

Photometric Test Report

Relevant Standards

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

Prepared For

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Issue Date: 2025-04-01

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		543
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	141.0
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		7.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	5.29
				277V	17.10
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.989
				277V	0.868
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3413
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		84.0
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		12
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		85
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		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%		55.9%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	29.3
			N/A	<22	
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		277.0
(Goniophotometer – Section 4.2)			Non-Worst Case		120.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.032
(Goniophotometer – Section 4.2)			Non-Worst Case		0.061
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		7.7
(Goniophotometer – Section 4.2)			Non-Worst Case		7.2

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-03-29	STRP2/MVS @8W3500K	-	250324005-S1
2	Goniophotometer Test	2025-03-29	STRP2/MVS @8W3500K	-	250324005-S1
3	THD and PF Test	2025-03-29	STRP2/MVS @8W3500K	-	250324005-S1

Remark (If any):

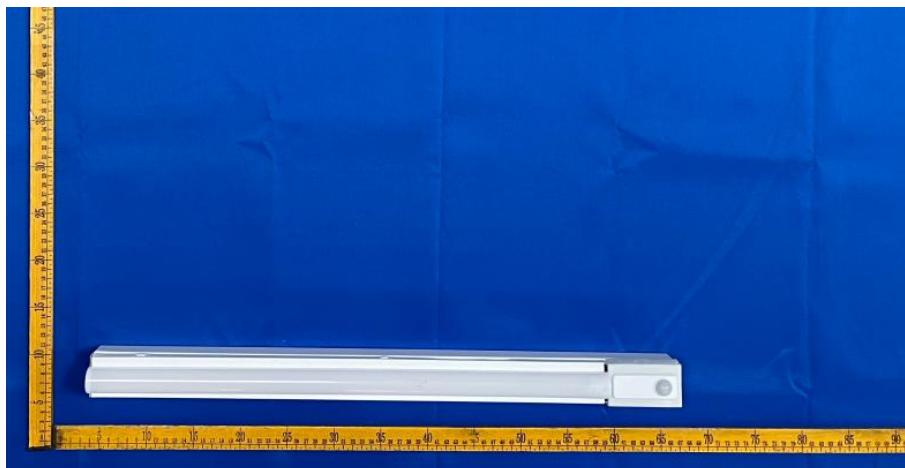
1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. STRP2/MVS @8W3500K, 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/MVS @8W3500K	Sample ID	250324005-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

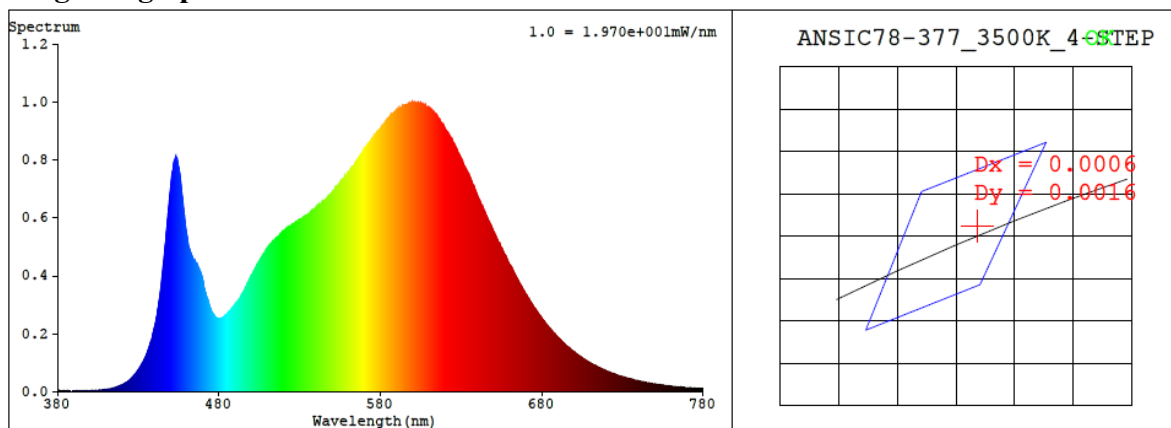
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.061	7.2	0.989
277.0	60	0.032	7.7	0.868

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3413	84.0	12	0.0006	1.5	85	95	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4109$ $y = 0.3948$ / $u' = 0.2377$ $v' = 0.5138$ ($duv=5.72e-04$)

