

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		770
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	148.1
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.4
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	6.25
				277V	10.46
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.994
				277V	0.927
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4915
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		83.3
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%		55.7%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	30.2
			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		0.041
(Goniophotometer – Section 4.2)			Non-Worst Case		0.084
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.4
(Goniophotometer – Section 4.2)			Non-Worst Case		10.0

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-01-02	STRP2 @10W5000K	-	241225003-S1
2	Goniophotometer Test	2025-01-02	STRP2 @10W5000K	-	241225003-S1
3	THD and PF Test	2025-01-02	STRP2 @10W5000K	-	241225003-S1

Remark (If any):

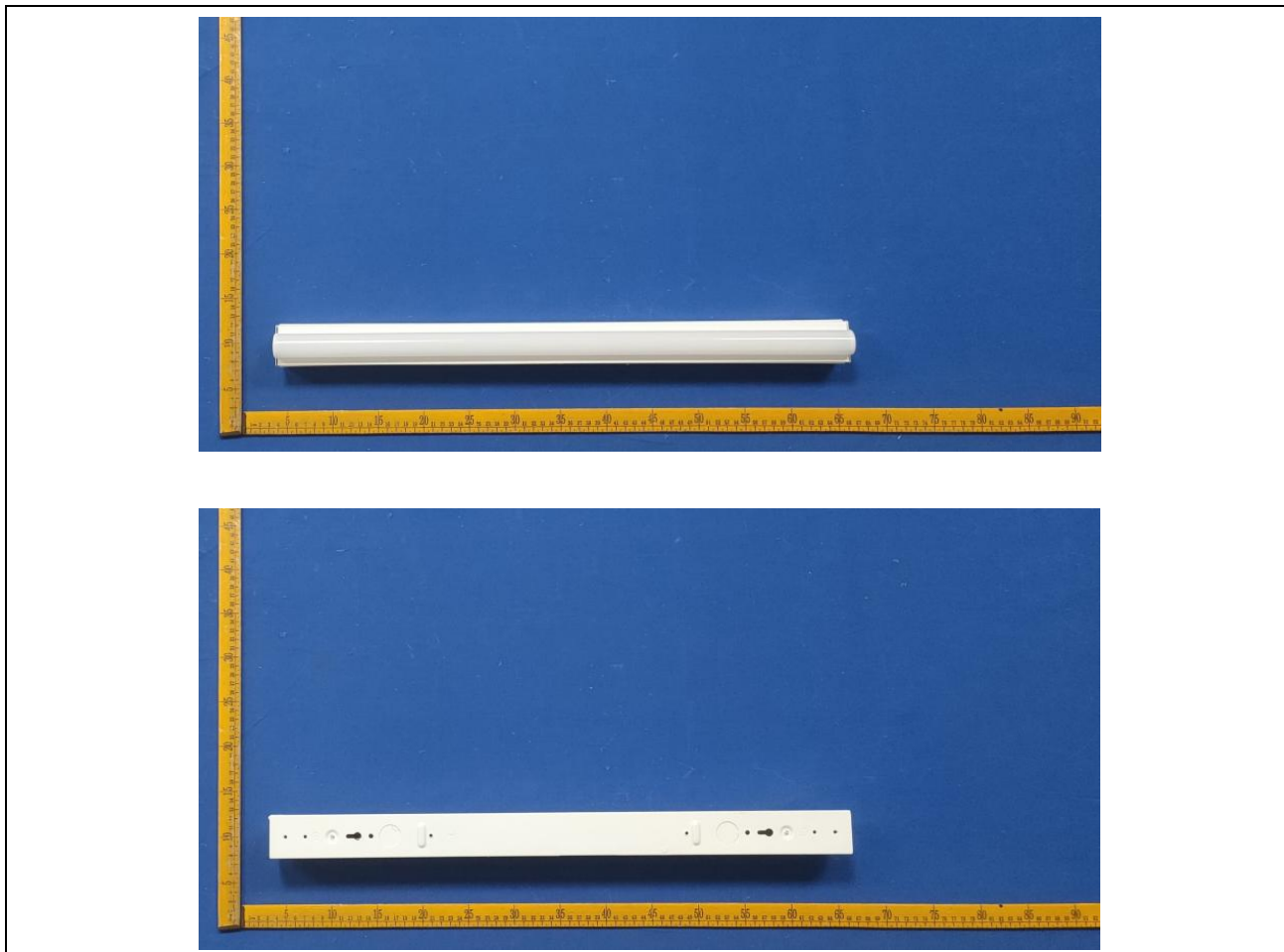
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2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
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3.0 Product Description

Luminaire Description: Model No. STRP2 @10W5000K, 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.	STRP2 @10W5000K	Sample ID	241225003-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

