

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

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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		1134
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	153.7
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		29.5
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	7.90
				277V	10.85
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.992
				277V	0.926
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4969
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		83.2
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		84
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		97
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%		63.1%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	28.5
			N/A	<22	
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		120.0
(Goniophotometer – Section 4.2)			Non-Worst Case		277.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.248
(Goniophotometer – Section 4.2)			Non-Worst Case		0.115
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		29.5
(Goniophotometer – Section 4.2)			Non-Worst Case		29.4

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-04-02	STRP4H/MVS @30W5000K	-	250402002-S1
2	Goniophotometer Test	2025-04-02	STRP4H/MVS @30W5000K	-	250402002-S1
3	THD and PF Test	2025-04-02	STRP4H/MVS @30W5000K	-	250402002-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. STRP4H/MVS @30W5000K, 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.	STRP4H/MVS @30W5000K	Sample ID	250402002-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

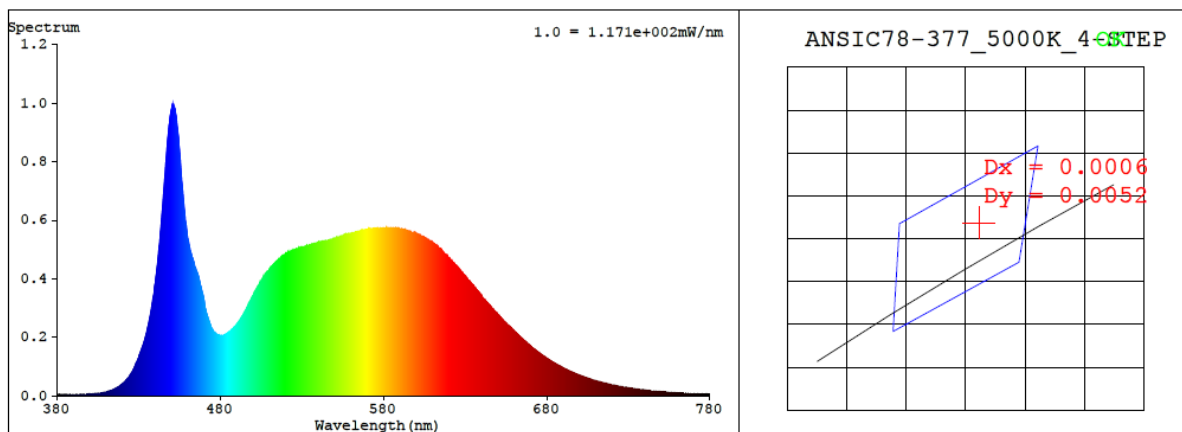
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.248	29.5	0.992
277.0	60	0.115	29.4	0.926

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4969	83.2	12	0.0024	1.2	84	97	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3465$ $y = 0.3576$ / $u' = 0.2101$ $v' = 0.4878$ ($duv=2.40e-03$)