CCT= 3413K Prcp WL: Ld=581.0nm Purity=41.8%

Peak WL: Lp=600nm FWHM: =143.9nm Ratio:R=20.8% G=76.0% B=3.2%

Render Index: Ra = 84.0 AvgR = 78.1 TM30:Rf=85 Rg=95

EEL: 0.09824 A++ Highest

R1 =83 R2 =92 R3 =96 R4 =82 R5 =83 R6 =89 R7 =84

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

4.1 Integrating Sphere Test

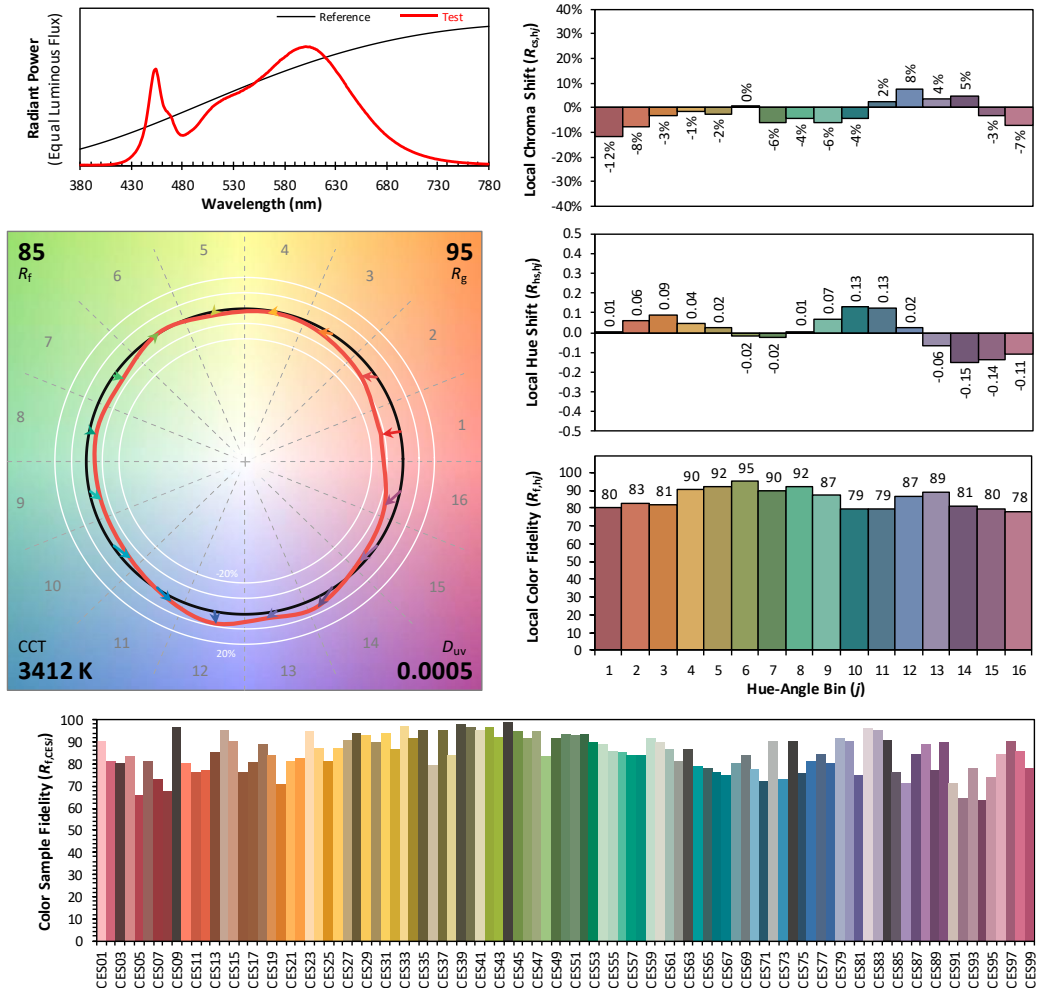
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/1

Model: STRP2/MVS @8W3500K



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

x 0.4109
 y 0.3947
 u' 0.2377
 v' 0.5137

CIE 13.3-1995
(CRI)

