

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

Address: 408 W 14th St New York, NY 10014

Prepared By

Dongguan New Testing Centre Co., Ltd.

Address: 3F No. 1 the 1st North Industry Road, Songshan Lake Science & Technology Park, Dongguan, Guangdong, China

Prepare by:

Alan Wang

Engineer: Alan Wang

Date: 2025-01-04

Review by:

Vincent Yuan

Technical Lead: Vincent Yuan

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		459
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	143.5
			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	7.78
				277V	18.66
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.979
				277V	0.838
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4095
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		85.0
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		18
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		95
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-11%
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	28.4
			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		0.028
(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 @6W4000K	-	241225003-S1
2	Goniophotometer Test	2025-01-02	STRP2 @6W4000K	-	241225003-S1
3	THD and PF Test	2025-01-02	STRP2 @6W4000K	-	241225003-S1

Remark (If any):

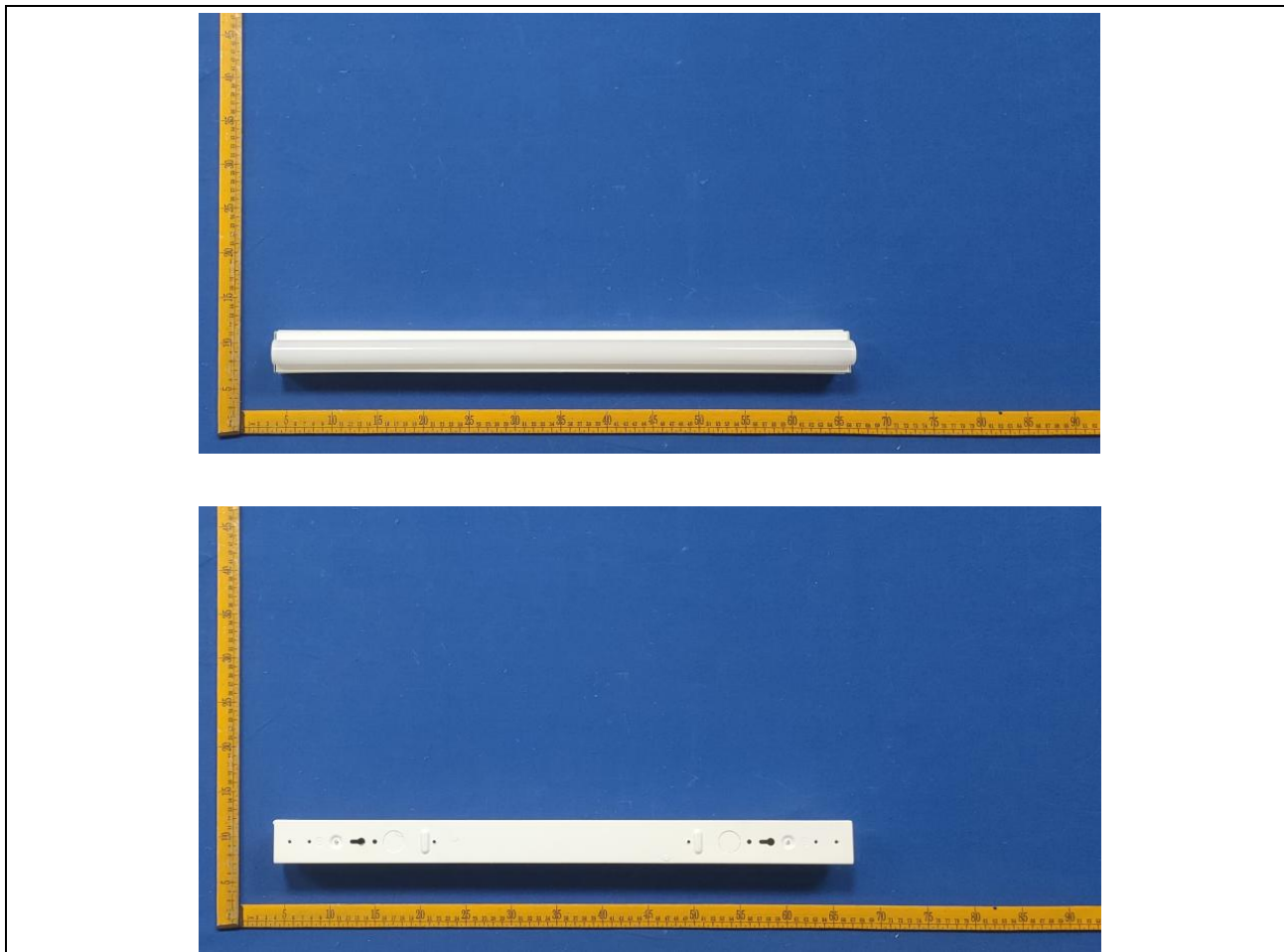
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. STRP2 @6W4000K, 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 @6W4000K	Sample ID	241225003-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

