

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		1146
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	160.2
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		28.6
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	8.20
				277V	11.39
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.992
				277V	0.921
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4109
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		85.1
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		18
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		85
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		96
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%		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		0.240
(Goniophotometer – Section 4.2)			Non-Worst Case		0.112
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		28.6
(Goniophotometer – Section 4.2)			Non-Worst Case		28.5

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-04-02	STRP4H/MVS @30W4000K	-	250402002-S1
2	Goniophotometer Test	2025-04-02	STRP4H/MVS @30W4000K	-	250402002-S1
3	THD and PF Test	2025-04-02	STRP4H/MVS @30W4000K	-	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 @30W4000K, 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 @30W4000K	Sample ID	250402002-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

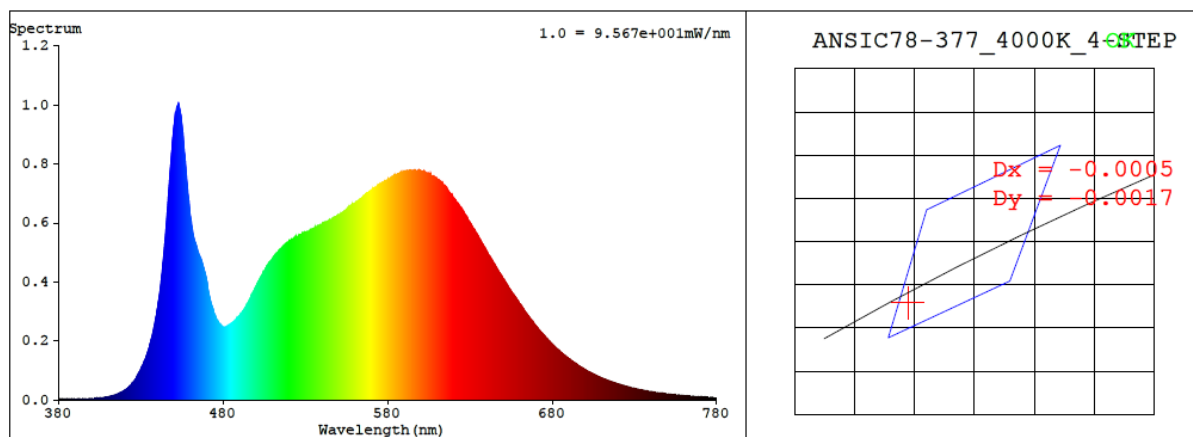
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.240	28.6	0.992
277.0	60	0.112	28.5	0.921

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4109	85.1	18	-0.0007	3.2	85	96	-11%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3753$ $y = 0.3721$ / $u' = 0.2236$ $v' = 0.4988$ ($duv = -6.50e-04$)

