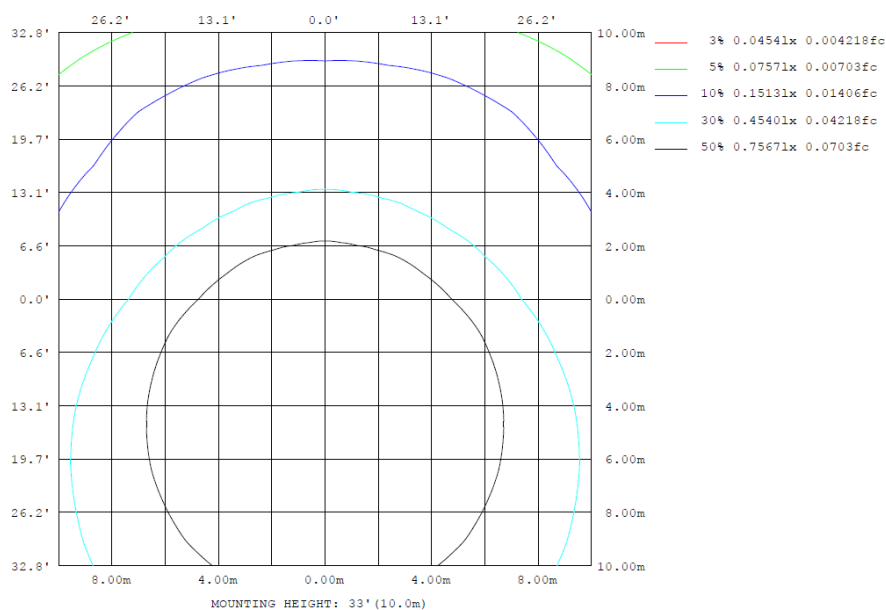
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

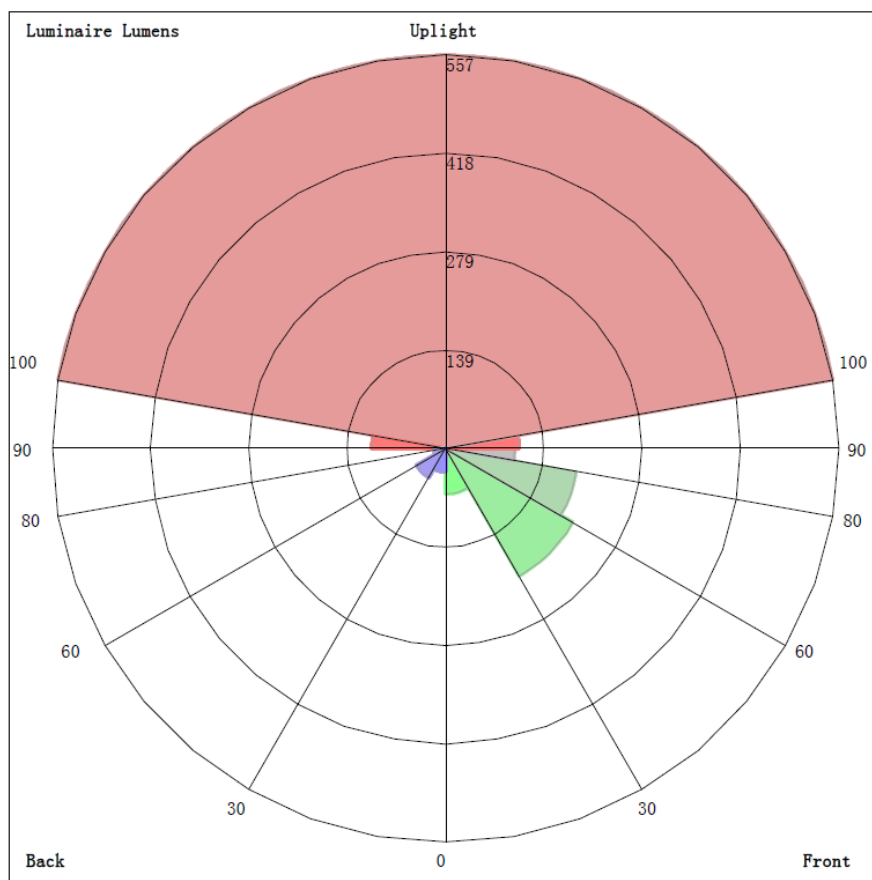
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	114.1	138.2	148.6	138.2	114.1	94.14	88.00	94.14	0- 10	11.09	11.09	0.84,0.84
20	107.9	158.3	182.0	158.3	107.9	73.11	61.75	73.11	10- 20	32.80	43.89	3.32,3.32
30	98.24	173.8	214.2	173.8	98.24	53.74	49.49	53.74	20- 30	53.02	96.92	7.32,7.32
40	80.83	187.7	244.7	187.7	80.83	45.51	40.08	45.51	30- 40	72.03	169.0	12.8,12.8
50	61.29	194.6	272.5	194.6	61.29	36.03	24.00	36.03	40- 50	87.06	256.0	19.3,19.3
60	39.62	197.7	296.8	197.7	39.62	21.65	11.57	21.65	50- 60	96.26	352.3	26.6,26.6
70	26.57	196.8	315.2	196.8	26.57	12.36	10.53	12.36	60- 70	101.2	453.4	34.3,34.3
80	14.61	191.6	325.8	191.6	14.61	12.10	9.733	12.10	70- 80	103.6	557.1	42.1,42.1
90	3.746	187.3	328.5	187.3	3.746	13.12	10.49	13.12	80- 90	104.6	661.7	50.5,50.5
100	14.61	191.6	325.8	191.6	14.61	12.10	9.733	12.10	90-100	104.6	766.3	57.9,57.9
110	26.57	196.8	315.2	196.8	26.57	12.36	10.53	12.36	100-110	103.6	870.0	65.7,65.7
120	39.62	197.7	296.8	197.7	39.62	21.65	11.57	21.65	110-120	101.2	971.1	73.4,73.4
130	61.29	194.6	272.5	194.6	61.29	36.03	24.00	36.03	120-130	96.26	1067	80.7,80.7
140	80.83	187.7	244.7	187.7	80.83	45.51	40.08	45.51	130-140	87.06	1154	87.2,87.2
150	98.24	173.8	214.2	173.8	98.24	53.74	49.49	53.74	140-150	72.03	1226	92.7,92.7
160	107.9	158.3	182.0	158.3	107.9	73.11	61.75	73.11	150-160	53.02	1280	96.7,96.7
170	114.1	138.2	148.6	138.2	114.1	94.14	88.00	94.14	160-170	32.80	1312	99.2,99.2
