

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: 2025-01-04

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		1143
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	153.4
			115	130	
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	20.00%	120V	6.40
				277V	13.55
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.993
				277V	0.911
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4902
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		83.5
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		13
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		84
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%		-12%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	≥40%		62.7%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	28.2
			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		0.059
(Goniophotometer – Section 4.2)			Non-Worst Case		0.123
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		14.9
(Goniophotometer – Section 4.2)			Non-Worst Case		14.7

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-01-02	STRP2H @15W5000K	-	241225004-S1
2	Goniophotometer Test	2025-01-02	STRP2H @15W5000K	-	241225004-S1
3	THD and PF Test	2025-01-02	STRP2H @15W5000K	-	241225004-S1

Remark (If any):

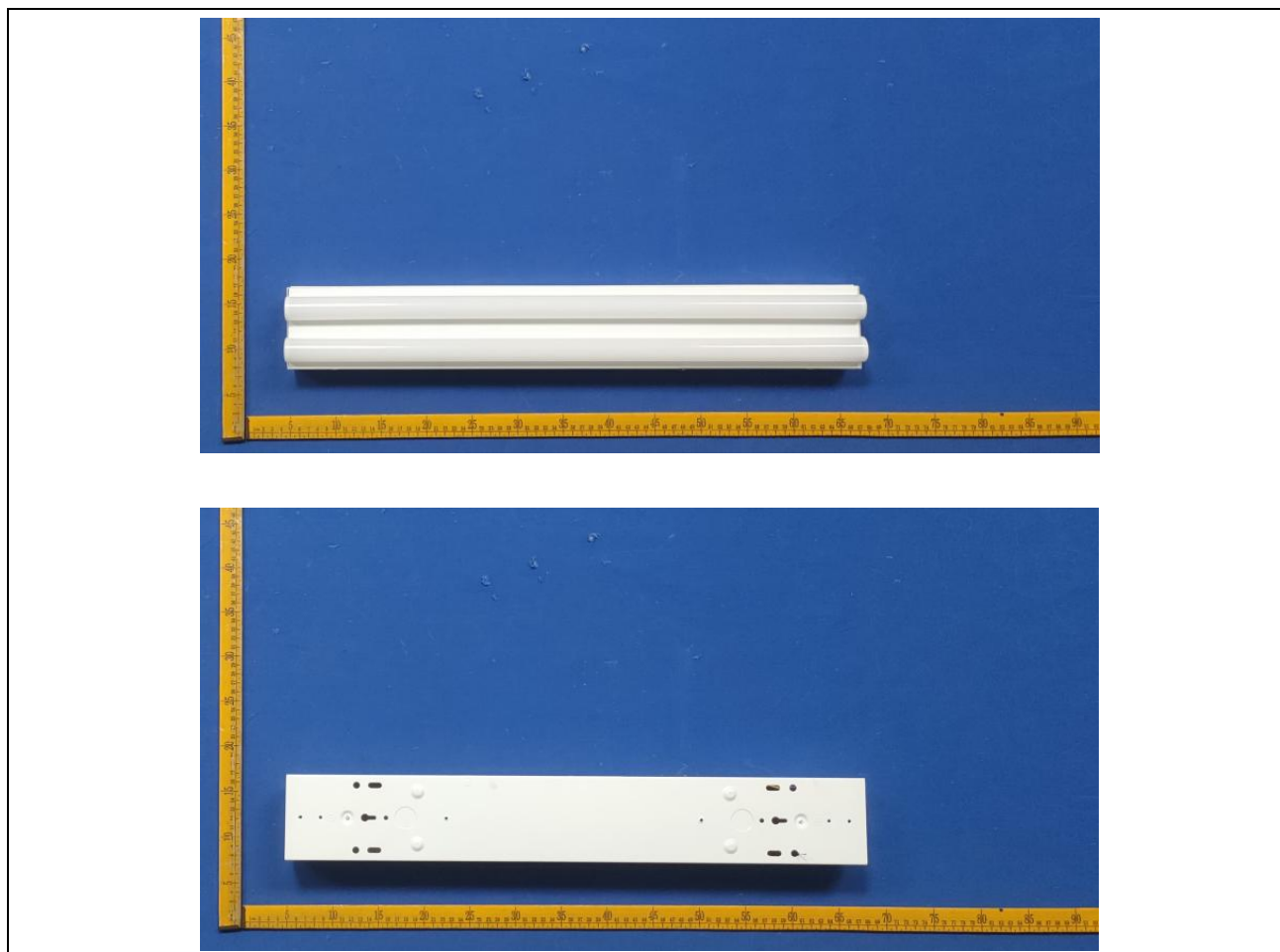
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2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
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3.0 Product Description

Luminaire Description: Model No. STRP2H @15W5000K, 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

Model No.	STRP2H @15W5000K	Sample ID	241225004-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

