

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		1490
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	156.0
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		38.2
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	9.87
				277V	6.57
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.993
				277V	0.956
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4102
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		84.8
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		17
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%		63.1%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	29.5
			N/A	<22	
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		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		0.321
(Goniophotometer – Section 4.2)			Non-Worst Case		0.140
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		38.2
(Goniophotometer – Section 4.2)			Non-Worst Case		37.2

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-04-02	STRP4H/MVS @40W4000K	-	250402002-S1
2	Goniophotometer Test	2025-04-02	STRP4H/MVS @40W4000K	-	250402002-S1
3	THD and PF Test	2025-04-02	STRP4H/MVS @40W4000K	-	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 @40W4000K, 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 @40W4000K	Sample ID	250402002-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

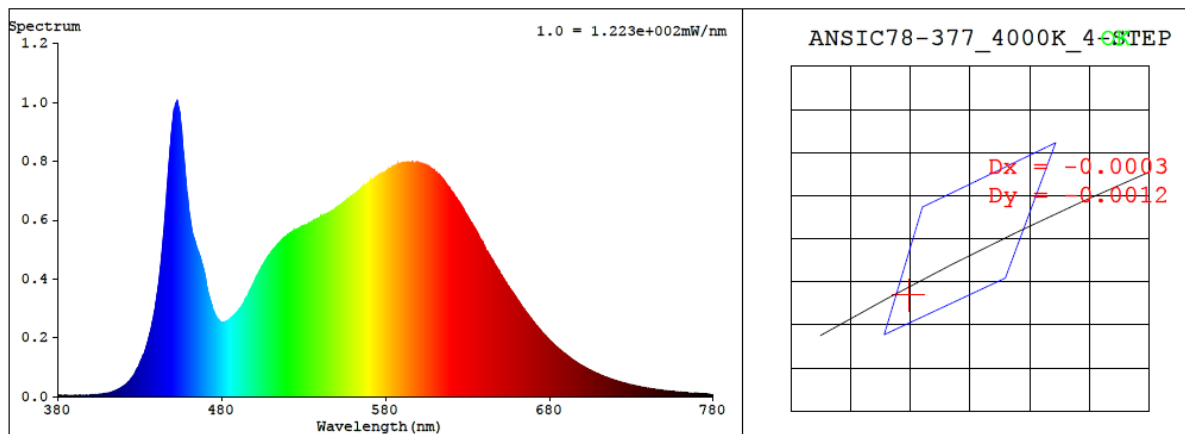
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.321	38.2	0.993
277.0	60	0.140	37.2	0.956

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4102	84.8	17	-0.0005	3.0	85	95	-11%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3758$ $y = 0.3728$ / $u' = 0.2236$ $v' = 0.4991$ ($duv = -4.82e-04$)