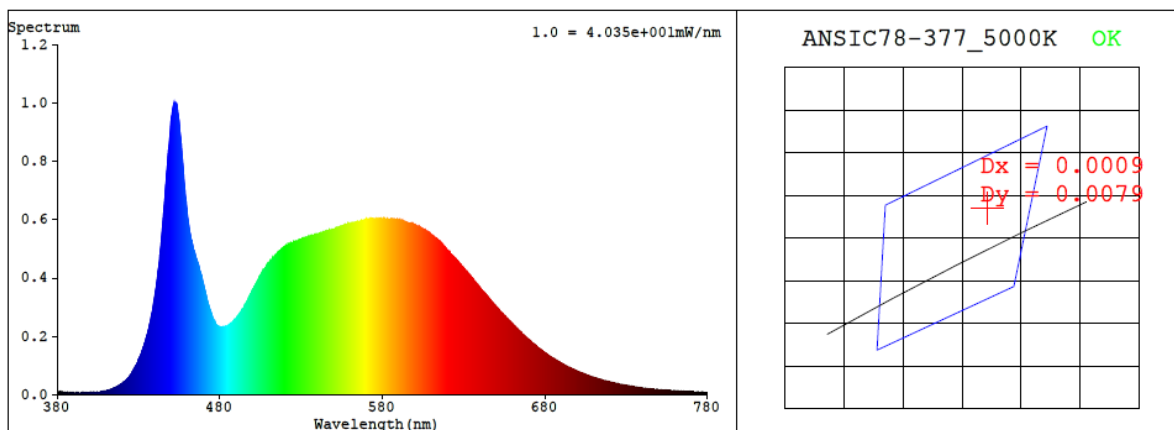
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.084	10.0	0.994
277.0	60	0.041	10.4	0.927

CCT (K)	CRI	R9	Duv	Rf	Rg	IES Rcs,h1
4915	83.3	13	0.0035	84	96	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3485$ $y = 0.3614$ / $u' = 0.2099$ $v' = 0.4899$ ($duv=3.53e-03$)

CCT= 4915K Prcp WL: $L_d=570.8nm$ Purity=13.0%

Peak WL: $L_p=452nm$ FWHM: $=20.4nm$ Ratio: R=15.8% G=79.8% B=4.4%

Render Index: $R_a = 83.3$ AvgR = 76.2 TM30: Rf=84 Rg=95

EEL: 0.09193 A++ Highest

R1 =81 R2 =88 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

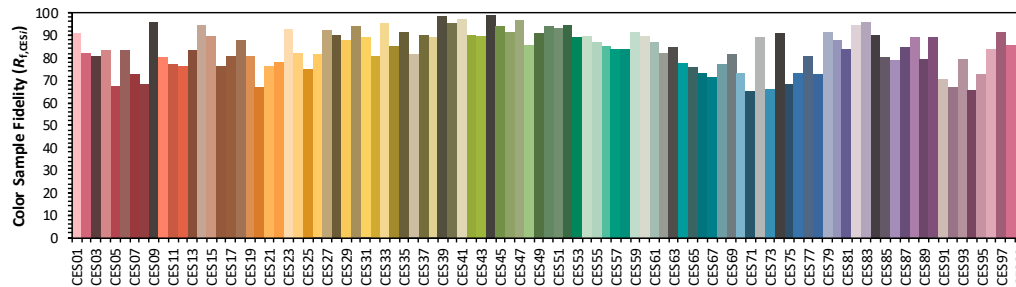
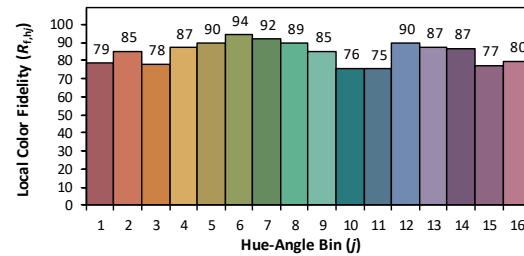
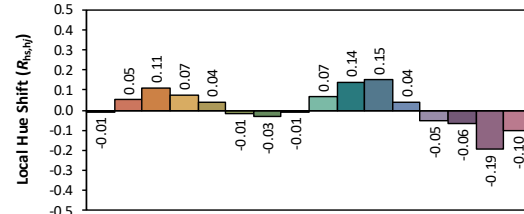
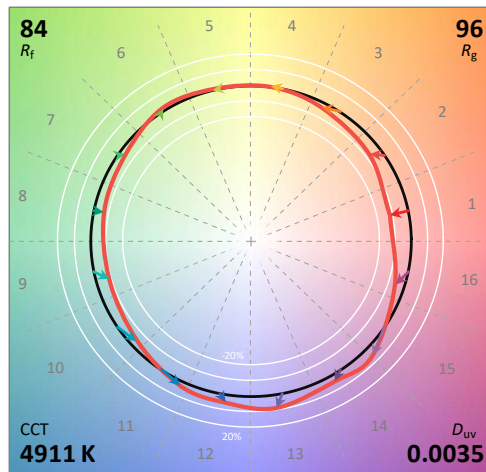
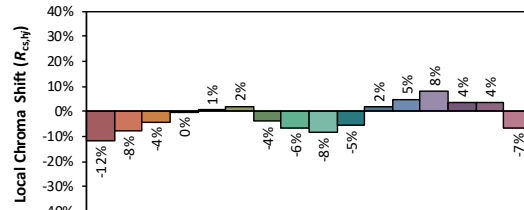
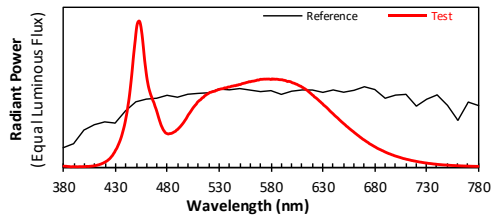
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/1/4