CCT= 4109K Prcp WL: $L_d = 579.0nm$ Purity=24.3%

Peak WL: $L_p = 453nm$ FWHM: $= 21.2nm$ Ratio: R=18.4% G=77.7% B=3.9%

Render Index: $R_a = 85.1$ AvgR = 79.1 TM30: $R_f = 85$ $R_g = 96$

EEL: 0.09046 A++ Highest

R1 =84 R2 =91 R3 =96 R4 =84 R5 =84 R6 =87 R7 =87

R8 =68 R9 =18 R10=79 R11=83 R12=63 R13=86 R14=98 R15=79

4.1 Integrating Sphere Test

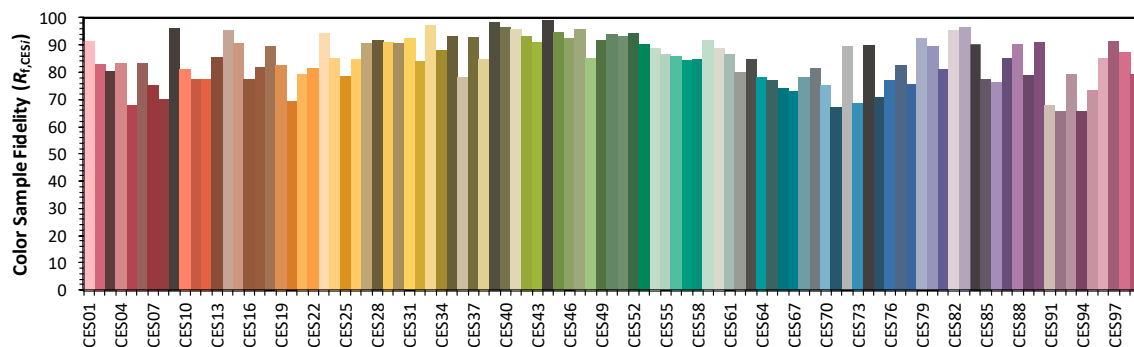
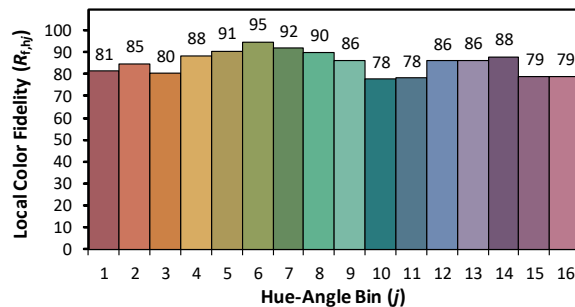
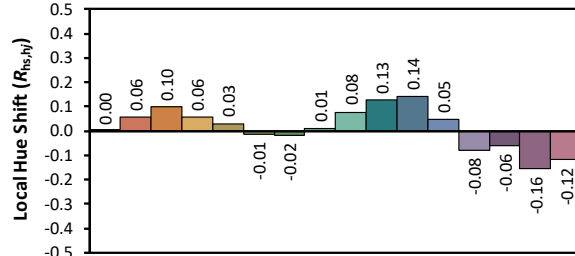
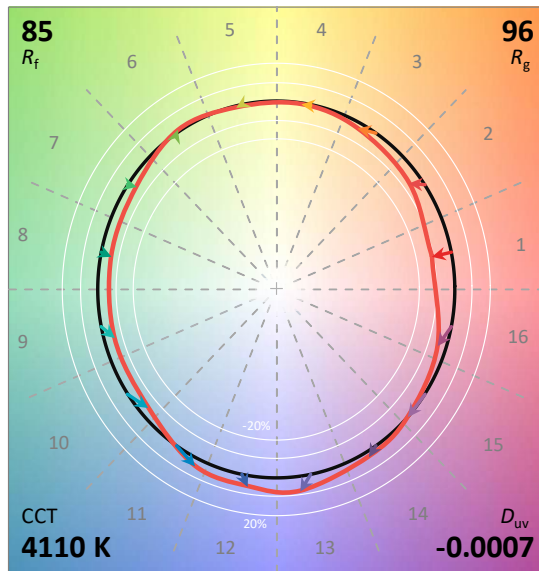
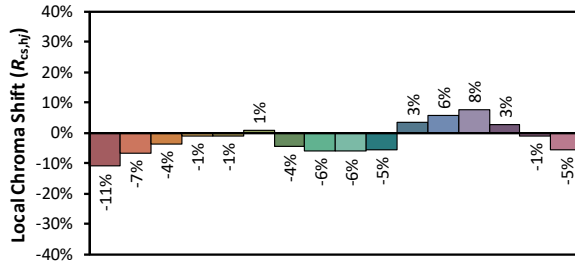
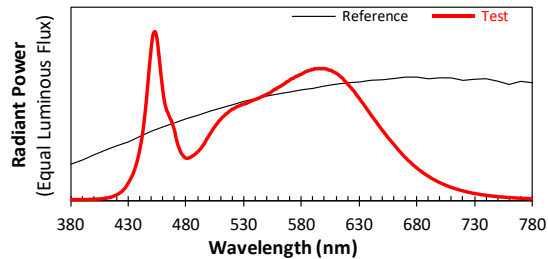
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/3

Model: STRP4H/MVS @30W4000K



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

x 0.3753
 y 0.3720
 u' 0.2236
 v' 0.4987

CIE 13.3-1995
(CRI)