180	116.7	116.7	116.7	116.7	116.7	116.7	116.7	116.7	170-180	11.09	1323	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	11.09	0-10	11.09	0.85%
10-20	32.80	0-20	43.89	3.34%
20-30	53.02	0-30	96.91	7.38%
30-40	72.03	0-40	168.94	12.87%
40-50	87.06	0-50	256.00	19.51%
50-60	96.26	0-60	352.26	26.84%
60-70	101.17	0-70	453.43	34.55%
70-80	103.63	0-80	557.06	42.45%
80-90	104.63	0-90	661.69	50.42%
90-100	104.63	0-100	766.32	58.40%
100-110	103.63	0-110	869.95	66.29%
110-120	101.17	0-120	971.12	74.00%
120-130	96.26	0-130	1067.38	81.34%
130-140	87.06	0-140	1154.44	87.97%
140-150	72.03	0-150	1226.47	93.46%
150-160	53.02	0-160	1279.49	97.50%
160-170	32.80	0-170	1312.29	100.00%
170-180	11.09	0-180	1323.38	100.85%

4.2 Goniophotometer Test

LCS/BUG

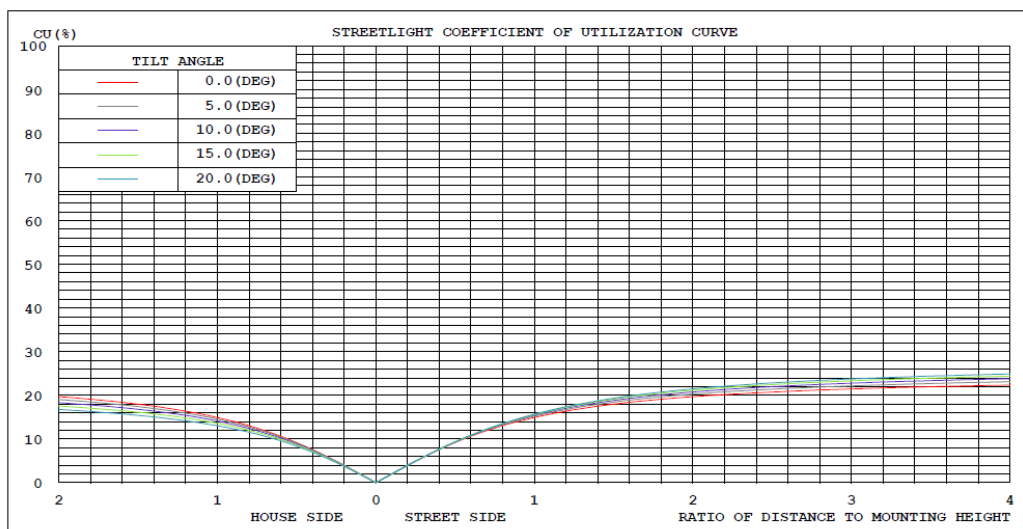


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

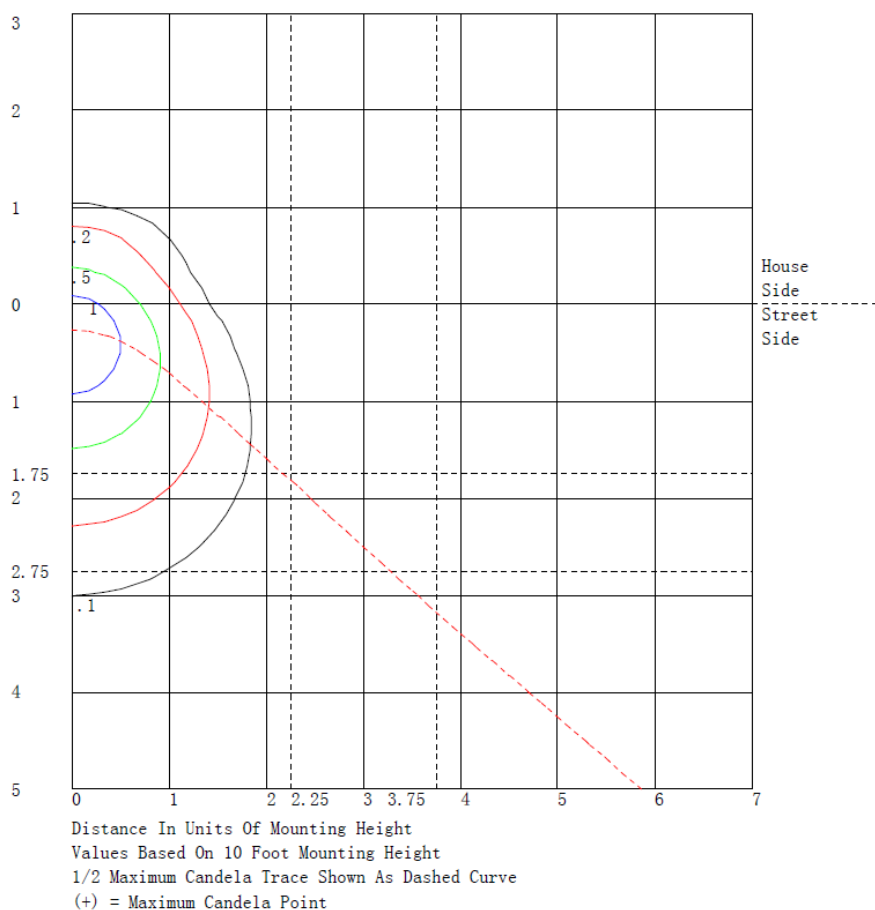
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	64.2	N.A.	4.8
FM - Front-Medium (30-60)	208.4	N.A.	15.7
FH - Front-High (60-80)	188.2	N.A.	14.2
FVH - Front-Very High (80-90)	98.0	N.A.	7.4
BL - Back-Low (0-30)	32.8	N.A.	2.5
BM - Back-Medium (30-60)	47.0	N.A.	3.5
BH - Back-High (60-80)	16.6	N.A.	1.3
BVH - Back-Very High (80-90)	6.6	N.A.	0.5
UL - Uplight-Low (90-100)	104.6	N.A.	7.9
UH - Uplight-High (100-180)	557.1	N.A.	42.1
Total	1323.5	N.A.	100.0
BUG Rating	B0-U4-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	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117
5	115	120	124	127	130	131	132	131	130	127	124	120	115	111	108	105	103	102	102
10	114	123	130	138	144	147	149	147	144	138	130	123	114	106	99.8	94.1	90.2	88.2	88.0
