

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: 2025-04-03

Review by:

Vincent Yuan

Technical Lead: Vincent Yuan

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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		577
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	149.9
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.4
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	6.11
				277V	13.59
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.993
				277V	0.915
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3447
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		83.9
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		11
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%		-12%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	≥40%		56.0%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	29.5
			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		0.061
(Goniophotometer – Section 4.2)			Non-Worst Case		0.127
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.4
(Goniophotometer – Section 4.2)			Non-Worst Case		15.1

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-04-03	STRP4/MVS @15W3500K	-	250402001-S1
2	Goniophotometer Test	2025-04-03	STRP4/MVS @15W3500K	-	250402001-S1
3	THD and PF Test	2025-04-03	STRP4/MVS @15W3500K	-	250402001-S1

Remark (If any):

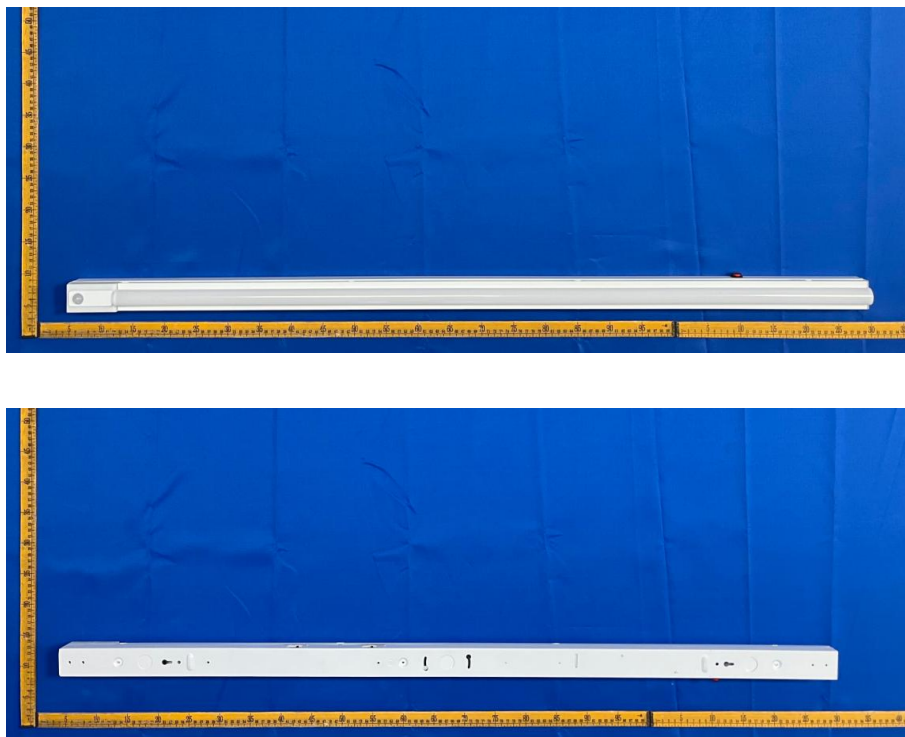
1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
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3.0 Product Description

Luminaire Description: Model No. STRP4/MVS @15W3500K, 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.	STRP4/MVS @15W3500K	Sample ID	250402001-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

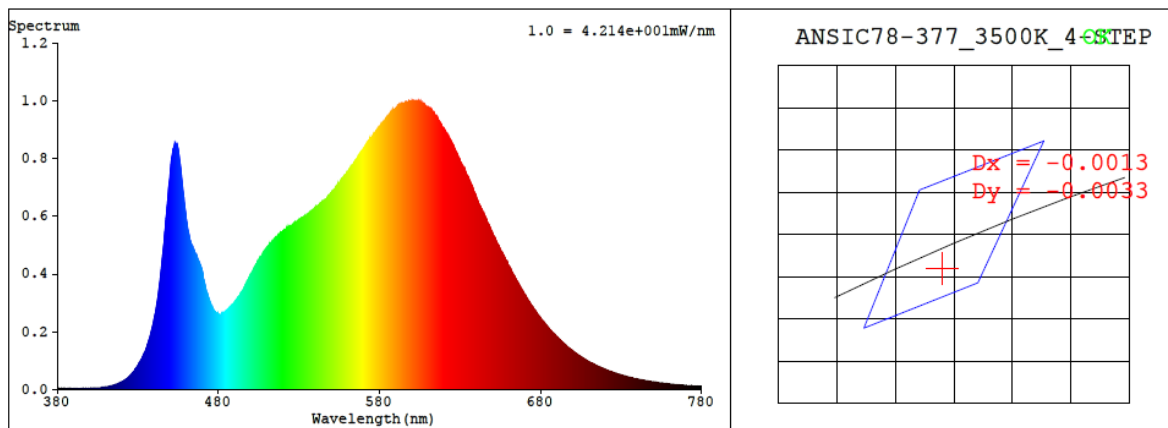
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm1^{\circ}\text{C}$.</p> <p>The sample measurements 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	0.127	15.1	0.993
277.0	60	0.061	15.4	0.915