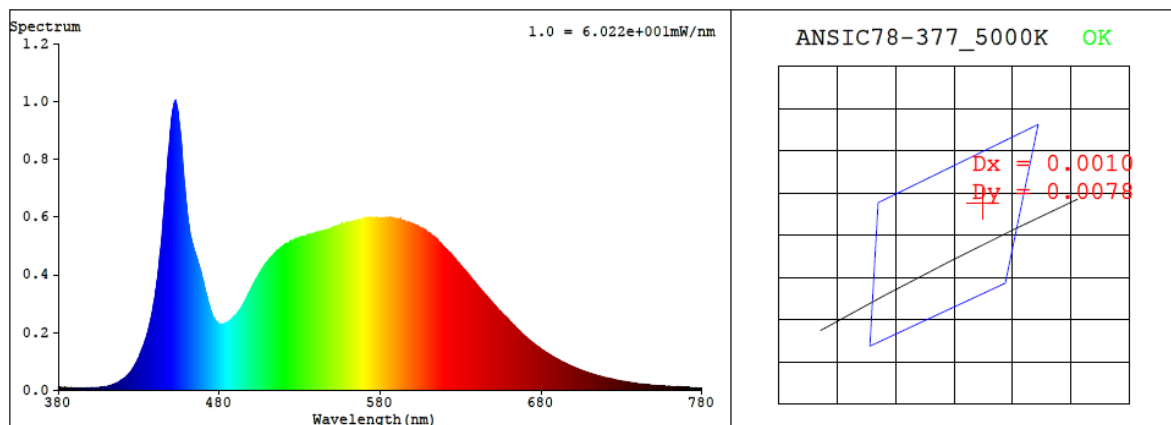
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.123	14.7	0.993
277.0	60	0.059	14.9	0.911

CCT (K)	CRI	R9	Duv	Rf	Rg	IES Rcs,h1
4902	83.5	13	0.0035	84	96	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3489$ $y = 0.3617$ / $u' = 0.2101$ $v' = 0.4901$ ($duv=3.49e-03$)

CCT= 4902K Prcp WL: $L_d=571.0nm$ Purity=13.2%

Peak WL: $L_p=453nm$ FWHM: $=20.1nm$ Ratio: $R=15.9\%$ $G=79.7\%$ $B=4.4\%$

Render Index: $R_a = 83.5$ $AvgR = 76.3$ $TM30:R_f=84$ $R_g=95$

EEL: 0.08907 A++ Highest

R1 =82 R2 =89 R3 =93 R4 =82 R5 =81 R6 =83 R7 =89

R8 =69 R9 =13 R10=72 R11=81 R12=55 R13=83 R14=96 R15=76

4.1 Integrating Sphere Test

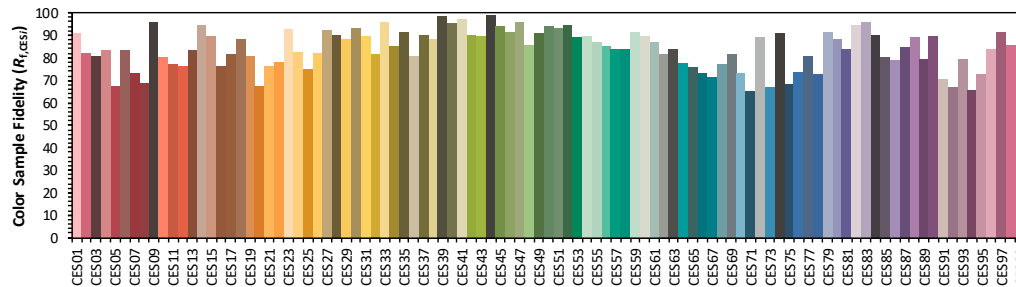
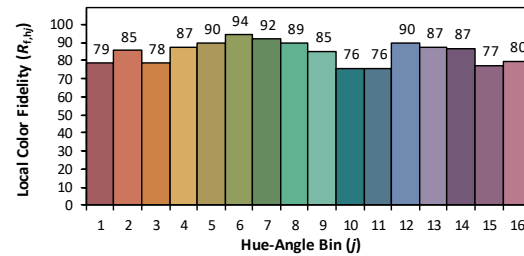
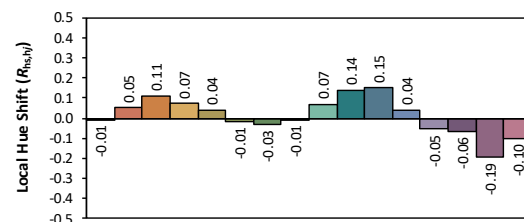
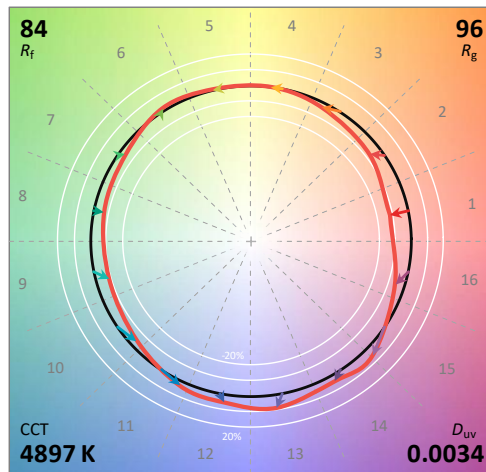
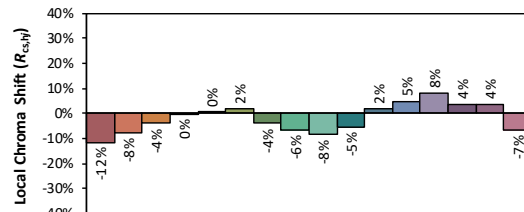
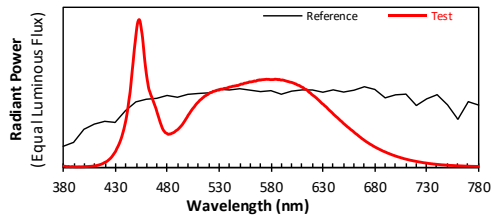
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/1/4