15	113	126	138	148	157	163	165	163	157	148	138	126	113	101	91.5	83.0	77.4	74.3	73.7
20	108	125	143	158	170	178	182	178	170	158	143	125	108	93.8	81.7	73.1	65.9	62.1	61.7
25	103	125	146	167	183	193	198	193	183	167	146	125	103	85.4	71.2	62.1	56.6	53.8	53.6
30	98.2	124	150	174	196	209	214	209	196	174	150	124	98.2	77.4	62.2	53.7	50.7	49.3	49.5
35	89.5	120	152	181	207	223	229	223	207	181	152	120	89.5	67.7	54.1	48.3	47.5	47.8	48.0
40	80.8	115	151	188	217	238	245	238	217	188	151	115	80.8	58.2	47.6	45.5	45.0	41.7	40.1
45	72.1	110	150	192	227	250	260	250	227	192	150	110	72.1	49.6	43.0	42.2	37.1	32.6	31.2
50	61.3	100	148	195	236	263	272	263	236	195	148	100	61.3	43.0	39.7	36.0	29.1	25.2	24.0
55	50.5	88.8	141	198	244	274	286	274	244	198	141	88.8	50.5	37.3	35.3	28.2	22.4	19.1	18.2
60	39.6	77.3	135	198	249	285	297	285	249	198	135	77.3	39.6	32.3	29.5	21.7	15.6	12.3	11.6
65	33.1	67.7	127	198	256	294	307	294	256	198	127	67.7	33.1	27.7	23.1	15.4	11.8	11.1	10.8
70	26.6	57.7	119	197	260	301	315	301	260	197	119	57.7	26.6	22.9	18.3	12.4	11.5	11.0	10.5
75	20.0	46.9	109	194	264	307	321	307	264	194	109	46.9	20.0	17.9	14.1	12.2	11.4	10.3	10.1
80	14.6	44.2	103	192	265	311	326	311	265	192	103	44.2	14.6	16.5	13.3	12.1	11.1	9.90	9.73
85	9.18	42.1	100.0	191	265	313	329	313	265	191	100.0	42.1	9.18	15.8	14.4	12.6	11.3	9.41	8.37
90	3.75	39.8	95.1	187	265	313	328	313	265	187	95.1	39.8	3.75	15.2	15.4	13.1	11.9	10.4	10.5
95	9.18	42.1	100.0	191	265	313	329	313	265	191	100.0	42.1	9.18	15.8	14.4	12.6	11.3	9.41	8.37
100	14.6	44.2	103	192	265	311	326	311	265	192	103	44.2	14.6	16.5	13.3	12.1	11.1	9.90	9.73
