

## Photometric Test Report

### Relevant Standards

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

Prepared For

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Revised Date: N/A

## 1.0 Test Summary

DLC Technical Requirements V5.1

Direct Linear Ambient Luminaires					
Requirement Category		Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	375 lm/ft		441
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	137.6
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		6.4
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	7.61
				277V	18.59
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.981
				277V	0.841
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3445
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		84.0
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		12
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		85
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		94
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-12%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	≥40%		55.7%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	28.3
			N/A	<22	
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		0.027
(Goniophotometer – Section 4.2)			Non-Worst Case		0.049
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		6.4
(Goniophotometer – Section 4.2)			Non-Worst Case		5.8

## 2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-01-02	STRP2 @6W3500K	-	241225003-S1
2	Goniophotometer Test	2025-01-02	STRP2 @6W3500K	-	241225003-S1
3	THD and PF Test	2025-01-02	STRP2 @6W3500K	-	241225003-S1

### Remark (If any):

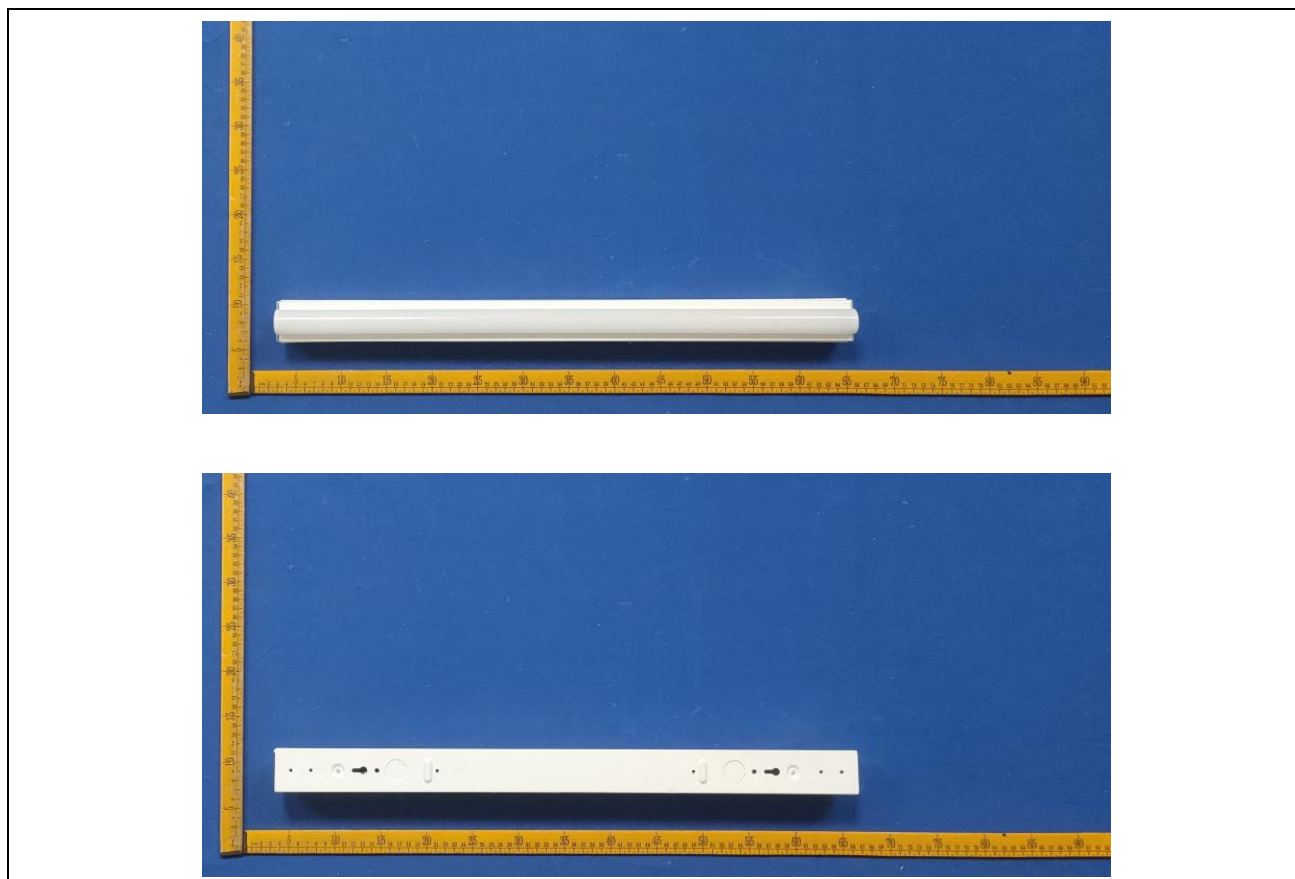
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### 3.0 Product Description