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3447	83.9	11	-0.0012	1.8	85	95	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4070$ $y = 0.3889$ / $u' = 0.2376$ $v' = 0.5108$ ($duv = -1.18e-03$)

CCT= 3447K Prcp WL: $L_d = 581.6\text{nm}$ Purity=38.9%

Peak WL: $L_p = 600\text{nm}$ FWHM: $=142.3\text{nm}$ Ratio: R=20.7% G=75.9% B=3.3%

Render Index: $R_a = 83.9$ AvgR = 78.3 TM30: $R_f = 84$ $R_g = 95$

EEL: 0.09554 A++ Highest

R1 =83	R2 =92	R3 =96	R4 =82	R5 =83	R6 =90	R7 =84
R8 =62	R9 =11	R10=82	R11=81	R12=68	R13=85	R14=99 R15=76

4.1 Integrating Sphere Test

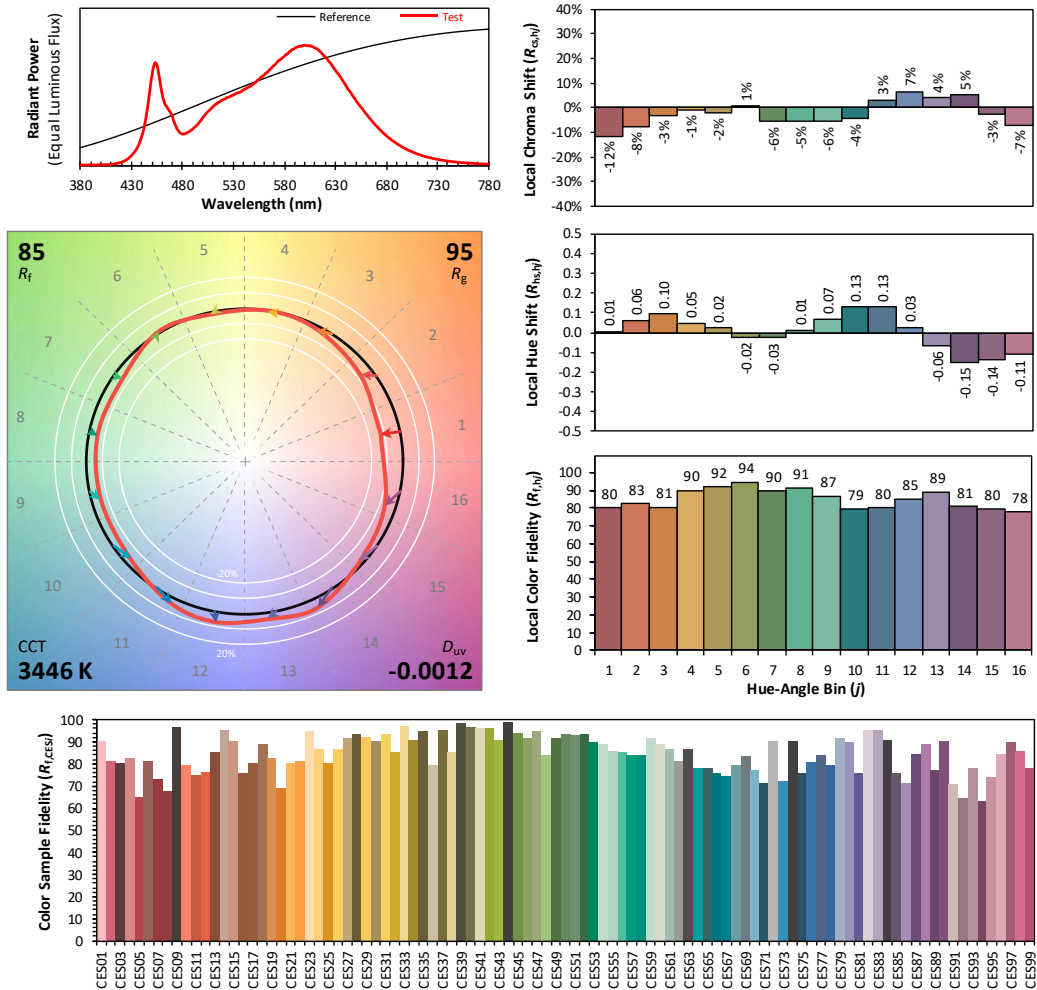
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/3