Model: STRP2H @15W5000K



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

x 0.3489
 y 0.3615
 u' 0.2101
 v' 0.4900

CIE 13.3-1995
(CRI)
 R_a 83
 R_g 13

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	1.15E-05	447	7.21E-04	514	4.72E-04	581	5.96E-04	648	3.14E-04	715	5.04E-05
381	1.00E-05	448	7.96E-04	515	4.77E-04	582	5.96E-04	649	3.08E-04	716	4.93E-05
382	9.30E-06	449	8.57E-04	516	4.84E-04	583	5.96E-04	650	3.00E-04	717	4.77E-05
383	7.20E-06	450	9.20E-04	517	4.87E-04	584	5.98E-04	651	2.95E-04	718	4.61E-05
384	9.10E-06	451	9.70E-04	518	4.92E-04	585	5.97E-04	652	2.88E-04	719	4.51E-05
385	8.30E-06	452	9.96E-04	519	4.95E-04	586	5.97E-04	653	2.82E-04	720	4.33E-05
386	7.20E-06	453	1.00E-03	520	5.01E-04	587	5.94E-04	654	2.76E-04	721	4.21E-05
387	6.90E-06	454	9.74E-04	521	5.05E-04	588	5.97E-04	655	2.71E-04	722	4.09E-05
388	8.60E-06	455	9.27E-04	522	5.08E-04	589	5.94E-04	656	2.65E-04	723	3.96E-05
389	6.80E-06	456	8.79E-04	523	5.10E-04	590	5.92E-04	657	2.59E-04	724	3.87E-05
390	7.10E-06	457	8.06E-04	524	5.15E-04	591	5.93E-04	658	2.54E-04	725	3.73E-05
391	6.20E-06	458	7.34E-04	525	5.16E-04	592	5.92E-04	659	2.49E-04	726	3.61E-05
392	6.30E-06	459	6.73E-04	526	5.19E-04	593	5.90E-04	660	2.42E-04	727	3.48E-05
393	6.20E-06	460	6.19E-04	527	5.20E-04	594	5.87E-04	661	2.36E-04	728	3.36E-05
394	6.60E-06	461	5.75E-04	528	5.24E-04	595	5.85E-04	662	2.30E-04	729	3.30E-05
395	6.90E-06	462	5.34E-04	529	5.25E-04	596	5.83E-04	663	2.25E-04	730	3.18E-05
396	6.30E-06	463	5.14E-04	530	5.25E-04	597	5.82E-04	664	2.19E-04	731	3.10E-05
397	6.60E-06	464	4.93E-04	531	5.29E-04	598	5.79E-04	665	2.13E-04	732	2.97E-05
398	6.80E-06	465	4.76E-04	532	5.31E-04	599	5.78E-04	666	2.08E-04	733	2.87E-05
399	7.10E-06	466	4.56E-04	533	5.31E-04	600	5.77E-04	667	2.03E-04	734	2.80E-05
400	7.40E-06	467	4.37E-04	534	5.33E-04	601	5.74E-04	668	1.97E-04	735	2.69E-05
401	8.10E-06	468	4.18E-04	535	5.36E-04	602	5.72E-04	669	1.92E-04	736	2.63E-05
402	8.30E-06	469	3.99E-04	536	5.37E-04	603	5.68E-04	670	1.87E-04	737	2.52E-05
403	8.50E-06	470	3.75E-04	537	5.37E-04	604	5.67E-04	671	1.82E-04	738	2.49E-05
404	9.00E-06	471	3.53E-04	538	5.40E-04	605	5.62E-04	672	1.77E-04	739	2.41E-05
405	9.60E-06	472	3.31E-04	539	5.42E-04	606	5.58E-04	673	1.72E-04	740	2.33E-05
406	9.80E-06	473	3.08E-04	540	5.45E-04	607	5.57E-04	674	1.68E-04	741	2.26E-05
407	1.05E-05	474	2.89E-04	541	5.46E-04	608	5.53E-04	675	1.63E-04	742	2.21E-05
408	1.13E-05	475	2.70E-04	542	5.47E-04	609	5.48E-04	676	1.59E-04	743	2.14E-05
409	1.25E-05	476	2.55E-04	543	5.51E-04	610	5.45E-04	677	1.55E-04	744	2.07E-05
410	1.31E-05	477	2.46E-04	544	5.51E-04	611	5.42E-04	678	1.51E-04	745	2.00E-05
411	1.41E-05	478	2.37E-04	545	5.53E-04	612	5.36E-04	679	1.46E-04	746	1.96E-05
412	1.59E-05	479	2.34E-04	546	5.53E-04	613	5.31E-04	680	1.42E-04	747	1.92E-05