Luminaire Description: Model No. STRP2 @6W3500K, color tunable from 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>	STRP2 @6W3500K	<b>Sample ID</b>	241225003-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

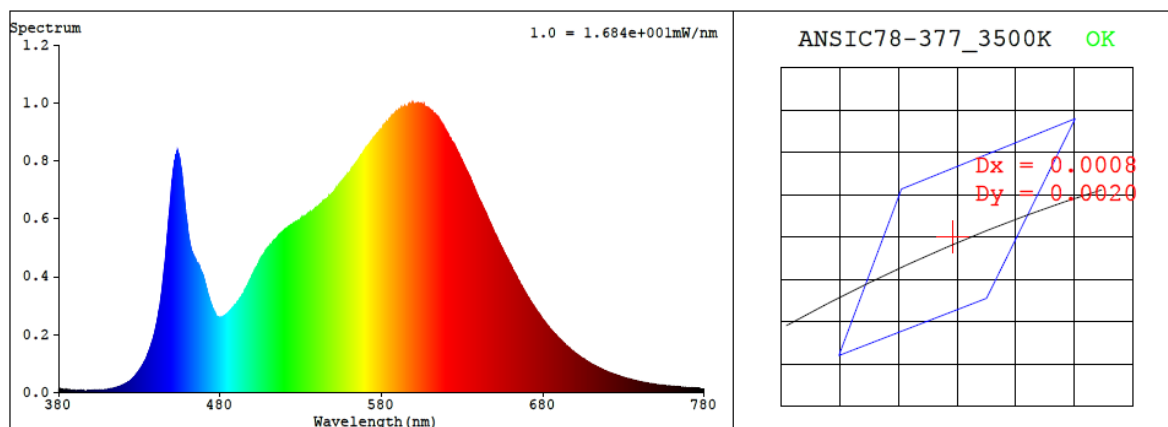
<b>Test Method</b>
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were 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	0.049	5.8	0.981
277.0	60	0.027	6.4	0.841

<b>CCT (K)</b>	<b>CRI</b>	<b>R9</b>	<b>Duv</b>	<b>Rf</b>	<b>Rg</b>	<b>IES Rcs,h1</b>
3445	84.0	12	0.0007	85	94	-12%

#### 4.1 Integrating Sphere Test



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.4092$   $y = 0.3942$  /  $u' = 0.2368$   $v' = 0.5133$  ( $duv=6.92e-04$ )