R_a 84
 R_g 12

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	2.90E-06	447	5.27E-04	514	5.22E-04	581	9.16E-04	648	5.79E-04	715	8.44E-05
381	2.70E-06	448	5.89E-04	515	5.27E-04	582	9.21E-04	649	5.67E-04	716	8.17E-05
382	2.90E-06	449	6.50E-04	516	5.34E-04	583	9.29E-04	650	5.54E-04	717	7.88E-05
383	2.70E-06	450	7.06E-04	517	5.37E-04	584	9.37E-04	651	5.42E-04	718	7.63E-05
384	3.20E-06	451	7.58E-04	518	5.45E-04	585	9.45E-04	652	5.31E-04	719	7.46E-05
385	2.10E-06	452	7.94E-04	519	5.48E-04	586	9.50E-04	653	5.18E-04	720	7.19E-05
386	2.90E-06	453	8.06E-04	520	5.55E-04	587	9.55E-04	654	5.09E-04	721	6.94E-05
387	2.60E-06	454	8.09E-04	521	5.60E-04	588	9.61E-04	655	4.96E-04	722	6.73E-05
388	2.10E-06	455	7.76E-04	522	5.61E-04	589	9.66E-04	656	4.85E-04	723	6.45E-05
389	2.00E-06	456	7.39E-04	523	5.68E-04	590	9.71E-04	657	4.73E-04	724	6.29E-05
390	1.80E-06	457	6.85E-04	524	5.71E-04	591	9.74E-04	658	4.64E-04	725	6.10E-05
391	2.20E-06	458	6.35E-04	525	5.75E-04	592	9.79E-04	659	4.51E-04	726	5.90E-05
392	2.50E-06	459	5.85E-04	526	5.78E-04	593	9.80E-04	660	4.40E-04	727	5.65E-05
393	2.10E-06	460	5.46E-04	527	5.83E-04	594	9.85E-04	661	4.31E-04	728	5.43E-05
394	2.80E-06	461	5.08E-04	528	5.88E-04	595	9.88E-04	662	4.20E-04	729	5.34E-05
395	2.80E-06	462	4.88E-04	529	5.89E-04	596	9.90E-04	663	4.08E-04	730	5.15E-05
396	2.50E-06	463	4.71E-04	530	5.95E-04	597	9.92E-04	664	3.98E-04	731	5.03E-05
397	3.40E-06	464	4.57E-04	531	5.97E-04	598	9.93E-04	665	3.87E-04	732	4.82E-05
398	2.90E-06	465	4.52E-04	532	6.00E-04	599	9.96E-04	666	3.77E-04	733	4.68E-05
399	2.90E-06	466	4.39E-04	533	6.05E-04	600	9.97E-04	667	3.68E-04	734	4.50E-05
400	3.80E-06	467	4.30E-04	534	6.08E-04	601	9.99E-04	668	3.56E-04	735	4.40E-05
401	3.70E-06	468	4.19E-04	535	6.11E-04	602	9.97E-04	669	3.48E-04	736	4.28E-05
402	3.40E-06	469	4.04E-04	536	6.15E-04	603	9.96E-04	670	3.37E-04	737	4.11E-05
403	4.20E-06	470	3.85E-04	537	6.22E-04	604	9.96E-04	671	3.29E-04	738	3.98E-05
404	4.60E-06	471	3.56E-04	538	6.26E-04	605	9.97E-04	672	3.20E-04	739	3.82E-05
405	4.70E-06	472	3.36E-04	539	6.29E-04	606	9.93E-04	673	3.10E-04	740	3.70E-05
406	5.40E-06	473	3.17E-04	540	6.34E-04	607	9.90E-04	674	3.02E-04	741	3.60E-05
407	5.90E-06	474	2.98E-04	541	6.40E-04	608	9.88E-04	675	2.93E-04	742	3.51E-05
408	6.00E-06	475	2.82E-04	542	6.46E-04	609	9.82E-04	676	2.86E-04	743	3.36E-05
409	6.70E-06	476	2.71E-04	543	6.48E-04	610	9.81E-04	677	2.77E-04	744	3.24E-05
410	7.40E-06	477	2.63E-04	544	6.57E-04	611	9.74E-04	678	2.67E-04	745	3.11E-05
411	8.20E-06	478	2.55E-04	545	6.58E-04	612	9.72E-04	679	2.61E-04	746	3.07E-05
412	9.60E-06	479	2.54E-04	546	6.62E-04	613	9.64E-04	680	2.53E-04	747	2.92E-05
413	1.01E-05	480	2.52E-04	547	6.69E-04	614	9.57E-04	681	2.46E-04	748	2.88E-05