Model: STRP4/MVS @15W3500K



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

x 0.4070
 y 0.3888
 u' 0.2377
 v' 0.5107

CIE 13.3-1995
(CRI)

R_a 84
 R_9 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	3.70E-06	447	5.65E-04	514	5.15E-04	581	9.19E-04	648	5.69E-04	715	8.17E-05
381	3.70E-06	448	6.27E-04	515	5.23E-04	582	9.25E-04	649	5.55E-04	716	7.89E-05
382	3.30E-06	449	6.99E-04	516	5.28E-04	583	9.25E-04	650	5.43E-04	717	7.68E-05
383	3.50E-06	450	7.47E-04	517	5.33E-04	584	9.38E-04	651	5.30E-04	718	7.45E-05
384	2.90E-06	451	8.03E-04	518	5.37E-04	585	9.46E-04	652	5.19E-04	719	7.23E-05
385	1.60E-06	452	8.33E-04	519	5.44E-04	586	9.50E-04	653	5.07E-04	720	6.99E-05
386	2.90E-06	453	8.54E-04	520	5.47E-04	587	9.60E-04	654	4.97E-04	721	6.75E-05
387	2.90E-06	454	8.49E-04	521	5.52E-04	588	9.65E-04	655	4.84E-04	722	6.54E-05
388	4.00E-06	455	8.33E-04	522	5.55E-04	589	9.66E-04	656	4.76E-04	723	6.32E-05
389	2.50E-06	456	7.89E-04	523	5.61E-04	590	9.73E-04	657	4.65E-04	724	6.13E-05
390	2.70E-06	457	7.42E-04	524	5.65E-04	591	9.79E-04	658	4.53E-04	725	5.92E-05
391	3.10E-06	458	6.91E-04	525	5.66E-04	592	9.81E-04	659	4.43E-04	726	5.70E-05
392	2.00E-06	459	6.38E-04	526	5.70E-04	593	9.86E-04	660	4.29E-04	727	5.56E-05
393	2.70E-06	460	5.93E-04	527	5.74E-04	594	9.91E-04	661	4.21E-04	728	5.31E-05
394	2.80E-06	461	5.56E-04	528	5.79E-04	595	9.89E-04	662	4.10E-04	729	5.18E-05
395	3.50E-06	462	5.28E-04	529	5.82E-04	596	9.94E-04	663	3.99E-04	730	4.99E-05
396	3.50E-06	463	5.04E-04	530	5.87E-04	597	9.92E-04	664	3.90E-04	731	4.84E-05
397	2.50E-06	464	4.95E-04	531	5.92E-04	598	9.96E-04	665	3.79E-04	732	4.69E-05
398	3.80E-06	465	4.80E-04	532	5.95E-04	599	9.98E-04	666	3.68E-04	733	4.53E-05
399	3.50E-06	466	4.67E-04	533	5.99E-04	600	9.99E-04	667	3.59E-04	734	4.39E-05
400	4.60E-06	467	4.54E-04	534	6.03E-04	601	9.96E-04	668	3.49E-04	735	4.28E-05
401	4.50E-06	468	4.41E-04	535	6.06E-04	602	9.97E-04	669	3.38E-04	736	4.11E-05
402	4.60E-06	469	4.26E-04	536	6.09E-04	603	9.95E-04	670	3.30E-04	737	4.02E-05
403	5.10E-06	470	4.09E-04	537	6.12E-04	604	9.97E-04	671	3.22E-04	738	3.83E-05
404	5.60E-06	471	3.75E-04	538	6.18E-04	605	9.94E-04	672	3.12E-04	739	3.73E-05
405	5.60E-06	472	3.55E-04	539	6.22E-04	606	9.95E-04	673	3.03E-04	740	3.62E-05
406	5.80E-06	473	3.35E-04	540	6.30E-04	607	9.89E-04	674	2.94E-04	741	3.48E-05
407	5.60E-06	474	3.13E-04	541	6.34E-04	608	9.87E-04	675	2.87E-04	742	3.36E-05
408	7.20E-06	475	2.99E-04	542	6.37E-04	609	9.80E-04	676	2.77E-04	743	3.29E-05
409	8.10E-06	476	2.86E-04	543	6.44E-04	610	9.77E-04	677	2.70E-04	744	3.20E-05
410	8.50E-06	477	2.75E-04	544	6.47E-04	611	9.72E-04	678	2.63E-04	745	3.05E-05
411	9.80E-06	478	2.68E-04	545	6.52E-04	612	9.71E-04	679	2.54E-04	746	2.98E-05
412	1.02E-05	479	2.64E-04	546	6.56E-04	613	9.62E-04	680	2.47E-04	747	2.86E-05
