

Photometric Test Report

Relevant Standards

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

Prepared For

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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		410
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	156.1
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.5
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	8.75
				277V	21.60
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.983
				277V	0.847
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4075
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		85.2
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		19
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%		56.0%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	28.3
			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		0.045
(Goniophotometer – Section 4.2)			Non-Worst Case		0.083
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.5
(Goniophotometer – Section 4.2)			Non-Worst Case		9.8

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-04-03	STRP4/MVS @10W4000K	-	250402001-S1
2	Goniophotometer Test	2025-04-03	STRP4/MVS @10W4000K	-	250402001-S1
3	THD and PF Test	2025-04-03	STRP4/MVS @10W4000K	-	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.
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. STRP4/MVS @10W4000K, 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 @10W4000K	Sample ID	250402001-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

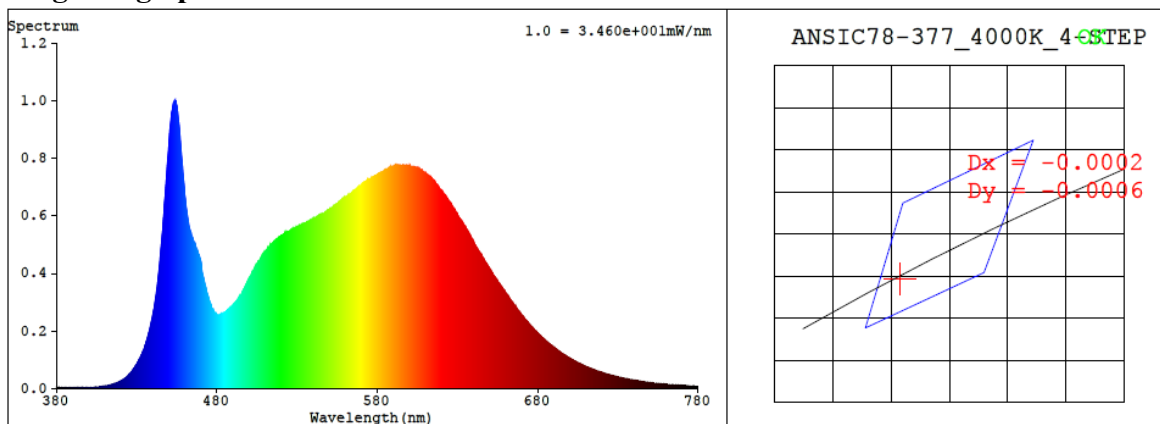
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.083	9.8	0.983
277.0	60	0.045	10.5	0.847

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4075	85.2	19	-0.0002	2.4	85	95	-11%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3770$ $y = 0.3742$ / $u' = 0.2239$ $v' = 0.4999$ ($duv = -2.06e-04$)

CCT= 4075K Prcp WL: $L_d = 578.9\text{nm}$ Purity=25.4%

Peak WL: $L_p = 454\text{nm}$ FWHM: $\approx 21.0\text{nm}$ Ratio: R=18.5% G=77.6% B=4.0%