413	1.76E-05	480	2.30E-04	547	5.56E-04	614	5.29E-04	681	1.39E-04	748	1.86E-05
414	1.95E-05	481	2.26E-04	548	5.55E-04	615	5.24E-04	682	1.35E-04	749	1.80E-05
415	2.16E-05	482	2.28E-04	549	5.59E-04	616	5.16E-04	683	1.31E-04	750	1.75E-05
416	2.39E-05	483	2.28E-04	550	5.61E-04	617	5.09E-04	684	1.28E-04	751	1.71E-05
417	2.69E-05	484	2.32E-04	551	5.65E-04	618	5.06E-04	685	1.24E-04	752	1.64E-05
418	2.97E-05	485	2.35E-04	552	5.65E-04	619	4.98E-04	686	1.21E-04	753	1.59E-05
419	3.44E-05	486	2.38E-04	553	5.66E-04	620	4.93E-04	687	1.17E-04	754	1.58E-05
420	3.80E-05	487	2.42E-04	554	5.70E-04	621	4.87E-04	688	1.14E-04	755	1.55E-05
421	4.10E-05	488	2.49E-04	555	5.72E-04	622	4.82E-04	689	1.11E-04	756	1.52E-05
422	4.56E-05	489	2.53E-04	556	5.72E-04	623	4.76E-04	690	1.08E-04	757	1.48E-05
423	5.15E-05	490	2.58E-04	557	5.75E-04	624	4.71E-04	691	1.05E-04	758	1.44E-05
424	5.75E-05	491	2.65E-04	558	5.75E-04	625	4.64E-04	692	1.02E-04	759	1.38E-05
425	6.38E-05	492	2.73E-04	559	5.80E-04	626	4.58E-04	693	9.83E-05	760	1.35E-05
426	7.16E-05	493	2.80E-04	560	5.80E-04	627	4.51E-04	694	9.64E-05	761	1.34E-05
427	8.08E-05	494	2.88E-04	561	5.80E-04	628	4.44E-04	695	9.31E-05	762	1.32E-05
428	9.10E-05	495	2.98E-04	562	5.82E-04	629	4.37E-04	696	9.04E-05	763	1.27E-05
429	1.01E-04	496	3.08E-04	563	5.83E-04	630	4.31E-04	697	8.77E-05	764	1.25E-05
430	1.12E-04	497	3.19E-04	564	5.86E-04	631	4.26E-04	698	8.50E-05	765	1.22E-05
431	1.27E-04	498	3.31E-04	565	5.85E-04	632	4.18E-04	699	8.29E-05	766	1.19E-05
432	1.41E-04	499	3.41E-04	566	5.87E-04	633	4.13E-04	700	8.01E-05	767	1.15E-05
433	1.55E-04	500	3.54E-04	567	5.92E-04	634	4.07E-04	701	7.78E-05	768	1.13E-05
434	1.72E-04	501	3.64E-04	568	5.90E-04	635	3.99E-04	702	7.54E-05	769	1.11E-05
435	1.91E-04	502	3.74E-04	569	5.94E-04	636	3.92E-04	703	7.31E-05	770	1.10E-05
436	2.11E-04	503	3.85E-04	570	5.92E-04	637	3.85E-04	704	7.13E-05	771	1.07E-05
437	2.37E-04	504	3.95E-04	571	5.94E-04	638	3.79E-04	705	6.90E-05	772	1.04E-05
438	2.62E-04	505	4.04E-04	572	5.95E-04	639	3.72E-04	706	6.69E-05	773	1.00E-05
439	2.93E-04	506	4.12E-04	573	5.96E-04	640	3.65E-04	707	6.51E-05	774	9.90E-06
440	3.25E-04	507	4.22E-04	574	5.96E-04	641	3.58E-04	708	6.25E-05	775	9.70E-06
441	3.65E-04	508	4.31E-04	575	5.97E-04	642	3.52E-04	709	6.08E-05	776	9.70E-06
442	4.12E-04	509	4.38E-04	576	5.98E-04	643	3.45E-04	710	5.90E-05	777	9.40E-06
443	4.65E-04	510	4.45E-04	577	5.97E-04	644	3.40E-04	711	5.73E-05	778	9.20E-06
444	5.12E-04	511	4.53E-04	578	5.97E-04	645	3.33E-04	712	5.55E-05	779	9.30E-06
445	5.82E-04	512	4.60E-04	579	5.96E-04	646	3.27E-04	713	5.38E-05	780	9.30E-06
446	6.53E-04	513	4.65E-04	580	5.95E-04	647	3.20E-04	714	5.23E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2H @15W5000K	Sample ID	241225004-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.7	Humidity (%RH)	41.3