R_a 85
 R_g 18

4.1 Integrating Sphere Test

Spectral Distribution over Visible Wavelength											
WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)
380	5.10E-06	447	7.13E-04	514	5.07E-04	581	7.49E-04	648	4.31E-04	715	6.38E-05
381	3.70E-06	448	7.90E-04	515	5.12E-04	582	7.52E-04	649	4.22E-04	716	6.18E-05
382	4.30E-06	449	8.60E-04	516	5.16E-04	583	7.57E-04	650	4.13E-04	717	5.98E-05
383	3.40E-06	450	9.24E-04	517	5.23E-04	584	7.61E-04	651	4.05E-04	718	5.75E-05
384	2.70E-06	451	9.73E-04	518	5.29E-04	585	7.62E-04	652	3.96E-04	719	5.61E-05
385	3.70E-06	452	9.92E-04	519	5.33E-04	586	7.66E-04	653	3.87E-04	720	5.42E-05
386	3.60E-06	453	9.95E-04	520	5.38E-04	587	7.66E-04	654	3.77E-04	721	5.25E-05
387	3.00E-06	454	9.76E-04	521	5.39E-04	588	7.69E-04	655	3.69E-04	722	5.09E-05
388	3.80E-06	455	9.33E-04	522	5.45E-04	589	7.73E-04	656	3.61E-04	723	4.95E-05
389	3.50E-06	456	8.73E-04	523	5.48E-04	590	7.71E-04	657	3.53E-04	724	4.74E-05
390	3.40E-06	457	8.10E-04	524	5.54E-04	591	7.75E-04	658	3.46E-04	725	4.62E-05
391	3.30E-06	458	7.43E-04	525	5.53E-04	592	7.77E-04	659	3.37E-04	726	4.45E-05
392	3.30E-06	459	6.85E-04	526	5.58E-04	593	7.76E-04	660	3.30E-04	727	4.31E-05
393	3.80E-06	460	6.28E-04	527	5.59E-04	594	7.76E-04	661	3.21E-04	728	4.16E-05
394	3.80E-06	461	5.86E-04	528	5.65E-04	595	7.78E-04	662	3.13E-04	729	4.01E-05
395	4.00E-06	462	5.54E-04	529	5.66E-04	596	7.77E-04	663	3.05E-04	730	3.92E-05
396	4.10E-06	463	5.32E-04	530	5.68E-04	597	7.76E-04	664	2.96E-04	731	3.79E-05
397	4.50E-06	464	5.16E-04	531	5.69E-04	598	7.77E-04	665	2.89E-04	732	3.65E-05
398	4.70E-06	465	4.99E-04	532	5.71E-04	599	7.79E-04	666	2.81E-04	733	3.54E-05
399	4.60E-06	466	4.83E-04	533	5.76E-04	600	7.77E-04	667	2.73E-04	734	3.48E-05
400	4.90E-06	467	4.71E-04	534	5.78E-04	601	7.74E-04	668	2.66E-04	735	3.34E-05
401	5.40E-06	468	4.49E-04	535	5.81E-04	602	7.75E-04	669	2.58E-04	736	3.21E-05
402	6.00E-06	469	4.29E-04	536	5.85E-04	603	7.70E-04	670	2.52E-04	737	3.14E-05
403	6.40E-06	470	4.06E-04	537	5.87E-04	604	7.68E-04	671	2.45E-04	738	3.03E-05
404	6.40E-06	471	3.71E-04	538	5.90E-04	605	7.68E-04	672	2.37E-04	739	2.92E-05
405	6.50E-06	472	3.45E-04	539	5.93E-04	606	7.66E-04	673	2.32E-04	740	2.87E-05
406	7.80E-06	473	3.21E-04	540	5.95E-04	607	7.59E-04	674	2.26E-04	741	2.77E-05
407	8.00E-06	474	3.04E-04	541	5.99E-04	608	7.58E-04	675	2.19E-04	742	2.64E-05
408	9.10E-06	475	2.85E-04	542	6.00E-04	609	7.53E-04	676	2.12E-04	743	2.54E-05
409	6.50E-06	476	2.73E-04	543	6.04E-04	610	7.50E-04	677	2.07E-04	744	2.47E-05
410	1.05E-05	477	2.65E-04	544	6.06E-04	611	7.45E-04	678	2.01E-04	745	2.41E-05
411	1.16E-05	478	2.56E-04	545	6.10E-04	612	7.41E-04	679	1.95E-04	746	2.33E-05
412	1.34E-05	479	2.50E-04	546	6.13E-04	613	7.35E-04	680	1.90E-04	747	2.29E-05
413	1.45E-05	480	2.47E-04	547	6.15E-04	614	7.28E-04	681	1.84E-04	748	2.20E-05