Render Index: $R_a = 85.2$ AvgR = 79.3 TM30: $R_f = 85$ $R_g = 95$

EEL: 0.09200 A++ Highest

R1 =84	R2 =92	R3 =96	R4 =83	R5 =84	R6 =88	R7 =87
R8 =68	R9 =19	R10=80	R11=82	R12=62	R13=87	R14=98
R15=79						

4.1 Integrating Sphere Test

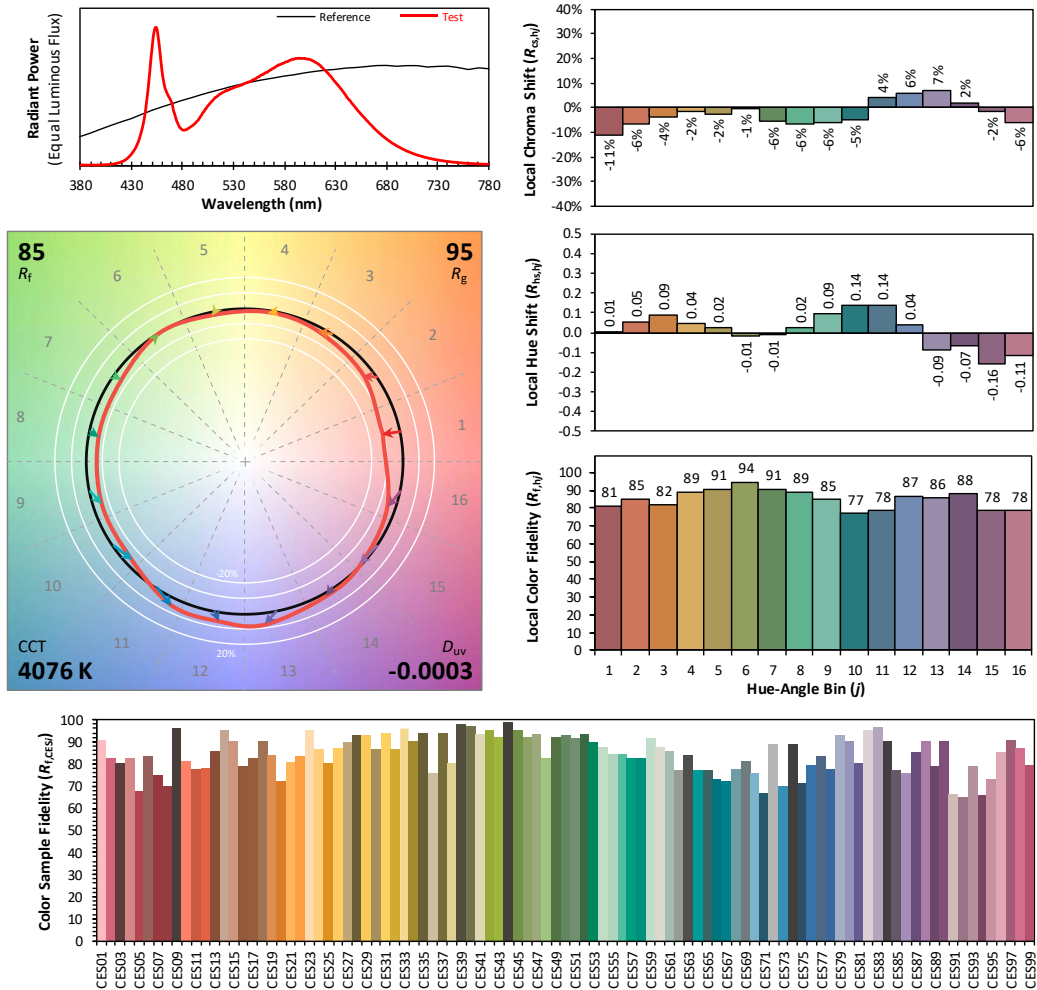
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/3

Model: STRP4/MVS @10W4000K



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

x 0.3770
 y 0.3740
 u' 0.2239
 v' 0.4999

CIE 13.3-1995
(CRI)