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	0.059	14.9	0.911
NON-WORST CASE	120.0	60	0.123	14.7	0.993

Test Result

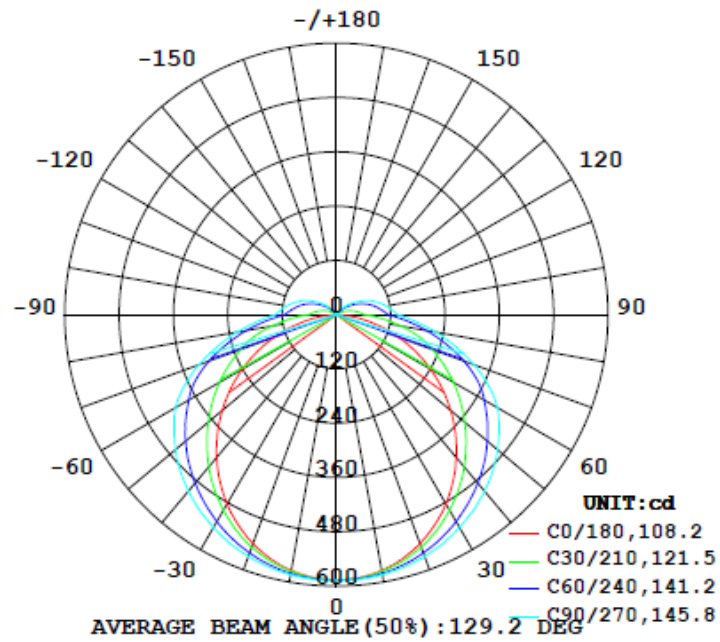
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
2285	1143	162.4	162.4	108.9	145.7	153.4

Zonal Lumen Requirement (0°-60°)	UGR	
	Crosswise	Endwise
62.7%	22.8	28.2

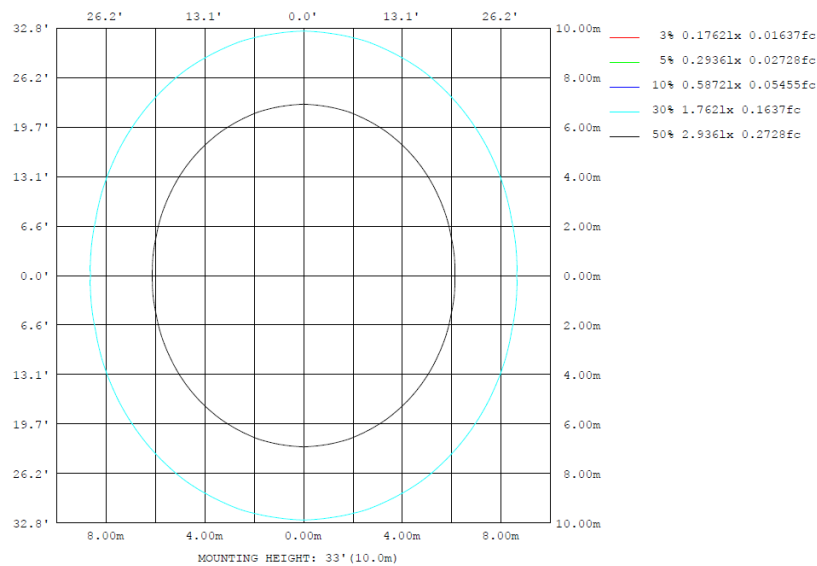
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

