

## 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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Date: 2025-08-22

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Technical Lead: Vincent Yuan

Issue Date: 2025-08-22

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		1597
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	107.2
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	5.56
				277V	20.47
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.995
				277V	0.924
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	2725±145	2776
			4 steps	2725±83	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.4
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		63
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		91
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%		-4%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.5%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U4-G2
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		0.058
(Goniophotometer – Section 4.2)			Non-Worst Case		0.124
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
(Goniophotometer – Section 4.2)			Non-Worst Case		14.8

## 2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-08-07	V1-24B @15W2700K	-	250728008-S1
2	Goniophotometer Test	2025-08-07	V1-24B @15W2700K	-	250728008-S1
3	THD and PF Test	2025-08-07	V1-24B @15W2700K	-	250728008-S1

### Remark (If any):

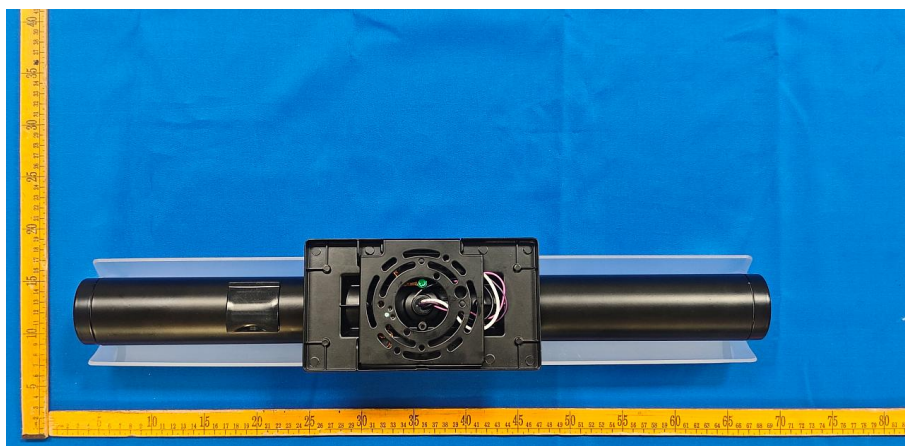
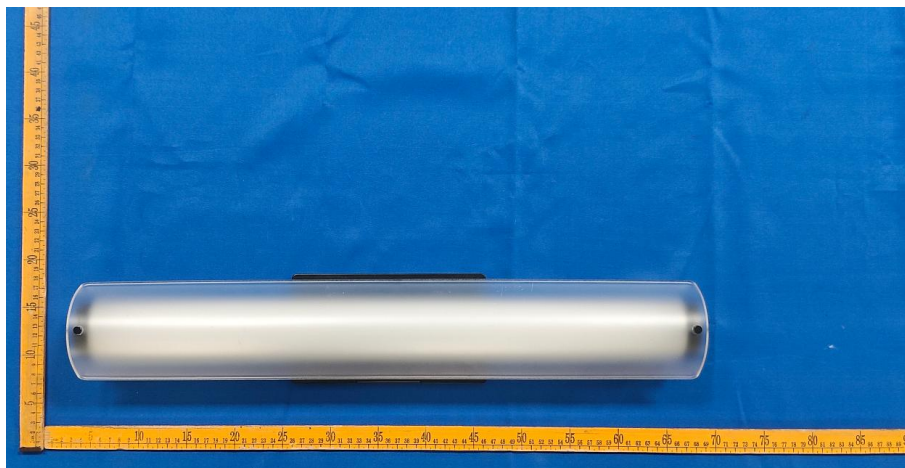
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

### 3.0 Product Description

Luminaire Description: Model No. V1-24B @15W2700K, 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

<b>Model No.</b>	V1-24B @15W2700K	<b>Sample ID</b>	250728008-S1
<b>Operate time (Min.)</b>	10	<b>Stabilization time (Min.)</b>	60
<b>Temperature (°C)</b>	25.4	<b>Humidity (%RH)</b>	41.0

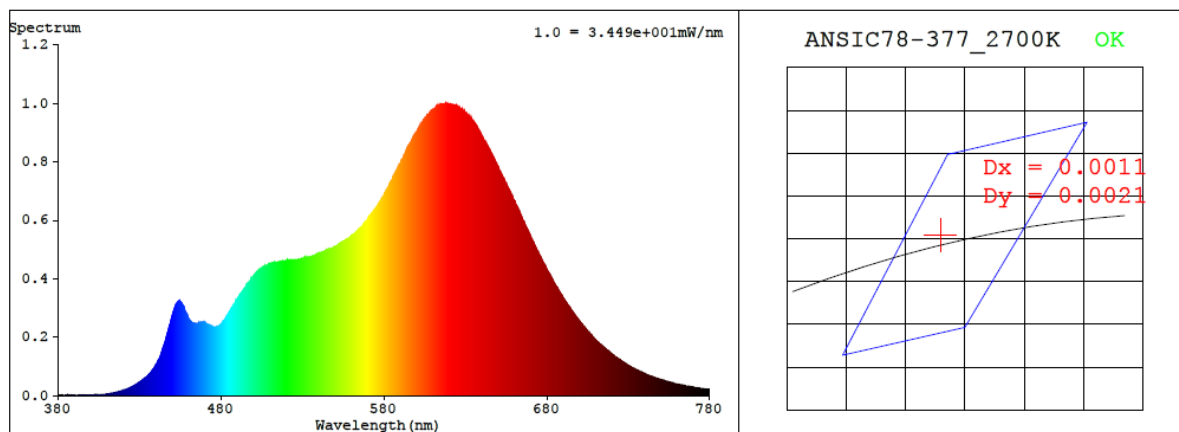
<b>Test Method</b>
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were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