CCT= 3445K      Prcp WL:   Ld=580.8nm      Purity=41.1%

Peak WL: Lp=599nm FWHM: =144.8nm Ratio:R=20.6% G=76.1% B=3.3%

Render Index: Ra = 84.0 AvgR = 78.2 TM30:Rf=85 Rg=95

EEI: 0.09281 A++ Highest

R1 =83    R2 =92    R3 =96    R4 =82    R5 =83    R6 =89    R7 =85

R8 =63    R9 =12    R10=81    R11=81    R12=67    R13=85    R14=99    R15=76

## 4.1 Integrating Sphere Test

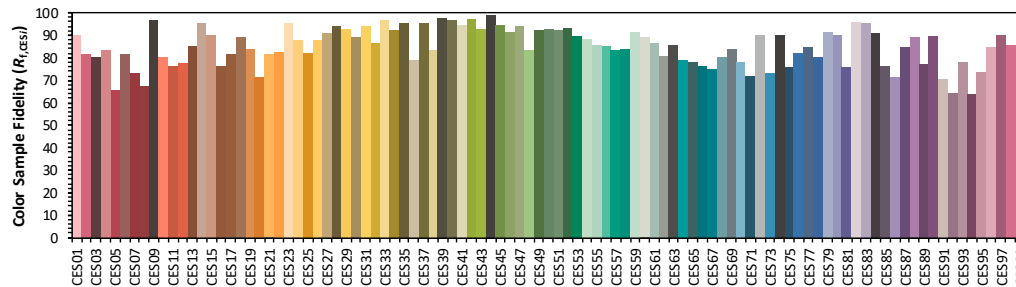
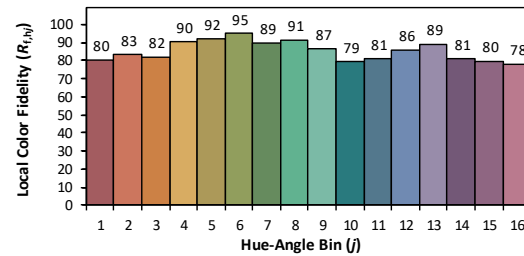
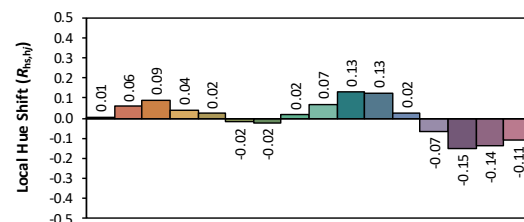
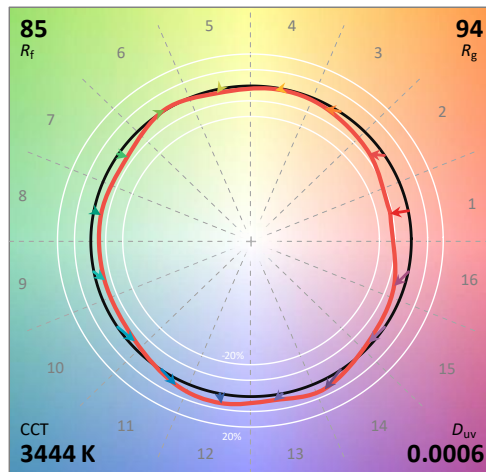
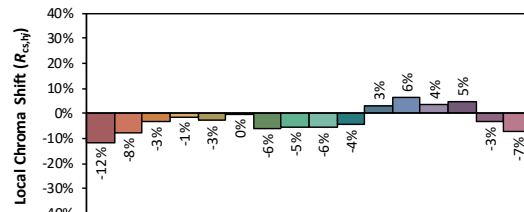
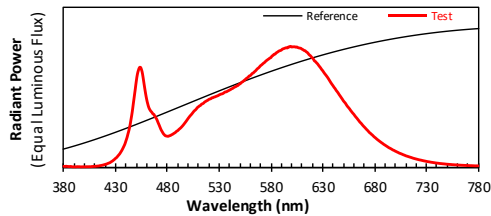
### ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/1/4