Model: STRP2 @10W5000K



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

x 0.3484
 y 0.3613
 u' 0.2100
 v' 0.4898

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	1.08E-05	447	7.40E-04	514	4.77E-04	581	6.05E-04	648	3.14E-04	715	5.08E-05
381	1.01E-05	448	8.09E-04	515	4.80E-04	582	6.02E-04	649	3.08E-04	716	4.89E-05
382	9.90E-06	449	8.72E-04	516	4.89E-04	583	6.04E-04	650	3.02E-04	717	4.80E-05
383	9.10E-06	450	9.41E-04	517	4.93E-04	584	6.02E-04	651	2.96E-04	718	4.62E-05
384	8.10E-06	451	9.81E-04	518	4.99E-04	585	6.03E-04	652	2.90E-04	719	4.52E-05
385	7.90E-06	452	9.96E-04	519	5.03E-04	586	6.02E-04	653	2.83E-04	720	4.34E-05
386	7.00E-06	453	9.97E-04	520	5.07E-04	587	6.01E-04	654	2.78E-04	721	4.22E-05
387	5.60E-06	454	9.76E-04	521	5.12E-04	588	5.99E-04	655	2.71E-04	722	4.09E-05
388	7.00E-06	455	9.33E-04	522	5.13E-04	589	5.99E-04	656	2.65E-04	723	3.95E-05
389	6.80E-06	456	8.75E-04	523	5.16E-04	590	5.99E-04	657	2.60E-04	724	3.81E-05
390	7.00E-06	457	8.05E-04	524	5.18E-04	591	5.99E-04	658	2.54E-04	725	3.75E-05
391	6.20E-06	458	7.33E-04	525	5.20E-04	592	5.96E-04	659	2.49E-04	726	3.60E-05
392	7.00E-06	459	6.75E-04	526	5.21E-04	593	5.95E-04	660	2.43E-04	727	3.49E-05
393	6.00E-06	460	6.21E-04	527	5.26E-04	594	5.93E-04	661	2.37E-04	728	3.37E-05
394	6.40E-06	461	5.78E-04	528	5.27E-04	595	5.90E-04	662	2.32E-04	729	3.27E-05
395	7.10E-06	462	5.43E-04	529	5.32E-04	596	5.86E-04	663	2.26E-04	730	3.19E-05
396	7.10E-06	463	5.18E-04	530	5.32E-04	597	5.88E-04	664	2.20E-04	731	3.09E-05
397	6.90E-06	464	4.95E-04	531	5.35E-04	598	5.87E-04	665	2.15E-04	732	2.96E-05
398	7.10E-06	465	4.77E-04	532	5.36E-04	599	5.85E-04	666	2.09E-04	733	2.89E-05
399	7.10E-06	466	4.57E-04	533	5.38E-04	600	5.81E-04	667	2.04E-04	734	2.82E-05
400	7.50E-06	467	4.42E-04	534	5.38E-04	601	5.78E-04	668	1.99E-04	735	2.74E-05
401	7.90E-06	468	4.19E-04	535	5.43E-04	602	5.76E-04	669	1.93E-04	736	2.64E-05
402	9.00E-06	469	4.00E-04	536	5.44E-04	603	5.73E-04	670	1.89E-04	737	2.54E-05
403	8.50E-06	470	3.78E-04	537	5.43E-04	604	5.70E-04	671	1.84E-04	738	2.48E-05
404	8.60E-06	471	3.54E-04	538	5.47E-04	605	5.68E-04	672	1.79E-04	739	2.42E-05
405	9.60E-06	472	3.31E-04	539	5.49E-04	606	5.64E-04	673	1.75E-04	740	2.32E-05
406	9.90E-06	473	3.09E-04	540	5.49E-04	607	5.60E-04	674	1.71E-04	741	2.24E-05
407	1.09E-05	474	2.89E-04	541	5.51E-04	608	5.56E-04	675	1.64E-04	742	2.18E-05
408	1.13E-05	475	2.73E-04	542	5.55E-04	609	5.54E-04	676	1.60E-04	743	2.12E-05
409	1.27E-05	476	2.58E-04	543	5.55E-04	610	5.48E-04	677	1.56E-04	744	2.07E-05
410	1.34E-05	477	2.49E-04	544	5.57E-04	611	5.45E-04	678	1.52E-04	745	2.00E-05
411	1.51E-05	478	2.39E-04	545	5.59E-04	612	5.40E-04	679	1.48E-04	746	1.93E-05
412	1.66E-05	479	2.34E-04	546	5.58E-04	613	5.37E-04	680	1.44E-04	747	1.89E-05
413	1.89E-05	480	2.31E-04	547	5.62E-04	614	5.31E-04	681	1.40E-04	748	1.85E-05