CCT= 4969K Prcp WL: $L_d=570.9nm$ Purity=11.3%

Peak WL: $L_p=451nm$ FWHM: $=19.4nm$ Ratio:R=15.8% G=79.9% B=4.3%

Render Index: $R_a = 83.2$ AvgR = 76.0 TM30:Rf=84 Rg=96

EEL: 0.09276 A++ Highest

R1 =81 R2 =88 R3 =92 R4 =83 R5 =81 R6 =82 R7 =89

R8 =69 R9 =12 R10=71 R11=81 R12=56 R13=83 R14=96 R15=76

4.1 Integrating Sphere Test

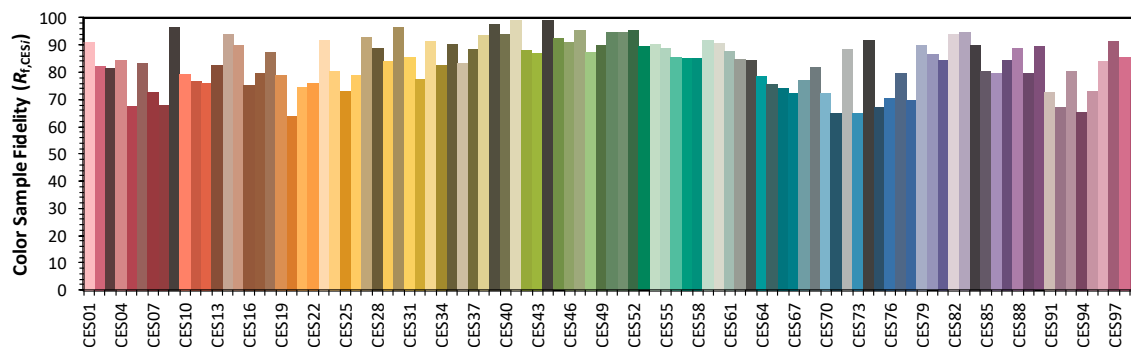
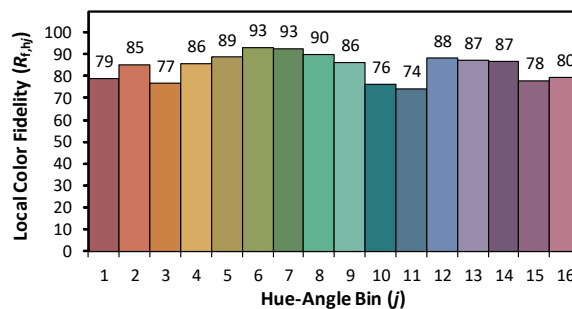
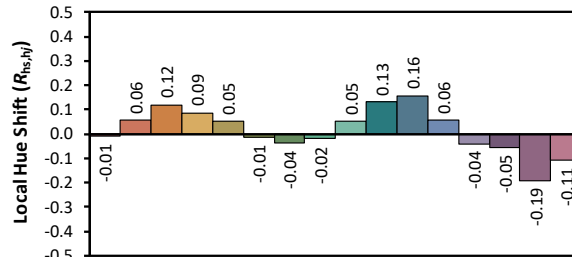
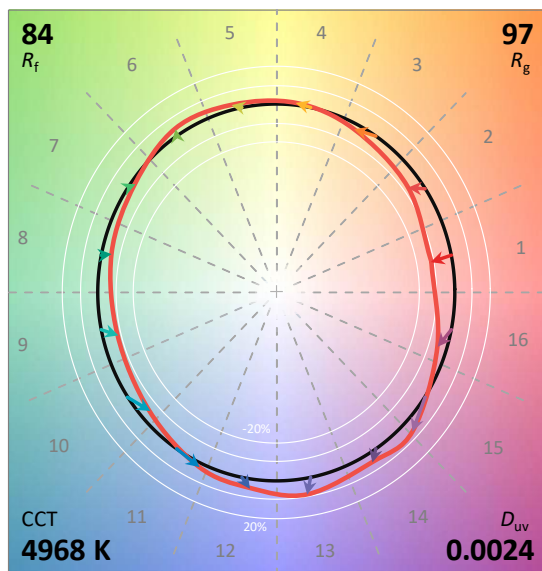
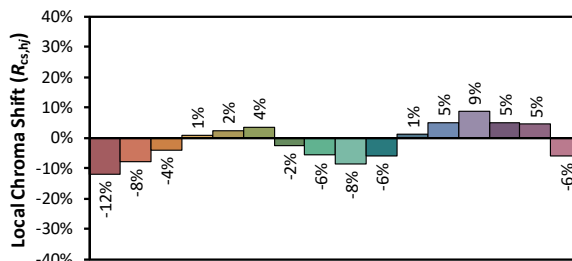
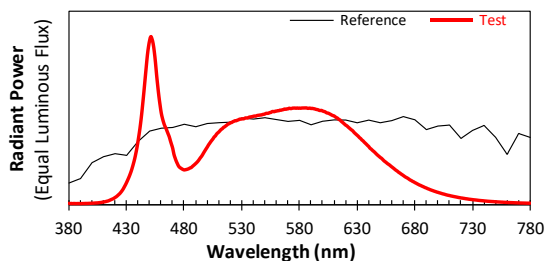
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/3