R_a 85
 R_g 19

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	3.90E-06	447	6.16E-04	514	5.00E-04	581	7.48E-04	648	4.34E-04	715	6.57E-05
381	3.90E-06	448	6.92E-04	515	5.06E-04	582	7.51E-04	649	4.25E-04	716	6.37E-05
382	3.90E-06	449	7.77E-04	516	5.13E-04	583	7.51E-04	650	4.16E-04	717	6.11E-05
383	3.30E-06	450	8.43E-04	517	5.17E-04	584	7.56E-04	651	4.08E-04	718	5.95E-05
384	2.80E-06	451	9.16E-04	518	5.22E-04	585	7.60E-04	652	3.98E-04	719	5.74E-05
385	2.60E-06	452	9.65E-04	519	5.27E-04	586	7.62E-04	653	3.89E-04	720	5.59E-05
386	2.60E-06	453	9.94E-04	520	5.30E-04	587	7.65E-04	654	3.82E-04	721	5.39E-05
387	2.40E-06	454	1.00E-03	521	5.33E-04	588	7.69E-04	655	3.73E-04	722	5.24E-05
388	2.70E-06	455	9.83E-04	522	5.37E-04	589	7.69E-04	656	3.65E-04	723	5.04E-05
389	2.70E-06	456	9.33E-04	523	5.43E-04	590	7.71E-04	657	3.57E-04	724	4.90E-05
390	2.80E-06	457	8.76E-04	524	5.44E-04	591	7.74E-04	658	3.49E-04	725	4.75E-05
391	3.00E-06	458	8.07E-04	525	5.45E-04	592	7.74E-04	659	3.42E-04	726	4.57E-05
392	3.20E-06	459	7.38E-04	526	5.49E-04	593	7.75E-04	660	3.32E-04	727	4.45E-05
393	3.30E-06	460	6.74E-04	527	5.53E-04	594	7.76E-04	661	3.25E-04	728	4.30E-05
394	2.80E-06	461	6.26E-04	528	5.56E-04	595	7.75E-04	662	3.17E-04	729	4.19E-05
395	3.00E-06	462	5.86E-04	529	5.59E-04	596	7.76E-04	663	3.09E-04	730	4.02E-05
396	3.70E-06	463	5.53E-04	530	5.62E-04	597	7.73E-04	664	3.01E-04	731	3.89E-05
397	3.50E-06	464	5.38E-04	531	5.65E-04	598	7.75E-04	665	2.94E-04	732	3.78E-05
398	3.40E-06	465	5.19E-04	532	5.68E-04	599	7.75E-04	666	2.86E-04	733	3.67E-05
399	4.40E-06	466	5.04E-04	533	5.71E-04	600	7.75E-04	667	2.78E-04	734	3.55E-05
400	4.20E-06	467	4.90E-04	534	5.74E-04	601	7.71E-04	668	2.70E-04	735	3.45E-05
401	4.60E-06	468	4.78E-04	535	5.75E-04	602	7.71E-04	669	2.63E-04	736	3.31E-05
402	4.60E-06	469	4.59E-04	536	5.77E-04	603	7.70E-04	670	2.56E-04	737	3.22E-05
403	5.00E-06	470	4.43E-04	537	5.79E-04	604	7.69E-04	671	2.50E-04	738	3.10E-05
404	5.50E-06	471	3.99E-04	538	5.83E-04	605	7.66E-04	672	2.42E-04	739	2.99E-05
405	5.60E-06	472	3.78E-04	539	5.85E-04	606	7.64E-04	673	2.36E-04	740	2.92E-05
406	5.90E-06	473	3.53E-04	540	5.91E-04	607	7.60E-04	674	2.29E-04	741	2.85E-05
407	6.70E-06	474	3.27E-04	541	5.93E-04	608	7.57E-04	675	2.23E-04	742	2.77E-05
408	7.10E-06	475	3.10E-04	542	5.96E-04	609	7.52E-04	676	2.16E-04	743	2.64E-05
409	8.10E-06	476	2.93E-04	543	5.98E-04	610	7.49E-04	677	2.10E-04	744	2.54E-05
410	8.50E-06	477	2.78E-04	544	6.02E-04	611	7.43E-04	678	2.05E-04	745	2.47E-05
411	9.60E-06	478	2.70E-04	545	6.05E-04	612	7.40E-04	679	1.99E-04	746	2.39E-05
412	1.04E-05	479	2.62E-04	546	6.06E-04	613	7.36E-04	680	1.93E-04	747	2.31E-05
413	1.18E-05	480	2.57E-04	547	6.09E-04	614	7.30E-04	681	1.87E-04	748	2.29E-05
414	1.33E-05	481	2.55E-04	548	6.14E-04	615	7.24E-04	682	1.82E-04	749	2.16E-05
415	1.49E-05	482	2.57E-04	549	6.19E-04	616	7.16E-04	683	1.77E-04	750	2.12E-05
416	1.69E-05	483	2.58E-04	550	6.22E-04	617	7.09E-04	684	1.72E-04	751	2.03E-05
417	1.86E-05	484	2.60E-04	551	6.25E-04	618	7.02E-04	685	1.66E-04	752	1.97E-05
418	2.08E-05	485	2.65E-04	552	6.28E-04	619	6.93E-04	686	1.61E-04	753	1.91E-05
419	2.36E-05	486	2.70E-04	553	6.36E-04	620	6.88E-04	687	1.57E-04	754	1.86E-05
420	2.63E-05	487	2.74E-04	554	6.39E-04	621	6.80E-04	688	1.53E-04	755	1.79E-05
421	2.98E-05	488	2.80E-04	555	6.41E-04	622	6.72E-04	689	1.48E-04	756	1.75E-05
422	3.28E-05	489	2.84E-04	556	6.48E-04	623	6.66E-04	690	1.44E-04	757	1.68E-05
423	3.67E-05	490	2.90E-04	557	6.53E-04	624	6.56E-04	691	1.39E-04	758	1.63E-05
424	4.09E-05	491	2.96E-04	558	6.57E-04	625	6.49E-04	692	1.35E-04	759	1.58E-05
425	4.66E-05	492	3.03E-04	559	6.58E-04	626	6.42E-04	693	1.31E-04	760	1.52E-05
426	5.23E-05	493	3.10E-04	560	6.64E-04	627	6.29E-04	694	1.27E-04	761	1.49E-05
427	5.96E-05	494	3.19E-04	561	6.68E-04	628	6.22E-04	695	1.23E-04	762	1.44E-05
428	6.70E-05	495	3.25E-04	562	6.73E-04	629	6.11E-04	696	1.19E-04	763	1.41E-05
429	7.52E-05	496	3.36E-04	563	6.73E-04	630	6.04E-04	697	1.16E-04	764	1.38E-05
430	8.40E-05	497	3.47E-04	564	6.80E-04	631	5.94E-04	698	1.12E-04	765	1.32E-05
431	9.45E-05	498	3.58E-04	565	6.86E-04	632	5.86E-04	699	1.09E-04	766	1.30E-05
432	1.04E-04	499	3.70E-04	566	6.90E-04	633	5.77E-04	700	1.05E-04	767	1.23E-05
433	1.17E-04	500	3.82E-04	567	6.94E-04	634	5.68E-04	701	1.02E-04	768	1.18E-05
434	1.29E-04	501	3.90E-04	568	6.99E-04	635	5.59E-04	702	9.94E-05	769	1.17E-05
435	1.44E-04	502	4.03E-04	569	7.03E-04	636	5.50E-04	703	9.56E-05	770	1.11E-05
436	1.61E-04	503	4.12E-04	570	7.06E-04	637	5.40E-04	704	9.30E-05	771	1.06E-05
437	1.81E-04	504	4.23E-04	571	7.12E-04	638	5.30E-04	705	9.01E-05	772	1.05E-05
438	2.04E-04	505	4.32E-04	572	7.17E-04	639	5.20E-04	706	8.74E-05	773	9.80E-06
439	2.29E-04	506	4.42E-04	573	7.21E-04	640	5.11E-04	707	8.41E-05	774	1.02E-05
440	2.57E-04	507	4.50E-04	574	7.27E-04	641	4.97E-04	708	8.19E-05	775	9.70E-06
441	2.86E-04	508	4.59E-04	575	7.27E-04	642	4.88E-04	709	7.93E-05	776	9.30E-06
442	3.23E-04	509	4.65E-04	576	7.31E-04	643	4.79E-04	710	7.66E-05	777	9.00E-06
443	3.65E-04	510	4.75E-04	577	7.34E-04	644	4.71E-04	711	7.44E-05	778	8.80E-06
444	4.17E-04	511	4.82E-04	578	7.38E-04	645	4.64E-04	712	7.20E-05	779	8.80E-06
445	4.80E-04	512	4.91E-04	579	7.40E-04	646	4.52E-04	713	6.99E-05	780	8.90E-06
446	5.42E-04	513	4.94E-04	580	7.43E-04	647	4.43E-04	714	6.78E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP4/MVS @10W4000K	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	0.045	10.5	0.847
NON-WORST CASE	120.0	60	0.083	9.8	0.983