Model: STRP2 @6W3500K



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

$x$  0.4092  
 $y$  0.3941  
 $u'$  0.2368  
 $v'$  0.5132

CIE 13.3-1995  
(CRI)  
 $R_a$  84  
 $R_g$  11

## 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	1.09E-05	447	5.22E-04	514	5.27E-04	581	9.20E-04	648	5.76E-04	715	8.44E-05
381	9.10E-06	448	5.86E-04	515	5.32E-04	582	9.25E-04	649	5.64E-04	716	8.17E-05
382	1.14E-05	449	6.50E-04	516	5.41E-04	583	9.34E-04	650	5.51E-04	717	7.85E-05
383	9.80E-06	450	7.16E-04	517	5.46E-04	584	9.35E-04	651	5.40E-04	718	7.59E-05
384	9.40E-06	451	7.69E-04	518	5.51E-04	585	9.45E-04	652	5.30E-04	719	7.37E-05
385	7.80E-06	452	8.02E-04	519	5.55E-04	586	9.51E-04	653	5.16E-04	720	7.13E-05
386	9.20E-06	453	8.25E-04	520	5.62E-04	587	9.57E-04	654	5.04E-04	721	6.91E-05
387	8.70E-06	454	8.27E-04	521	5.66E-04	588	9.62E-04	655	4.94E-04	722	6.68E-05
388	6.80E-06	455	8.07E-04	522	5.68E-04	589	9.65E-04	656	4.84E-04	723	6.46E-05
389	6.10E-06	456	7.71E-04	523	5.75E-04	590	9.69E-04	657	4.71E-04	724	6.27E-05
390	6.80E-06	457	7.16E-04	524	5.76E-04	591	9.76E-04	658	4.60E-04	725	6.12E-05
391	5.90E-06	458	6.60E-04	525	5.81E-04	592	9.80E-04	659	4.50E-04	726	5.90E-05
392	6.60E-06	459	6.07E-04	526	5.83E-04	593	9.83E-04	660	4.40E-04	727	5.70E-05
393	7.50E-06	460	5.62E-04	527	5.87E-04	594	9.86E-04	661	4.28E-04	728	5.52E-05
394	7.00E-06	461	5.26E-04	528	5.90E-04	595	9.88E-04	662	4.17E-04	729	5.34E-05
395	7.30E-06	462	4.96E-04	529	5.94E-04	596	9.87E-04	663	4.08E-04	730	5.16E-05
396	6.10E-06	463	4.78E-04	530	5.99E-04	597	9.96E-04	664	3.97E-04	731	4.98E-05
397	6.10E-06	464	4.65E-04	531	6.03E-04	598	9.95E-04	665	3.86E-04	732	4.82E-05
398	6.40E-06	465	4.56E-04	532	6.07E-04	599	1.00E-03	666	3.74E-04	733	4.71E-05
399	6.30E-06	466	4.43E-04	533	6.09E-04	600	9.94E-04	667	3.66E-04	734	4.53E-05
400	6.90E-06	467	4.38E-04	534	6.13E-04	601	9.96E-04	668	3.56E-04	735	4.38E-05
401	6.30E-06	468	4.21E-04	535	6.19E-04	602	9.96E-04	669	3.46E-04	736	4.26E-05
402	7.40E-06	469	4.09E-04	536	6.24E-04	603	9.96E-04	670	3.36E-04	737	4.11E-05
403	6.90E-06	470	3.92E-04	537	6.25E-04	604	9.93E-04	671	3.28E-04	738	4.00E-05
404	7.20E-06	471	3.71E-04	538	6.30E-04	605	9.95E-04	672	3.18E-04	739	3.84E-05
405	7.50E-06	472	3.51E-04	539	6.34E-04	606	9.90E-04	673	3.09E-04	740	3.73E-05
406	7.10E-06	473	3.30E-04	540	6.39E-04	607	9.87E-04	674	3.01E-04	741	3.64E-05
407	8.80E-06	474	3.10E-04	541	6.43E-04	608	9.85E-04	675	2.90E-04	742	3.53E-05
408	8.90E-06	475	2.96E-04	542	6.50E-04	609	9.83E-04	676	2.84E-04	743	3.40E-05
409	1.02E-05	476	2.81E-04	543	6.53E-04	610	9.77E-04	677	2.75E-04	744	3.31E-05
410	9.90E-06	477	2.71E-04	544	6.59E-04	611	9.73E-04	678	2.68E-04	745	3.24E-05
411	1.14E-05	478	2.63E-04	545	6.64E-04	612	9.66E-04	679	2.59E-04	746	3.12E-05
412	1.19E-05	479	2.60E-04	546	6.67E-04	613	9.64E-04	680	2.52E-04	747	3.07E-05
413	1.31E-05	480	2.59E-04	547	6.74E-04	614	9.56E-04	681	2.45E-04	748	2.97E-05
414	1.38E-05	481	2.59E-04	548	6.77E-04	615	9.50E-04	682	2.37E-04	749	2.87E-05
415	1.64E-05	482	2.63E-04	549	6.85E-04	616	9.41E-04	683	2.30E-04	750	2.77E-05
416	1.72E-05	483	2.65E-04	550	6.90E-04	617	9.30E-04	684	2.24E-04	751	2.73E-05
417	1.95E-05	484	2.71E-04	551	6.97E-04	618	9.24E-04	685	2.17E-04	752	2.64E-05
418	2.13E-05	485	2.74E-04	552	7.05E-04	619	9.14E-04	686	2.11E-04	753	2.58E-05
419	2.40E-05	486	2.81E-04	553	7.10E-04	620	9.04E-04	687	2.04E-04	754	2.53E-05
420	2.63E-05	487	2.86E-04	554	7.18E-04	621	8.96E-04	688	1.98E-04	755	2.43E-05
421	2.89E-05	488	2.92E-04	555	7.24E-04	622	8.80E-04	689	1.92E-04	756	2.38E-05
422	3.20E-05	489	3.00E-04	556	7.33E-04	623	8.75E-04	690	1.87E-04	757	2.32E-05
423	3.60E-05	490	3.05E-04	557	7.39E-04	624	8.64E-04	691	1.81E-04	758	2.26E-05
424	3.88E-05	491	3.14E-04	558	7.45E-04	625	8.56E-04	692	1.75E-04	759	2.23E-05
425	4.35E-05	492	3.21E-04	559	7.55E-04	626	8.44E-04	693	1.70E-04	760	2.14E-05
426	4.93E-05	493	3.29E-04	560	7.58E-04	627	8.33E-04	694	1.64E-04	761	2.07E-05
427	5.45E-05	494	3.38E-04	561	7.67E-04	628	8.22E-04	695	1.60E-04	762	2.03E-05
428	6.17E-05	495	3.47E-04	562	7.76E-04	629	8.09E-04	696	1.55E-04	763	2.01E-05
429	6.86E-05	496	3.58E-04	563	7.81E-04	630	7.99E-04	697	1.50E-04	764	1.94E-05
430	7.69E-05	497	3.69E-04	564	7.90E-04	631	7.86E-04	698	1.45E-04	765	1.91E-05
431	8.35E-05	498	3.81E-04	565	7.97E-04	632	7.74E-04	699	1.41E-04	766	1.86E-05
432	9.40E-05	499	3.93E-04	566	8.06E-04	633	7.64E-04	700	1.36E-04	767	1.82E-05
433	1.04E-04	500	4.05E-04	567	8.16E-04	634	7.52E-04	701	1.32E-04	768	1.79E-05
434	1.14E-04	501	4.16E-04	568	8.22E-04	635	7.40E-04	702	1.28E-04	769	1.74E-05
435	1.28E-04	502	4.27E-04	569	8.31E-04	636	7.27E-04	703	1.24E-04	770	1.71E-05
436	1.42E-04	503	4.36E-04	570	8.41E-04	637	7.13E-04	704	1.19E-04	771	1.66E-05
437	1.59E-04	504	4.47E-04	571	8.47E-04	638	6.99E-04	705	1.16E-04	772	1.63E-05
438	1.76E-04	505	4.58E-04	572	8.55E-04	639	6.86E-04	706	1.13E-04	773	1.59E-05
439	1.96E-04	506	4.68E-04	573	8.62E-04	640	6.75E-04	707	1.09E-04	774	1.58E-05
440	2.22E-04	507	4.75E-04	574	8.68E-04	641	6.62E-04	708	1.05E-04	775	1.52E-05
441	2.48E-04	508	4.84E-04	575	8.78E-04	642	6.51E-04	709	1.02E-04	776	1.51E-05
442	2.81E-04	509	4.95E-04	576	8.84E-04	643	6.37E-04	710	9.83E-05	777	1.43E-05
443	3.13E-04	510	5.02E-04	577	8.91E-04	644	6.26E-04	711	9.53E-05	778	1.44E-05
444	3.54E-04	511	5.09E-04	578	8.96E-04	645	6.15E-04	712	9.27E-05	779	1.45E-05
445	4.05E-04	512	5.13E-04	579	9.04E-04	646	6.01E-04	713	8.99E-05	780	1.45E-05
446	4.57E-04	513	5.23E-04	580	9.07E-04	647	5.89E-04	714	8.71E-05	N/A	N/A