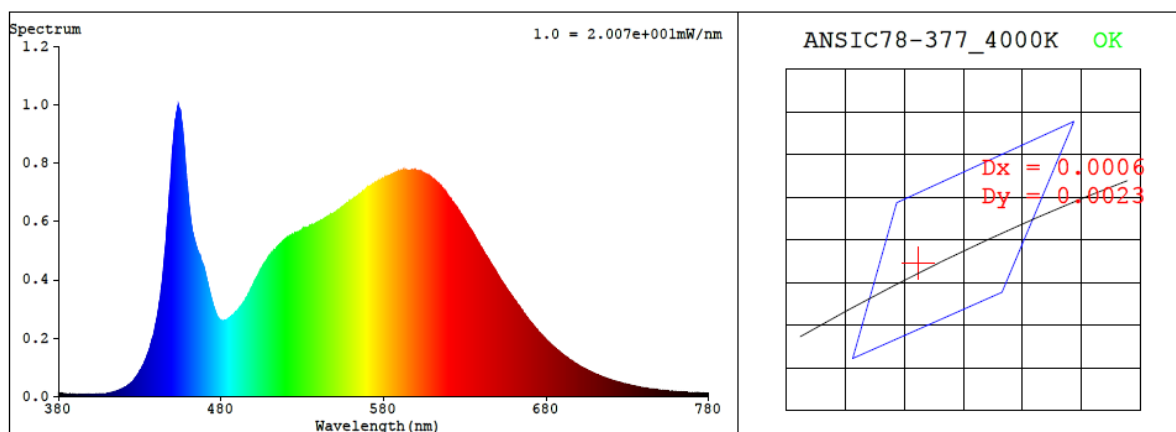
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm1^{\circ}\text{C}$.</p> <p>The sample measurements 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	0.049	5.8	0.979
277.0	60	0.028	6.4	0.838

CCT (K)	CRI	R9	Duv	Rf	Rg	IES Rcs,h1
4095	85.0	18	0.0009	85	95	-11%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3770$ $y = 0.3765$ / $u' = 0.2229$ $v' = 0.5009$ ($duv=9.05e-04$)

CCT= 4095K Prcp WL: Ld=578.2nm Purity=26.1%

Peak WL: Lp=454nm FWHM: =20.5nm Ratio:R=18.3% G=77.7% B=4.0%

Render Index: Ra = 85.0 AvgR = 78.9 TM30:Rf=85 Rg=95

EEL: 0.08952 A++ Highest

R1 =84 R2 =92 R3 =96 R4 =83 R5 =83 R6 =88 R7 =87

R8 =68 R9 =18 R10=79 R11=82 R12=61 R13=86 R14=98 R15=78

4.1 Integrating Sphere Test

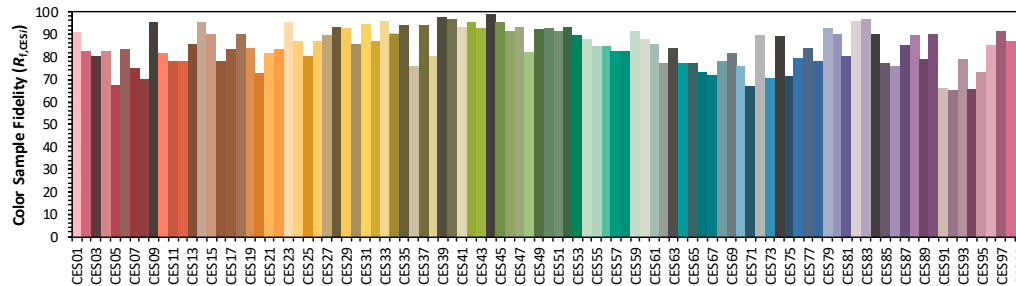
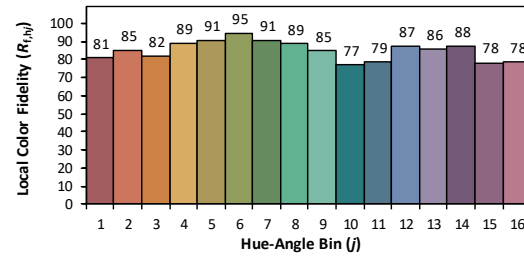
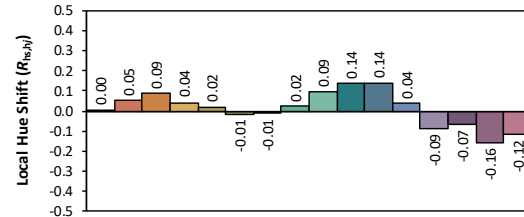
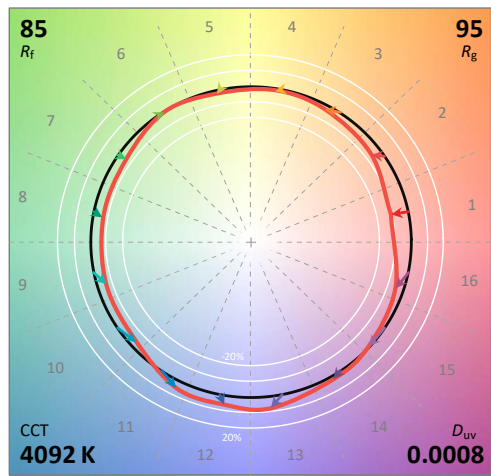
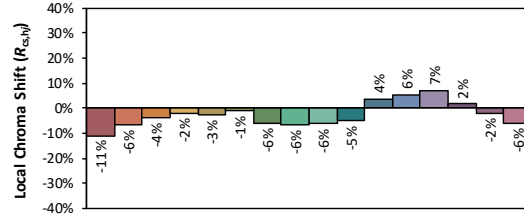
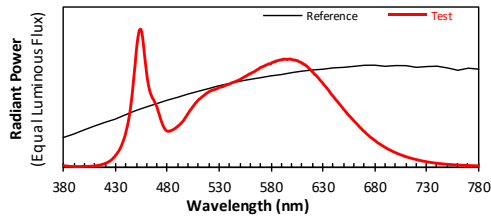
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/1/4