Model: STRP4H/MVS @30W5000K



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

x 0.3465
 y 0.3574
 u' 0.2101
 v' 0.4877

CIE 13.3-1995
(CRI)
 R_a 83
 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	5.20E-06	447	8.17E-04	514	4.57E-04	581	5.71E-04	648	2.90E-04	715	4.42E-05
381	3.90E-06	448	8.87E-04	515	4.61E-04	582	5.73E-04	649	2.84E-04	716	4.28E-05
382	4.60E-06	449	9.39E-04	516	4.66E-04	583	5.73E-04	650	2.78E-04	717	4.14E-05
383	3.50E-06	450	9.77E-04	517	4.72E-04	584	5.73E-04	651	2.74E-04	718	3.99E-05
384	4.20E-06	451	9.98E-04	518	4.77E-04	585	5.73E-04	652	2.67E-04	719	3.87E-05
385	4.20E-06	452	9.83E-04	519	4.80E-04	586	5.73E-04	653	2.60E-04	720	3.72E-05
386	3.70E-06	453	9.55E-04	520	4.85E-04	587	5.71E-04	654	2.54E-04	721	3.65E-05
387	3.90E-06	454	9.07E-04	521	4.86E-04	588	5.71E-04	655	2.49E-04	722	3.53E-05
388	4.20E-06	455	8.44E-04	522	4.91E-04	589	5.72E-04	656	2.43E-04	723	3.43E-05
389	3.70E-06	456	7.69E-04	523	4.94E-04	590	5.70E-04	657	2.38E-04	724	3.29E-05
390	3.40E-06	457	7.02E-04	524	4.97E-04	591	5.70E-04	658	2.33E-04	725	3.21E-05
391	3.80E-06	458	6.41E-04	525	4.97E-04	592	5.69E-04	659	2.27E-04	726	3.10E-05
392	4.10E-06	459	5.90E-04	526	5.00E-04	593	5.68E-04	660	2.22E-04	727	2.98E-05
393	4.10E-06	460	5.44E-04	527	5.02E-04	594	5.65E-04	661	2.17E-04	728	2.91E-05
394	4.60E-06	461	5.13E-04	528	5.06E-04	595	5.64E-04	662	2.11E-04	729	2.81E-05
395	4.70E-06	462	4.88E-04	529	5.06E-04	596	5.62E-04	663	2.05E-04	730	2.73E-05
396	4.70E-06	463	4.68E-04	530	5.08E-04	597	5.59E-04	664	2.00E-04	731	2.64E-05
397	5.00E-06	464	4.53E-04	531	5.08E-04	598	5.58E-04	665	1.96E-04	732	2.57E-05
398	5.30E-06	465	4.36E-04	532	5.10E-04	599	5.58E-04	666	1.90E-04	733	2.50E-05
399	5.60E-06	466	4.18E-04	533	5.13E-04	600	5.55E-04	667	1.85E-04	734	2.42E-05
400	6.10E-06	467	4.01E-04	534	5.13E-04	601	5.52E-04	668	1.80E-04	735	2.32E-05
401	6.20E-06	468	3.77E-04	535	5.14E-04	602	5.50E-04	669	1.76E-04	736	2.24E-05
402	6.80E-06	469	3.54E-04	536	5.17E-04	603	5.46E-04	670	1.71E-04	737	2.18E-05
403	7.40E-06	470	3.31E-04	537	5.19E-04	604	5.43E-04	671	1.66E-04	738	2.11E-05
404	7.70E-06	471	2.98E-04	538	5.20E-04	605	5.42E-04	672	1.61E-04	739	2.06E-05
405	8.10E-06	472	2.76E-04	539	5.22E-04	606	5.38E-04	673	1.58E-04	740	1.98E-05
406	9.00E-06	473	2.57E-04	540	5.24E-04	607	5.34E-04	674	1.53E-04	741	1.91E-05
407	9.90E-06	474	2.42E-04	541	5.25E-04	608	5.30E-04	675	1.49E-04	742	1.86E-05
408	1.05E-05	475	2.27E-04	542	5.24E-04	609	5.27E-04	676	1.44E-04	743	1.78E-05
409	1.21E-05	476	2.19E-04	543	5.28E-04	610	5.25E-04	677	1.41E-04	744	1.73E-05
410	1.29E-05	477	2.15E-04	544	5.29E-04	611	5.20E-04	678	1.36E-04	745	1.68E-05
411	1.45E-05	478	2.10E-04	545	5.30E-04	612	5.15E-04	679	1.33E-04	746	1.64E-05
412	1.61E-05	479	2.06E-04	546	5.31E-04	613	5.12E-04	680	1.29E-04	747	1.59E-05