414	2.03E-05	481	2.29E-04	548	5.61E-04	615	5.27E-04	682	1.36E-04	749	1.82E-05
415	2.32E-05	482	2.32E-04	549	5.66E-04	616	5.20E-04	683	1.32E-04	750	1.76E-05
416	2.53E-05	483	2.33E-04	550	5.66E-04	617	5.14E-04	684	1.28E-04	751	1.71E-05
417	2.86E-05	484	2.34E-04	551	5.68E-04	618	5.08E-04	685	1.25E-04	752	1.68E-05
418	3.14E-05	485	2.37E-04	552	5.72E-04	619	5.02E-04	686	1.22E-04	753	1.62E-05
419	3.55E-05	486	2.41E-04	553	5.73E-04	620	4.95E-04	687	1.18E-04	754	1.59E-05
420	3.90E-05	487	2.45E-04	554	5.75E-04	621	4.91E-04	688	1.15E-04	755	1.52E-05
421	4.34E-05	488	2.49E-04	555	5.76E-04	622	4.82E-04	689	1.12E-04	756	1.50E-05
422	4.78E-05	489	2.57E-04	556	5.79E-04	623	4.78E-04	690	1.08E-04	757	1.48E-05
423	5.40E-05	490	2.61E-04	557	5.81E-04	624	4.72E-04	691	1.05E-04	758	1.43E-05
424	5.95E-05	491	2.69E-04	558	5.82E-04	625	4.66E-04	692	1.02E-04	759	1.40E-05
425	6.70E-05	492	2.76E-04	559	5.86E-04	626	4.60E-04	693	9.86E-05	760	1.37E-05
426	7.58E-05	493	2.84E-04	560	5.84E-04	627	4.53E-04	694	9.56E-05	761	1.34E-05
427	8.38E-05	494	2.93E-04	561	5.87E-04	628	4.47E-04	695	9.35E-05	762	1.30E-05
428	9.56E-05	495	3.02E-04	562	5.89E-04	629	4.40E-04	696	9.06E-05	763	1.27E-05
429	1.06E-04	496	3.11E-04	563	5.89E-04	630	4.34E-04	697	8.76E-05	764	1.22E-05
430	1.20E-04	497	3.22E-04	564	5.90E-04	631	4.26E-04	698	8.56E-05	765	1.21E-05
431	1.31E-04	498	3.32E-04	565	5.92E-04	632	4.21E-04	699	8.23E-05	766	1.17E-05
432	1.46E-04	499	3.45E-04	566	5.94E-04	633	4.15E-04	700	8.00E-05	767	1.17E-05
433	1.62E-04	500	3.58E-04	567	5.97E-04	634	4.09E-04	701	7.78E-05	768	1.12E-05
434	1.79E-04	501	3.68E-04	568	5.96E-04	635	4.02E-04	702	7.57E-05	769	1.11E-05
435	1.99E-04	502	3.77E-04	569	5.99E-04	636	3.94E-04	703	7.35E-05	770	1.09E-05
436	2.21E-04	503	3.88E-04	570	6.02E-04	637	3.86E-04	704	7.14E-05	771	1.06E-05
437	2.47E-04	504	3.99E-04	571	6.01E-04	638	3.80E-04	705	6.93E-05	772	1.03E-05
438	2.74E-04	505	4.09E-04	572	6.02E-04	639	3.73E-04	706	6.69E-05	773	1.01E-05
439	3.04E-04	506	4.18E-04	573	6.03E-04	640	3.67E-04	707	6.47E-05	774	9.90E-06
440	3.40E-04	507	4.26E-04	574	6.03E-04	641	3.60E-04	708	6.22E-05	775	9.60E-06
441	3.78E-04	508	4.34E-04	575	6.03E-04	642	3.53E-04	709	6.11E-05	776	9.60E-06
442	4.25E-04	509	4.45E-04	576	6.03E-04	643	3.47E-04	710	5.91E-05	777	9.50E-06
443	4.72E-04	510	4.52E-04	577	6.03E-04	644	3.41E-04	711	5.72E-05	778	9.20E-06
444	5.29E-04	511	4.58E-04	578	6.04E-04	645	3.35E-04	712	5.59E-05	779	9.20E-06
445	5.94E-04	512	4.62E-04	579	6.03E-04	646	3.27E-04	713	5.43E-05	780	9.20E-06
446	6.63E-04	513	4.70E-04	580	6.00E-04	647	3.21E-04	714	5.26E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2 @10W5000K	Sample ID	241225003-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	0.041	10.4	0.927
NON-WORST CASE	120.0	60	0.084	10.0	0.994