Model: STRP2 @6W4000K



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

x 0.3770
 y 0.3763
 u' 0.2230
 v' 0.5009

CIE 13.3-1995
(CRI)

R_a 85
 R_g 18

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	1.34E-05	447	6.03E-04	514	5.09E-04	581	7.53E-04	648	4.39E-04	715	6.68E-05
381	1.11E-05	448	6.78E-04	515	5.15E-04	582	7.55E-04	649	4.30E-04	716	6.47E-05
382	1.09E-05	449	7.54E-04	516	5.22E-04	583	7.59E-04	650	4.20E-04	717	6.24E-05
383	8.70E-06	450	8.39E-04	517	5.27E-04	584	7.58E-04	651	4.11E-04	718	6.05E-05
384	9.40E-06	451	9.04E-04	518	5.33E-04	585	7.65E-04	652	4.02E-04	719	5.88E-05
385	8.60E-06	452	9.53E-04	519	5.38E-04	586	7.66E-04	653	3.93E-04	720	5.69E-05
386	6.70E-06	453	9.86E-04	520	5.42E-04	587	7.68E-04	654	3.85E-04	721	5.52E-05
387	7.50E-06	454	9.93E-04	521	5.48E-04	588	7.70E-04	655	3.76E-04	722	5.36E-05
388	6.60E-06	455	9.79E-04	522	5.50E-04	589	7.72E-04	656	3.68E-04	723	5.16E-05
389	6.70E-06	456	9.35E-04	523	5.55E-04	590	7.72E-04	657	3.60E-04	724	5.00E-05
390	6.50E-06	457	8.71E-04	524	5.55E-04	591	7.76E-04	658	3.52E-04	725	4.84E-05
391	5.60E-06	458	8.00E-04	525	5.59E-04	592	7.75E-04	659	3.44E-04	726	4.70E-05
392	6.30E-06	459	7.36E-04	526	5.59E-04	593	7.78E-04	660	3.35E-04	727	4.53E-05
393	6.50E-06	460	6.73E-04	527	5.64E-04	594	7.78E-04	661	3.28E-04	728	4.40E-05
394	6.40E-06	461	6.22E-04	528	5.65E-04	595	7.76E-04	662	3.20E-04	729	4.27E-05
395	5.90E-06	462	5.80E-04	529	5.71E-04	596	7.74E-04	663	3.13E-04	730	4.12E-05
396	6.50E-06	463	5.50E-04	530	5.73E-04	597	7.78E-04	664	3.04E-04	731	3.98E-05
397	6.90E-06	464	5.25E-04	531	5.77E-04	598	7.77E-04	665	2.97E-04	732	3.86E-05
398	6.70E-06	465	5.09E-04	532	5.78E-04	599	7.79E-04	666	2.87E-04	733	3.74E-05
399	6.90E-06	466	4.92E-04	533	5.79E-04	600	7.75E-04	667	2.81E-04	734	3.64E-05
400	7.00E-06	467	4.83E-04	534	5.82E-04	601	7.74E-04	668	2.73E-04	735	3.51E-05
401	7.40E-06	468	4.63E-04	535	5.86E-04	602	7.71E-04	669	2.65E-04	736	3.41E-05
402	7.30E-06	469	4.49E-04	536	5.90E-04	603	7.72E-04	670	2.59E-04	737	3.30E-05
403	7.50E-06	470	4.31E-04	537	5.91E-04	604	7.68E-04	671	2.52E-04	738	3.19E-05
404	7.90E-06	471	4.05E-04	538	5.94E-04	605	7.68E-04	672	2.44E-04	739	3.09E-05
405	8.40E-06	472	3.84E-04	539	5.98E-04	606	7.65E-04	673	2.38E-04	740	3.00E-05
406	8.40E-06	473	3.58E-04	540	5.99E-04	607	7.60E-04	674	2.31E-04	741	2.92E-05
407	8.90E-06	474	3.35E-04	541	6.03E-04	608	7.57E-04	675	2.24E-04	742	2.84E-05
408	9.00E-06	475	3.15E-04	542	6.07E-04	609	7.55E-04	676	2.18E-04	743	2.72E-05
409	9.80E-06	476	2.97E-04	543	6.10E-04	610	7.48E-04	677	2.12E-04	744	2.71E-05
410	1.12E-05	477	2.84E-04	544	6.12E-04	611	7.46E-04	678	2.08E-04	745	2.59E-05
411	1.16E-05	478	2.72E-04	545	6.15E-04	612	7.39E-04	679	2.01E-04	746	2.51E-05
412	1.26E-05	479	2.65E-04	546	6.17E-04	613	7.37E-04	680	1.96E-04	747	2.43E-05