413	1.80E-05	480	2.04E-04	547	5.32E-04	614	5.05E-04	681	1.25E-04	748	1.56E-05
414	1.97E-05	481	2.06E-04	548	5.34E-04	615	5.02E-04	682	1.21E-04	749	1.48E-05
415	2.27E-05	482	2.07E-04	549	5.35E-04	616	4.94E-04	683	1.18E-04	750	1.45E-05
416	2.57E-05	483	2.09E-04	550	5.38E-04	617	4.89E-04	684	1.14E-04	751	1.40E-05
417	2.89E-05	484	2.12E-04	551	5.41E-04	618	4.83E-04	685	1.12E-04	752	1.35E-05
418	3.16E-05	485	2.16E-04	552	5.41E-04	619	4.77E-04	686	1.08E-04	753	1.31E-05
419	3.55E-05	486	2.18E-04	553	5.42E-04	620	4.71E-04	687	1.05E-04	754	1.29E-05
420	4.02E-05	487	2.25E-04	554	5.45E-04	621	4.67E-04	688	1.02E-04	755	1.23E-05
421	4.46E-05	488	2.30E-04	555	5.46E-04	622	4.60E-04	689	9.86E-05	756	1.21E-05
422	5.04E-05	489	2.37E-04	556	5.51E-04	623	4.54E-04	690	9.63E-05	757	1.15E-05
423	5.68E-05	490	2.43E-04	557	5.52E-04	624	4.48E-04	691	9.26E-05	758	1.13E-05
424	6.30E-05	491	2.50E-04	558	5.51E-04	625	4.42E-04	692	9.03E-05	759	1.09E-05
425	7.12E-05	492	2.57E-04	559	5.54E-04	626	4.38E-04	693	8.72E-05	760	1.04E-05
426	8.03E-05	493	2.67E-04	560	5.54E-04	627	4.29E-04	694	8.46E-05	761	1.00E-05
427	9.06E-05	494	2.77E-04	561	5.57E-04	628	4.22E-04	695	8.21E-05	762	1.00E-05
428	1.03E-04	495	2.85E-04	562	5.57E-04	629	4.16E-04	696	7.97E-05	763	9.50E-06
429	1.16E-04	496	2.96E-04	563	5.60E-04	630	4.10E-04	697	7.71E-05	764	9.40E-06
430	1.30E-04	497	3.08E-04	564	5.60E-04	631	4.04E-04	698	7.50E-05	765	9.10E-06
431	1.45E-04	498	3.19E-04	565	5.62E-04	632	3.96E-04	699	7.24E-05	766	8.80E-06
432	1.61E-04	499	3.30E-04	566	5.63E-04	633	3.91E-04	700	7.06E-05	767	8.50E-06
433	1.79E-04	500	3.41E-04	567	5.67E-04	634	3.83E-04	701	6.83E-05	768	8.30E-06
434	1.98E-04	501	3.53E-04	568	5.65E-04	635	3.77E-04	702	6.64E-05	769	7.90E-06
435	2.20E-04	502	3.62E-04	569	5.67E-04	636	3.70E-04	703	6.42E-05	770	7.70E-06
436	2.44E-04	503	3.73E-04	570	5.68E-04	637	3.63E-04	704	6.21E-05	771	7.30E-06
437	2.71E-04	504	3.81E-04	571	5.72E-04	638	3.57E-04	705	6.04E-05	772	7.20E-06
438	3.03E-04	505	3.90E-04	572	5.69E-04	639	3.50E-04	706	5.85E-05	773	7.00E-06
439	3.39E-04	506	4.01E-04	573	5.70E-04	640	3.43E-04	707	5.63E-05	774	6.90E-06
440	3.81E-04	507	4.07E-04	574	5.72E-04	641	3.34E-04	708	5.46E-05	775	6.70E-06
441	4.25E-04	508	4.18E-04	575	5.72E-04	642	3.29E-04	709	5.29E-05	776	6.50E-06
442	4.76E-04	509	4.24E-04	576	5.72E-04	643	3.22E-04	710	5.17E-05	777	6.20E-06
443	5.34E-04	510	4.30E-04	577	5.71E-04	644	3.16E-04	711	4.98E-05	778	6.10E-06
444	6.01E-04	511	4.38E-04	578	5.73E-04	645	3.10E-04	712	4.84E-05	779	6.10E-06
445	6.71E-04	512	4.45E-04	579	5.71E-04	646	3.03E-04	713	4.69E-05	780	6.10E-06
446	7.45E-04	513	4.50E-04	580	5.72E-04	647	2.96E-04	714	4.55E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP4H/MVS @30W5000K	Sample ID	250402002-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.8	Humidity (%RH)	42.9