414	1.61E-05	481	2.48E-04	548	6.20E-04	615	7.24E-04	682	1.78E-04	749	2.12E-05
415	1.83E-05	482	2.49E-04	549	6.22E-04	616	7.17E-04	683	1.73E-04	750	2.04E-05
416	2.01E-05	483	2.51E-04	550	6.26E-04	617	7.07E-04	684	1.69E-04	751	2.00E-05
417	2.32E-05	484	2.54E-04	551	6.29E-04	618	7.00E-04	685	1.63E-04	752	1.92E-05
418	2.59E-05	485	2.59E-04	552	6.32E-04	619	6.95E-04	686	1.58E-04	753	1.85E-05
419	2.92E-05	486	2.63E-04	553	6.36E-04	620	6.84E-04	687	1.54E-04	754	1.84E-05
420	3.25E-05	487	2.67E-04	554	6.41E-04	621	6.79E-04	688	1.50E-04	755	1.77E-05
421	3.57E-05	488	2.74E-04	555	6.46E-04	622	6.69E-04	689	1.45E-04	756	1.69E-05
422	4.07E-05	489	2.80E-04	556	6.52E-04	623	6.64E-04	690	1.41E-04	757	1.68E-05
423	4.55E-05	490	2.86E-04	557	6.56E-04	624	6.54E-04	691	1.37E-04	758	1.60E-05
424	5.00E-05	491	2.94E-04	558	6.56E-04	625	6.48E-04	692	1.32E-04	759	1.54E-05
425	5.74E-05	492	3.00E-04	559	6.64E-04	626	6.40E-04	693	1.28E-04	760	1.49E-05
426	6.42E-05	493	3.09E-04	560	6.67E-04	627	6.28E-04	694	1.24E-04	761	1.44E-05
427	7.19E-05	494	3.19E-04	561	6.71E-04	628	6.19E-04	695	1.21E-04	762	1.42E-05
428	8.19E-05	495	3.27E-04	562	6.73E-04	629	6.10E-04	696	1.17E-04	763	1.37E-05
429	9.29E-05	496	3.39E-04	563	6.79E-04	630	6.01E-04	697	1.13E-04	764	1.32E-05
430	1.05E-04	497	3.52E-04	564	6.83E-04	631	5.92E-04	698	1.10E-04	765	1.28E-05
431	1.16E-04	498	3.64E-04	565	6.87E-04	632	5.82E-04	699	1.06E-04	766	1.25E-05
432	1.30E-04	499	3.73E-04	566	6.92E-04	633	5.74E-04	700	1.03E-04	767	1.19E-05
433	1.44E-04	500	3.85E-04	567	6.99E-04	634	5.63E-04	701	9.96E-05	768	1.16E-05
434	1.58E-04	501	3.96E-04	568	7.00E-04	635	5.55E-04	702	9.65E-05	769	1.14E-05
435	1.77E-04	502	4.07E-04	569	7.07E-04	636	5.45E-04	703	9.33E-05	770	1.10E-05
436	1.98E-04	503	4.17E-04	570	7.10E-04	637	5.35E-04	704	9.09E-05	771	1.08E-05
437	2.20E-04	504	4.28E-04	571	7.17E-04	638	5.25E-04	705	8.76E-05	772	1.02E-05
438	2.47E-04	505	4.36E-04	572	7.19E-04	639	5.15E-04	706	8.50E-05	773	1.00E-05
439	2.77E-04	506	4.47E-04	573	7.20E-04	640	5.06E-04	707	8.24E-05	774	9.70E-06
440	3.10E-04	507	4.53E-04	574	7.26E-04	641	4.95E-04	708	7.95E-05	775	9.40E-06
441	3.47E-04	508	4.65E-04	575	7.31E-04	642	4.87E-04	709	7.71E-05	776	9.00E-06
442	3.88E-04	509	4.71E-04	576	7.33E-04	643	4.77E-04	710	7.46E-05	777	8.90E-06
443	4.41E-04	510	4.79E-04	577	7.35E-04	644	4.69E-04	711	7.20E-05	778	8.40E-06
444	4.99E-04	511	4.87E-04	578	7.40E-04	645	4.60E-04	712	7.05E-05	779	8.40E-06
445	5.63E-04	512	4.94E-04	579	7.42E-04	646	4.49E-04	713	6.79E-05	780	8.40E-06
446	6.37E-04	513	4.99E-04	580	7.45E-04	647	4.40E-04	714	6.59E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP4H/MVS @30W4000K	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	0.240	28.6	0.992
NON-WORST CASE	277.0	60	0.112	28.5	0.921