413	1.45E-05	480	2.61E-04	547	6.22E-04	614	7.30E-04	681	1.90E-04	748	2.35E-05
414	1.54E-05	481	2.59E-04	548	6.23E-04	615	7.26E-04	682	1.84E-04	749	2.30E-05
415	1.71E-05	482	2.62E-04	549	6.28E-04	616	7.18E-04	683	1.78E-04	750	2.25E-05
416	1.90E-05	483	2.62E-04	550	6.31E-04	617	7.09E-04	684	1.74E-04	751	2.20E-05
417	2.11E-05	484	2.66E-04	551	6.35E-04	618	7.03E-04	685	1.69E-04	752	2.13E-05
418	2.39E-05	485	2.69E-04	552	6.40E-04	619	6.95E-04	686	1.64E-04	753	2.06E-05
419	2.58E-05	486	2.74E-04	553	6.43E-04	620	6.87E-04	687	1.59E-04	754	2.03E-05
420	2.91E-05	487	2.78E-04	554	6.49E-04	621	6.81E-04	688	1.55E-04	755	1.98E-05
421	3.16E-05	488	2.82E-04	555	6.53E-04	622	6.68E-04	689	1.50E-04	756	1.91E-05
422	3.53E-05	489	2.91E-04	556	6.55E-04	623	6.66E-04	690	1.46E-04	757	1.88E-05
423	3.93E-05	490	2.94E-04	557	6.61E-04	624	6.58E-04	691	1.41E-04	758	1.82E-05
424	4.32E-05	491	3.02E-04	558	6.65E-04	625	6.50E-04	692	1.37E-04	759	1.81E-05
425	4.88E-05	492	3.07E-04	559	6.72E-04	626	6.41E-04	693	1.32E-04	760	1.72E-05
426	5.43E-05	493	3.16E-04	560	6.71E-04	627	6.31E-04	694	1.28E-04	761	1.70E-05
427	6.10E-05	494	3.23E-04	561	6.77E-04	628	6.23E-04	695	1.25E-04	762	1.68E-05
428	7.01E-05	495	3.32E-04	562	6.82E-04	629	6.14E-04	696	1.21E-04	763	1.63E-05
429	7.72E-05	496	3.42E-04	563	6.84E-04	630	6.06E-04	697	1.17E-04	764	1.60E-05
430	8.74E-05	497	3.54E-04	564	6.89E-04	631	5.95E-04	698	1.14E-04	765	1.55E-05
431	9.58E-05	498	3.64E-04	565	6.93E-04	632	5.87E-04	699	1.10E-04	766	1.50E-05
432	1.07E-04	499	3.76E-04	566	6.98E-04	633	5.79E-04	700	1.07E-04	767	1.48E-05
433	1.18E-04	500	3.88E-04	567	7.03E-04	634	5.70E-04	701	1.04E-04	768	1.43E-05
434	1.31E-04	501	3.99E-04	568	7.06E-04	635	5.61E-04	702	1.01E-04	769	1.39E-05
435	1.45E-04	502	4.11E-04	569	7.12E-04	636	5.51E-04	703	9.72E-05	770	1.39E-05
436	1.63E-04	503	4.19E-04	570	7.18E-04	637	5.40E-04	704	9.50E-05	771	1.34E-05
437	1.83E-04	504	4.31E-04	571	7.20E-04	638	5.29E-04	705	9.14E-05	772	1.31E-05
438	2.04E-04	505	4.40E-04	572	7.23E-04	639	5.20E-04	706	8.92E-05	773	1.30E-05
439	2.26E-04	506	4.50E-04	573	7.27E-04	640	5.12E-04	707	8.62E-05	774	1.28E-05
440	2.56E-04	507	4.60E-04	574	7.29E-04	641	5.03E-04	708	8.32E-05	775	1.25E-05
441	2.86E-04	508	4.67E-04	575	7.35E-04	642	4.92E-04	709	8.03E-05	776	1.22E-05
442	3.20E-04	509	4.78E-04	576	7.37E-04	643	4.84E-04	710	7.82E-05	777	1.19E-05
443	3.60E-04	510	4.85E-04	577	7.40E-04	644	4.76E-04	711	7.56E-05	778	1.16E-05
444	4.07E-04	511	4.92E-04	578	7.44E-04	645	4.66E-04	712	7.35E-05	779	1.16E-05
445	4.65E-04	512	4.96E-04	579	7.44E-04	646	4.57E-04	713	7.10E-05	780	1.16E-05
446	5.28E-04	513	5.04E-04	580	7.45E-04	647	4.48E-04	714	6.88E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2 @6W4000K	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	0.028	6.4	0.838
NON-WORST CASE	120.0	60	0.049	5.8	0.979