<b>Voltage (Vac)</b>	<b>Frequency (Hz)</b>	<b>Current (A)</b>	<b>Power (W)</b>	<b>Power Factor</b>
120.0	60	0.124	14.8	0.995
277.0	60	0.058	14.9	0.924

<b>CCT (K)</b>	<b>CRI</b>	<b>R9</b>	<b>Duv</b>	<b>SDCM</b>	<b>Rf</b>	<b>Rg</b>	<b>IES Rcs,h1</b>
2776	93.4	63	0.0007	2.4	91	96	-4%

## 4.1 Integrating Sphere Test



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.4549$   $y = 0.4113$  /  $u' = 0.2590$   $v' = 0.5269$  ( $duv=6.90e-04$ )

CCT= 2776K Prcp WL: Ld=583.6nm Purity=60.0%

Peak WL: Lp=618nm FWHM: =127.3nm Ratio:R=26.7% G=70.1% B=3.2%

Render Index: Ra = 93.4 AvgR = 91.6 TM30:Rf=91 Rg=96

EEL: 0.13307 A+

R1 =99 R2 =97 R3 =93 R4 =97 R5 =98 R6 =91 R7 =89

R8 =82 R9 =63 R10=94 R11=94 R12=88 R13=99 R14=97 R15=91

## 4.1 Integrating Sphere Test

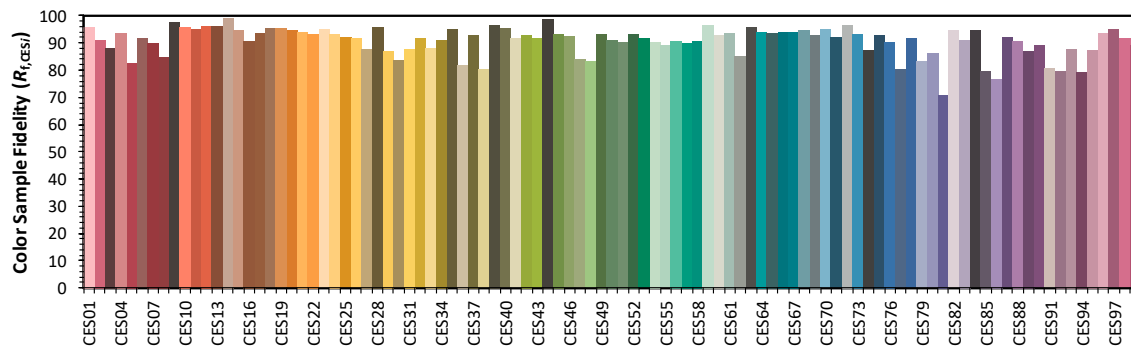
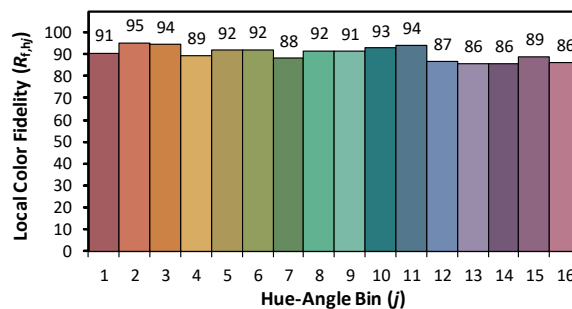
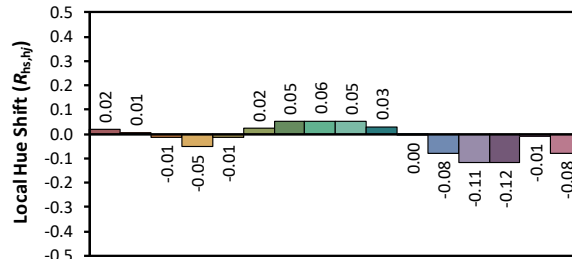
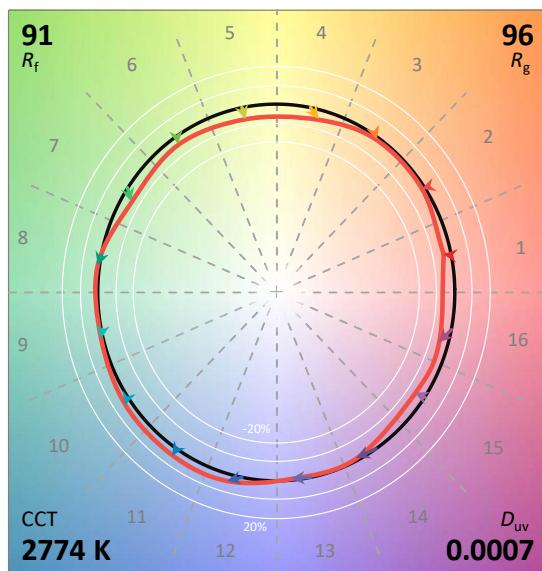
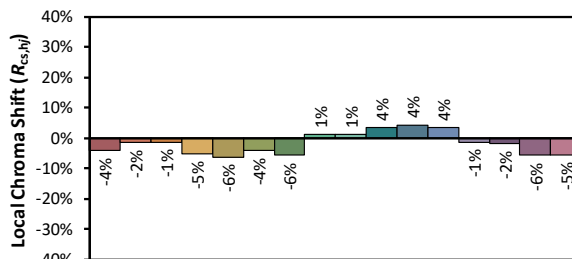
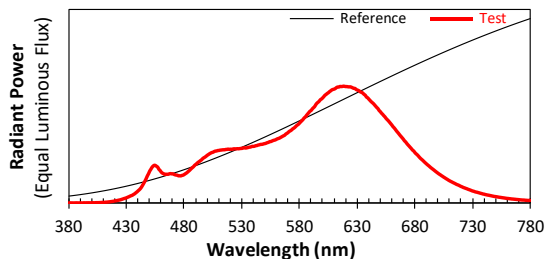
### ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/22