Test Result

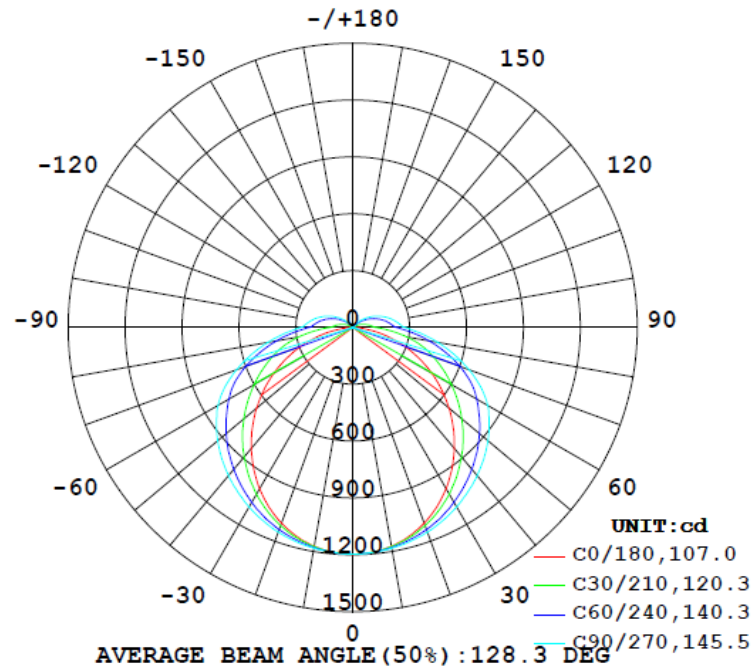
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
4583	1146	160.0	160.0	107.0	145.3	160.2