Test Result

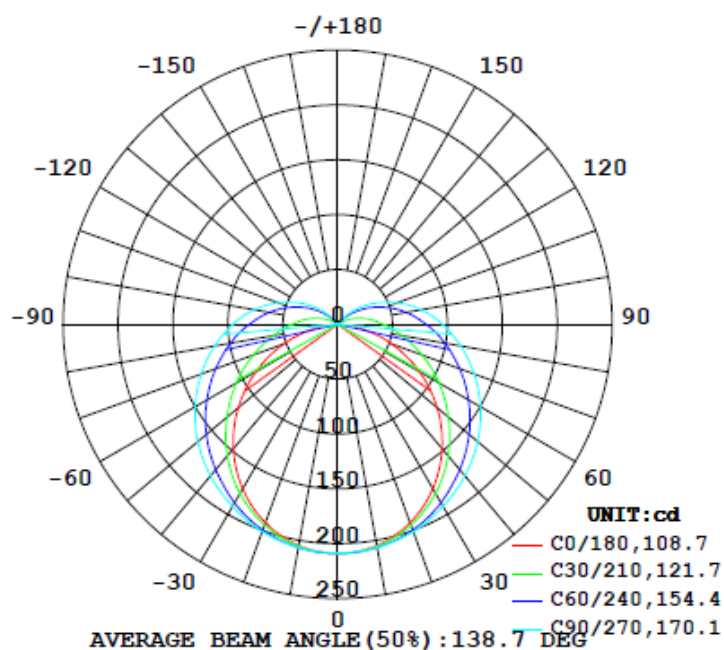
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
918	459	161.7	161.7	108.9	169.8	143.5