Test Result

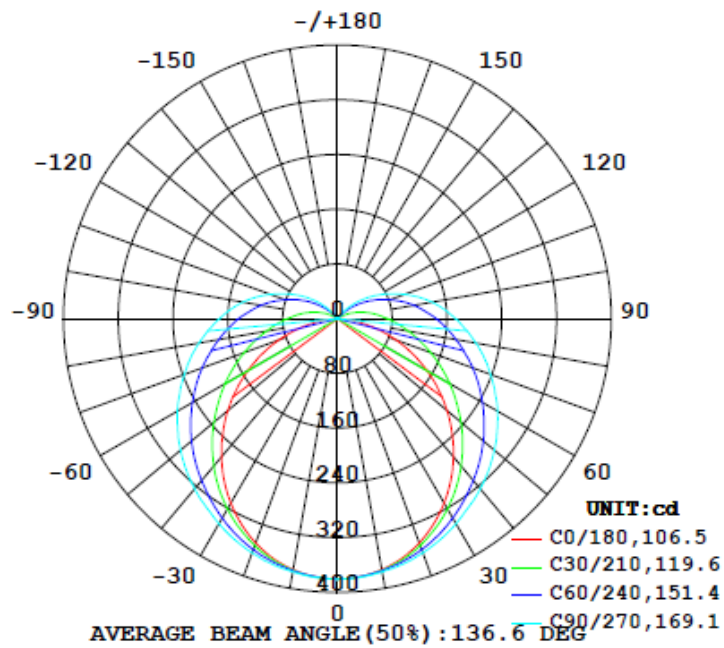
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
1639	410	159.8	159.8	106.4	169.1	156.1