Model: V1-24B @15W2700K



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

$x$  0.4550  
 $y$  0.4112  
 $u'$  0.2591  
 $v'$  0.5269

CIE 13.3-1995  
(CRI)  
 $R_a$  93  
 $R_g$  63



## 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	2.10E-04	514	4.56E-04	581	6.95E-04	648	8.07E-04	715	1.66E-04
381	1.60E-06	448	2.33E-04	515	4.56E-04	582	7.05E-04	649	7.92E-04	716	1.60E-04
382	1.20E-06	449	2.51E-04	516	4.58E-04	583	7.15E-04	650	7.82E-04	717	1.56E-04
383	1.10E-06	450	2.73E-04	517	4.59E-04	584	7.28E-04	651	7.69E-04	718	1.52E-04
384	8.00E-07	451	2.89E-04	518	4.61E-04	585	7.37E-04	652	7.60E-04	719	1.47E-04
385	1.10E-06	452	3.06E-04	519	4.59E-04	586	7.50E-04	653	7.48E-04	720	1.42E-04
386	1.50E-06	453	3.16E-04	520	4.61E-04	587	7.62E-04	654	7.38E-04	721	1.38E-04
387	1.60E-06	454	3.23E-04	521	4.60E-04	588	7.74E-04	655	7.24E-04	722	1.33E-04
388	1.00E-06	455	3.21E-04	522	4.62E-04	589	7.85E-04	656	7.14E-04	723	1.30E-04
389	1.30E-06	456	3.14E-04	523	4.64E-04	590	7.92E-04	657	7.04E-04	724	1.26E-04
390	1.60E-06	457	3.06E-04	524	4.64E-04	591	8.05E-04	658	6.92E-04	725	1.23E-04
391	9.00E-07	458	2.89E-04	525	4.64E-04	592	8.15E-04	659	6.80E-04	726	1.18E-04
392	9.00E-07	459	2.79E-04	526	4.65E-04	593	8.25E-04	660	6.67E-04	727	1.15E-04
393	2.10E-06	460	2.65E-04	527	4.64E-04	594	8.41E-04	661	6.54E-04	728	1.11E-04
394	1.40E-06	461	2.56E-04	528	4.66E-04	595	8.54E-04	662	6.43E-04	729	1.07E-04
395	1.90E-06	462	2.51E-04	529	4.67E-04	596	8.62E-04	663	6.31E-04	730	1.03E-04
396	2.00E-06	463	2.46E-04	530	4.68E-04	597	8.71E-04	664	6.17E-04	731	1.01E-04
397	2.10E-06	464	2.47E-04	531	4.70E-04	598	8.84E-04	665	6.06E-04	732	9.68E-05
398	2.00E-06	465	2.46E-04	532	4.73E-04	599	8.90E-04	666	5.94E-04	733	9.41E-05
399	2.00E-06	466	2.47E-04	533	4.71E-04	600	9.00E-04	667	5.81E-04	734	9.20E-05
400	2.20E-06	467	2.50E-04	534	4.72E-04	601	9.11E-04	668	5.69E-04	735	8.92E-05
401	2.50E-06	468	2.52E-04	535	4.74E-04	602	9.22E-04	669	5.58E-04	736	8.64E-05
402	2.10E-06	469	2.50E-04	536	4.77E-04	603	9.29E-04	670	5.46E-04	737	8.33E-05
403	2.90E-06	470	2.50E-04	537	4.79E-04	604	9.38E-04	671	5.32E-04	738	8.09E-05
404	3.40E-06	471	2.46E-04	538	4.81E-04	605	9.44E-04	672	5.23E-04	739	7.75E-05
405	3.20E-06	472	2.42E-04	539	4.85E-04	606	9.53E-04	673	5.09E-04	740	7.59E-05
406	3.60E-06	473	2.39E-04	540	4.85E-04	607	9.60E-04	674	4.98E-04	741	7.29E-05
407	4.10E-06	474	2.38E-04	541	4.87E-04	608	9.68E-04	675	4.87E-04	742	7.07E-05
408	4.70E-06	475	2.33E-04	542	4.91E-04	609	9.72E-04	676	4.76E-04	743	6.85E-05
409	5.30E-06	476	2.34E-04	543	4.92E-04	610	9.75E-04	677	4.65E-04	744	6.69E-05
410	5.50E-06	477	2.33E-04	544	4.96E-04	611	9.80E-04	678	4.53E-04	745	6.47E-05
411	6.30E-06	478	2.36E-04	545	4.98E-04	612	9.88E-04	679	4.45E-04	746	6.26E-05