413	1.17E-05	480	2.60E-04	547	6.61E-04	614	9.56E-04	681	2.39E-04	748	2.79E-05
414	1.32E-05	481	2.60E-04	548	6.68E-04	615	9.47E-04	682	2.33E-04	749	2.68E-05
415	1.51E-05	482	2.64E-04	549	6.73E-04	616	9.39E-04	683	2.26E-04	750	2.61E-05
416	1.68E-05	483	2.65E-04	550	6.80E-04	617	9.29E-04	684	2.20E-04	751	2.53E-05
417	1.85E-05	484	2.68E-04	551	6.87E-04	618	9.20E-04	685	2.12E-04	752	2.45E-05
418	2.14E-05	485	2.74E-04	552	6.93E-04	619	9.08E-04	686	2.06E-04	753	2.37E-05
419	2.40E-05	486	2.78E-04	553	7.03E-04	620	9.03E-04	687	2.00E-04	754	2.31E-05
420	2.63E-05	487	2.83E-04	554	7.11E-04	621	8.93E-04	688	1.94E-04	755	2.21E-05
421	2.91E-05	488	2.91E-04	555	7.14E-04	622	8.84E-04	689	1.90E-04	756	2.18E-05
422	3.31E-05	489	2.95E-04	556	7.24E-04	623	8.75E-04	690	1.82E-04	757	2.10E-05
423	3.67E-05	490	3.02E-04	557	7.32E-04	624	8.62E-04	691	1.77E-04	758	2.01E-05
424	4.11E-05	491	3.10E-04	558	7.38E-04	625	8.53E-04	692	1.72E-04	759	1.97E-05
425	4.66E-05	492	3.18E-04	559	7.44E-04	626	8.42E-04	693	1.66E-04	760	1.90E-05
426	5.22E-05	493	3.25E-04	560	7.52E-04	627	8.28E-04	694	1.62E-04	761	1.82E-05
427	5.91E-05	494	3.34E-04	561	7.61E-04	628	8.16E-04	695	1.56E-04	762	1.79E-05
428	6.60E-05	495	3.41E-04	562	7.68E-04	629	8.03E-04	696	1.51E-04	763	1.73E-05
429	7.41E-05	496	3.52E-04	563	7.73E-04	630	7.92E-04	697	1.46E-04	764	1.68E-05
430	8.29E-05	497	3.64E-04	564	7.82E-04	631	7.80E-04	698	1.42E-04	765	1.61E-05
431	9.21E-05	498	3.74E-04	565	7.93E-04	632	7.69E-04	699	1.38E-04	766	1.54E-05
432	1.02E-04	499	3.86E-04	566	7.99E-04	633	7.60E-04	700	1.34E-04	767	1.51E-05
433	1.13E-04	500	3.99E-04	567	8.07E-04	634	7.46E-04	701	1.28E-04	768	1.45E-05
434	1.25E-04	501	4.07E-04	568	8.17E-04	635	7.36E-04	702	1.25E-04	769	1.44E-05
435	1.38E-04	502	4.19E-04	569	8.26E-04	636	7.21E-04	703	1.21E-04	770	1.37E-05
436	1.54E-04	503	4.29E-04	570	8.33E-04	637	7.08E-04	704	1.17E-04	771	1.30E-05
437	1.72E-04	504	4.39E-04	571	8.41E-04	638	6.95E-04	705	1.14E-04	772	1.30E-05
438	1.94E-04	505	4.47E-04	572	8.50E-04	639	6.81E-04	706	1.10E-04	773	1.23E-05
439	2.17E-04	506	4.57E-04	573	8.59E-04	640	6.70E-04	707	1.06E-04	774	1.24E-05
440	2.45E-04	507	4.62E-04	574	8.71E-04	641	6.53E-04	708	1.03E-04	775	1.18E-05
441	2.71E-04	508	4.74E-04	575	8.73E-04	642	6.38E-04	709	9.95E-05	776	1.15E-05
442	3.05E-04	509	4.81E-04	576	8.82E-04	643	6.29E-04	710	9.53E-05	777	1.12E-05
443	3.46E-04	510	4.89E-04	577	8.87E-04	644	6.17E-04	711	9.29E-05	778	1.08E-05
444	3.93E-04	511	4.97E-04	578	8.96E-04	645	6.06E-04	712	9.08E-05	779	1.08E-05
445	4.47E-04	512	5.07E-04	579	9.01E-04	646	5.93E-04	713	8.79E-05	780	1.08E-05
446	5.01E-04	513	5.10E-04	580	9.08E-04	647	5.79E-04	714	8.44E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP4/MVS @15W3500K	Sample ID	250402001-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	25.0	Humidity (%RH)	42.6