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	120.0	60	0.248	29.5	0.992
NON-WORST CASE	277.0	60	0.115	29.4	0.926

Test Result

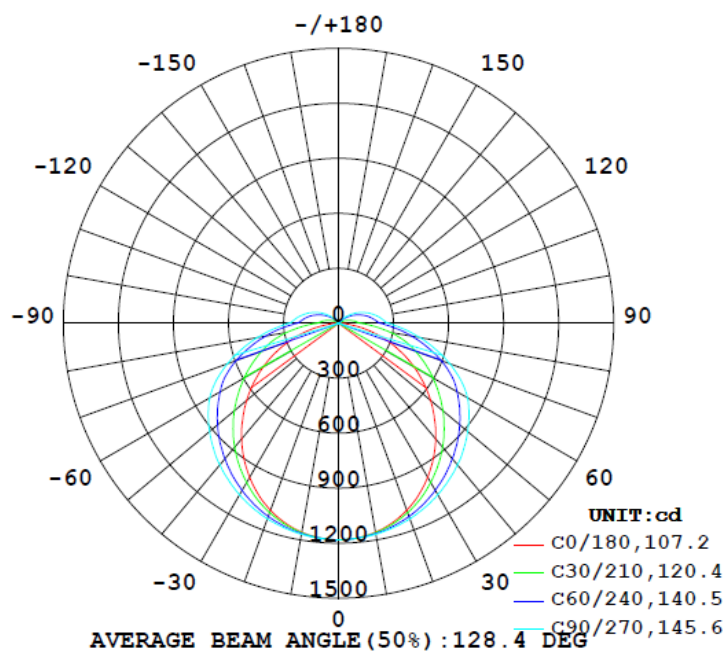
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
4534	1134	160.1	160.1	107.1	145.4	153.7