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
56.0%	20.0	28.3

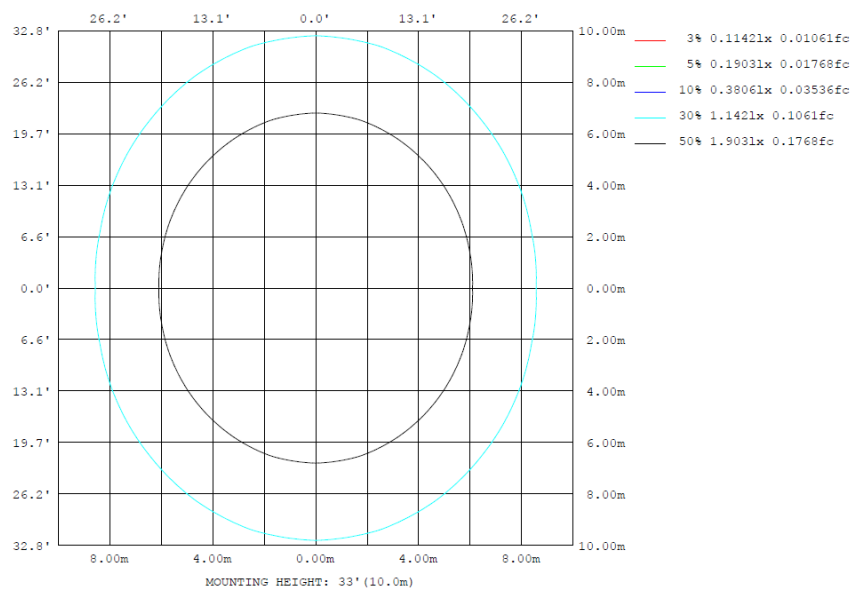
4.2 Goniophotometer Test

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	372.4	373.5	376.2	373.5	372.4	373.5	376.2	373.5	0- 10	36.00	36.00	2.2,2.2
20	348.9	356.0	364.3	356.0	348.9	356.0	364.3	356.0	10- 20	103.5	139.5	8.51,8.51
30	311.5	328.8	346.2	328.8	311.5	328.8	346.2	328.8	20- 30	158.6	298.1	18.2,18.2
40	263.6	294.3	324.4	294.3	263.6	294.3	324.4	294.3	30- 40	195.7	493.8	30.1,30.1
50	208.9	257.0	299.1	257.0	208.9	257.0	299.1	257.0	40- 50	213.0	706.8	43.1,43.1
60	150.6	218.6	269.9	218.6	150.6	218.6	269.9	218.6	50- 60	210.9	917.7	56,56
70	90.99	180.1	238.1	180.1	90.99	180.1	238.1	180.1	60- 70	192.3	1110	67.7,67.7
80	34.56	144.4	205.3	144.4	34.56	144.4	205.3	144.4	70- 80	162.2	1272	77.6,77.6
90	2.290	113.3	172.7	113.3	2.290	113.3	172.7	113.3	80- 90	128.1	1400	85.4,85.4
100	1.637	84.13	140.2	84.13	1.637	84.13	140.2	84.13	90-100	97.72	1498	91.4,91.4
110	1.701	56.19	104.8	56.19	1.701	56.19	104.8	56.19	100-110	68.75	1567	95.6,95.6
120	1.787	31.10	70.01	31.10	1.787	31.10	70.01	31.10	110-120	42.30	1609	98.2,98.2
130	1.874	9.221	38.64	9.221	1.874	9.221	38.64	9.221	120-130	21.05	1630	99.5,99.5
140	1.870	1.247	11.05	1.247	1.870	1.247	11.05	1.247	130-140	6.959	1637	99.9,99.9
150	1.863	1.070	0.7669	1.070	1.863	1.070	0.7669	1.070	140-150	1.060	1638	99.9,99.9
160	1.851	0.7712	0.7669	0.7712	1.851	0.7712	0.7669	0.7712	150-160	0.5134	1639	100,100
170	2.269	0.7852	0.7669	0.7852	2.269	0.7852	0.7669	0.7852	160-170	0.3044	1639	100,100
180	0.1917	0.1917	0.1917	0.1917	0.1917	0.1917	0.1917	0.1917	170-180	0.1031	1639	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	36.00	0-10	36.00	2.20%
10-20	103.52	0-20	139.52	8.51%
20-30	158.58	0-30	298.10	18.19%
30-40	195.68	0-40	493.78	30.13%
40-50	213.01	0-50	706.79	43.12%
50-60	210.92	0-60	917.71	55.99%
60-70	192.30	0-70	1110.01	67.72%
70-80	162.22	0-80	1272.23	77.62%
80-90	128.12	0-90	1400.35	85.44%
90-100	97.72	0-100	1498.07	91.40%
100-110	68.75	0-110	1566.82	95.60%
110-120	42.30	0-120	1609.12	98.18%
120-130	21.05	0-130	1630.17	99.46%
130-140	6.96	0-140	1637.13	99.89%
140-150	1.06	0-150	1638.19	99.95%
150-160	0.51	0-160	1638.70	99.98%
160-170	0.30	0-170	1639.00	100.00%
170-180	0.10	0-180	1639.10	100.01%