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

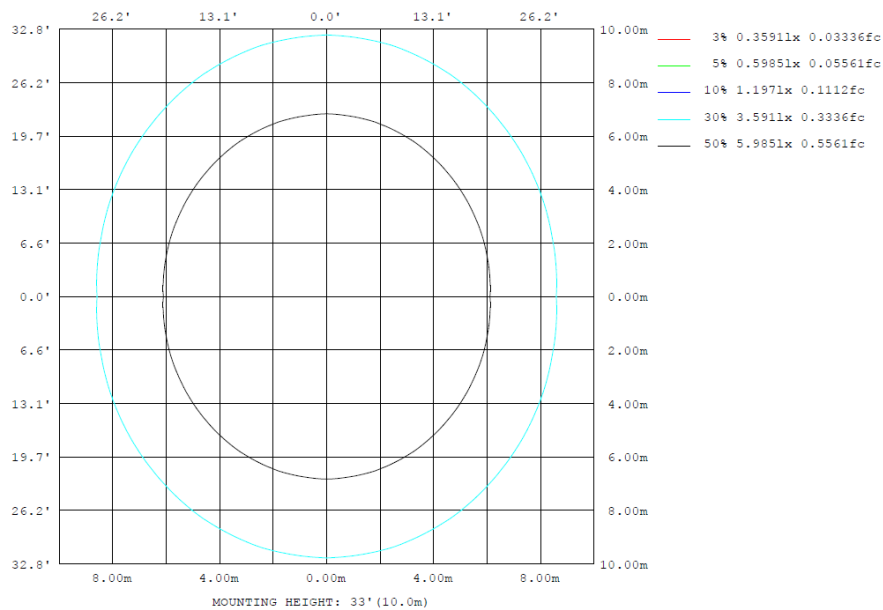
4.2 Goniophotometer Test

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	zone	total	%lum, lamp
10	1172	1175	1183	1175	1172	1175	1183	1175	0- 10	113.2	113.2	2.47, 2.47
20	1099	1121	1149	1121	1099	1121	1149	1121	10- 20	326.0	439.3	9.58, 9.58
30	982.7	1040	1094	1040	982.7	1040	1094	1040	20- 30	500.7	940.0	20.5, 20.5
40	833.4	933.0	1020	933.0	833.4	933.0	1020	933.0	30- 40	619.0	1559	34, 34
50	662.2	811.9	930.2	811.9	662.2	811.9	930.2	811.9	40- 50	672.6	2232	48.7, 48.7
60	479.5	681.3	821.2	681.3	479.5	681.3	821.2	681.3	50- 60	660.9	2893	63.1, 63.1
70	290.8	540.0	652.2	540.0	290.8	540.0	652.2	540.0	60- 70	586.0	3479	75.9, 75.9
80	112.4	355.9	455.0	355.9	112.4	355.9	455.0	355.9	70- 80	443.3	3922	85.6, 85.6
90	4.923	182.1	273.2	182.1	4.923	182.1	273.2	182.1	80- 90	265.2	4187	91.4, 91.4
100	4.235	137.4	221.0	137.4	4.235	137.4	221.0	137.4	90-100	155.9	4343	94.8, 94.8
110	5.643	95.44	170.1	95.44	5.643	95.44	170.1	95.44	100-110	113.0	4456	97.2, 97.2
120	5.775	54.89	116.1	54.89	5.775	54.89	116.1	54.89	110-120	71.58	4528	98.8, 98.8
130	5.694	18.77	65.51	18.77	5.694	18.77	65.51	18.77	120-130	36.95	4564	99.6, 99.6
140	5.590	2.864	21.14	2.864	5.590	2.864	21.14	2.864	130-140	13.31	4578	99.9, 99.9
150	5.486	2.513	1.799	2.513	5.486	2.513	1.799	2.513	140-150	2.730	4581	99.9, 99.9
160	5.144	2.328	1.847	2.328	5.144	2.328	1.847	2.328	150-160	1.414	4582	100, 100
170	6.627	2.695	1.982	2.695	6.627	2.695	1.982	2.695	160-170	0.8844	4583	100, 100
180	6.998	2.956	2.735	2.956	6.998	2.956	2.735	2.956	170-180	0.3574	4583	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	113.23	0-10	113.23	2.47%
10-20	326.04	0-20	439.27	9.59%
20-30	500.71	0-30	939.98	20.51%
30-40	618.98	0-40	1558.96	34.02%
40-50	672.62	0-50	2231.58	48.69%
50-60	660.93	0-60	2892.51	63.12%
60-70	586.03	0-70	3478.54	75.90%
70-80	443.31	0-80	3921.85	85.58%
80-90	265.18	0-90	4187.03	91.36%
90-100	155.90	0-100	4342.93	94.77%
100-110	113.02	0-110	4455.95	97.23%
110-120	71.58	0-120	4527.53	98.79%
120-130	36.95	0-130	4564.48	99.60%
130-140	13.31	0-140	4577.79	99.89%
140-150	2.73	0-150	4580.52	99.95%
150-160	1.41	0-160	4581.93	99.98%
160-170	0.88	0-170	4582.81	100.00%
170-180	0.36	0-180	4583.17	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		UGR Viewed Crosswise					UGR Viewed Endwise			
Y=2H		13.2	14.7	13.7	15.2	15.8	16.3	17.9	16.8	18.4
3H		14.8	16.2	15.3	16.7	17.2	19.0	20.4	19.5	20.9
4H		15.3	16.6	15.8	17.1	17.7	20.3	21.6	20.8	22.1
6H		15.6	16.8	16.1	17.4	18.0	21.5	22.7	22.0	23.3
8H		15.7	16.9	16.2	17.4	18.0	22.1	23.3	22.6	23.8
12H		15.7	16.8	16.3	17.4	18.0	22.7	23.9	23.3	24.4
4H		2H	14.5	15.8	15.0	16.3	16.9	16.8	18.1	17.3
		3H	16.3	17.5	16.9	18.0	18.6	19.7	20.9	20.3
		4H	17.0	18.1	17.6	18.6	19.3	21.1	22.2	21.7
		6H	17.5	18.4	18.1	19.0	19.7	22.5	23.5	23.1
		8H	17.6	18.5	18.2	19.1	19.7	23.2	24.1	23.8
		12H	17.7	18.5	18.3	19.1	19.8	24.0	24.8	24.6
8H		4H	18.0	18.8	18.6	19.4	20.1	21.4	22.2	22.0
		6H	18.7	19.4	19.3	20.1	20.7	23.0	23.7	23.6
		8H	18.9	19.6	19.6	20.2	20.9	23.8	24.5	24.4
		12H	19.1	19.7	19.7	20.3	21.1	24.7	25.3	25.4
12H		4H	18.2	19.0	18.8	19.6	20.3	21.4	22.2	22.0
		6H	19.1	19.7	19.7	20.3	21.1	23.0	23.7	23.7
		8H	19.4	20.0	20.0	20.6	21.4	23.9	24.5	24.5