Zonal Lumen Requirement	UGR	
(0°-60°)	Crosswise	Endwise
55.7%	20.3	28.4

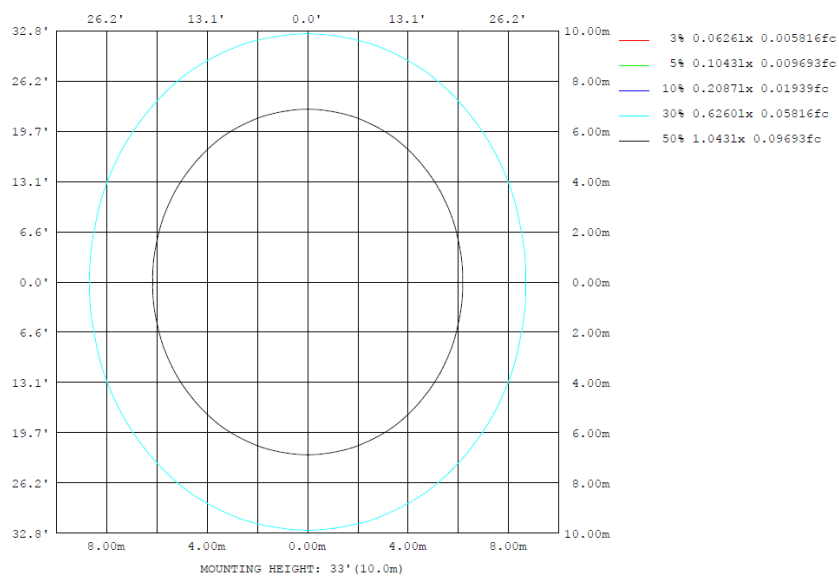
4.2 Goniophotometer Test

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	204.7	206.1	206.5	206.1	204.7	206.1	206.5	206.1	0- 10	19.80	19.80	2.16,2.16
20	192.5	197.2	201.2	197.2	192.5	197.2	201.2	197.2	10- 20	57.12	76.91	8.38,8.38
30	173.2	182.8	191.7	182.8	173.2	182.8	191.7	182.8	20- 30	87.90	164.8	17.9,17.9
40	147.8	164.5	180.3	164.5	147.8	164.5	180.3	164.5	30- 40	108.9	273.8	29.8,29.8
50	118.1	144.0	166.5	144.0	118.1	144.0	166.5	144.0	40- 50	119.1	392.8	42.8,42.8
60	85.82	123.3	150.0	123.3	85.82	123.3	150.0	123.3	50- 60	118.3	511.2	55.7,55.7
70	52.07	101.5	132.2	101.5	52.07	101.5	132.2	101.5	60- 70	108.0	619.2	67.4,67.4
80	20.69	81.41	113.7	81.41	20.69	81.41	113.7	81.41	70- 80	91.26	710.5	77.4,77.4
90	2.284	63.38	95.50	63.38	2.284	63.38	95.50	63.38	80- 90	72.17	782.6	85.2,85.2
100	1.609	47.58	77.31	47.58	1.609	47.58	77.31	47.58	90-100	54.85	837.5	91.2,91.2
110	1.609	32.18	57.60	32.18	1.609	32.18	57.60	32.18	100-110	38.72	876.2	95.4,95.4
120	1.609	17.95	38.48	17.95	1.609	17.95	38.48	17.95	110-120	23.94	900.1	98,98
130	1.609	5.600	21.42	5.600	1.609	5.600	21.42	5.600	120-130	12.12	912.3	99.4,99.4
140	1.609	1.115	6.109	1.115	1.609	1.115	6.109	1.115	130-140	4.223	916.5	99.8,99.8
150	1.609	0.9290	0.5599	0.9290	1.609	0.9290	0.5599	0.9290	140-150	0.8989	917.4	99.9,99.9
160	1.609	0.6503	0.5599	0.6503	1.609	0.6503	0.5599	0.6503	150-160	0.4821	917.9	100,100
170	1.609	0.7417	0.4666	0.7417	1.609	0.7417	0.4666	0.7417	160-170	0.2609	918.1	100,100
180	1.609	0.7432	0.4666	0.7432	1.609	0.7432	0.4666	0.7432	170-180	0.0890	918.2	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	19.80	0-10	19.80	2.16%
10-20	57.12	0-20	76.92	8.38%
20-30	87.90	0-30	164.82	17.95%
30-40	108.94	0-40	273.76	29.82%
40-50	119.06	0-50	392.82	42.78%
50-60	118.34	0-60	511.16	55.67%
60-70	108.05	0-70	619.21	67.44%
70-80	91.26	0-80	710.47	77.38%
80-90	72.17	0-90	782.64	85.24%
90-100	54.85	0-100	837.49	91.22%
100-110	38.72	0-110	876.21	95.43%
110-120	23.94	0-120	900.15	98.04%
120-130	12.12	0-130	912.27	99.36%
130-140	4.22	0-140	916.49	99.82%
140-150	0.90	0-150	917.39	99.92%
150-160	0.48	0-160	917.87	99.97%
160-170	0.26	0-170	918.13	100.00%
170-180	0.09	0-180	918.22	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	18.5	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	25.7	27.0	27.7
	6H	18.6	19.7	19.2	20.4	21.1	26.8	28.0	27.4	28.6	29.3
	8H	18.6	19.8	19.3	20.4	21.1	27.7	28.8	28.3	29.4	30.1
	12H	18.6	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	20.7	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	21.9	22.8	23.6	26.0	26.8	26.7	27.5	28.3
	6H	21.9	22.7	22.6	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	28.0	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	16.2	17.6	16.8	18.2	18.9	20.3	21.7	20.9	22.3	23.0
	3H	17.6	18.9	18.2	19.5	20.2	23.3	24.6	23.9	25.2	25.9
	4H	18.0	19.3	18.6	19.9	20.6	24.8	26.1	25.4	26.7	27.4
	6H	18.3	19.4	18.9	20.1	20.8	26.5	27.7	27.1	28.3	29.0
	8H	18.3	19.5	19.0	20.1	20.8	27.4	28.5	28.0	29.1	29.8
	12H	18.3	19.4	19.0	20.1	20.8	28.3	29.4	28.9	30.0	30.8
4H	2H	17.5	18.8	18.1	19.4	20.1	20.6	21.9	21.2	22.5	23.2
	3H	19.2	20.3	19.8	20.9	21.7	23.9	24.9	24.5	25.6	26.3
	4H	19.8	20.8	20.4	21.5	22.2	25.5	26.5	26.2	27.2	27.9
	6H	20.2	21.1	20.9	21.8	22.5	27.4	28.3	28.0	28.9	29.7
	8H	20.3	21.1	21.0	21.8	22.6	28.4	29.2	29.0	29.9	30.7
	12H	20.4	21.1	21.0	21.8	22.6	29.4	30.2	30.1	30.9	31.7
8H	4H	21.0	21.8	21.6	22.5	23.3	25.7	26.5	26.4	27.2	28.0
	6H	21.6	22.4	22.3	23.1	23.9	27.7	28.4	28.4	29.1	29.9
	8H	21.9	22.5	22.6	23.2	24.0	28.8	29.5	29.5	30.2	31.0
	12H	22.0	22.6	22.7	23.3	24.2	30.1	30.7	30.8	31.4	32.2
12H	4H	21.4	22.1	22.0	22.8	23.6	25.7	26.5	26.4	27.2	28.0
	6H	22.2	22.8	22.9	23.5	24.4	27.7	28.4	28.5	29.1	29.9
	8H	22.5	23.1	23.2	23.8	24.7	28.9	29.5	29.6	30.2	31.1