4.2 Goniophotometer Test

UGR – Uncorrected Table:

UGR TABLE - UNCORRECTED

Reflectances										
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20
Room Size										
X=2H	Y=2H	UGR Viewed Crosswise				UGR Viewed Endwise				
	3H	14.3	15.7	14.9	16.3	17.0	18.5	19.9	19.1	20.5
	4H	15.6	17.0	16.2	17.6	18.3	21.5	22.8	22.1	23.4
	6H	16.1	17.3	16.7	17.9	18.6	23.1	24.3	23.7	24.9
	8H	16.3	17.5	17.0	18.1	18.8	24.8	25.9	25.4	26.6
	12H	16.4	17.5	17.0	18.1	18.9	25.7	26.8	26.3	27.4
		16.4	17.5	17.0	18.1	18.9	26.7	27.7	27.3	28.4
4H	2H	15.6	16.9	16.2	17.5	18.2	18.8	20.0	19.4	20.7
	3H	17.3	18.4	17.9	19.0	19.7	22.1	23.1	22.7	23.8
	4H	17.9	18.9	18.5	19.5	20.3	23.8	24.8	24.4	25.4
	6H	18.3	19.1	18.9	19.8	20.6	25.6	26.5	26.3	27.2
	8H	18.3	19.2	19.0	19.9	20.6	26.6	27.5	27.3	28.2
	12H	18.4	19.2	19.1	19.9	20.6	27.8	28.5	28.5	29.2
8H	4H	19.1	19.9	19.7	20.6	21.4	23.9	24.8	24.6	25.4
	6H	19.7	20.4	20.4	21.2	21.9	26.0	26.7	26.7	27.4
	8H	19.9	20.6	20.6	21.3	22.1	27.1	27.7	27.8	28.5
	12H	20.1	20.6	20.8	21.4	22.2	28.4	29.0	29.1	29.7
12H	4H	19.5	20.2	20.1	20.9	21.7	23.9	24.7	24.6	25.4
	6H	20.3	20.9	21.0	21.6	22.5	26.0	26.6	26.7	27.3
	8H	20.6	21.2	21.3	21.9	22.8	27.2	27.8	27.9	28.5