Zonal Lumen Summary

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total	lum, lamp
10	574.5	579.7	583.7	579.7	574.5	579.7	583.7	579.7	0- 10	55.64	55.64	2.44,2.44
20	538.9	554.0	568.3	554.0	538.9	554.0	568.3	554.0	10- 20	160.5	216.1	9.46,9.46
30	482.9	513.9	543.2	513.9	482.9	513.9	543.2	513.9	20- 30	247.0	463.1	20.3,20.3
40	412.2	461.9	509.3	461.9	412.2	461.9	509.3	461.9	30- 40	306.2	769.3	33.7,33.7
50	329.4	404.2	464.6	404.2	329.4	404.2	464.6	404.2	40- 50	333.7	1103	48.3,48.3
60	239.5	340.2	410.6	340.2	239.5	340.2	410.6	340.2	50- 60	329.0	1432	62.7,62.7
70	146.2	270.4	322.9	270.4	146.2	270.4	322.9	270.4	60- 70	292.2	1724	75.5,75.5
80	56.78	177.2	223.1	177.2	56.78	177.2	223.1	177.2	70- 80	220.5	1945	85.1,85.1
90	3.775	91.61	135.5	91.61	3.775	91.61	135.5	91.61	80- 90	131.5	2076	90.9,90.9
100	3.278	70.99	111.9	70.99	3.278	70.99	111.9	70.99	90-100	79.79	2156	94.4,94.4
110	3.278	50.03	87.04	50.03	3.278	50.03	87.04	50.03	100-110	58.46	2214	96.9,96.9
120	3.281	30.03	60.18	30.03	3.281	30.03	60.18	30.03	110-120	37.68	2252	98.6,98.6
130	4.121	12.39	35.28	12.39	4.121	12.39	35.28	12.39	120-130	20.31	2272	99.5,99.5
140	4.309	2.586	13.51	2.586	4.309	2.586	13.51	2.586	130-140	8.293	2281	99.8,99.8
150	4.402	2.307	1.391	2.307	4.402	2.307	1.391	2.307	140-150	2.190	2283	99.9,99.9
160	4.121	1.938	1.391	1.938	4.121	1.938	1.391	1.938	150-160	1.089	2284	100,100
170	4.496	1.938	1.391	1.938	4.496	1.938	1.391	1.938	160-170	0.6255	2285	100,100
180	4.496	1.938	1.669	1.938	4.496	1.938	1.669	1.938	170-180	0.2293	2285	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	55.64	0-10	55.64	2.44%
10-20	160.50	0-20	216.14	9.46%
20-30	246.95	0-30	463.09	20.27%
30-40	306.18	0-40	769.27	33.67%
40-50	333.73	0-50	1103.00	48.28%
50-60	329.04	0-60	1432.04	62.68%
60-70	292.18	0-70	1724.22	75.47%
70-80	220.51	0-80	1944.73	85.12%
80-90	131.51	0-90	2076.24	90.88%
90-100	79.79	0-100	2156.03	94.37%
100-110	58.46	0-110	2214.49	96.93%
110-120	37.68	0-120	2252.17	98.58%
120-130	20.31	0-130	2272.48	99.47%
130-140	8.29	0-140	2280.77	99.83%
140-150	2.19	0-150	2282.96	99.92%
150-160	1.09	0-160	2284.05	99.97%
160-170	0.63	0-170	2284.68	100.00%
170-180	0.23	0-180	2284.91	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										
X=2H	Y=2H	UGR Viewed Crosswise					UGR Viewed Endwise			
	3H	15.4	17.0	15.9	17.5	18.0	18.6	20.1	19.1	20.6
	4H	17.0	18.4	17.5	18.9	19.5	21.3	22.7	21.8	23.2
	6H	17.5	18.9	18.1	19.4	20.0	22.4	23.8	23.0	24.3
	8H	17.9	19.1	18.4	19.6	20.2	23.6	24.8	24.2	25.4
	12H	17.9	19.1	18.5	19.7	20.3	24.2	25.4	24.7	25.9
	12H	18.0	19.1	18.5	19.7	20.3	24.8	25.9	25.3	26.5
4H	2H	16.7	18.0	17.2	18.6	19.1	19.1	20.4	19.6	20.9
	3H	18.6	19.7	19.1	20.3	20.9	22.0	23.1	22.5	23.7
	4H	19.3	20.3	19.9	20.9	21.5	23.3	24.4	23.9	24.9
	6H	19.8	20.7	20.3	21.3	21.9	24.7	25.6	25.2	26.2
	8H	19.9	20.8	20.5	21.4	22.0	25.3	26.2	25.9	26.8
	12H	20.0	20.8	20.6	21.4	22.0	26.0	26.8	26.6	27.5
8H	4H	20.2	21.1	20.8	21.7	22.3	23.6	24.4	24.1	25.0
	6H	21.0	21.7	21.6	22.3	23.0	25.1	25.8	25.7	26.5
	8H	21.2	21.9	21.8	22.5	23.2	25.9	26.6	26.5	27.2
	12H	21.4	22.0	22.0	22.6	23.3	26.8	27.4	27.4	28.0
12H	4H	20.4	21.2	21.1	21.9	22.5	23.6	24.4	24.2	25.0
	6H	21.3	22.0	22.0	22.6	23.3	25.2	25.8	25.8	26.4
	8H	21.7	22.3	22.3	22.9	23.6	26.0	26.6	26.6	27.2