Maximum UGR = 32.2

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	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209	209
5	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208
10	205	205	205	206	207	207	207	207	206	205	205	205	205	205	206	207	207	207	208
15	199	200	201	202	204	204	204	204	202	201	200	199	199	200	201	202	204	204	204
20	192	193	195	197	199	201	201	201	199	197	195	193	192	193	195	197	199	201	201
25	184	185	187	191	194	196	197	196	194	191	187	185	184	185	187	191	194	196	197
30	173	175	178	183	188	191	192	191	188	183	178	175	173	175	178	183	188	191	192
35	161	163	168	174	180	185	186	185	180	174	168	163	161	163	168	174	180	185	186
40	148	150	157	164	173	178	180	178	173	164	157	150	148	150	157	164	173	178	180
45	133	136	144	154	165	171	174	171	165	154	144	136	133	136	144	154	165	171	174
50	118	122	131	144	156	164	166	164	156	144	131	122	118	122	131	144	156	164	166
55	102	107	119	134	147	155	158	155	147	134	119	107	102	107	119	134	147	155	158
60	85.8	92.2	107	123	137	147	150	147	137	123	107	92.2	85.8	92.2	107	123	137	147	150
65	69.0	76.7	94.1	112	128	138	141	138	128	112	94.1	76.7	69.0	76.7	94.1	112	128	138	141
70	52.1	61.9	81.9	101	118	129	132	129	118	101	81.9	61.9	52.1	61.9	81.9	101	118	129	132
75	35.6	48.2	70.3	91.3	108	120	123	120	108	91.3	70.3	48.2	35.6	48.2	70.3	91.3	108	120	123
80	20.7	35.9	59.6	81.4	99.3	110	114	110	99.3	81.4	59.6	35.9	20.7	35.9	59.6	81.4	99.3	110	114
85	8.63	26.0	50.3	72.3	90.0	101	104	101	90.0	72.3	50.3	26.0	8.63	26.0	50.3	72.3	90.0	101	104
90	2.28	18.3	41.8	63.4	80.7	91.5	95.5	91.5	80.7	63.4	41.8	18.3	2.28	18.3	41.8	63.4	80.7	91.5	95.5
95	1.80	12.9	34.7	55.4	71.9	82.4	86.7	82.4	71.9	55.4	34.7	12.9	1.80	12.9	34.7	55.4	71.9	82.4	86.7
100	1.61	8.36	28.1	47.6	63.4	73.1	77.3	73.1	63.4	47.6	28.1	8.36	1.61	8.36	28.1	47.6	63.4	73.1	77.3
105	1.61	4.52	21.7	39.7	54.7	64.0	67.5	64.0	54.7	39.7	21.7	4.52	1.61	4.52	21.7	39.7	54.7	64.0	67.5
110	1.61	2.07	15.7	32.2	45.7	54.3	57.6	54.3	45.7	32.2	15.7	2.07	1.61	2.07	15.7	32.2	45.7	54.3	57.6
115	1.61	1.79	10.2	24.8	37.4	45.0	48.0	45.0	37.4	24.8	10.2	1.79	1.61	1.79	10.2	24.8	37.4	45.0	48.0
120	1.61	1.88	5.24	17.9	29.1	36.0	38.5	36.0	29.1	17.9	5.24	1.88	1.61	1.88	5.24	17.9	29.1	36.0	38.5
125	1.61	1.69	1.97	11.4	21.3	27.6	29.8	27.6	21.3	11.4	1.97	1.69	1.61	1.69	1.97	11.4	21.3	27.6	29.8
130	1.61	1.69	1.68	5.60	13.9	19.5	21.4	19.5	13.9	5.60	1.68	1.69	1.61	1.69	1.68	5.60	13.9	19.5	21.4
135	1.61	1.69	1.49	1.68	6.99	11.8	13.4	11.8	6.99	1.68	1.49	1.69	1.61	1.69	1.49	1.68	6.99	11.8	13.4
140	1.61	1.69	1.49	1.11	1.68	4.68	6.11	4.68	1.68	1.11	1.49	1.69	1.61	1.69	1.49	1.11	1.68	4.68	6.11
145	1.61	1.60	1.40	1.02	1.03	0.84	0.94	0.84	1.03	1.02	1.40	1.60	1.61	1.60	1.40	1.02	1.03	0.84	0.94
150	1.61	1.50	1.21	0.93	1.02	0.84	0.56	0.84	1.02	0.93	1.21	1.50	1.61	1.50	1.21	0.93	1.02	0.84	0.56
155	1.61	1.41	1.21	1.02	1.02	0.84	0.56	0.84	1.02	1.21	1.41	1.61	1.41	1.21	1.02	1.02	0.84	0.56	0.84
160	1.61	1.22	1.02	0.65	0.84	0.74	0.56	0.74	0.84	0.65	1.02	1.22	1.61	1.22	1.02	0.65	0.84	0.74	0.56
165	1.61	1.22	1.02	0.56	0.84	0.74	0.56	0.74	0.84	0.56	1.02	1.22	1.61	1.22	1.02	0.56	0.84	0.74	0.56
170	1.61	1.22	1.02	0.74	0.84	0.74	0.47	0.74	0.84	0.74	1.02	1.22	1.61	1.22	1.02	0.74	0.84	0.74	0.47
175	1.61	1.22	1.12	0.65	0.84	0.74	0.47	0.74	0.84	0.65	1.12	1.22	1.61	1.22	1.12	0.65	0.84	0.74	0.47
180	1.61	1.22	1.12	0.74	0.84	0.74	0.47	0.74	0.84	0.74	1.12	1.22	1.61	1.22	1.12	0.74	0.84	0.74	0.47