414	1.22E-05	481	2.52E-04	548	6.74E-04	615	9.51E-04	682	2.38E-04	749	2.74E-05
415	1.35E-05	482	2.56E-04	549	6.79E-04	616	9.44E-04	683	2.32E-04	750	2.71E-05
416	1.55E-05	483	2.58E-04	550	6.87E-04	617	9.36E-04	684	2.25E-04	751	2.57E-05
417	1.72E-05	484	2.65E-04	551	6.93E-04	618	9.26E-04	685	2.19E-04	752	2.47E-05
418	1.96E-05	485	2.68E-04	552	7.01E-04	619	9.18E-04	686	2.12E-04	753	2.44E-05
419	2.16E-05	486	2.75E-04	553	7.09E-04	620	9.08E-04	687	2.06E-04	754	2.34E-05
420	2.35E-05	487	2.81E-04	554	7.14E-04	621	8.98E-04	688	1.99E-04	755	2.24E-05
421	2.66E-05	488	2.88E-04	555	7.22E-04	622	8.92E-04	689	1.93E-04	756	2.20E-05
422	3.01E-05	489	2.93E-04	556	7.29E-04	623	8.81E-04	690	1.87E-04	757	2.14E-05
423	3.30E-05	490	3.00E-04	557	7.35E-04	624	8.71E-04	691	1.82E-04	758	2.08E-05
424	3.74E-05	491	3.07E-04	558	7.45E-04	625	8.63E-04	692	1.76E-04	759	1.98E-05
425	4.18E-05	492	3.15E-04	559	7.47E-04	626	8.50E-04	693	1.70E-04	760	1.95E-05
426	4.79E-05	493	3.23E-04	560	7.56E-04	627	8.39E-04	694	1.65E-04	761	1.90E-05
427	5.32E-05	494	3.33E-04	561	7.63E-04	628	8.27E-04	695	1.60E-04	762	1.83E-05
428	5.96E-05	495	3.43E-04	562	7.72E-04	629	8.15E-04	696	1.55E-04	763	1.80E-05
429	6.71E-05	496	3.54E-04	563	7.78E-04	630	8.03E-04	697	1.51E-04	764	1.72E-05
430	7.50E-05	497	3.65E-04	564	7.84E-04	631	7.90E-04	698	1.45E-04	765	1.64E-05
431	8.29E-05	498	3.77E-04	565	7.95E-04	632	7.79E-04	699	1.42E-04	766	1.64E-05
432	9.35E-05	499	3.88E-04	566	8.02E-04	633	7.68E-04	700	1.37E-04	767	1.53E-05
433	1.03E-04	500	3.99E-04	567	8.10E-04	634	7.57E-04	701	1.33E-04	768	1.50E-05
434	1.13E-04	501	4.10E-04	568	8.19E-04	635	7.45E-04	702	1.29E-04	769	1.45E-05
435	1.27E-04	502	4.21E-04	569	8.27E-04	636	7.32E-04	703	1.25E-04	770	1.40E-05
436	1.41E-04	503	4.30E-04	570	8.37E-04	637	7.19E-04	704	1.21E-04	771	1.34E-05
437	1.58E-04	504	4.42E-04	571	8.43E-04	638	7.07E-04	705	1.17E-04	772	1.34E-05
438	1.75E-04	505	4.51E-04	572	8.52E-04	639	6.92E-04	706	1.13E-04	773	1.27E-05
439	1.99E-04	506	4.61E-04	573	8.59E-04	640	6.82E-04	707	1.10E-04	774	1.25E-05
440	2.23E-04	507	4.69E-04	574	8.66E-04	641	6.63E-04	708	1.06E-04	775	1.19E-05
441	2.49E-04	508	4.77E-04	575	8.75E-04	642	6.53E-04	709	1.02E-04	776	1.17E-05
442	2.84E-04	509	4.90E-04	576	8.86E-04	643	6.41E-04	710	9.93E-05	777	1.13E-05
443	3.19E-04	510	4.96E-04	577	8.89E-04	644	6.27E-04	711	9.62E-05	778	1.08E-05
444	3.61E-04	511	5.03E-04	578	8.97E-04	645	6.16E-04	712	9.31E-05	779	1.08E-05
445	4.13E-04	512	5.10E-04	579	9.01E-04	646	6.02E-04	713	8.99E-05	780	1.08E-05
446	4.68E-04	513	5.16E-04	580	9.09E-04	647	5.90E-04	714	8.77E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2/MVS @8W3500K	Sample ID	250324005-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	0.032	7.7	0.868
NON-WORST CASE	120.0	60	0.061	7.2	0.989