## 4.0 LM-79 Measurement and Test Results

### 4.2 Goniophotometer Test

<b>Model No.</b>	STRP2 @6W3500K	<b>Sample ID</b>	241225003-S1
<b>Operate time (Min.)</b>	30	<b>Stabilization time (Min.)</b>	60
<b>Temperature (°C)</b>	24.7	<b>Humidity (%RH)</b>	41.3

<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 \pm 1^\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	0.027	6.4	0.841
<b>NON-WORST CASE</b>	120.0	60	0.049	5.8	0.981

### Test Result

Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
881	441	160.7	160.7	108.5	170.1	137.6

Zonal Lumen Requirement (0°-60°)	UGR	
	Crosswise	Endwise
55.7%	20.2	28.3



## 4.2 Goniophotometer Test

### Zonal Lumen Summary

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	197.0	197.7	199.0	197.7	197.0	197.7	199.0	197.7	0- 10	19.03	19.03	2.16,2.16
20	184.9	189.6	194.0	189.6	184.9	189.6	194.0	189.6	10- 20	54.92	73.95	8.39,8.39
30	166.0	175.4	184.8	175.4	166.0	175.4	184.8	175.4	20- 30	84.47	158.4	18.18
40	141.8	157.9	173.9	157.9	141.8	157.9	173.9	157.9	30- 40	104.6	263.0	29.9,29.9
50	113.1	138.2	160.3	138.2	113.1	138.2	160.3	138.2	40- 50	114.3	377.3	42.8,42.8
60	82.23	118.0	144.4	118.0	82.23	118.0	144.4	118.0	50- 60	113.5	490.8	55.7,55.7
70	49.69	97.40	127.3	97.40	49.69	97.40	127.3	97.40	60- 70	103.7	594.5	67.5,67.5
80	19.68	78.02	109.4	78.02	19.68	78.02	109.4	78.02	70- 80	87.52	682.0	77.4,77.4
90	1.990	60.96	91.92	60.96	1.990	60.96	91.92	60.96	80- 90	69.21	751.2	85.3,85.3
100	1.405	45.92	74.41	45.92	1.405	45.92	74.41	45.92	90-100	52.64	803.9	91.3,91.3
110	1.405	30.87	55.49	30.87	1.405	30.87	55.49	30.87	100-110	37.13	841.0	95.5,95.5
120	1.405	17.01	37.16	17.01	1.405	17.01	37.16	17.01	110-120	22.89	863.9	98.1,98.1
130	1.405	5.075	20.47	5.075	1.405	5.075	20.47	5.075	120-130	11.51	875.4	99.4,99.4
140	1.405	1.103	5.659	1.103	1.405	1.103	5.659	1.103	130-140	3.955	879.3	99.8,99.8
150	1.405	1.010	0.5552	1.010	1.405	1.010	0.5552	1.010	140-150	0.8168	880.2	99.9,99.9
160	1.405	0.9178	0.5543	0.9178	1.405	0.9178	0.5543	0.9178	150-160	0.4326	880.6	100,100
170	1.405	0.8260	0.3702	0.8260	1.405	0.8260	0.3702	0.8260	160-170	0.2430	880.8	100,100
180	1.499	0.8260	0.3702	0.8260	1.499	0.8260	0.3702	0.8260	170-180	0.0836	880.9	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	19.03	0-10	19.03	2.16%
10-20	54.92	0-20	73.95	8.40%
20-30	84.47	0-30	158.42	17.98%
30-40	104.62	0-40	263.04	29.86%
40-50	114.28	0-50	377.32	42.84%
50-60	113.52	0-60	490.84	55.72%
60-70	103.66	0-70	594.50	67.49%
70-80	87.52	0-80	682.02	77.43%
80-90	69.21	0-90	751.23	85.28%
90-100	52.64	0-100	803.87	91.26%
100-110	37.13	0-110	841.00	95.48%
110-120	22.89	0-120	863.89	98.07%
120-130	11.51	0-130	875.40	99.38%
130-140	3.96	0-140	879.36	99.83%
140-150	0.82	0-150	880.18	99.92%
150-160	0.43	0-160	880.61	99.97%
160-170	0.24	0-170	880.85	100.00%
170-180	0.08	0-180	880.93	100.01%