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	209	209	209	209	209														
5	208	208	208	208	208														
10	207	207	206	205	205														
15	204	204	202	201	200														
20	201	199	197	195	193														
25	196	194	191	187	185														
30	191	188	183	178	175														
35	185	180	174	168	163														
40	178	173	164	157	150														
45	171	165	154	144	136														
50	164	156	144	131	122														
55	155	147	134	119	107														
60	147	137	123	107	92.2														
65	138	128	112	94.1	76.7														
70	129	118	101	81.9	61.9														
75	120	108	91.3	70.3	48.2														
80	110	99.3	81.4	59.6	35.9														
85	101	90.0	72.3	50.3	26.0														
90	91.5	80.7	63.4	41.8	18.3														
95	82.4	71.9	55.4	34.7	12.9														
100	73.1	63.4	47.6	28.1	8.36														
105	64.0	54.7	39.7	21.7	4.52														
110	54.3	45.7	32.2	15.7	2.07														
115	45.0	37.4	24.8	10.2	1.79														
120	36.0	29.1	17.9	5.24	1.88														
125	27.6	21.3	11.4	1.97	1.69														
130	19.5	13.9	5.60	1.68	1.69														
135	11.8	6.99	1.68	1.49	1.69														
140	4.68	1.68	1.11	1.49	1.69														
145	0.84	1.03	1.02	1.40	1.60														
150	0.84	1.02	0.93	1.21	1.50														
155	0.84	1.02	1.02	1.21	1.41														
160	0.74	0.84	0.65	1.02	1.22														
165	0.74	0.84	0.56	1.02	1.22														
170	0.74	0.84	0.74	1.02	1.22														
175	0.74	0.84	0.65	1.12	1.22														
180	0.74	0.84	0.74	1.12	1.22														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2 @6W4000K	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	0.049	5.8	0.979	7.78
277.0	60	0.028	6.4	0.838	18.66

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*****