412	7.40E-06	479	2.39E-04	546	5.01E-04	613	9.92E-04	680	4.32E-04	747	6.03E-05
413	7.90E-06	480	2.45E-04	547	5.02E-04	614	9.92E-04	681	4.22E-04	748	5.83E-05
414	9.20E-06	481	2.51E-04	548	5.04E-04	615	9.97E-04	682	4.13E-04	749	5.63E-05
415	1.02E-05	482	2.58E-04	549	5.07E-04	616	9.97E-04	683	4.03E-04	750	5.50E-05
416	1.17E-05	483	2.66E-04	550	5.09E-04	617	9.97E-04	684	3.91E-04	751	5.34E-05
417	1.32E-05	484	2.75E-04	551	5.12E-04	618	1.00E-03	685	3.81E-04	752	5.18E-05
418	1.45E-05	485	2.84E-04	552	5.17E-04	619	9.98E-04	686	3.72E-04	753	4.98E-05
419	1.63E-05	486	2.94E-04	553	5.19E-04	620	9.97E-04	687	3.64E-04	754	4.86E-05
420	1.87E-05	487	3.03E-04	554	5.25E-04	621	9.97E-04	688	3.54E-04	755	4.71E-05
421	2.01E-05	488	3.11E-04	555	5.26E-04	622	9.95E-04	689	3.44E-04	756	4.54E-05
422	2.22E-05	489	3.23E-04	556	5.30E-04	623	9.94E-04	690	3.35E-04	757	4.41E-05
423	2.44E-05	490	3.31E-04	557	5.35E-04	624	9.94E-04	691	3.27E-04	758	4.25E-05
424	2.64E-05	491	3.40E-04	558	5.38E-04	625	9.91E-04	692	3.19E-04	759	4.10E-05
425	2.90E-05	492	3.48E-04	559	5.41E-04	626	9.86E-04	693	3.10E-04	760	3.96E-05
426	3.24E-05	493	3.55E-04	560	5.46E-04	627	9.81E-04	694	3.01E-04	761	3.88E-05
427	3.56E-05	494	3.63E-04	561	5.50E-04	628	9.81E-04	695	2.94E-04	762	3.72E-05
428	3.91E-05	495	3.70E-04	562	5.53E-04	629	9.72E-04	696	2.86E-04	763	3.62E-05
429	4.19E-05	496	3.81E-04	563	5.58E-04	630	9.67E-04	697	2.78E-04	764	3.47E-05
430	4.57E-05	497	3.88E-04	564	5.64E-04	631	9.63E-04	698	2.70E-04	765	3.41E-05
431	5.02E-05	498	3.93E-04	565	5.70E-04	632	9.57E-04	699	2.63E-04	766	3.29E-05
432	5.42E-05	499	4.01E-04	566	5.75E-04	633	9.50E-04	700	2.55E-04	767	3.21E-05
433	5.92E-05	500	4.09E-04	567	5.80E-04	634	9.46E-04	701	2.48E-04	768	3.08E-05
434	6.32E-05	501	4.16E-04	568	5.90E-04	635	9.39E-04	702	2.42E-04	769	3.00E-05
435	6.72E-05	502	4.22E-04	569	5.96E-04	636	9.29E-04	703	2.35E-04	770	2.90E-05
436	7.37E-05	503	4.28E-04	570	6.03E-04	637	9.22E-04	704	2.29E-04	771	2.77E-05
437	7.96E-05	504	4.32E-04	571	6.13E-04	638	9.07E-04	705	2.22E-04	772	2.70E-05
438	8.80E-05	505	4.35E-04	572	6.18E-04	639	9.01E-04	706	2.16E-04	773	2.59E-05
439	9.56E-05	506	4.41E-04	573	6.25E-04	640	8.90E-04	707	2.09E-04	774	2.56E-05
440	1.05E-04	507	4.44E-04	574	6.34E-04	641	8.79E-04	708	2.03E-04	775	2.50E-05
441	1.14E-04	508	4.46E-04	575	6.41E-04	642	8.68E-04	709	1.97E-04	776	2.37E-05
442	1.24E-04	509	4.49E-04	576	6.49E-04	643	8.60E-04	710	1.91E-04	777	2.33E-05
443	1.38E-04	510	4.50E-04	577	6.59E-04	644	8.51E-04	711	1.86E-04	778	2.24E-05
444	1.55E-04	511	4.52E-04	578	6.67E-04	645	8.40E-04	712	1.81E-04	779	2.24E-05
445	1.72E-04	512	4.53E-04	579	6.74E-04	646	8.28E-04	713	1.75E-04	780	2.25E-05
446	1.90E-04	513	4.55E-04	580	6.85E-04	647	8.17E-04	714	1.71E-04	N/A	N/A