Maximum UGR = 28.7

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										
X=2H	Y=2H	UGR Viewed Crosswise					UGR Viewed Endwise			
	3H	18.3	19.9	18.8	20.4	20.9	21.5	23.0	22.0	23.5
	4H	19.9	21.3	20.4	21.8	22.4	24.2	25.6	24.7	26.1
	6H	20.4	21.8	21.0	22.3	22.9	25.3	26.7	25.9	27.2
	8H	20.8	22.0	21.3	22.5	23.1	26.5	27.7	27.1	28.3
	12H	20.8	22.0	21.4	22.6	23.2	27.1	28.3	27.6	28.8
	12H	20.9	22.0	21.4	22.6	23.2	27.7	28.8	28.2	29.4
4H	2H	19.6	20.9	20.1	21.5	22.0	22.0	23.3	22.5	23.8
	3H	21.5	22.6	22.0	23.2	23.8	24.9	26.0	25.4	26.6
	4H	22.2	23.2	22.8	23.8	24.4	26.2	27.3	26.8	27.8
	6H	22.7	23.6	23.2	24.2	24.8	27.6	28.5	28.1	29.1
	8H	22.8	23.7	23.4	24.3	24.9	28.2	29.1	28.8	29.7
	12H	22.9	23.7	23.5	24.3	24.9	28.9	29.7	29.5	30.4
8H	4H	23.1	24.0	23.7	24.6	25.2	26.5	27.3	27.0	27.9
	6H	23.9	24.6	24.5	25.2	25.9	28.0	28.7	28.6	29.4
	8H	24.1	24.8	24.7	25.4	26.1	28.8	29.5	29.4	30.1
	12H	24.3	24.9	24.9	25.5	26.2	29.7	30.3	30.3	30.9
12H	4H	23.3	24.1	24.0	24.8	25.4	26.5	27.3	27.1	27.9
	6H	24.2	24.9	24.9	25.5	26.2	28.1	28.7	28.7	29.3
	8H	24.6	25.2	25.2	25.8	26.5	28.9	29.5	29.5	30.1