## 4.2 Goniophotometer Test

UGR – Uncorrected Table:

**UGR TABLE - UNCORRECTED**

Reflectances											
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30	
Walls	50	30	50	30	30	50	30	50	30	30	
Floor Cavity	20	20	20	20	20	20	20	20	20	20	
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	16.5	17.9	17.1	18.5	19.2	20.6	22.0	21.2	22.6	23.3
	3H	17.9	19.2	18.4	19.8	20.5	23.6	24.9	24.2	25.5	26.2
	4H	18.3	19.5	18.9	20.2	20.9	25.2	26.4	25.8	27.0	27.7
	6H	18.5	19.7	19.2	20.3	21.1	26.8	28.0	27.4	28.6	29.3
	8H	18.6	19.7	19.2	20.4	21.1	27.7	28.8	28.3	29.4	30.2
	12H	18.6	19.7	19.3	20.3	21.1	28.6	29.7	29.3	30.3	31.1
4H	2H	17.8	19.1	18.4	19.7	20.4	20.9	22.2	21.5	22.8	23.5
	3H	19.5	20.6	20.1	21.2	21.9	24.2	25.2	24.8	25.9	26.6
	4H	20.1	21.1	20.7	21.7	22.5	25.9	26.9	26.5	27.5	28.3
	6H	20.5	21.4	21.1	22.0	22.8	27.7	28.6	28.4	29.3	30.0
	8H	20.6	21.4	21.2	22.1	22.9	28.7	29.5	29.3	30.2	31.0
	12H	20.6	21.4	21.3	22.1	22.9	29.8	30.5	30.4	31.2	32.0
8H	4H	21.3	22.1	21.9	22.8	23.6	26.0	26.9	26.7	27.5	28.3
	6H	21.9	22.6	22.6	23.4	24.1	28.0	28.7	28.7	29.5	30.2
	8H	22.2	22.8	22.9	23.5	24.3	29.1	29.8	29.8	30.5	31.3
	12H	22.3	22.9	23.0	23.6	24.4	30.4	31.0	31.1	31.7	32.5
12H	4H	21.6	22.4	22.3	23.1	23.9	26.0	26.8	26.7	27.5	28.3
	6H	22.5	23.1	23.2	23.8	24.7	28.1	28.7	28.8	29.4	30.2
	8H	22.8	23.4	23.5	24.1	25.0	29.2	29.8	29.9	30.5	31.4

Maximum UGR = 32.5

UGR – Corrected Table:

**UGR TABLE - CORRECTED**

Reflectances											
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30	
Walls	50	30	50	30	30	50	30	50	30	30	
Floor Cavity	20	20	20	20	20	20	20	20	20	20	
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	16.1	17.5	16.7	18.1	18.8	20.2	21.6	20.8	22.2	22.9
	3H	17.5	18.8	18.0	19.4	20.1	23.2	24.5	23.8	25.1	25.8
	4H	17.9	19.1	18.5	19.8	20.5	24.8	26.0	25.4	26.6	27.3
	6H	18.1	19.3	18.8	19.9	20.7	26.4	27.6	27.0	28.2	28.9
	8H	18.2	19.3	18.8	20.0	20.7	27.3	28.4	27.9	29.0	29.8
	12H	18.2	19.3	18.9	19.9	20.7	28.2	29.3	28.9	29.9	30.7
4H	2H	17.4	18.7	18.0	19.3	20.0	20.5	21.8	21.1	22.4	23.1
	3H	19.1	20.2	19.7	20.8	21.5	23.8	24.8	24.4	25.5	26.2
	4H	19.7	20.7	20.3	21.3	22.1	25.5	26.5	26.1	27.1	27.9
	6H	20.1	21.0	20.7	21.6	22.4	27.3	28.2	28.0	28.9	29.6
	8H	20.2	21.0	20.8	21.7	22.5	28.3	29.1	28.9	29.8	30.6
	12H	20.2	21.0	20.9	21.7	22.5	29.4	30.1	30.0	30.8	31.6
8H	4H	20.9	21.7	21.5	22.4	23.2	25.6	26.5	26.3	27.1	27.9
	6H	21.5	22.2	22.2	23.0	23.7	27.6	28.3	28.3	29.1	29.8
	8H	21.8	22.4	22.5	23.1	23.9	28.7	29.4	29.4	30.1	30.9
	12H	21.9	22.5	22.6	23.2	24.0	30.0	30.6	30.7	31.3	32.1
12H	4H	21.2	22.0	21.9	22.7	23.5	25.6	26.4	26.3	27.1	27.9
	6H	22.1	22.7	22.8	23.4	24.3	27.7	28.3	28.4	29.0	29.8
	8H	22.4	23.0	23.1	23.7	24.6	28.8	29.4	29.5	30.1	31.0

Maximum UGR = 32.1

## 4.2 Goniophotometer Test

### Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
γ (DEG)	201	201	200	201	201	201	201	201	201	201	200	201	201	201	200	201	201	201	201
5	200	200	200	200	200	200	201	200	200	200	200	200	200	200	200	200	200	200	201
10	197	197	198	198	199	199	199	199	199	198	198	197	197	197	198	198	199	199	199
15	192	192	193	194	196	197	197	197	196	194	193	192	192	192	193	194	196	197	197
20	185	185	187	190	192	193	194	193	192	190	187	185	185	185	187	190	192	193	194
25	176	177	180	183	187	189	190	189	187	183	180	177	176	177	180	183	187	189	190
30	166	167	171	175	181	184	185	184	181	175	171	167	166	167	171	175	181	184	185
35	155	156	161	167	174	178	180	178	174	167	161	156	155	156	161	167	174	178	180
40	142	144	150	158	166	172	174	172	166	158	150	144	142	144	150	158	166	172	174
45	128	130	138	148	158	165	167	165	158	148	138	130	128	130	138	148	158	165	167
50	113	117	126	138	150	157	160	157	150	138	126	117	113	117	126	138	150	157	160
55	98.0	103	114	128	141	149	152	149	141	128	114	103	98.0	103	114	128	141	149	152
60	82.2	88.1	102	118	132	141	144	141	132	118	102	88.1	82.2	88.1	102	118	132	141	144
65	65.9	73.3	90.2	107	123	133	136	133	123	107	90.2	73.3	65.9	73.3	90.2	107	123	133	136
70	49.7	59.2	78.3	97.4	113	124	127	124	113	97.4	78.3	59.2	49.7	59.2	78.3	97.4	113	124	127
75	34.0	45.9	67.4	87.7	104	115	119	115	104	87.7	67.4	45.9	34.0	45.9	67.4	87.7	104	115	119
80	19.7	34.2	57.1	78.0	95.2	106	109	106	95.2	78.0	57.1	34.2	19.7	34.2	57.1	78.0	95.2	106	109
85	8.08	24.6	48.1	69.5	86.3	96.8	100	96.8	86.3	69.5	48.1	24.6	8.08	24.6	48.1	69.5	86.3	96.8	100
90	1.99	17.2	39.9	61.0	77.2	88.0	91.9	88.0	77.2	61.0	39.9	17.2	1.99	17.2	39.9	61.0	77.2	88.0	91.9
95	1.41	12.1	33.3	53.3	68.9	79.3	83.3	79.3	68.9	53.3	33.3	12.1	1.41	12.1	33.3	53.3	68.9	79.3	83.3
100	1.40	7.72	26.9	45.9	60.9	70.2	74.4	70.2	60.9	45.9	26.9	7.72	1.40	7.72	26.9	45.9	60.9	70.2	74.4
105	1.40	4.10	20.7	38.1	52.3	61.4	65.1	61.4	52.3	38.1	20.7	4.10	1.40	4.10	20.7	38.1	52.3	61.4	65.1
110	1.40	1.77	15.0	30.9	43.8	52.4	55.5	52.4	43.8	30.9	15.0	1.77	1.40	1.77	15.0	30.9	43.8	52.4	55.5
115	1.40	1.58	9.69	23.6	35.7	43.2	46.1	43.2	35.7	23.6	9.69	1.58	1.40	1.58	9.69	23.6	35.7	43.2	46.1
120	1.40	1.58	4.90	17.0	27.7	34.7	37.2	34.7	27.7	17.0	4.90	1.58	1.40	1.58	4.90	17.0	27.7	34.7	37.2
125	1.40	1.48	1.76	10.7	20.2	26.4	28.7	26.4	20.2	10.7	1.76	1.48	1.40	1.48	1.76	10.7	20.2	26.4	28.7
130	1.40	1.48	1.38	5.08	13.1	18.6	20.5	18.6	13.1	5.08	1.38	1.48	1.40	1.48	1.38	5.08	13.1	18.6	20.5
135	1.40	1.48	1.38	1.47	6.48	11.2	12.8	11.2	6.48	1.47	1.38	1.48	1.40	1.48	1.38	1.47	6.48	11.2	12.8
140	1.40	1.48	1.38	1.10	1.48	4.43	5.66	4.43	1.48	1.10	1.38	1.48	1.40	1.48	1.38	1.10	1.48	4.43	5.66
145	1.40	1.48	1.11	1.10	0.92	0.92	0.94	0.92	0.92	1.10	1.11	1.48	1.40	1.48	1.11	1.10	0.92	0.92	0.94
150	1.40	1.39	1.01	1.01	0.74	0.74	0.56	0.74	0.74	1.01	1.01	1.39	1.40	1.39	1.01	1.01	0.74	0.74	0.56
155	1.40	1.30	0.92	0.92	0.74	0.74	0.46	0.74	0.74	0.92	0.92	1.30	1.40	1.30	0.92	0.92	0.74	0.74	0.46
160	1.40	1.21	0.74	0.92	0.74	0.74	0.55	0.74	0.74	0.92	0.74	1.21	1.40	1.21	0.74	0.92	0.74	0.74	0.55
165	1.40	1.21	0.74	0.83	0.74	0.74	0.37	0.74	0.74	0.83	0.74	1.21	1.40	1.21	0.74	0.83	0.74	0.74	0.37
170	1.40	1.21	0.83	0.83	0.74	0.74	0.37	0.74	0.74	0.83	0.83	1.21	1.40	1.21	0.83	0.83	0.74	0.74	0.37
175	1.50	1.21	0.83	0.83	0.74	0.74	0.37	0.74	0.74	0.83	0.83	1.21	1.50	1.21	0.83	0.83	0.74	0.74	0.37
180	1.50	1.21	0.83	0.83	0.74	0.74	0.37	0.74	0.74	0.83	0.83	1.21	1.50	1.21	0.83	0.83	0.74	0.74	0.37