## 4.0 LM-79 Measurement and Test Results

### 4.2 Goniophotometer Test

<b>Model No.</b>	V1-24B @15W2700K	<b>Sample ID</b>	250728008-S1
<b>Operate time (Min.)</b>	30	<b>Stabilization time (Min.)</b>	60
<b>Temperature (°C)</b>	24.9	<b>Humidity (%RH)</b>	42.6

<b>Test Method</b>
<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 <math>25\pm1^{\circ}\text{C}</math>, 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 <math>\pm 0.2</math> 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 <math>1.0^{\circ}</math> vertical intervals and <math>15^{\circ}</math> horizontal intervals.</p>

### Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
<b>WORST CASE</b>	277.0	60	0.058	14.9	0.924
<b>NON-WORST CASE</b>	120.0	60	0.124	14.8	0.995

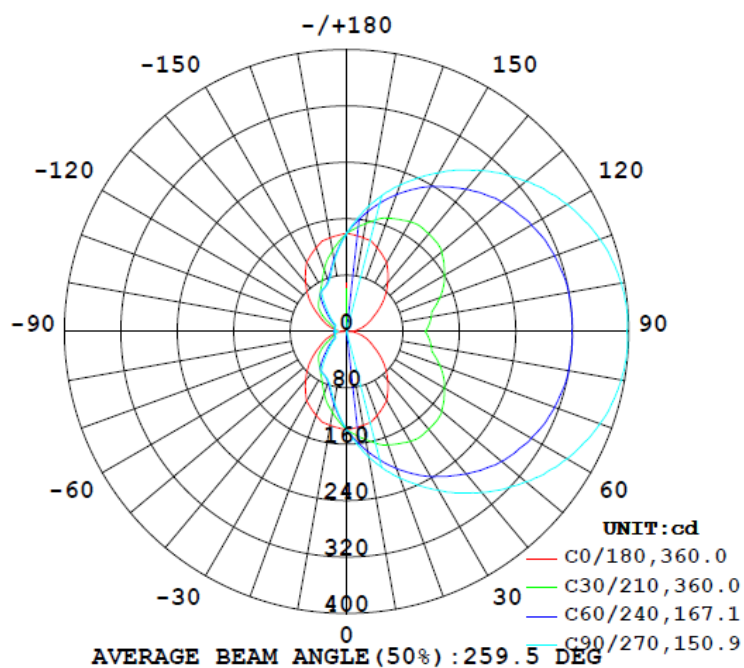
### Test Result

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°)	
1597	86.2	154.5	180.0	97.4	107.2	26.5%	B0-U4-G2