Maximum UGR = 31.6

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	587	586	586	587	587	587	587	587	587	587	586	586	587	586	586	587	587	587	587
5	584	583	584	586	585	586	587	586	585	586	584	583	584	583	584	586	585	586	587
10	574	574	576	580	580	583	584	583	580	580	576	574	574	574	576	580	580	583	584
15	559	560	564	568	572	576	578	576	572	568	564	560	559	560	564	568	572	576	578
20	539	540	547	554	561	567	568	567	561	554	547	540	539	540	547	554	561	567	568
25	513	516	525	536	546	554	558	554	546	536	525	516	513	516	525	536	546	554	558
30	483	487	500	514	528	539	543	539	528	514	500	487	483	487	500	514	528	539	543
35	449	456	471	489	508	522	528	522	508	489	471	456	449	456	471	489	508	522	528
40	412	419	439	462	486	503	509	503	486	462	439	419	412	419	439	462	486	503	509
45	372	381	405	434	462	481	488	481	462	434	405	381	372	381	405	434	462	481	488
50	329	341	370	404	435	457	465	457	435	404	370	341	329	341	370	404	435	457	465
55	285	300	334	372	407	430	439	430	407	372	334	300	285	300	334	372	407	430	439
60	240	257	298	340	377	402	411	402	377	340	298	257	240	257	298	340	377	402	411
65	193	216	261	307	343	364	370	364	343	307	261	216	193	216	261	307	343	364	370
70	146	175	225	270	299	317	323	317	299	270	225	175	146	175	225	270	299	317	323
75	100	135	189	225	250	268	273	268	250	225	189	135	100	135	189	225	250	268	273
80	56.8	98.3	145	177	202	218	223	218	202	177	145	98.3	56.8	98.3	145	177	202	218	223
85	21.0	61.9	101	131	156	171	176	171	156	131	101	61.9	21.0	61.9	101	131	156	171	176
90	3.77	28.7	62.2	91.6	115	130	136	130	115	91.6	62.2	28.7	3.77	28.7	62.2	91.6	115	130	136
95	3.28	21.0	52.3	80.4	103	118	124	118	103	80.4	52.3	21.0	3.28	21.0	52.3	80.4	103	118	124
100	3.28	14.2	43.5	71.0	92.5	106	112	106	92.5	71.0	43.5	14.2	3.28	14.2	43.5	71.0	92.5	106	112
105	3.28	8.50	34.5	60.5	81.5	94.3	99.9	94.3	81.5	60.5	34.5	8.50	3.28	8.50	34.5	60.5	81.5	94.3	99.9
110	3.28	4.19	26.2	50.0	69.5	82.1	87.0	82.1	69.5	50.0	26.2	4.19	3.28	4.19	26.2	50.0	69.5	82.1	87.0
115	3.28	3.54	18.3	39.7	57.4	69.1	73.7	69.1	57.4	39.7	18.3	3.54	3.28	3.54	18.3	39.7	57.4	69.1	73.7
120	3.28	3.54	11.3	30.0	45.9	56.1	60.2	56.1	45.9	30.0	11.3	3.54	3.28	3.54	11.3	30.0	45.9	56.1	60.2
125	3.84	3.63	4.92	20.8	34.7	43.9	47.3	43.9	34.7	20.8	4.92	3.63	3.84	3.63	4.92	20.8	34.7	43.9	47.3
130	4.12	3.44	3.24	12.4	24.3	32.6	35.3	32.6	24.3	12.4	3.24	3.44	4.12	3.44	3.24	12.4	24.3	32.6	35.3
135	4.31	3.44	3.15	4.82	14.7	21.8	24.1	21.8	14.7	4.82	3.15	3.44	4.31	3.44	3.15	4.82	14.7	21.8	24.1
140	4.31	3.44	3.14	2.59	5.77	11.5	13.5	11.5	5.77	2.59	3.14	3.44	4.31	3.44	3.14	2.59	5.77	11.5	13.5
145	4.40	3.44	2.87	2.49	2.12	2.63	3.90	2.63	2.12	2.49	2.87	3.44	4.40	3.44	2.87	2.49	2.12	2.63	3.90
150	4.40	3.44	2.68	2.31	1.94	1.57	1.39	1.57	1.94	2.31	2.68	3.44	4.40	3.44	2.68	2.31	1.94	1.57	1.39
155	4.22	3.26	2.50	2.21	1.76	1.57	1.39	1.57	1.76	2.21	2.50	3.26	4.22	3.26	2.50	2.21	1.76	1.57	1.39
160	4.12	2.98	2.22	1.94	1.66	1.48	1.39	1.48	1.66	1.94	2.22	2.98	4.12	2.98	2.22	1.94	1.66	1.48	1.39
165	4.31	2.98	2.22	1.94	1.66	1.48	1.39	1.48	1.66	1.94	2.22	2.98	4.31	2.98	2.22	1.94	1.66	1.48	1.39
170	4.50	3.44	2.59	1.94	1.66	1.48	1.39	1.48	1.66	1.94	2.59	3.44	4.50	3.44	2.59	1.94	1.66	1.48	1.39
175	4.50	3.63	2.59	1.94	1.76	1.67	1.58	1.67	1.76	1.94	2.59	3.63	4.50	3.63	2.59	1.94	1.76	1.67	1.58
180	4.50	3.63	2.59	1.94	1.76	1.67	1.67	1.67	1.76	1.94	2.59	3.63	4.50	3.63	2.59	1.94	1.76	1.67	1.67

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	587	587	587	586	586														
5	586	585	586	584	583														
10	583	580	580	576	574														
15	576	572	568	564	560														
20	567	561	554	547	540														
25	554	546	536	525	516														
30	539	528	514	500	487														
35	522	508	489	471	456														
40	503	486	462	439	419														
45	481	462	434	405	381														
50	457	435	404	370	341														
55	430	407	372	334	300														
60	402	377	340	298	257														
65	364	343	307	261	216														
70	317	299	270	225	175														
75	268	250	225	189	135														
80	218	202	177	145	98.3														
85	171	156	131	101	61.9														
90	130	115	91.6	62.2	28.7														
95	118	103	80.4	52.3	21.0														
100	106	92.5	71.0	43.5	14.2														
105	94.3	81.5	60.5	34.5	8.50														
110	82.1	69.5	50.0	26.2	4.19														
115	69.1	57.4	39.7	18.3	3.54														
120	56.1	45.9	30.0	11.3	3.54														
125	43.9	34.7	20.8	4.92	3.63														
130	32.6	24.3	12.4	3.24	3.44														
135	21.8	14.7	4.82	3.15	3.44														
140	11.5	5.77	2.59	3.14	3.44														
145	2.63	2.12	2.49	2.87	3.44														
150	1.57	1.94	2.31	2.68	3.44														
155	1.57	1.76	2.21	2.50	3.26														
160	1.48	1.66	1.94	2.22	2.98														
165	1.48	1.66	1.94	2.22	2.98														
170	1.48	1.66	1.94	2.59	3.44														
175	1.67	1.76	1.94	2.59	3.63														
180	1.67	1.76	1.94	2.59	3.63														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2H @15W5000K	Sample ID	241225004-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	0.123	14.7	0.993	6.40
277.0	60	0.059	14.9	0.911	13.55

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*****