Table--2

UNIT: cd

C (DEG)	285	300	315	330	345														
γ (DEG)	201	201	201	200	201														
5	200	200	200	200	200														
10	199	199	198	198	197														
15	197	196	194	193	192														
20	193	192	190	187	185														
25	189	187	183	180	177														
30	184	181	175	171	167														
35	178	174	167	161	156														
40	172	166	158	150	144														
45	165	158	148	138	130														
50	157	150	138	126	117														
55	149	141	128	114	103														
60	141	132	118	102	88.1														
65	133	123	107	90.2	73.3														
70	124	113	97.4	78.3	59.2														
75	115	104	87.7	67.4	45.9														
80	106	95.2	78.0	57.1	34.2														
85	96.8	86.3	69.5	48.1	24.6														
90	88.0	77.2	61.0	39.9	17.2														
95	79.3	68.9	53.3	33.3	12.1														
100	70.2	60.9	45.9	26.9	7.72														
105	61.4	52.3	38.1	20.7	4.10														
110	52.4	43.8	30.9	15.0	1.77														
115	43.2	35.7	23.6	9.69	1.58														
120	34.7	27.7	17.0	4.90	1.58														
125	26.4	20.2	10.7	1.76	1.48														
130	18.6	13.1	5.08	1.38	1.48														
135	11.2	6.48	1.47	1.38	1.48														
140	4.43	1.48	1.10	1.38	1.48														
145	0.92	0.92	1.10	1.11	1.48														
150	0.74	0.74	1.01	1.01	1.39														
155	0.74	0.74	0.92	0.92	1.30														
160	0.74	0.74	0.92	0.74	1.21														
165	0.74	0.74	0.83	0.74	1.21														
170	0.74	0.74	0.83	0.83	1.21														
175	0.74	0.74	0.83	0.83	1.21														
180	0.74	0.74	0.83	0.83	1.21														

## 4.0 LM-79 Measurement and Test Results

### 4.3 THD and PF Test

<b>Model No.</b>	STRP2 @6W3500K	<b>Sample ID</b>	241225003-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	0.049	5.8	0.981	7.61
277.0	60	0.027	6.4	0.841	18.59

## 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	2024-08-06	2025-08-05
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

\*\*\*\*\*End of Report\*\*\*\*\*