Test Result

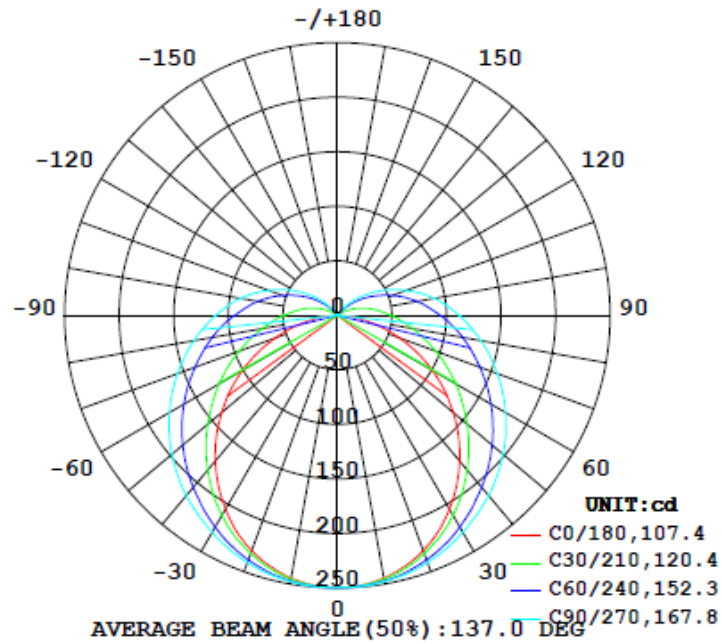
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
1086	543	164.6	164.6	108.4	167.8	141.0