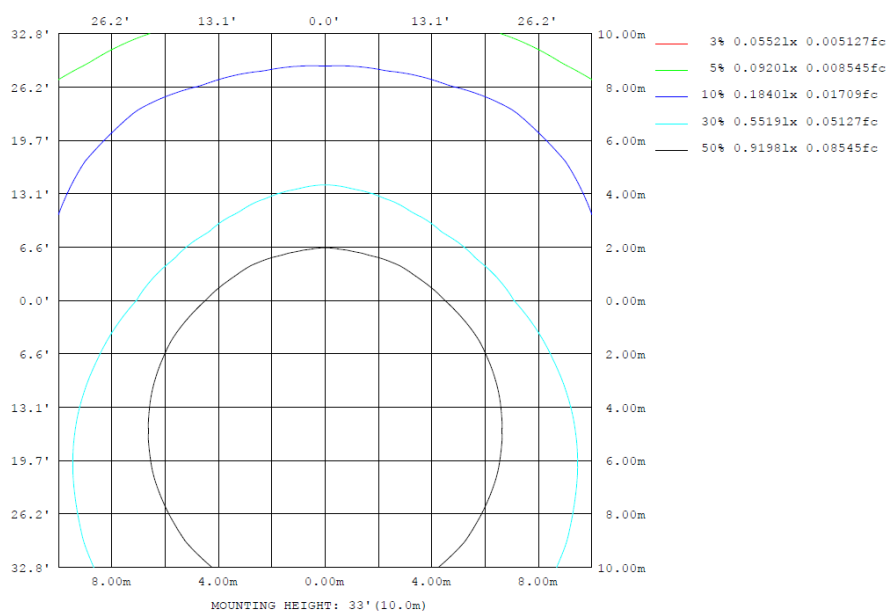
## 4.2 Goniophotometer Test

### Lighting Distribution Curve

#### LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



### Isolux Plot



## 4.2 Goniophotometer Test

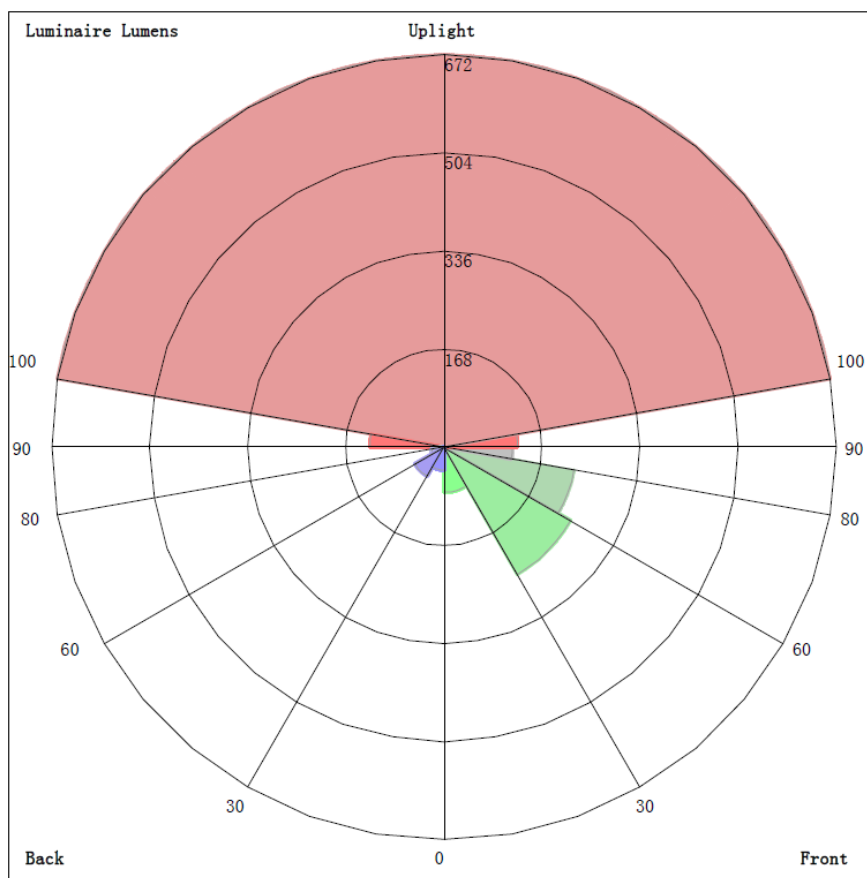
### Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	135.3	165.0	180.5	165.0	135.3	109.4	101.5	109.4	0- 10	13.17	13.17	0.83,0.83
20	126.6	191.9	221.2	191.9	126.6	83.60	74.99	83.60	10- 20	38.95	52.13	3.26,3.26
30	113.5	210.8	260.1	210.8	113.5	67.97	69.05	67.97	20- 30	63.83	116.0	7.26,7.26
40	90.82	226.7	298.0	226.7	90.82	62.67	46.18	62.67	30- 40	87.23	203.2	12.7,12.7
50	67.98	235.0	331.8	235.0	67.98	41.11	28.62	41.11	40- 50	104.6	307.8	19.3,19.3
60	45.01	238.7	361.1	238.7	45.01	25.56	17.82	25.56	50- 60	115.9	423.7	26.5,26.5
70	30.33	236.3	382.1	236.3	30.33	18.33	17.13	18.33	60- 70	122.5	546.2	34.2,34.2
80	16.30	230.1	395.5	230.1	16.30	17.83	16.99	17.83	70- 80	125.6	671.8	42.1,42.1
90	2.918	224.5	397.1	224.5	2.918	18.69	17.58	18.69	80- 90	126.6	798.4	50.50
100	16.30	230.1	395.5	230.1	16.30	17.83	16.99	17.83	90-100	126.6	925.0	57.9,57.9
110	30.33	236.3	382.1	236.3	30.33	18.33	17.13	18.33	100-110	125.6	1051	65.8,65.8
120	45.01	238.7	361.1	238.7	45.01	25.56	17.82	25.56	110-120	122.5	1173	73.5,73.5
130	67.98	235.0	331.8	235.0	67.98	41.11	28.62	41.11	120-130	115.9	1289	80.7,80.7
140	90.82	226.7	298.0	226.7	90.82	62.67	46.18	62.67	130-140	104.6	1394	87.3,87.3
150	113.5	210.8	260.1	210.8	113.5	67.97	69.05	67.97	140-150	87.23	1481	92.7,92.7
160	126.6	191.9	221.2	191.9	126.6	83.60	74.99	83.60	150-160	63.83	1545	96.7,96.7
170	135.3	165.0	180.5	165.0	135.3	109.4	101.5	109.4	160-170	38.95	1584	99.2,99.2
180	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	170-180	13.17	1597	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	13.17	0-10	13.17	0.83%
10-20	38.95	0-20	52.12	3.29%
20-30	63.83	0-30	115.95	7.32%
30-40	87.23	0-40	203.18	12.83%
40-50	104.63	0-50	307.81	19.44%
50-60	115.87	0-60	423.68	26.75%
60-70	122.53	0-70	546.21	34.49%
70-80	125.62	0-80	671.83	42.42%
80-90	126.59	0-90	798.42	50.42%
90-100	126.59	0-100	925.01	58.41%
100-110	125.62	0-110	1050.63	66.34%
110-120	122.53	0-120	1173.16	74.08%
120-130	115.87	0-130	1289.03	81.40%
130-140	104.63	0-140	1393.66	88.00%
140-150	87.23	0-150	1480.89	93.51%
150-160	63.83	0-160	1544.72	97.54%
160-170	38.95	0-170	1583.67	100.00%
170-180	13.17	0-180	1596.84	100.83%