Test Result

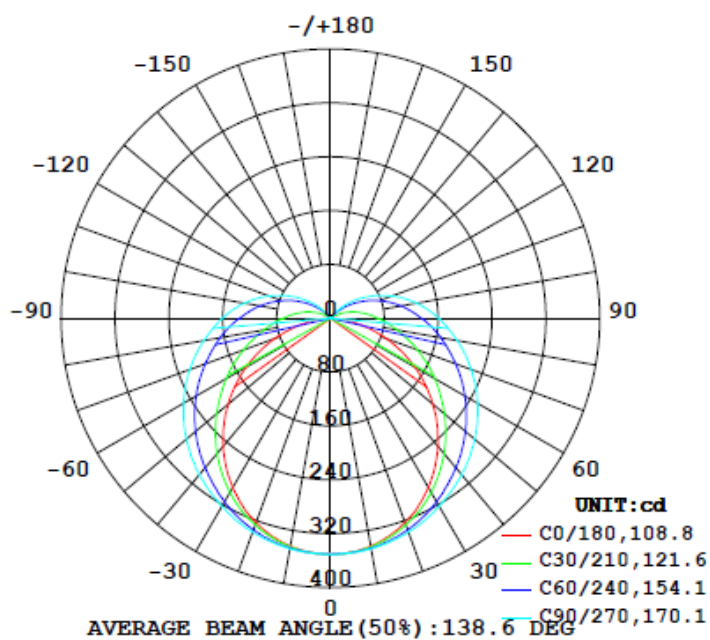
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
1540	770	161.8	161.8	108.9	170.1	148.1