105	20.0	46.9	109	194	264	307	321	307	264	194	109	46.9	20.0	17.9	14.1	12.2	11.4	10.3	10.1
110	26.6	57.7	119	197	260	301	315	301	260	197	119	57.7	26.6	22.9	18.3	12.4	11.5	11.0	10.5
115	33.1	67.7	127	198	256	294	307	294	256	198	127	67.7	33.1	27.7	23.1	15.4	11.8	11.1	10.8
120	39.6	77.3	135	198	249	285	297	285	249	198	135	77.3	39.6	32.3	29.5	21.7	15.6	12.3	11.6
125	50.5	88.8	141	198	244	274	286	274	244	198	141	88.8	50.5	37.3	35.3	28.2	22.4	19.1	18.2
130	61.3	100	148	195	236	263	272	263	236	195	148	100	61.3	43.0	39.7	36.0	29.1	25.2	24.0
135	72.1	110	150	192	227	250	260	250	227	192	150	110	72.1	49.6	43.0	42.2	37.1	32.6	31.2
140	80.8	115	151	188	217	238	245	238	217	188	151	115	80.8	58.2	47.6	45.5	45.0	41.7	40.1
145	89.5	120	152	181	207	223	229	223	207	181	152	120	89.5	67.7	54.1	48.3	47.5	47.8	48.0
150	98.2	124	150	174	196	209	214	209	196	174	150	124	98.2	77.4	62.2	53.7	50.7	49.3	49.5
155	103	125	146	167	183	193	198	193	183	167	146	125	103	85.4	71.2	62.1	56.6	53.8	53.6
160	108	125	143	158	170	178	182	178	170	158	143	125	108	93.8	81.7	73.1	65.9	62.1	61.7
165	113	126	138	148	157	163	165	163	157	148	138	126	113	101	91.5	83.0	77.4	74.3	73.7
170	114	123	130	138	144	147	149	147	144	138	130	123	114	106	99.8	94.1	90.2	88.2	88.0
175	115	120	124	127	130	131	132	131	130	127	124	120	115	111	108	105	103	102	102
180	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	117	117	117	117	117														
5	102	103	105	108	111														
10	88.2	90.2	94.1	99.8	106														
15	74.3	77.4	83.0	91.5	101														
20	62.1	65.9	73.1	81.7	93.8														