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	0.061	15.4	0.915
NON-WORST CASE	120.0	60	0.127	15.1	0.993

Test Result

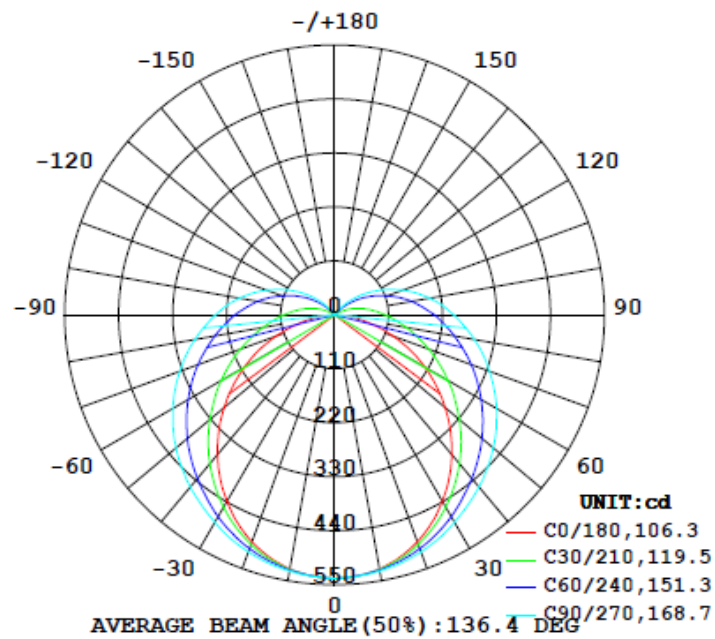
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
2309	577	159.6	159.6	106.3	168.8	149.9