Zonal Lumen Requirement (0°-60°)	UGR	
	Crosswise	Endwise
55.7%	22.1	30.2

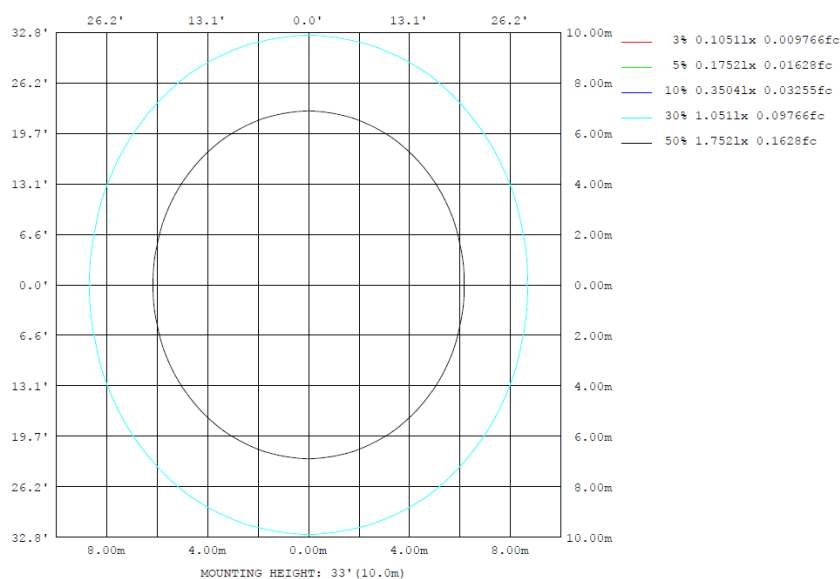
4.2 Goniophotometer Test

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	ϕ zone	ϕ total	%lum, lamp
10	343.6	345.5	347.9	345.5	343.6	345.5	347.9	345.5	0- 10	33.23	33.23	2.16, 2.16
20	323.1	330.5	338.2	330.5	323.1	330.5	338.2	330.5	10- 20	95.85	129.1	8.38, 8.38
30	290.5	306.7	322.6	306.7	290.5	306.7	322.6	306.7	20- 30	147.5	276.6	18.18
40	248.1	275.4	303.3	275.4	248.1	275.4	303.3	275.4	30- 40	182.7	459.3	29.8, 29.8
50	198.6	241.5	279.4	241.5	198.6	241.5	279.4	241.5	40- 50	199.7	658.9	42.8, 42.8
60	144.4	206.1	252.3	206.1	144.4	206.1	252.3	206.1	50- 60	198.4	857.4	55.7, 55.7
70	88.13	170.4	222.3	170.4	88.13	170.4	222.3	170.4	60- 70	181.3	1039	67.4, 67.4
80	34.75	136.7	191.4	136.7	34.75	136.7	191.4	136.7	70- 80	153.2	1192	77.4, 77.4
90	3.800	106.5	160.6	106.5	3.800	106.5	160.6	106.5	80- 90	121.2	1313	85.2, 85.2
100	2.743	80.23	130.1	80.23	2.743	80.23	130.1	80.23	90-100	92.20	1405	91.2, 91.2
110	2.743	53.84	97.00	53.84	2.743	53.84	97.00	53.84	100-110	65.00	1470	95.5, 95.5
120	2.743	30.04	64.72	30.04	2.743	30.04	64.72	30.04	110-120	40.11	1510	98.1, 98.1
130	2.837	9.134	35.65	9.134	2.837	9.134	35.65	9.134	120-130	20.18	1531	99.4, 99.4
140	2.837	2.039	9.968	2.039	2.837	2.039	9.968	2.039	130-140	6.977	1538	99.8, 99.8
150	2.837	1.760	1.027	1.760	2.837	1.760	1.027	1.760	140-150	1.446	1539	99.9, 99.9
160	2.837	1.297	0.9339	1.297	2.837	1.297	0.9339	1.297	150-160	0.7583	1540	100, 100
170	2.837	1.390	1.027	1.390	2.837	1.390	1.027	1.390	160-170	0.4213	1540	100, 100
180	2.837	1.390	1.214	1.390	2.837	1.390	1.214	1.390	170-180	0.1490	1540	100, 100
DEG	LUMINOUS INTENSITY: cd									UNIT: lm		

Zonal (lm)		Total (lm)		Percent
0-10	33.23	0-10	33.23	2.16%
10-20	95.85	0-20	129.08	8.38%
20-30	147.47	0-30	276.55	17.96%
30-40	182.73	0-40	459.28	29.82%
40-50	199.67	0-50	658.95	42.78%
50-60	198.42	0-60	857.37	55.67%
60-70	181.31	0-70	1038.68	67.44%
70-80	153.21	0-80	1191.89	77.38%
80-90	121.24	0-90	1313.13	85.26%
90-100	92.20	0-100	1405.33	91.24%
100-110	65.00	0-110	1470.33	95.46%
110-120	40.11	0-120	1510.44	98.07%
120-130	20.18	0-130	1530.62	99.38%
130-140	6.98	0-140	1537.60	99.83%
140-150	1.45	0-150	1539.05	99.92%
150-160	0.76	0-160	1539.81	99.97%
160-170	0.42	0-170	1540.23	100.00%
170-180	0.15	0-180	1540.38	100.01%

4.2 Goniophotometer Test

UGR – Uncorrected Table:

UGR TABLE - UNCORRECTED

Reflectances		70	70	50	50	30	70	70	50	50	30
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	18.0	17.1	18.5	19.2	20.6	22.0	21.2	22.6	23.3
	3H	17.9	19.2	18.5	19.8	20.5	23.6	24.9	24.2	25.5	26.2
	4H	18.3	19.6	18.9	20.2	20.9	25.1	26.4	25.8	27.0	27.7
	6H	18.6	19.8	19.2	20.4	21.1	26.8	28.0	27.4	28.6	29.3
	8H	18.7	19.8	19.3	20.4	21.1	27.7	28.8	28.3	29.4	30.2
	12H	18.7	19.7	19.3	20.4	21.1	28.6	29.7	29.2	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	22.0	24.2	25.2	24.8	25.9	26.6
	4H	20.1	21.1	20.8	21.8	22.5	25.8	26.8	26.5	27.5	28.2
	6H	20.5	21.4	21.2	22.1	22.8	27.7	28.6	28.3	29.2	30.0
	8H	20.6	21.4	21.3	22.1	22.9	28.7	29.5	29.3	30.2	31.0
	12H	20.7	21.4	21.3	22.1	22.9	29.7	30.5	30.4	31.2	32.0
8H	4H	21.3	22.1	22.0	22.8	23.6	26.0	26.8	26.7	27.5	28.3
	6H	22.0	22.7	22.7	23.4	24.2	28.0	28.7	28.7	29.4	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	24.5	30.4	31.0	31.1	31.7	32.5
12H	4H	21.7	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	22.9	23.4	23.6	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		70	70	50	50	30	70	70	50	50	30
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	18.0	19.5	18.6	20.0	20.7	22.1	23.5	22.7	24.1	24.8
	3H	19.4	20.7	20.0	21.3	22.0	25.1	26.4	25.7	27.0	27.7
	4H	19.8	21.1	20.4	21.7	22.4	26.6	27.9	27.3	28.5	29.2
	6H	20.1	21.3	20.7	21.9	22.6	28.3	29.5	28.9	30.1	30.8
	8H	20.2	21.3	20.8	21.9	22.6	29.2	30.3	29.8	30.9	31.7
	12H	20.2	21.2	20.8	21.9	22.6	30.1	31.2	30.7	31.8	32.6
4H	2H	19.3	20.6	19.9	21.2	21.9	22.4	23.7	23.0	24.3	25.0
	3H	21.0	22.1	21.6	22.7	23.5	25.7	26.7	26.3	27.4	28.1
	4H	21.6	22.6	22.3	23.3	24.0	27.3	28.3	28.0	29.0	29.7
	6H	22.0	22.9	22.7	23.6	24.3	29.2	30.1	29.8	30.7	31.5
	8H	22.1	22.9	22.8	23.6	24.4	30.2	31.0	30.8	31.7	32.5
	12H	22.2	22.9	22.8	23.6	24.4	31.2	32.0	31.9	32.7	33.5
8H	4H	22.8	23.6	23.5	24.3	25.1	27.5	28.3	28.2	29.0	29.8
	6H	23.5	24.2	24.2	24.9	25.7	29.5	30.2	30.2	30.9	31.7
	8H	23.7	24.3	24.4	25.0	25.8	30.6	31.3	31.3	32.0	32.8
	12H	23.8	24.4	24.5	25.1	26.0	31.9	32.5	32.6	33.2	34.0
12H	4H	23.2	23.9	23.8	24.6	25.4	27.5	28.3	28.2	29.0	29.8
	6H	24.0	24.6	24.7	25.3	26.2	29.6	30.2	30.3	30.9	31.7
	8H	24.4	24.9	25.1	25.6	26.5	30.7	31.3	31.4	32.0	32.9