Zonal Lumen Requirement (0°-60°)	UGR	
	Crosswise	Endwise
55.9%	21.3	29.3

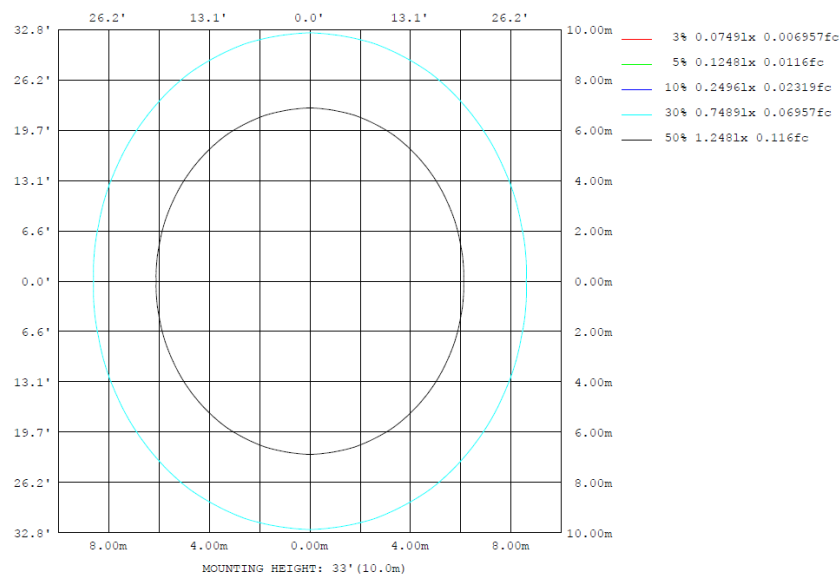
4.2 Goniophotometer Test

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	Φ lum, lamp
10	244.7	245.9	247.9	245.9	244.7	245.9	247.9	245.9	0- 10	23.67	23.67	2.18,2.18
20	229.5	235.2	241.2	235.2	229.5	235.2	241.2	235.2	10- 20	68.27	91.94	8.47,8.47
30	205.2	217.9	229.6	217.9	205.2	217.9	229.6	217.9	20- 30	104.9	196.8	18.1,18.1
40	174.3	195.2	215.7	195.2	174.3	195.2	215.7	195.2	30- 40	129.6	326.4	30.1,30.1
50	138.7	170.5	198.2	170.5	138.7	170.5	198.2	170.5	40- 50	141.1	467.6	43.1,43.1
60	100.3	144.9	177.8	144.9	100.3	144.9	177.8	144.9	50- 60	139.8	607.3	55.9,55.9
70	60.57	119.6	156.0	119.6	60.57	119.6	156.0	119.6	60- 70	127.2	734.5	67.6,67.6
80	24.17	95.60	133.5	95.60	24.17	95.60	133.5	95.60	70- 80	107.2	841.7	77.5,77.5
90	2.836	74.06	111.5	74.06	2.836	74.06	111.5	74.06	80- 90	84.59	926.3	85.3,85.3
100	2.029	55.87	90.38	55.87	2.029	55.87	90.38	55.87	90-100	64.23	990.5	91.2,91.2
110	1.973	37.69	67.22	37.69	1.973	37.69	67.22	37.69	100-110	45.44	1036	95.4,95.4
120	1.973	21.58	44.96	21.58	1.973	21.58	44.96	21.58	110-120	28.17	1064	98,98
130	1.973	7.503	25.25	7.503	1.973	7.503	25.25	7.503	120-130	14.45	1079	99.3,99.3
140	1.973	1.677	8.093	1.677	1.973	1.677	8.093	1.677	130-140	5.279	1084	99.8,99.8
150	1.973	1.161	0.9295	1.161	1.973	1.161	0.9295	1.161	140-150	1.135	1085	99.9,99.9
160	1.664	0.8945	0.8946	0.8945	1.664	0.8945	0.8946	0.8945	150-160	0.4912	1086	100,100
170	1.625	0.9126	0.8596	0.9126	1.625	0.9126	0.8596	0.9126	160-170	0.2746	1086	100,100
180	1.597	1.280	0.8352	1.280	1.597	1.280	0.8352	1.280	170-180	0.0939	1086	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	23.67	0-10	23.67	2.18%
10-20	68.27	0-20	91.94	8.47%
20-30	104.86	0-30	196.80	18.13%
30-40	129.60	0-40	326.40	30.06%
40-50	141.15	0-50	467.55	43.06%
50-60	139.76	0-60	607.31	55.93%
60-70	127.24	0-70	734.55	67.65%
70-80	107.17	0-80	841.72	77.52%
80-90	84.59	0-90	926.31	85.31%
90-100	64.23	0-100	990.54	91.23%
100-110	45.44	0-110	1035.98	95.41%
110-120	28.17	0-120	1064.15	98.01%
120-130	14.45	0-130	1078.60	99.34%
130-140	5.28	0-140	1083.88	99.83%
140-150	1.14	0-150	1085.02	99.93%
150-160	0.49	0-160	1085.51	99.98%
160-170	0.27	0-170	1085.78	100.00%
170-180	0.09	0-180	1085.87	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	16.9	18.4	17.5	18.9	19.6	21.1	22.5	21.6	23.1	23.7
	3H	18.3	19.6	18.9	20.2	20.9	24.0	25.3	24.6	25.9	26.6
	4H	18.7	20.0	19.3	20.6	21.3	25.5	26.8	26.2	27.4	28.1
	6H	19.0	20.1	19.6	20.8	21.5	27.2	28.3	27.8	29.0	29.7
	8H	19.0	20.1	19.6	20.8	21.5	28.0	29.1	28.7	29.8	30.5
	12H	19.0	20.1	19.7	20.8	21.5	29.0	30.0	29.6	30.7	31.4
4H	2H	18.2	19.5	18.8	20.1	20.8	21.4	22.6	22.0	23.2	23.9
	3H	19.9	21.0	20.5	21.6	22.4	24.6	25.6	25.2	26.3	27.0
	4H	20.5	21.5	21.1	22.1	22.9	26.2	27.2	26.9	27.9	28.6
	6H	20.9	21.8	21.5	22.4	23.2	28.1	28.9	28.7	29.6	30.4
	8H	21.0	21.8	21.6	22.5	23.3	29.0	29.9	29.7	30.5	31.3
	12H	21.0	21.8	21.7	22.5	23.3	30.1	30.9	30.8	31.6	32.3
8H	4H	21.7	22.5	22.3	23.2	24.0	26.4	27.2	27.1	27.9	28.7
	6H	22.3	23.0	23.0	23.8	24.5	28.4	29.1	29.1	29.8	30.6
	8H	22.5	23.2	23.2	23.9	24.7	29.5	30.1	30.2	30.9	31.7
	12H	22.7	23.3	23.4	24.0	24.8	30.7	31.3	31.4	32.0	32.9
12H	4H	22.0	22.8	22.7	23.5	24.3	26.4	27.2	27.1	27.9	28.7
	6H	22.9	23.5	23.6	24.2	25.1	28.4	29.1	29.1	29.8	30.6
	8H	23.2	23.8	23.9	24.5	25.4	29.6	30.2	30.3	30.9	31.7