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
56.0%	21.2	29.5

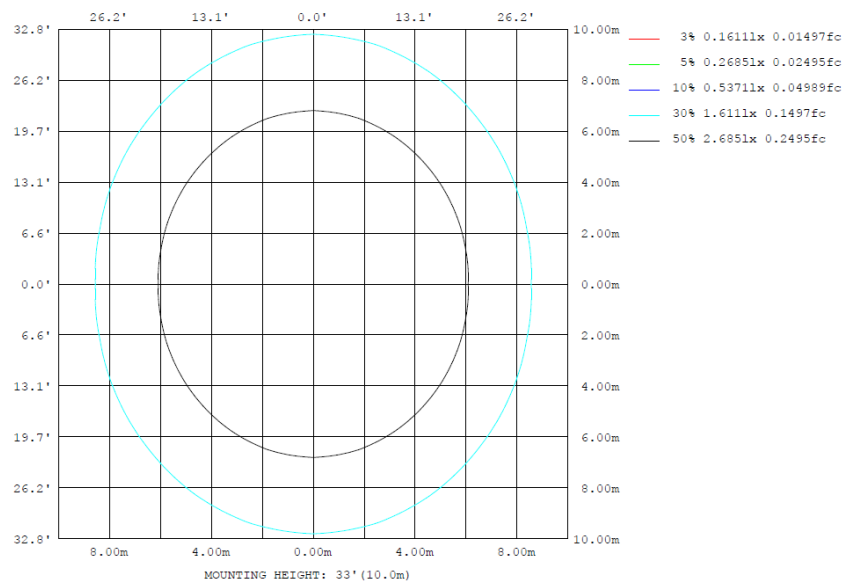
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	525.6	527.0	530.0	527.0	525.6	527.0	530.0	527.0	0- 10	50.78	50.78	2.2,2.2
20	492.5	501.8	514.1	501.8	492.5	501.8	514.1	501.8	10- 20	146.0	196.8	8.52,8.52
30	438.9	463.5	488.1	463.5	438.9	463.5	488.1	463.5	20- 30	223.7	420.5	18.2,18.2
40	371.5	414.5	457.9	414.5	371.5	414.5	457.9	414.5	30- 40	275.8	696.3	30.2,30.2
50	294.4	362.1	422.1	362.1	294.4	362.1	422.1	362.1	40- 50	300.2	996.4	43.2,43.2
60	211.8	307.9	380.6	307.9	211.8	307.9	380.6	307.9	50- 60	297.2	1294	56,56
70	127.8	253.4	335.6	253.4	127.8	253.4	335.6	253.4	60- 70	270.9	1565	67.8,67.8
80	48.46	203.1	289.5	203.1	48.46	203.1	289.5	203.1	70- 80	228.4	1793	77.7,77.7
90	2.640	159.1	243.0	159.1	2.640	159.1	243.0	159.1	80- 90	180.3	1973	85.5,85.5
100	1.968	118.5	197.3	118.5	1.968	118.5	197.3	118.5	90-100	137.3	2111	91.4,91.4
110	2.624	79.27	147.3	79.27	2.624	79.27	147.3	79.27	100-110	96.59	2207	95.6,95.6
120	2.614	43.66	98.86	43.66	2.614	43.66	98.86	43.66	110-120	59.52	2267	98.2,98.2
130	2.693	12.89	54.32	12.89	2.693	12.89	54.32	12.89	120-130	29.56	2296	99.5,99.5
140	2.871	1.587	15.34	1.587	2.871	1.587	15.34	1.587	130-140	9.666	2306	99.9,99.9
150	2.947	1.236	0.9272	1.236	2.947	1.236	0.9272	1.236	140-150	1.420	2307	99.9,99.9
160	2.584	1.132	0.9924	1.132	2.584	1.132	0.9924	1.132	150-160	0.7007	2308	100,100
170	3.146	1.226	0.9586	1.226	3.146	1.226	0.9586	1.226	160-170	0.4129	2308	100,100
180	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	170-180	0.1431	2309	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	50.78	0-10	50.78	2.20%
10-20	146.02	0-20	196.80	8.53%
20-30	223.67	0-30	420.47	18.21%
30-40	275.81	0-40	696.28	30.16%
40-50	300.16	0-50	996.44	43.17%
50-60	297.19	0-60	1293.63	56.04%
60-70	270.89	0-70	1564.52	67.77%
70-80	228.44	0-80	1792.96	77.67%
80-90	180.25	0-90	1973.21	85.48%
90-100	137.33	0-100	2110.54	91.43%
100-110	96.59	0-110	2207.13	95.61%
110-120	59.52	0-120	2266.65	98.19%
120-130	29.56	0-130	2296.21	99.47%
130-140	9.67	0-140	2305.88	99.89%
140-150	1.42	0-150	2307.30	99.95%
150-160	0.70	0-160	2308.00	99.98%
160-170	0.41	0-170	2308.41	100.00%
170-180	0.14	0-180	2308.55	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	14.3	15.7	14.9	16.3	17.0	18.5	19.9	19.1	20.5	21.2
	3H	15.6	17.0	16.2	17.5	18.2	21.5	22.8	22.1	23.4	24.1
	4H	16.1	17.3	16.7	17.9	18.6	23.1	24.3	23.7	24.9	25.7
	6H	16.3	17.5	16.9	18.1	18.8	24.8	25.9	25.4	26.6	27.3
	8H	16.4	17.5	17.0	18.1	18.8	25.7	26.8	26.3	27.4	28.2
	12H	16.4	17.4	17.0	18.1	18.8	26.7	27.7	27.3	28.4	29.1
4H	2H	15.6	16.9	16.2	17.5	18.2	18.8	20.0	19.4	20.7	21.4
	3H	17.3	18.4	17.9	19.0	19.7	22.1	23.1	22.7	23.8	24.5
	4H	17.9	18.9	18.5	19.5	20.3	23.8	24.8	24.4	25.4	26.2
	6H	18.3	19.1	18.9	19.8	20.6	25.6	26.5	26.3	27.2	28.0
	8H	18.3	19.2	19.0	19.8	20.6	26.6	27.5	27.3	28.2	28.9
	12H	18.4	19.1	19.1	19.8	20.6	27.8	28.5	28.5	29.2	30.0
8H	4H	19.1	19.9	19.7	20.6	21.4	23.9	24.8	24.6	25.4	26.2
	6H	19.7	20.4	20.4	21.1	21.9	26.0	26.7	26.7	27.4	28.2
	8H	19.9	20.6	20.6	21.3	22.1	27.1	27.7	27.8	28.5	29.3
	12H	20.1	20.6	20.8	21.4	22.2	28.4	29.0	29.1	29.7	30.5
12H	4H	19.4	20.2	20.1	20.9	21.7	23.9	24.7	24.6	25.4	26.2
	6H	20.3	20.9	21.0	21.6	22.4	26.0	26.6	26.7	27.3	28.2
	8H	20.6	21.2	21.3	21.9	22.8	27.2	27.8	27.9	28.5	29.3
Maximum UGR = 30.5											