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										
X=2H		UGR Viewed Crosswise					UGR Viewed Endwise			
Y=2H		18.5	20.0	19.0	20.5	21.1	21.6	23.2	22.1	23.7
3H		20.1	21.5	20.6	22.0	22.5	24.3	25.7	24.8	26.2
4H		20.6	21.9	21.1	22.4	23.0	25.6	26.9	26.1	27.4
6H		20.9	22.1	21.4	22.7	23.3	26.8	28.0	27.3	28.6
8H		21.0	22.2	21.5	22.7	23.3	27.4	28.6	27.9	29.1
12H		21.0	22.1	21.6	22.7	23.3	28.0	29.2	28.6	29.7
4H		2H	19.8	21.1	20.3	21.6	22.2	22.1	23.4	22.6
		3H	21.6	22.8	22.2	23.3	23.9	25.0	26.2	25.6
		4H	22.3	23.4	22.9	23.9	24.6	26.4	27.5	27.0
		6H	22.8	23.7	23.4	24.3	25.0	27.8	28.8	28.4
		8H	22.9	23.8	23.5	24.4	25.0	28.5	29.4	29.1
		12H	23.0	23.8	23.6	24.4	25.1	29.3	30.1	29.9
8H		4H	23.3	24.1	23.9	24.7	25.4	26.7	27.5	27.3
		6H	24.0	24.7	24.6	25.4	26.0	28.3	29.0	28.9
		8H	24.2	24.9	24.9	25.5	26.2	29.1	29.8	29.7
		12H	24.4	25.0	25.0	25.6	26.4	30.0	30.6	30.7
12H		4H	23.5	24.3	24.1	24.9	25.6	26.7	27.5	27.3
		6H	24.4	25.0	25.0	25.6	26.4	28.3	29.0	29.0
		8H	24.7	25.3	25.3	25.9	26.7	29.2	29.8	29.8

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	1197	1195	1196	1196	1196	1196	1196	1196	1196	1196	1196	1195	1197	1195	1196	1196	1196	1196	1196
5	1192	1190	1189	1191	1191	1192	1192	1192	1191	1191	1189	1190	1192	1190	1189	1191	1191	1192	1192
10	1172	1173	1174	1175	1179	1183	1183	1183	1179	1175	1174	1173	1172	1173	1174	1175	1179	1183	1183
15	1141	1144	1148	1153	1160	1165	1169	1165	1160	1153	1148	1144	1141	1144	1148	1153	1160	1165	1169
20	1099	1104	1113	1121	1135	1145	1149	1145	1135	1121	1113	1104	1099	1104	1113	1121	1135	1145	1149
25	1046	1056	1068	1084	1103	1117	1124	1117	1103	1084	1068	1056	1046	1056	1068	1084	1103	1117	1124
30	983	997	1017	1040	1066	1085	1094	1085	1066	1040	1017	997	983	997	1017	1040	1066	1085	1094
35	911	930	957	989	1023	1048	1059	1048	1023	989	957	930	911	930	957	989	1023	1048	1059
40	833	856	892	933	976	1008	1020	1008	976	933	892	856	833	856	892	933	976	1008	1020
45	750	777	823	873	926	963	978	963	926	873	823	777	750	777	823	873	926	963	978
50	662	694	751	812	872	914	930	914	872	812	751	694	662	694	751	812	872	914	930
55	571	608	675	747	814	860	878	860	814	747	675	608	571	608	675	747	814	860	878
60	480	522	600	681	754	803	821	803	754	681	600	522	480	522	600	681	754	803	821
65	386	437	525	614	687	729	744	729	687	614	525	437	386	437	525	614	687	729	744
70	291	353	451	540	601	638	652	638	601	540	451	353	291	353	451	540	601	638	652
75	198	272	377	451	505	540	554	540	505	451	377	272	198	272	377	451	505	540	554
80	112	196	289	356	409	442	455	442	409	356	289	196	112	196	289	356	409	442	455
85	41.7	121	200	264	315	348	360	348	315	264	200	121	41.7	121	200	264	315	348	360
90	4.92	53.6	122	182	231	262	273	262	231	182	122	53.6	4.92	53.6	122	182	231	262	273
95	4.00	37.2	100	157	203	232	245	232	203	157	100	37.2	4.00	37.2	100	157	203	232	245
100	4.23	24.4	82.2	137	182	209	221	209	182	137	82.2	24.4	4.23	24.4	82.2	137	182	209	221
105	5.34	13.3	64.1	117	160	186	196	186	160	117	64.1	13.3	5.34	13.3	64.1	117	160	186	196
110	5.64	5.02	47.3	95.4	135	161	170	161	135	95.4	47.3	5.02	5.64	5.02	47.3	95.4	135	161	170
115	5.71	4.55	31.9	74.5	111	134	143	134	111	74.5	31.9	4.55	5.71	4.55	31.9	74.5	111	134	143
120	5.77	4.58	17.3	54.9	87.6	109	116	109	87.6	54.9	17.3	4.58	5.77	4.58	17.3	54.9	87.6	109	116
125	5.75	4.61	5.19	36.0	64.8	83.8	90.2	83.8	64.8	36.0	5.19	4.61	5.75	4.61	5.19	36.0	64.8	83.8	90.2
130	5.69	4.89	3.82	18.8	43.2	60.0	65.5	60.0	43.2	18.8	3.82	4.89	5.69	4.89	3.82	18.8	43.2	60.0	65.5
135	5.64	4.90	3.78	4.35	23.3	37.5	42.4	37.5	23.3	4.35	3.78	4.90	5.64	4.90	3.78	4.35	23.3	37.5	42.4
140	5.59	5.46	3.64	2.86	5.60	16.7	21.1	16.7	5.60	2.86	3.64	5.46	5.59	5.46	3.64	2.86	5.60	16.7	21.1
145	5.54	5.62	3.51	2.59	2.26	2.35	3.02	2.35	2.26	2.59	3.51	5.62	5.54	5.62	3.51	2.59	2.26	2.35	3.02
150	5.49	5.27	3.21	2.51	2.29	2.19	1.80	2.19	2.29	2.51	3.21	5.27	5.49	5.27	3.21	2.51	2.29	2.19	1.80
155	5.43	4.72	2.95	2.40	2.33	2.23	1.82	2.23	2.33	2.40	2.95	4.72	5.43	4.72	2.95	2.40	2.33	2.23	1.82
160	5.14	4.58	2.72	2.33	2.36	2.27	1.85	2.27	2.36	2.33	2.72	4.58	5.14	4.58	2.72	2.33	2.36	2.27	1.85
165	5.53	4.80	2.68	2.51	2.40	2.32	1.87	2.32	2.40	2.51	2.68	4.80	5.53	4.80	2.68	2.51	2.40	2.32	1.87
170	6.63	5.83	3.14	2.70	2.60	2.53	1.98	2.53	2.60	2.70	3.14	5.83	6.63	5.83	3.14	2.70	2.60	2.53	1.98
175	7.03	6.11	3.51	2.96	2.75	2.81	2.55	2.81	2.75	2.96	3.51	6.11	7.03	6.11	3.51	2.96	2.75	2.81	2.55
180	7.00	6.11	3.79	2.96	2.79	2.81	2.74	2.81	2.79	2.96	3.79	6.11	7.00	6.11	3.79	2.96	2.79	2.81	2.74