Maximum UGR = 32.9

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	18.7	17.8	19.2	19.9	21.4	22.8	21.9	23.4	24.0
	3H	18.6	19.9	19.2	20.5	21.2	24.3	25.6	24.9	26.2	26.9
	4H	19.0	20.3	19.6	20.9	21.6	25.8	27.1	26.5	27.7	28.4
	6H	19.3	20.4	19.9	21.1	21.8	27.5	28.6	28.1	29.3	30.0
	8H	19.3	20.4	19.9	21.1	21.8	28.3	29.4	29.0	30.1	30.8
	12H	19.3	20.4	20.0	21.1	21.8	29.3	30.3	29.9	31.0	31.7
4H	2H	18.5	19.8	19.1	20.4	21.1	21.7	22.9	22.3	23.5	24.2
	3H	20.2	21.3	20.8	21.9	22.7	24.9	25.9	25.5	26.6	27.3
	4H	20.8	21.8	21.4	22.4	23.2	26.5	27.5	27.2	28.2	28.9
	6H	21.2	22.1	21.8	22.7	23.5	28.4	29.2	29.0	29.9	30.7
	8H	21.3	22.1	21.9	22.8	23.6	29.3	30.2	30.0	30.8	31.6
	12H	21.3	22.1	22.0	22.8	23.6	30.4	31.2	31.1	31.9	32.6
8H	4H	22.0	22.8	22.6	23.5	24.3	26.7	27.5	27.4	28.2	29.0
	6H	22.6	23.3	23.3	24.1	24.8	28.7	29.4	29.4	30.1	30.9
	8H	22.8	23.5	23.5	24.2	25.0	29.8	30.4	30.5	31.2	32.0
	12H	23.0	23.6	23.7	24.3	25.1	31.0	31.6	31.7	32.3	33.2
12H	4H	22.3	23.1	23.0	23.8	24.6	26.7	27.5	27.4	28.2	29.0
	6H	23.2	23.8	23.9	24.5	25.4	28.7	29.4	29.4	30.1	30.9
	8H	23.5	24.1	24.2	24.8	25.7	29.9	30.5	30.6	31.2	32.0

Maximum UGR = 33.2

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	250	250	249	249	250	250	250	250	250	249	249	250	250	250	249	249	250	250	250
5	249	249	249	248	249	249	250	249	249	248	249	249	249	249	249	248	249	249	250
10	245	245	246	246	247	248	248	248	247	246	246	245	245	245	246	246	247	248	248
15	238	239	240	242	244	245	245	245	244	242	240	239	238	239	240	242	244	245	245
20	229	230	232	235	238	240	241	240	238	235	232	230	229	230	232	235	238	240	241
25	219	220	223	227	232	235	236	235	232	227	223	220	219	220	223	227	232	235	236
30	205	207	212	218	224	228	230	228	224	218	212	207	205	207	212	218	224	228	230
35	190	193	199	207	215	221	223	221	215	207	199	193	190	193	199	207	215	221	223
40	174	177	185	195	206	213	216	213	206	195	185	177	174	177	185	195	206	213	216
45	157	161	170	183	196	204	207	204	196	183	170	161	157	161	170	183	196	204	207
50	139	144	155	171	185	195	198	195	185	171	155	144	139	144	155	171	185	195	198
55	120	126	140	158	174	184	188	184	174	158	140	126	120	126	140	158	174	184	188
60	100	108	125	145	162	174	178	174	162	145	125	108	100	108	125	145	162	174	178
65	80.4	90.1	110	132	151	163	167	163	151	132	110	90.1	80.4	90.1	110	132	151	163	167
70	60.6	72.5	96.0	120	139	152	156	152	139	120	96.0	72.5	60.6	72.5	96.0	120	139	152	156
75	41.4	56.4	82.4	107	128	141	145	141	128	107	82.4	56.4	41.4	56.4	82.4	107	128	141	145
80	24.2	42.0	70.0	95.6	117	129	133	129	117	95.6	70.0	42.0	24.2	42.0	70.0	95.6	117	129	133
85	10.2	30.4	59.0	84.8	106	118	122	118	106	84.8	59.0	30.4	10.2	30.4	59.0	84.8	106	118	122
90	2.84	21.4	48.9	74.1	94.3	107	112	107	94.3	74.1	48.9	21.4	2.84	21.4	48.9	74.1	94.3	107	112
95	2.12	15.3	40.8	64.9	83.9	96.3	101	96.3	83.9	64.9	40.8	15.3	2.12	15.3	40.8	64.9	83.9	96.3	101
100	2.03	10.2	32.9	55.9	74.2	85.6	90.4	85.6	74.2	55.9	32.9	10.2	2.03	10.2	32.9	55.9	74.2	85.6	90.4
105	1.97	5.72	25.8	46.6	63.9	74.6	78.9	74.6	63.9	46.6	25.8	5.72	1.97	5.72	25.8	46.6	63.9	74.6	78.9
110	1.97	2.61	19.0	37.7	53.7	63.4	67.2	63.4	53.7	37.7	19.0	2.61	1.97	2.61	19.0	37.7	53.7	63.4	67.2
115	1.97	2.24	12.6	29.5	43.7	52.3	55.8	52.3	43.7	29.5	12.6	2.24	1.97	2.24	12.6	29.5	43.7	52.3	55.8
120	1.97	2.13	7.03	21.6	34.1	42.0	45.0	42.0	34.1	21.6	7.03	2.13	1.97	2.13	7.03	21.6	34.1	42.0	45.0
125	1.97	2.01	2.50	14.2	25.5	32.3	34.7	32.3	25.5	14.2	2.50	2.01	1.97	2.01	2.50	14.2	25.5	32.3	34.7
130	1.97	1.93	2.01	7.50	17.0	23.2	25.3	23.2	17.0	7.50	2.01	1.93	1.97	1.93	2.01	7.50	17.0	23.2	25.3
135	1.97	1.87	1.84	2.15	9.27	14.5	16.4	14.5	9.27	2.15	1.84	1.87	1.97	1.87	1.84	2.15	9.27	14.5	16.4
140	1.97	1.83	1.71	1.68	2.51	6.69	8.09	6.69	2.51	1.68	1.71	1.83	1.97	1.83	1.71	1.68	2.51	6.69	8.09
145	1.97	1.78	1.66	1.29	1.38	1.21	1.41	1.21	1.38	1.29	1.66	1.78	1.97	1.78	1.66	1.29	1.38	1.21	1.41
150	1.97	1.40	1.11	1.16	1.10	1.08	0.93	1.08	1.10	1.16	1.11	1.40	1.97	1.40	1.11	1.16	1.10	1.08	0.93
155	1.68	1.10	0.94	0.98	0.96	0.96	0.91	0.96	0.96	0.98	0.94	1.10	1.68	1.10	0.94	0.98	0.96	0.96	0.91
160	1.66	1.01	0.88	0.89	0.87	0.88	0.89	0.88	0.87	0.89	0.88	1.01	1.66	1.01	0.88	0.89	0.87	0.88	0.89
165	1.64	1.02	0.90	0.90	0.86	0.86	0.88	0.86	0.86	0.90	0.90	1.02	1.64	1.02	0.90	0.90	0.86	0.86	0.88
170	1.62	1.06	0.94	0.91	0.85	0.85	0.86	0.85	0.85	0.91	0.94	1.06	1.62	1.06	0.94	0.91	0.85	0.85	0.86
175	1.61	1.11	0.99	0.92	0.84	0.84	0.84	0.84	0.84	0.92	0.99	1.11	1.61	1.11	0.99	0.92	0.84	0.84	0.84
180	1.60	1.12	1.02	1.28	0.83	0.83	0.84	0.83	0.83	1.28	1.02	1.12	1.60	1.12	1.02	1.28	0.83	0.83	0.84