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										
X=2H	Y=2H	UGR Viewed Crosswise				UGR Viewed Endwise				
	3H	16.0	17.4	16.6	18.0	18.7	20.2	21.6	20.8	22.2
	4H	17.3	18.7	17.9	19.3	20.0	23.2	24.5	23.8	25.1
	6H	17.8	19.0	18.4	19.6	20.3	24.8	26.0	25.4	26.6
	8H	18.0	19.2	18.7	19.8	20.5	26.5	27.6	27.1	28.3
	12H	18.1	19.2	18.7	19.8	20.6	27.4	28.5	28.0	29.1
		18.1	19.2	18.7	19.8	20.6	28.4	29.4	29.0	30.1
4H	2H	17.3	18.6	17.9	19.2	19.9	20.5	21.7	21.1	22.4
	3H	19.0	20.1	19.6	20.7	21.4	23.8	24.8	24.4	25.5
	4H	19.6	20.6	20.2	21.2	22.0	25.5	26.5	26.1	27.1
	6H	20.0	20.8	20.6	21.5	22.3	27.3	28.2	28.0	28.9
	8H	20.0	20.9	20.7	21.6	22.3	28.3	29.2	29.0	29.9
	12H	20.1	20.9	20.8	21.6	22.3	29.5	30.2	30.2	30.9
8H	4H	20.8	21.6	21.4	22.3	23.1	25.6	26.5	26.3	27.1
	6H	21.4	22.1	22.1	22.9	23.6	27.7	28.4	28.4	29.1
	8H	21.6	22.3	22.3	23.0	23.8	28.8	29.4	29.5	30.2
	12H	21.8	22.3	22.5	23.1	23.9	30.1	30.7	30.8	31.4
12H	4H	21.2	21.9	21.8	22.6	23.4	25.6	26.4	26.3	27.1
	6H	22.0	22.6	22.7	23.3	24.2	27.7	28.3	28.4	29.0
	8H	22.3	22.9	23.0	23.6	24.5	28.9	29.5	29.6	30.2

Maximum UGR = 32.2

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	381	381	381	381	381	381	381	381	381	381	381	381	381	381	381	381	381	381	381
5	378	378	379	379	378	379	379	379	378	379	379	378	378	378	379	379	378	379	379
10	372	373	374	373	374	376	376	374	373	374	373	372	373	374	373	374	376	376	376
15	363	364	365	366	368	370	371	370	368	366	365	364	363	364	365	366	368	370	371
20	349	350	353	356	359	363	364	363	359	356	353	350	349	350	353	356	359	363	364
25	332	334	338	343	349	354	356	354	349	343	338	334	332	334	338	343	349	354	356
30	311	315	321	329	337	344	346	344	337	329	321	315	311	315	321	329	337	344	346
35	289	293	302	312	323	332	335	332	323	312	302	293	289	293	302	312	323	332	335
40	264	269	281	294	309	321	324	321	309	294	281	269	264	269	281	294	309	321	324
45	237	244	259	276	294	308	312	308	294	276	259	244	237	244	259	276	294	308	312
50	209	218	235	257	278	293	299	293	278	257	235	218	209	218	235	257	278	293	299
55	180	191	212	238	262	279	285	279	262	238	212	191	180	191	212	238	262	279	285
60	151	163	189	219	244	263	270	263	244	219	189	163	151	163	189	219	244	263	270
65	121	136	167	199	228	247	254	247	228	199	167	136	121	136	167	199	228	247	254
70	91.0	109	145	180	210	231	238	231	210	180	145	109	91.0	109	145	180	210	231	238
75	61.8	84.8	125	162	193	214	222	214	193	162	125	84.8	61.8	84.8	125	162	193	214	222
80	34.6	62.4	106	144	176	197	205	197	176	144	106	62.4	34.6	62.4	106	144	176	197	205
85	13.1	44.0	88.3	128	160	181	189	181	160	128	88.3	44.0	13.1	44.0	88.3	128	160	181	189
90	2.29	30.4	73.7	113	145	165	173	165	145	113	73.7	30.4	2.29	30.4	73.7	113	145	165	173
95	1.62	21.4	60.6	98.3	128	149	157	149	128	98.3	60.6	21.4	1.62	21.4	60.6	98.3	128	149	157
100	1.64	13.5	48.6	84.1	114	132	140	132	114	84.1	48.6	13.5	1.64	13.5	48.6	84.1	114	132	140
105	1.58	6.65	37.2	69.9	97.5	115	123	115	97.5	69.9	37.2	6.65	1.58	6.65	37.2	69.9	97.5	115	123
110	1.70	2.74	27.0	56.2	81.5	98.3	105	98.3	81.5	56.2	27.0	2.74	1.70	2.74	27.0	56.2	81.5	98.3	105
115	1.70	2.23	17.3	43.2	65.9	81.1	87.2	81.1	65.9	43.2	17.3	2.23	1.70	2.23	17.3	43.2	65.9	81.1	87.2
120	1.79	1.94	8.57	31.1	51.1	64.8	70.0	64.8	51.1	31.1	8.57	1.94	1.79	1.94	8.57	31.1	51.1	64.8	70.0
125	1.79	1.70	2.67	19.7	37.1	49.0	53.9	49.0	37.1	19.7	2.67	1.70	1.79	1.70	2.67	19.7	37.1	49.0	53.9
130	1.87	1.69	1.91	9.22	24.1	34.2	38.6	34.2	24.1	9.22	1.91	1.69	1.87	1.69	1.91	9.22	24.1	34.2	38.6
135	1.87	1.68	1.42	2.10	11.9	20.8	24.4	20.8	11.9	2.10	1.42	1.68	1.87	1.68	1.42	2.10	11.9	20.8	24.4
140	1.87	1.67	1.40	1.25	2.26	8.09	11.0	8.09	2.26	1.25	1.40	1.67	1.87	1.67	1.40	1.25	2.26	8.09	11.0
145	1.87	1.68	1.42	1.03	0.95	1.00	0.97	1.00	0.95	1.03	1.42	1.68	1.87	1.68	1.42	1.03	0.95	1.00	0.97
150	1.86	1.66	1.34	1.07	0.87	0.86	0.77	0.86	0.87	1.07	1.34	1.66	1.86	1.66	1.34	1.07	0.87	0.86	0.77
155	1.86	1.61	1.09	0.83	0.85	0.85	0.77	0.85	0.83	1.09	1.61	1.86	1.61	1.09	0.83	0.85	0.85	0.85	0.77
160	1.85	1.57	1.00	0.77	0.85	0.85	0.77	0.85	0.85	1.00	1.57	1.85	1.57	1.00	0.77	0.85	0.85	0.85	0.77
165	1.84	1.58	1.12	0.78	0.85	0.85	0.77	0.85	0.85	1.12	1.58	1.84	1.58	1.12	0.78	0.85	0.85	0.85	0.77
170	2.27	1.53	1.08	0.79	0.85	0.85	0.77	0.85	0.85	1.08	1.53	2.27	1.53	1.08	0.79	0.85	0.85	0.85	0.77
175	2.01	1.41	1.03	0.87	0.87	0.87	0.77	0.87	0.87	1.03	1.41	2.01	1.41	1.03	0.87	0.87	0.87	0.87	0.77
180	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19