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
63.1%	22.9	28.5

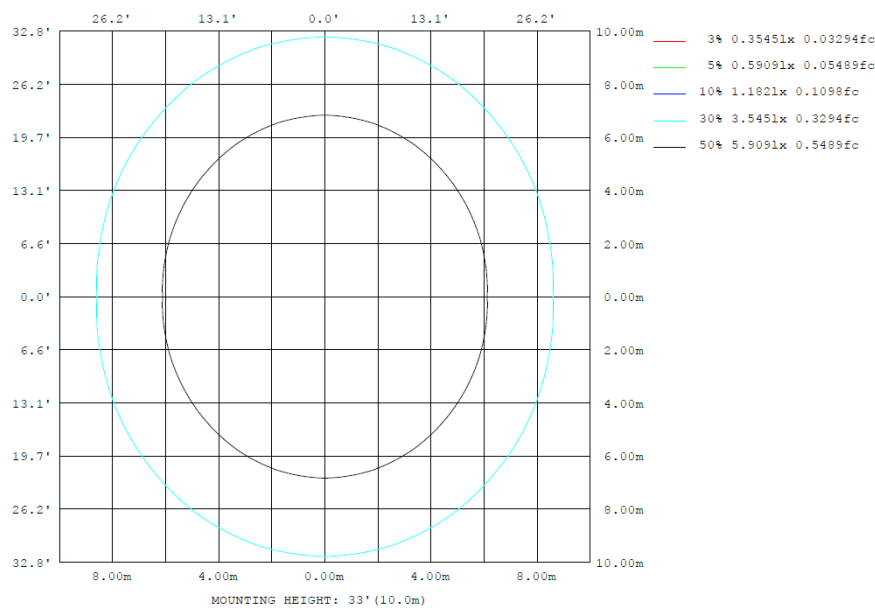
4.2 Goniophotometer Test

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	Φ um, lamp
10	1158	1160	1169	1160	1158	1160	1169	1160	0- 10	111.8	111.8	2.47,2.47
20	1086	1108	1135	1108	1086	1108	1135	1108	10- 20	322.1	433.9	9.57,9.57
30	970.9	1027	1081	1027	970.9	1027	1081	1027	20- 30	494.7	928.6	20.5,20.5
40	823.1	922.0	1008	922.0	823.1	922.0	1008	922.0	30- 40	611.7	1540	34,34
50	654.8	802.7	918.7	802.7	654.8	802.7	918.7	802.7	40- 50	665.0	2205	48.6,48.6
60	474.1	673.7	811.8	673.7	474.1	673.7	811.8	673.7	50- 60	653.6	2859	63.1,63.1
70	287.8	534.4	644.7	534.4	287.8	534.4	644.7	534.4	60- 70	579.8	3439	75.8,75.8
80	111.5	352.7	450.0	352.7	111.5	352.7	450.0	352.7	70- 80	438.9	3878	85.5,85.5
90	5.191	180.9	270.4	180.9	5.191	180.9	270.4	180.9	80- 90	262.8	4140	91.3,91.3
100	4.592	136.3	218.3	136.3	4.592	136.3	218.3	136.3	90-100	154.6	4295	94.7,94.7
110	5.656	94.75	168.2	94.75	5.656	94.75	168.2	94.75	100-110	112.1	4407	97.2,97.2
120	5.997	54.55	114.9	54.55	5.997	54.55	114.9	54.55	110-120	71.08	4478	98.8,98.8
130	6.061	18.73	64.83	18.73	6.061	18.73	64.83	18.73	120-130	36.76	4515	99.6,99.6
140	5.954	3.025	20.83	3.025	5.954	3.025	20.83	3.025	130-140	13.31	4528	99.9,99.9
150	5.788	2.492	1.960	2.492	5.788	2.492	1.960	2.492	140-150	2.784	4531	99.9,99.9
160	5.178	2.327	1.860	2.327	5.178	2.327	1.860	2.327	150-160	1.408	4533	100,100
170	6.620	2.619	2.070	2.619	6.620	2.619	2.070	2.619	160-170	0.8686	4533	100,100
180	6.989	2.952	2.733	2.952	6.989	2.952	2.733	2.952	170-180	0.3520	4534	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	111.84	0-10	111.84	2.47%
10-20	322.07	0-20	433.91	9.57%
20-30	494.70	0-30	928.61	20.48%
30-40	611.75	0-40	1540.36	33.98%
40-50	664.95	0-50	2205.31	48.65%
50-60	653.62	0-60	2858.93	63.06%
60-70	579.81	0-70	3438.74	75.85%
70-80	438.86	0-80	3877.60	85.53%
80-90	262.78	0-90	4140.38	91.33%
90-100	154.64	0-100	4295.02	94.74%
100-110	112.15	0-110	4407.17	97.22%
110-120	71.08	0-120	4478.25	98.78%
120-130	36.76	0-130	4515.01	99.59%
130-140	13.31	0-140	4528.32	99.89%
140-150	2.78	0-150	4531.10	99.95%
150-160	1.41	0-160	4532.51	99.98%
160-170	0.87	0-170	4533.38	100.00%
170-180	0.35	0-180	4533.73	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	13.2	14.7	13.7	15.2	15.8	16.3	17.9	16.8	18.4	18.9
	3H	14.8	16.2	15.3	16.7	17.2	19.0	20.4	19.5	20.9	21.5
	4H	15.3	16.6	15.8	17.1	17.7	20.3	21.6	20.8	22.1	22.7
	6H	15.6	16.8	16.2	17.4	18.0	21.5	22.7	22.0	23.3	23.9
	8H	15.7	16.9	16.2	17.4	18.0	22.1	23.3	22.6	23.8	24.4
	12H	15.7	16.8	16.3	17.4	18.0	22.7	23.9	23.3	24.4	25.1
4H	2H	14.5	15.8	15.0	16.3	16.9	16.8	18.1	17.3	18.6	19.2
	3H	16.3	17.5	16.9	18.0	18.6	19.7	20.9	20.3	21.4	22.0
	4H	17.0	18.1	17.6	18.6	19.3	21.1	22.2	21.7	22.7	23.4
	6H	17.5	18.4	18.1	19.0	19.7	22.5	23.5	23.1	24.1	24.7
	8H	17.6	18.5	18.2	19.1	19.8	23.2	24.1	23.8	24.7	25.4
	12H	17.7	18.5	18.3	19.1	19.8	24.0	24.8	24.6	25.4	26.1
8H	4H	18.0	18.8	18.6	19.4	20.1	21.4	22.2	22.0	22.8	23.5
	6H	18.7	19.4	19.3	20.1	20.7	23.0	23.7	23.6	24.3	25.0
	8H	18.9	19.6	19.6	20.3	20.9	23.8	24.5	24.4	25.1	25.8
	12H	19.1	19.7	19.7	20.3	21.1	24.7	25.3	25.4	26.0	26.7
12H	4H	18.2	19.0	18.8	19.6	20.3	21.4	22.2	22.0	22.8	23.5
	6H	19.1	19.7	19.7	20.3	21.1	23.0	23.7	23.7	24.3	25.0
	8H	19.4	20.0	20.1	20.6	21.4	23.9	24.5	24.6	25.1	25.9