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	1196	1196	1196	1196	1195														
5	1192	1191	1191	1189	1190														
10	1183	1179	1175	1174	1173														
15	1165	1160	1153	1148	1144														
20	1145	1135	1121	1113	1104														
25	1117	1103	1084	1068	1056														
30	1085	1066	1040	1017	997														
35	1048	1023	989	957	930														
40	1008	976	933	892	856														
45	963	926	873	823	777														
50	914	872	812	751	694														
55	860	814	747	675	608														
60	803	754	681	600	522														
65	729	687	614	525	437														
70	638	601	540	451	353														
75	540	505	451	377	272														
80	442	409	356	289	196														
85	348	315	264	200	121														
90	262	231	182	122	53.6														
95	232	203	157	100	37.2														
100	209	182	137	82.2	24.4														
105	186	160	117	64.1	13.3														
110	161	135	95.4	47.3	5.02														
115	134	111	74.5	31.9	4.55														
120	109	87.6	54.9	17.3	4.58														
125	83.8	64.8	36.0	5.19	4.61														
130	60.0	43.2	18.8	3.82	4.89														
135	37.5	23.3	4.35	3.78	4.90														
140	16.7	5.60	2.86	3.64	5.46														
145	2.35	2.26	2.59	3.51	5.62														
150	2.19	2.29	2.51	3.21	5.27														
155	2.23	2.33	2.40	2.95	4.72														
160	2.27	2.36	2.33	2.72	4.58														
165	2.32	2.40	2.51	2.68	4.80														
170	2.53	2.60	2.70	3.14	5.83														
175	2.81	2.75	2.96	3.51	6.11														
180	2.81	2.79	2.96	3.79	6.11														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP4H/MVS @30W4000K	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	0.240	28.6	0.992	8.20
277.0	60	0.112	28.5	0.921	11.39

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*****