25	53.8	56.6	62.1	71.2	85.4														
30	49.3	50.7	53.7	62.2	77.4														
35	47.8	47.5	48.3	54.1	67.7														
40	41.7	45.0	45.5	47.6	58.2														
45	32.6	37.1	42.2	43.0	49.6														
50	25.2	29.1	36.0	39.7	43.0														
55	19.1	22.4	28.2	35.3	37.3														
60	12.3	15.6	21.7	29.5	32.3														
65	11.1	11.8	15.4	23.1	27.7														
70	11.0	11.5	12.4	18.3	22.9														
75	10.3	11.4	12.2	14.1	17.9														
80	9.90	11.1	12.1	13.3	16.5														
85	9.41	11.3	12.6	14.4	15.8														
90	10.4	11.9	13.1	15.4	15.2														
95	9.41	11.3	12.6	14.4	15.8														
100	9.90	11.1	12.1	13.3	16.5														
105	10.3	11.4	12.2	14.1	17.9														
110	11.0	11.5	12.4	18.3	22.9														
115	11.1	11.8	15.4	23.1	27.7														
120	12.3	15.6	21.7	29.5	32.3														
125	19.1	22.4	28.2	35.3	37.3														
130	25.2	29.1	36.0	39.7	43.0														
135	32.6	37.1	42.2	43.0	49.6														
140	41.7	45.0	45.5	47.6	58.2														
145	47.8	47.5	48.3	54.1	67.7														
150	49.3	50.7	53.7	62.2	77.4														
155	53.8	56.6	62.1	71.2	85.4														
160	62.1	65.9	73.1	81.7	93.8														
165	74.3	77.4	83.0	91.5	101														
170	88.2	90.2	94.1	99.8	106														
175	102	103	105	108	111														
180	117	117	117	117	117														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18B @12W3500K	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	0.098	11.6	0.990	6.33
277.0	60	0.048	11.7	0.880	27.35

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*****