Maximum UGR = 26.7

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	18.5	20.0	19.0	20.5	21.1	21.6	23.2	22.1	23.7	24.2
	3H	20.1	21.5	20.6	22.0	22.5	24.3	25.7	24.8	26.2	26.8
	4H	20.6	21.9	21.1	22.4	23.0	25.6	26.9	26.1	27.4	28.0
	6H	20.9	22.1	21.5	22.7	23.3	26.8	28.0	27.3	28.6	29.2
	8H	21.0	22.2	21.5	22.7	23.3	27.4	28.6	27.9	29.1	29.7
	12H	21.0	22.1	21.6	22.7	23.3	28.0	29.2	28.6	29.7	30.4
4H	2H	19.8	21.1	20.3	21.6	22.2	22.1	23.4	22.6	23.9	24.5
	3H	21.6	22.8	22.2	23.3	23.9	25.0	26.2	25.6	26.7	27.3
	4H	22.3	23.4	22.9	23.9	24.6	26.4	27.5	27.0	28.0	28.7
	6H	22.8	23.7	23.4	24.3	25.0	27.8	28.8	28.4	29.4	30.0
	8H	22.9	23.8	23.5	24.4	25.1	28.5	29.4	29.1	30.0	30.7
	12H	23.0	23.8	23.6	24.4	25.1	29.3	30.1	29.9	30.7	31.4
8H	4H	23.3	24.1	23.9	24.7	25.4	26.7	27.5	27.3	28.1	28.8
	6H	24.0	24.7	24.6	25.4	26.0	28.3	29.0	28.9	29.6	30.3
	8H	24.2	24.9	24.9	25.6	26.2	29.1	29.8	29.7	30.4	31.1
	12H	24.4	25.0	25.0	25.6	26.4	30.0	30.6	30.7	31.3	32.0
12H	4H	23.5	24.3	24.1	24.9	25.6	26.7	27.5	27.3	28.1	28.8
	6H	24.4	25.0	25.0	25.6	26.4	28.3	29.0	29.0	29.6	30.3
	8H	24.7	25.3	25.4	25.9	26.7	29.2	29.8	29.9	30.4	31.2

Maximum UGR = 32.0

4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) y (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1182	1181	1181	1181	1181	1181	1182	1181	1181	1181	1181	1181	1182	1181	1181	1181	1181	1181	1182
5	1176	1175	1175	1175	1176	1178	1177	1178	1176	1175	1175	1175	1176	1175	1175	1175	1176	1178	1177
10	1158	1158	1160	1160	1165	1168	1169	1168	1165	1160	1160	1158	1158	1158	1160	1160	1165	1168	1169
15	1127	1130	1135	1139	1146	1152	1154	1152	1146	1139	1135	1130	1127	1130	1135	1139	1146	1152	1154
20	1086	1091	1100	1108	1121	1131	1135	1131	1121	1108	1100	1091	1086	1091	1100	1108	1121	1131	1135
25	1033	1043	1056	1071	1090	1104	1111	1104	1090	1071	1056	1043	1033	1043	1056	1071	1090	1104	1111
30	971	985	1004	1027	1053	1072	1081	1072	1053	1027	1004	985	971	985	1004	1027	1053	1072	1081
35	900	918	946	977	1011	1036	1046	1036	1011	977	946	918	900	918	946	977	1011	1036	1046
40	823	846	882	922	965	996	1008	996	965	922	882	846	823	846	882	922	965	996	1008
45	740	768	814	863	916	952	966	952	916	863	814	768	740	768	814	863	916	952	966
50	655	686	742	803	862	903	919	903	862	803	742	686	655	686	742	803	862	903	919
55	565	602	668	739	805	851	868	851	805	739	668	602	565	602	668	739	805	851	868
60	474	517	594	674	746	795	812	795	746	674	594	517	474	517	594	674	746	795	812
65	381	432	520	607	680	720	735	720	680	607	520	432	381	432	520	607	680	720	735
70	288	349	446	534	595	631	645	631	595	534	446	349	288	349	446	534	595	631	645
75	197	269	373	446	500	534	548	534	500	446	373	269	197	269	373	446	500	534	548
80	111	194	287	353	405	438	450	438	405	353	287	194	111	194	287	353	405	438	450
85	41.5	120	198	262	312	345	356	345	312	262	198	120	41.5	120	198	262	312	345	356
90	5.19	53.3	121	181	229	259	270	259	229	181	121	53.3	5.19	53.3	121	181	229	259	270
95	4.14	37.5	99.7	156	201	230	242	230	201	156	99.7	37.5	4.14	37.5	99.7	156	201	230	242
100	4.59	24.7	81.9	136	181	207	218	207	181	136	81.9	24.7	4.59	24.7	81.9	136	181	207	218
105	5.42	13.6	63.9	116	158	184	194	184	158	116	63.9	13.6	5.42	13.6	63.9	116	158	184	194
110	5.66	5.36	47.2	94.8	134	159	168	159	134	94.8	47.2	5.36	5.66	5.36	47.2	94.8	134	159	168
115	5.86	4.94	31.8	74.1	110	133	141	133	110	74.1	31.8	4.94	5.86	4.94	31.8	74.1	110	133	141
120	6.00	5.07	17.3	54.6	86.8	107	115	107	86.8	54.6	17.3	5.07	6.00	5.07	17.3	54.6	86.8	107	115
125	6.04	5.19	5.48	35.8	64.2	82.9	89.3	82.9	64.2	35.8	5.48	5.19	6.04	5.19	5.48	35.8	64.2	82.9	89.3
130	6.06	5.31	4.06	18.7	42.7	59.3	64.8	59.3	42.7	18.7	4.06	5.31	6.06	5.31	4.06	18.7	42.7	59.3	64.8
135	6.04	5.45	3.89	4.40	23.1	37.0	42.1	37.0	23.1	4.40	3.89	5.45	6.04	5.45	3.89	4.40	23.1	37.0	42.1
140	5.95	5.69	3.76	3.03	5.58	16.5	20.8	16.5	5.58	3.03	3.76	5.69	5.95	5.69	3.76	3.03	5.58	16.5	20.8
145	5.87	5.82	3.58	2.74	2.29	3.09	2.98	3.09	2.29	2.74	3.58	5.82	5.87	5.82	3.58	2.74	2.29	3.09	2.98
150	5.79	5.36	3.32	2.49	2.16	2.06	1.96	2.06	2.16	2.49	3.32	5.36	5.79	5.36	3.32	2.49	2.16	2.06	1.96
155	5.70	4.81	2.95	2.40	2.08	2.09	1.91	2.09	2.08	2.40	2.95	4.81	5.70	4.81	2.95	2.40	2.08	2.09	1.91
160	5.18	4.43	2.70	2.33	2.24	2.11	1.86	2.11	2.24	2.33	2.70	4.43	5.18	4.43	2.70	2.33	2.24	2.11	1.86
165	5.24	4.89	2.75	2.38	2.40	2.14	1.81	2.14	2.40	2.38	2.75	4.89	5.24	4.89	2.75	2.38	2.40	2.14	1.81
170	6.62	5.91	3.04	2.62	2.51	2.52	2.07	2.52	2.51	2.62	3.04	5.91	6.62	5.91	3.04	2.62	2.51	2.52	2.07
175	6.90	6.01	3.47	2.86	2.68	2.71	2.72	2.71	2.68	2.86	3.47	6.01	6.90	6.01	3.47	2.86	2.68	2.71	2.72
180	6.99	6.19	3.51	2.95	2.70	2.71	2.73	2.71	2.70	2.95	3.51	6.19	6.99	6.19	3.51	2.95	2.70	2.71	2.73