## 4.2 Goniophotometer Test

LCS/BUG

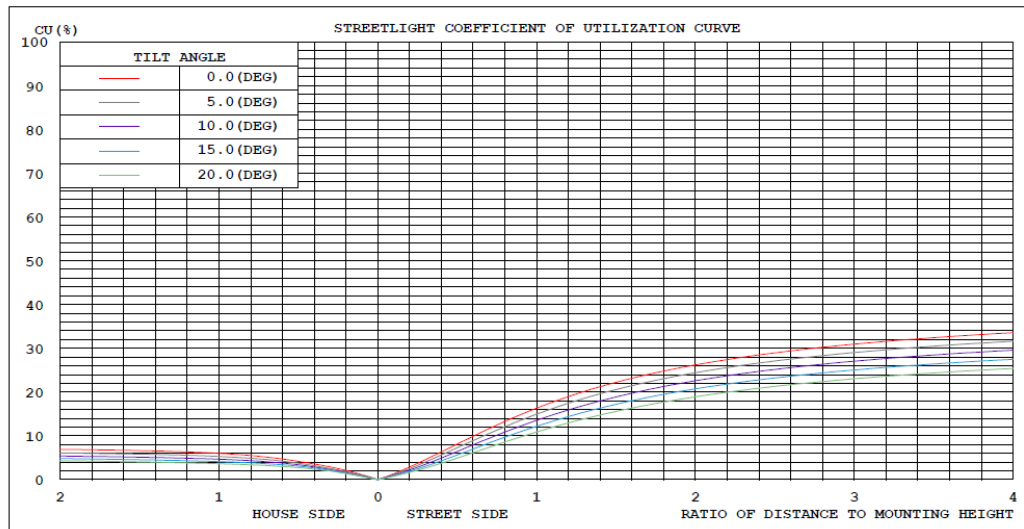


### LUMINAIRE CLASSIFICATION SYSTEM (LCS)

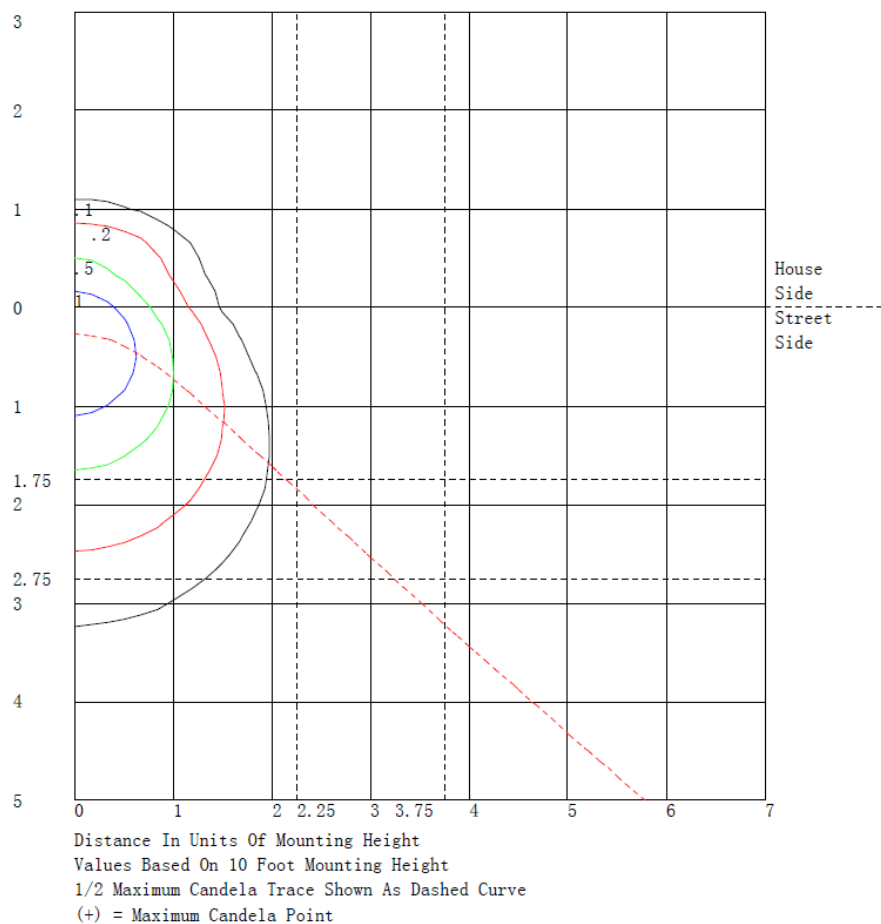
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	77.2	N.A.	4.8
FM - Front-Medium (30-60)	250.8	N.A.	15.7
FH - Front-High (60-80)	226.3	N.A.	14.2
FVH - Front-Very High (80-90)	117.7	N.A.	7.4
BL - Back-Low (0-30)	38.8	N.A.	2.4
BM - Back-Medium (30-60)	56.9	N.A.	3.6
BH - Back-High (60-80)	21.8	N.A.	1.4
BVH - Back-Very High (80-90)	8.9	N.A.	0.6
UL - Uplight-Low (90-100)	126.6	N.A.	7.9
UH - Uplight-High (100-180)	671.8	N.A.	42.1
Total	1596.8	N.A.	100.0
BUG Rating	B0-U4-G2		