Table--2

UNIT: cd

C (DEG) y	285	300	315	330	345														
0	381	381	381	381	381														
5	379	378	379	379	378														
10	376	374	373	374	373														
15	370	368	366	365	364														
20	363	359	356	353	350														
25	354	349	343	338	334														
30	344	337	329	321	315														
35	332	323	312	302	293														
40	321	309	294	281	269														
45	308	294	276	259	244														
50	293	278	257	235	218														
55	279	262	238	212	191														
60	263	244	219	189	163														
65	247	228	199	167	136														
70	231	210	180	145	109														
75	214	193	162	125	84.8														
80	197	176	144	106	62.4														
85	181	160	128	88.3	44.0														
90	165	145	113	73.7	30.4														
95	149	128	98.3	60.6	21.4														
100	132	114	84.1	48.6	13.5														
105	115	97.5	69.9	37.2	6.65														
110	98.3	81.5	56.2	27.0	2.74														
115	81.1	65.9	43.2	17.3	2.23														
120	64.8	51.1	31.1	8.57	1.94														
125	49.0	37.1	19.7	2.67	1.70														
130	34.2	24.1	9.22	1.91	1.69														
135	20.8	11.9	2.10	1.42	1.68														
140	8.09	2.26	1.25	1.40	1.67														
145	1.00	0.95	1.03	1.42	1.68														
150	0.86	0.87	1.07	1.34	1.66														
155	0.85	0.85	0.83	1.09	1.61														
160	0.85	0.85	0.77	1.00	1.57														
165	0.85	0.85	0.78	1.12	1.58														
170	0.85	0.85	0.79	1.08	1.53														
175	0.87	0.87	0.87	1.03	1.41														
180	0.19	0.19	0.19	0.19	0.19														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP4/MVS @10W4000K	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	0.083	9.8	0.983	8.75
277.0	60	0.045	10.5	0.847	21.60

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*****