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	17.2	18.6	17.8	19.2	19.9	21.4	22.8	22.0	23.4	24.1
	3H	18.5	19.9	19.1	20.4	21.1	24.4	25.7	25.0	26.3	27.0
	4H	19.0	20.2	19.6	20.8	21.5	26.0	27.2	26.6	27.8	28.6
	6H	19.2	20.4	19.8	21.0	21.7	27.7	28.8	28.3	29.5	30.2
	8H	19.3	20.4	19.9	21.0	21.7	28.6	29.7	29.2	30.3	31.1
	12H	19.3	20.3	19.9	21.0	21.7	29.6	30.6	30.2	31.3	32.0
4H	2H	18.5	19.8	19.1	20.4	21.1	21.7	22.9	22.3	23.6	24.3
	3H	20.2	21.3	20.8	21.9	22.6	25.0	26.0	25.6	26.7	27.4
	4H	20.8	21.8	21.4	22.4	23.2	26.7	27.7	27.3	28.3	29.1
	6H	21.2	22.0	21.8	22.7	23.5	28.5	29.4	29.2	30.1	30.9
	8H	21.2	22.1	21.9	22.7	23.5	29.5	30.4	30.2	31.1	31.8
	12H	21.3	22.0	22.0	22.7	23.5	30.7	31.4	31.4	32.1	32.9
8H	4H	22.0	22.8	22.6	23.5	24.3	26.8	27.7	27.5	28.3	29.1
	6H	22.6	23.3	23.3	24.0	24.8	28.9	29.6	29.6	30.3	31.1
	8H	22.8	23.5	23.5	24.2	25.0	30.0	30.6	30.7	31.4	32.2
	12H	23.0	23.5	23.7	24.3	25.1	31.3	31.9	32.0	32.6	33.4
12H	4H	22.3	23.1	23.0	23.8	24.6	26.8	27.6	27.5	28.3	29.1
	6H	23.2	23.8	23.9	24.5	25.3	28.9	29.5	29.6	30.2	31.1
	8H	23.5	24.1	24.2	24.8	25.7	30.1	30.7	30.8	31.4	32.2
Maximum UGR = 33.4											