## 4.2 Goniophotometer Test

### Coefficients of Utilization



### Isolines



## 4.2 Goniophotometer Test

### Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139
5	137	142	147	152	155	158	159	158	155	152	147	142	137	132	128	124	122	120	120
10	135	145	156	165	173	178	181	178	173	165	156	145	135	125	117	109	104	102	102
15	133	149	165	179	190	198	202	198	190	179	165	149	133	118	106	95.6	88.9	85.8	85.6
20	127	148	171	192	207	217	221	217	207	192	171	148	127	108	93.4	83.6	77.3	74.9	75.0
25	120	147	176	202	223	235	241	235	223	202	176	147	120	97.5	81.7	73.7	71.0	70.0	70.5
30	114	146	180	211	238	253	260	253	238	211	180	146	114	87.4	72.5	68.0	68.2	68.5	69.0
35	102	141	182	219	251	272	280	272	251	219	182	141	102	76.6	65.8	64.9	65.1	60.8	59.3
40	90.8	134	181	227	264	289	298	289	264	227	181	134	90.8	66.9	60.6	62.7	54.0	48.0	46.2
45	79.5	128	180	232	276	305	316	305	276	232	180	128	79.5	58.4	56.3	52.6	42.3	37.7	36.1
50	68.0	116	176	235	287	320	332	320	287	235	176	116	68.0	51.9	51.6	41.1	33.4	29.7	28.6
55	56.5	103	169	239	295	333	347	333	295	239	169	103	56.5	46.3	43.4	32.1	26.5	23.5	22.9
60	45.0	88.6	160	239	303	345	361	345	303	239	160	88.6	45.0	41.2	34.0	25.6	20.7	18.4	17.8
65	37.7	77.6	152	238	310	356	372	356	310	238	152	77.6	37.7	34.4	26.0	20.5	18.2	17.5	17.3
70	30.3	66.4	141	236	314	365	382	365	314	236	141	66.4	30.3	26.7	21.3	18.3	18.1	17.5	17.1
75	23.0	54.3	129	234	318	371	390	371	318	234	129	54.3	23.0	18.7	17.4	18.0	18.1	17.5	17.1
80	16.3	51.0	122	230	320	375	396	375	320	230	122	51.0	16.3	16.9	16.5	17.8	17.6	17.3	17.0
85	9.61	48.4	118	228	320	378	398	378	320	228	118	48.4	9.61	16.0	16.9	18.2	17.8	15.8	15.2
90	2.92	45.5	112	225	319	377	397	377	319	225	112	45.5	2.92	15.2	17.3	18.7	18.7	15.3	17.6
95	9.61	48.4	118	228	320	378	398	378	320	228	118	48.4	9.61	16.0	16.9	18.2	17.8	15.8	15.2
100	16.3	51.0	122	230	320	375	396	375	320	230	122	51.0	16.3	16.9	16.5	17.8	17.6	17.3	17.0
105	23.0	54.3	129	234	318	371	390	371	318	234	129	54.3	23.0	18.7	17.4	18.0	18.1	17.5	17.1
110	30.3	66.4	141	236	314	365	382	365	314	236	141	66.4	30.3	26.7	21.3	18.3	18.1	17.5	17.1
115	37.7	77.6	152	238	310	356	372	356	310	238	152	77.6	37.7	34.4	26.0	20.5	18.2	17.5	17.3
120	45.0	88.6	160	239	303	345	361	345	303	239	160	88.6	45.0	41.2	34.0	25.6	20.7	18.4	17.8
125	56.5	103	169	239	295	333	347	333	295	239	169	103	56.5	46.3	43.4	32.1	26.5	23.5	22.9
130	68.0	116	176	235	287	320	332	320	287	235	176	116	68.0	51.9	51.6	41.1	33.4	29.7	28.6
135	79.5	128	180	232	276	305	316	305	276	232	180	128	79.5	58.4	56.3	52.6	42.3	37.7	36.1
140	90.8	134	181	227	264	289	298	289	264	227	181	134	90.8	66.9	60.6	62.7	54.0	48.0	46.2
145	102	141	182	219	251	272	280	272	251	219	182	141	102	76.6	65.8	64.9	65.1	60.8	59.3
150	114	146	180	211	238	253	260	253	238	211	180	146	114	87.4	72.5	68.0	68.2	68.5	69.0
155	120	147	176	202	223	235	241	235	223	202	176	147	120	97.5	81.7	73.7	71.0	70.0	70.5
160	127	148	171	192	207	217	221	217	207	192	171	148	127	108	93.4	83.6	77.3	74.9	75.0
165	133	149	165	179	190	198	202	198	190	179	165	149	133	118	106	95.6	88.9	85.8	85.6
170	135	145	156	165	173	178	181	178	173	165	156	145	135	125	117	109	104	102	102
175	137	142	147	152	155	158	159	158	155	152	147	142	137	132	128	124	122	120	120
180	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	139	139	139	139	139														
5	120	122	124	128	132														
10	102	104	109	117	125														
15	85.8	88.9	95.6	106	118														
20	74.9	77.3	83.6	93.4	108														
25	70.0	71.0	73.7	81.7	97.5														
30	68.5	68.2	68.0	72.5	87.4														
35	60.8	65.1	64.9	65.8	76.6														
40	48.0	54.0	62.7	60.6	66.9														
45	37.7	42.3	52.6	56.3	58.4														
50	29.7	33.4	41.1	51.6	51.9														
55	23.5	26.5	32.1	43.4	46.3														
60	18.4	20.7	25.6	34.0	41.2														
65	17.5	18.2	20.5	26.0	34.4														
70	17.5	18.1	18.3	21.3	26.7														
75	17.5	18.1	18.0	17.4	18.7														
80	17.3	17.6	17.8	16.5	16.9														
85	15.8	17.8	18.2	16.9	16.0														
90	15.3	18.7	18.7	17.3	15.2														
95	15.8	17.8	18.2	16.9	16.0														
100	17.3	17.6	17.8	16.5	16.9														
105	17.5	18.1	18.0	17.4	18.7														
110	17.5	18.1	18.3	21.3	26.7														
115	17.5	18.2	20.5	26.0	34.4														
120	18.4	20.7	25.6	34.0	41.2														
125	23.5	26.5	32.1	43.4	46.3														
130	29.7	33.4	41.1	51.6	51.9														
135	37.7	42.3	52.6	56.3	58.4														
140	48.0	54.0	62.7	60.6	66.9														
145	60.8	65.1	64.9	65.8	76.6														
150	68.5	68.2	68.0	72.5	87.4														
155	70.0	71.0	73.7	81.7	97.5														
160	74.9	77.3	83.6	93.4	108														
165	85.8	88.9	95.6	106	118														
170	102	104	109	117	125														
175	120	122	124	128	132														
180	139	139	139	139	139														

## 4.0 LM-79 Measurement and Test Results

### 4.3 THD and PF Test

<b>Model No.</b>	V1-24B @15W2700K	<b>Sample ID</b>	250728008-S1
<b>Temperature (°C)</b>	25.4	<b>Humidity (%RH)</b>	41.0

<b>Test Method</b>
<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 <math>25 \pm 1^{\circ}\text{C}</math>. 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	0.124	14.8	0.995	5.56
277.0	60	0.058	14.9	0.924	20.47



## 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\*\*\*\*\*