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	1181	1181	1181	1181	1181														
5	1178	1176	1175	1175	1175														
10	1168	1165	1160	1160	1158														
15	1152	1146	1139	1135	1130														
20	1131	1121	1108	1100	1091														
25	1104	1090	1071	1056	1043														
30	1072	1053	1027	1004	985														
35	1036	1011	977	946	918														
40	996	965	922	882	846														
45	952	916	863	814	768														
50	903	862	803	742	686														
55	851	805	739	668	602														
60	795	746	674	594	517														
65	720	680	607	520	432														
70	631	595	534	446	349														
75	534	500	446	373	269														
80	438	405	353	287	194														
85	345	312	262	198	120														
90	259	229	181	121	53.3														
95	230	201	156	99.7	37.5														
100	207	181	136	81.9	24.7														
105	184	158	116	63.9	13.6														
110	159	134	94.8	47.2	5.36														
115	133	110	74.1	31.8	4.94														
120	107	86.8	54.6	17.3	5.07														
125	82.9	64.2	35.8	5.48	5.19														
130	59.3	42.7	18.7	4.06	5.31														
135	37.0	23.1	4.40	3.89	5.45														
140	16.5	5.58	3.03	3.76	5.69														
145	3.09	2.29	2.74	3.58	5.82														
150	2.06	2.16	2.49	3.32	5.36														
155	2.09	2.08	2.40	2.95	4.81														
160	2.11	2.24	2.33	2.70	4.43														
165	2.14	2.40	2.38	2.75	4.89														
170	2.52	2.51	2.62	3.04	5.91														
175	2.71	2.68	2.86	3.47	6.01														
180	2.71	2.70	2.95	3.51	6.19														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP4H/MVS @30W5000K	Sample ID	250402002-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	0.248	29.5	0.992	7.90
277.0	60	0.115	29.4	0.926	10.85

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*****