4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) y	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537
5	534	535	534	534	534	534	535	534	534	534	534	535	534	535	534	534	534	534	535
10	526	526	527	527	528	529	530	529	528	527	527	526	526	526	527	527	528	529	530
15	512	513	515	516	519	522	524	522	519	516	515	513	512	513	515	516	519	522	524
20	492	495	498	502	507	512	514	512	507	502	498	495	492	495	498	502	507	512	514
25	468	471	477	484	492	500	502	500	492	484	477	471	468	471	477	484	492	500	502
30	439	444	453	463	475	485	488	485	475	463	453	444	439	444	453	463	475	485	488
35	407	413	425	440	455	468	473	468	455	440	425	413	407	413	425	440	455	468	473
40	372	379	396	415	435	452	458	452	435	415	396	379	372	379	396	415	435	452	458
45	334	344	365	388	414	433	441	433	414	388	365	344	334	344	365	388	414	433	441
50	294	307	332	362	392	413	422	413	392	362	332	307	294	307	332	362	392	413	422
55	253	269	299	335	369	392	402	392	369	335	299	269	253	269	299	335	369	392	402
60	212	230	267	308	345	371	381	371	345	308	267	230	212	230	267	308	345	371	381
65	170	191	235	280	321	348	359	348	321	280	235	191	170	191	235	280	321	348	359
70	128	154	204	253	296	325	336	325	296	253	204	154	128	154	204	253	296	325	336
75	86.6	119	175	228	272	302	313	302	272	228	175	119	86.6	119	175	228	272	302	313
80	48.5	87.8	149	203	248	278	289	278	248	203	149	87.8	48.5	87.8	149	203	248	278	289
85	18.1	61.7	124	180	225	255	266	255	225	180	124	61.7	18.1	61.7	124	180	225	255	266
90	2.64	42.2	104	159	203	233	243	233	203	159	104	42.2	2.64	42.2	104	159	203	233	243
95	1.94	29.6	85.5	138	180	209	221	209	180	138	85.5	29.6	1.94	29.6	85.5	138	180	209	221
100	1.97	18.5	68.2	118	160	185	197	185	160	118	68.2	18.5	1.97	18.5	68.2	118	160	185	197
105	2.08	9.04	52.1	98.5	137	162	173	162	137	98.5	52.1	9.04	2.08	9.04	52.1	98.5	137	162	173
110	2.62	3.49	37.5	79.3	115	138	147	138	115	79.3	37.5	3.49	2.62	3.49	37.5	79.3	115	138	147
115	2.53	2.83	24.0	60.9	93.1	114	123	114	93.1	60.9	24.0	2.83	2.53	2.83	24.0	60.9	93.1	114	123
120	2.61	2.42	11.7	43.7	72.1	91.4	98.9	91.4	72.1	43.7	11.7	2.42	2.61	2.42	11.7	43.7	72.1	91.4	98.9
125	2.70	2.07	3.30	27.7	52.4	69.2	76.1	69.2	52.4	27.7	3.30	2.07	2.70	2.07	3.30	27.7	52.4	69.2	76.1
130	2.69	2.06	2.33	12.9	33.8	48.3	54.3	48.3	33.8	12.9	2.33	2.06	2.69	2.06	2.33	12.9	33.8	48.3	54.3
135	2.78	2.05	1.71	2.72	16.7	29.3	34.0	29.3	16.7	2.72	1.71	2.05	2.78	2.05	1.71	2.72	16.7	29.3	34.0
140	2.87	2.24	1.69	1.59	2.93	11.3	15.3	11.3	2.93	1.59	1.69	2.24	2.87	2.24	1.69	1.59	2.93	11.3	15.3
145	2.96	2.37	1.68	1.42	1.23	1.20	1.25	1.20	1.23	1.42	1.68	2.37	2.96	2.37	1.68	1.42	1.23	1.20	1.25
150	2.95	2.35	1.57	1.24	1.13	1.05	0.93	1.05	1.13	1.24	1.57	2.35	2.95	2.35	1.57	1.24	1.13	1.05	0.93
155	2.93	2.33	1.56	1.22	1.13	1.04	0.96	1.04	1.13	1.22	1.56	2.33	2.93	2.33	1.56	1.22	1.13	1.04	0.96
160	2.58	2.19	1.30	1.13	1.13	1.04	0.99	1.04	1.13	1.13	1.30	2.19	2.58	2.19	1.30	1.13	1.13	1.04	0.99
165	2.57	2.11	1.32	1.24	1.14	1.12	1.03	1.12	1.14	1.24	1.32	2.11	2.57	2.11	1.32	1.24	1.14	1.12	1.03
170	3.15	2.14	1.29	1.23	1.25	1.29	0.96	1.29	1.25	1.23	1.29	2.14	3.15	2.14	1.29	1.23	1.25	1.29	0.96
175	2.93	1.77	1.26	1.23	1.27	1.31	1.24	1.31	1.27	1.23	1.26	1.77	2.93	1.77	1.26	1.23	1.27	1.31	1.24
180	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05

Table--2

UNIT: cd

C (DEG) y	285	300	315	330	345														
0	537	537	537	537	537														
5	534	534	534	534	535														
10	529	528	527	527	526														
15	522	519	516	515	513														
20	512	507	502	498	495														
25	500	492	484	477	471														
30	485	475	463	453	444														
35	468	455	440	425	413														
40	452	435	415	396	379														
45	433	414	388	365	344														
50	413	392	362	332	307														
55	392	369	335	299	269														
60	371	345	308	267	230														
65	348	321	280	235	191														
70	325	296	253	204	154														
75	302	272	228	175	119														
80	278	248	203	149	87.8														
85	255	225	180	124	61.7														
90	233	203	159	104	42.2														
95	209	180	138	85.5	29.6														
100	185	160	118	68.2	18.5														
105	162	137	98.5	52.1	9.04														
110	138	115	79.3	37.5	3.49														
115	114	93.1	60.9	24.0	2.83														
120	91.4	72.1	43.7	11.7	2.42														
125	69.2	52.4	27.7	3.30	2.07														
130	48.3	33.8	12.9	2.33	2.06														
135	29.3	16.7	2.72	1.71	2.05														
140	11.3	2.93	1.59	1.69	2.24														
145	1.20	1.23	1.42	1.68	2.37														
150	1.05	1.13	1.24	1.57	2.35														
155	1.04	1.13	1.22	1.56	2.33														
160	1.04	1.13	1.13	1.30	2.19														
165	1.12	1.14	1.24	1.32	2.11														
170	1.29	1.25	1.23	1.29	2.14														
175	1.31	1.27	1.23	1.26	1.77														
180	1.05	1.05	1.05	1.05	1.05														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP4/MVS @15W3500K	Sample ID	250402001-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±1°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	0.127	15.1	0.993	6.11
277.0	60	0.061	15.4	0.915	13.59

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*****