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	250	250	249	249	250														
5	249	249	248	249	249														
10	248	247	246	246	245														
15	245	244	242	240	239														
20	240	238	235	232	230														
25	235	232	227	223	220														
30	228	224	218	212	207														
35	221	215	207	199	193														
40	213	206	195	185	177														
45	204	196	183	170	161														
50	195	185	171	155	144														
55	184	174	158	140	126														
60	174	162	145	125	108														
65	163	151	132	110	90.1														
70	152	139	120	96.0	72.5														
75	141	128	107	82.4	56.4														
80	129	117	95.6	70.0	42.0														
85	118	106	84.8	59.0	30.4														
90	107	94.3	74.1	48.9	21.4														
95	96.3	83.9	64.9	40.8	15.3														
100	85.6	74.2	55.9	32.9	10.2														
105	74.6	63.9	46.6	25.8	5.72														
110	63.4	53.7	37.7	19.0	2.61														
115	52.3	43.7	29.5	12.6	2.24														
120	42.0	34.1	21.6	7.03	2.13														
125	32.3	25.5	14.2	2.50	2.01														
130	23.2	17.0	7.50	2.01	1.93														
135	14.5	9.27	2.15	1.84	1.87														
140	6.69	2.51	1.68	1.71	1.83														
145	1.21	1.38	1.29	1.66	1.78														
150	1.08	1.10	1.16	1.11	1.40														
155	0.96	0.96	0.98	0.94	1.10														
160	0.88	0.87	0.89	0.88	1.01														
165	0.86	0.86	0.90	0.90	1.02														
170	0.85	0.85	0.91	0.94	1.06														
175	0.84	0.84	0.92	0.99	1.11														
180	0.83	0.83	1.28	1.02	1.12														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2/MVS @8W3500K	Sample ID	250324005-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	0.061	7.2	0.989	5.29
277.0	60	0.032	7.7	0.868	17.10

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*****