Maximum UGR = 34.0

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	350	350	351	350	351	350	350	350	351	350	351	350	350	350	351	350	351	350	350
5	349	349	349	349	349	350	350	350	349	349	349	349	349	349	349	349	349	350	350
10	344	344	345	345	347	347	348	347	347	345	345	344	344	344	345	345	347	347	348
15	335	335	337	339	342	343	344	343	342	339	337	335	335	335	337	339	342	343	344
20	323	324	327	330	335	337	338	337	335	330	327	324	323	324	327	330	335	337	338
25	308	310	315	319	325	329	331	329	325	319	315	310	308	310	315	319	325	329	331
30	291	292	299	307	315	320	323	320	315	307	299	292	291	292	299	307	315	320	323
35	270	273	281	292	303	310	313	310	303	292	281	273	270	273	281	292	303	310	313
40	248	252	262	275	290	299	303	299	290	275	262	252	248	252	262	275	290	299	303
45	224	229	242	259	276	287	292	287	276	259	242	229	224	229	242	259	276	287	292
50	199	205	221	241	262	274	279	274	262	241	221	205	199	205	221	241	262	274	279
55	172	180	200	224	246	261	266	261	246	224	200	180	172	180	200	224	246	261	266
60	144	155	179	206	230	246	252	246	230	206	179	155	144	155	179	206	230	246	252
65	116	129	158	188	214	231	237	231	214	188	158	129	116	129	158	188	214	231	237
70	88.1	104	138	170	198	216	222	216	198	170	138	104	88.1	104	138	170	198	216	222
75	60.2	81.3	118	153	182	201	207	201	182	153	118	81.3	60.2	81.3	118	153	182	201	207
80	34.7	60.3	101	137	166	185	191	185	166	137	101	60.3	34.7	60.3	101	137	166	185	191
85	14.6	43.2	84.7	122	151	169	175	169	151	122	84.7	43.2	14.6	43.2	84.7	122	151	169	175
90	3.80	30.4	70.2	106	135	154	161	154	135	106	70.2	30.4	3.80	30.4	70.2	106	135	154	161
95	2.84	21.3	58.6	93.1	121	138	146	138	121	93.1	58.6	21.3	2.84	21.3	58.6	93.1	121	138	146
100	2.74	13.8	47.1	80.2	106	123	130	123	106	80.2	47.1	13.8	2.74	13.8	47.1	80.2	106	123	130
105	2.74	7.33	36.3	66.7	91.7	107	114	107	91.7	66.7	36.3	7.33	2.74	7.33	36.3	66.7	91.7	107	114
110	2.74	3.28	26.5	53.8	76.7	91.3	97.0	91.3	76.7	53.8	26.5	3.28	2.74	3.28	26.5	53.8	76.7	91.3	97.0
115	2.74	3.09	17.2	41.4	62.4	75.4	80.6	75.4	62.4	41.4	17.2	3.09	2.74	3.09	17.2	41.4	62.4	75.4	80.6
120	2.74	2.81	8.70	30.0	48.5	60.5	64.7	60.5	48.5	30.0	8.70	2.81	2.74	2.81	8.70	30.0	48.5	60.5	64.7
125	2.74	2.72	3.07	18.9	35.3	46.0	49.8	46.0	35.3	18.9	3.07	2.72	2.74	2.72	3.07	18.9	35.3	46.0	49.8
130	2.84	2.72	2.61	9.13	23.0	32.4	35.6	32.4	23.0	9.13	2.61	2.72	2.84	2.72	2.61	9.13	23.0	32.4	35.6
135	2.84	2.72	2.42	2.70	11.4	19.5	22.4	19.5	11.4	2.70	2.42	2.72	2.84	2.72	2.42	2.70	11.4	19.5	22.4
140	2.84	2.72	2.33	2.04	2.72	7.66	9.97	7.66	2.72	2.04	2.33	2.72	2.84	2.72	2.33	2.04	2.72	7.66	9.97
145	2.84	2.62	2.14	1.85	1.58	1.31	1.50	1.31	1.58	1.85	2.14	2.62	2.84	2.62	2.14	1.85	1.58	1.31	1.50
150	2.84	2.44	2.05	1.76	1.39	1.21	1.03	1.21	1.39	1.76	2.05	2.44	2.84	2.44	2.05	1.76	1.39	1.21	1.03
155	2.84	2.25	1.77	1.58	1.30	1.02	0.94	1.02	1.30	1.58	1.77	2.25	2.84	2.25	1.77	1.58	1.30	1.02	0.94
160	2.84	1.97	1.58	1.30	1.21	0.93	0.93	0.93	1.21	1.30	1.58	1.97	2.84	1.97	1.58	1.30	1.21	0.93	0.93
165	2.84	1.87	1.58	1.39	1.21	0.93	0.93	0.93	1.21	1.39	1.58	1.87	2.84	1.87	1.58	1.39	1.21	0.93	0.93
170	2.84	1.97	1.58	1.39	1.30	1.12	1.03	1.12	1.30	1.39	1.58	1.97	2.84	1.97	1.58	1.39	1.30	1.12	1.03
175	2.84	1.97	1.58	1.39	1.39	1.12	1.22	1.12	1.39	1.39	1.58	1.97	2.84	1.97	1.58	1.39	1.39	1.12	1.22
180	2.84	1.97	1.58	1.39	1.39	1.12	1.21	1.12	1.39	1.39	1.58	1.97	2.84	1.97	1.58	1.39	1.39	1.12	1.21

Table--2

UNIT: cd

C (DEG) Y (DEG)	285	300	315	330	345														
0	350	351	350	351	350														
5	350	349	349	349	349														
10	347	347	345	345	344														
15	343	342	339	337	335														
20	337	335	330	327	324														
25	329	325	319	315	310														
30	320	315	307	299	292														
35	310	303	292	281	273														
40	299	290	275	262	252														
45	287	276	259	242	229														
50	274	262	241	221	205														
55	261	246	224	200	180														
60	246	230	206	179	155														
65	231	214	188	158	129														
70	216	198	170	138	104														
75	201	182	153	118	81.3														
80	185	166	137	101	60.3														
85	169	151	122	84.7	43.2														
90	154	135	106	70.2	30.4														
95	138	121	93.1	58.6	21.3														
100	123	106	80.2	47.1	13.8														
105	107	91.7	66.7	36.3	7.33														
110	91.3	76.7	53.8	26.5	3.28														
115	75.4	62.4	41.4	17.2	3.09														
120	60.5	48.5	30.0	8.70	2.81														
125	46.0	35.3	18.9	3.07	2.72														
130	32.4	23.0	9.13	2.61	2.72														
135	19.5	11.4	2.70	2.42	2.72														
140	7.66	2.72	2.04	2.33	2.72														
145	1.31	1.58	1.85	2.14	2.62														
150	1.21	1.39	1.76	2.05	2.44														
155	1.02	1.30	1.58	1.77	2.25														
160	0.93	1.21	1.30	1.58	1.97														
165	0.93	1.21	1.39	1.58	1.87														
170	1.12	1.30	1.39	1.58	1.97														
175	1.12	1.39	1.39	1.58	1.97														
180	1.12	1.39	1.39	1.58	1.97														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2 @10W5000K	Sample ID	241225003-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	0.084	10.0	0.994	6.25
277.0	60	0.041	10.4	0.927	10.46

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*****