CCT= 4102K Prcp WL: Ld=579.0nm Purity=24.6%

Peak WL: Lp=453nm FWHM: =21.8nm Ratio:R=18.3% G=77.8% B=3.9%

Render Index: Ra = 84.8 AvgR = 78.7 TM30:Rf=85 Rg=96

EEL: 0.09129 A++ Highest

R1 =84 R2 =91 R3 =96 R4 =83 R5 =83 R6 =87 R7 =87

R8 =67 R9 =17 R10=78 R11=83 R12=63 R13=86 R14=98 R15=78

4.1 Integrating Sphere Test

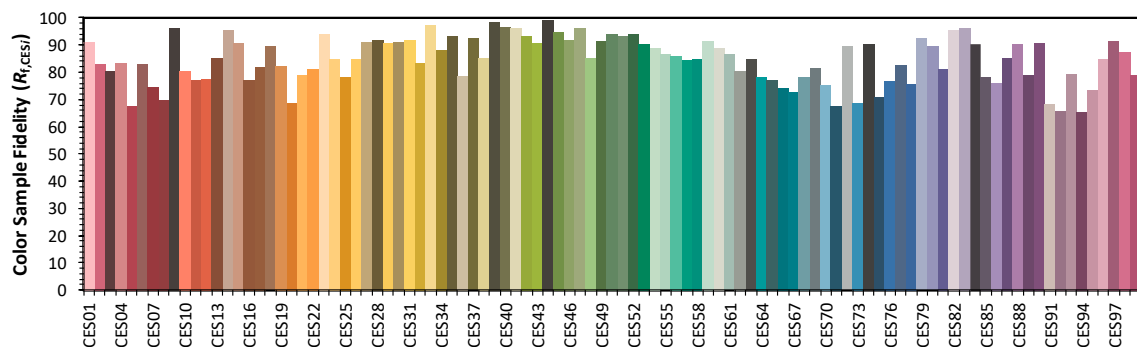
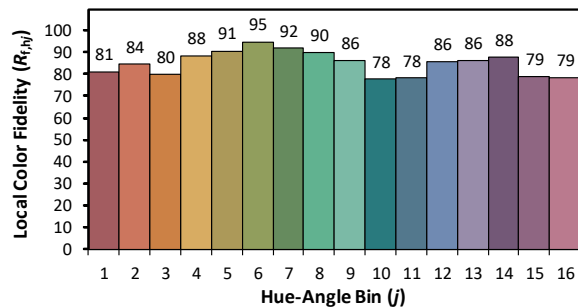
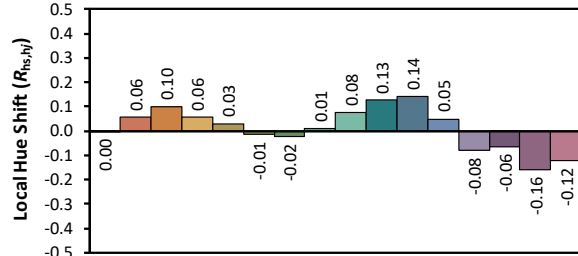
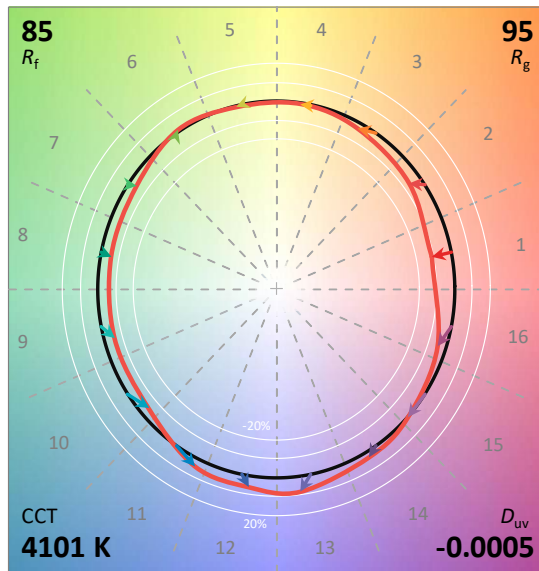
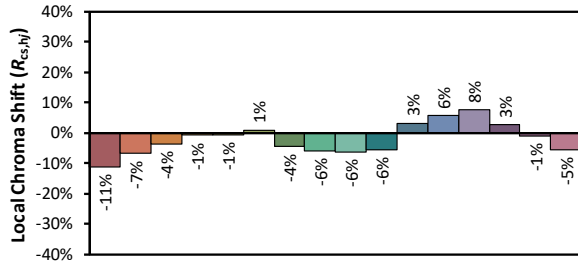
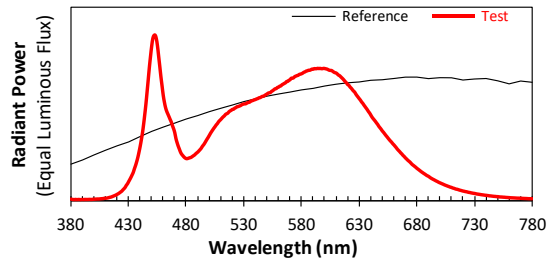
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/3

Model: STRP4H/MVS @40W4000K



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

x 0.3758
 y 0.3726
 u' 0.2237
 v' 0.4991

CIE 13.3-1995
(CRI)

R_a 85
 R_g 16

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	6.20E-06	447	7.28E-04	514	5.17E-04	581	7.67E-04	648	4.37E-04	715	6.55E-05
381	5.00E-06	448	8.04E-04	515	5.22E-04	582	7.73E-04	649	4.28E-04	716	6.33E-05
382	3.80E-06	449	8.70E-04	516	5.26E-04	583	7.75E-04	650	4.18E-04	717	6.08E-05
383	3.50E-06	450	9.31E-04	517	5.34E-04	584	7.80E-04	651	4.10E-04	718	5.91E-05
384	4.50E-06	451	9.77E-04	518	5.39E-04	585	7.81E-04	652	4.01E-04	719	5.70E-05
385	3.30E-06	452	9.95E-04	519	5.43E-04	586	7.85E-04	653	3.92E-04	720	5.51E-05
386	3.90E-06	453	9.96E-04	520	5.48E-04	587	7.85E-04	654	3.83E-04	721	5.36E-05
387	4.30E-06	454	9.75E-04	521	5.49E-04	588	7.87E-04	655	3.75E-04	722	5.18E-05
388	3.20E-06	455	9.32E-04	522	5.56E-04	589	7.91E-04	656	3.66E-04	723	5.07E-05
389	3.80E-06	456	8.71E-04	523	5.59E-04	590	7.91E-04	657	3.58E-04	724	4.89E-05
390	4.20E-06	457	8.09E-04	524	5.64E-04	591	7.94E-04	658	3.51E-04	725	4.70E-05
391	3.60E-06	458	7.45E-04	525	5.65E-04	592	7.94E-04	659	3.42E-04	726	4.61E-05
392	4.40E-06	459	6.89E-04	526	5.68E-04	593	7.94E-04	660	3.34E-04	727	4.41E-05
393	4.20E-06	460	6.34E-04	527	5.71E-04	594	7.96E-04	661	3.26E-04	728	4.28E-05
394	4.10E-06	461	5.92E-04	528	5.76E-04	595	7.95E-04	662	3.18E-04	729	4.15E-05
395	4.30E-06	462	5.60E-04	529	5.79E-04	596	7.96E-04	663	3.09E-04	730	4.05E-05
396	4.80E-06	463	5.37E-04	530	5.81E-04	597	7.94E-04	664	3.01E-04	731	3.89E-05
397	4.40E-06	464	5.20E-04	531	5.82E-04	598	7.94E-04	665	2.94E-04	732	3.74E-05
398	4.30E-06	465	5.04E-04	532	5.84E-04	599	7.96E-04	666	2.85E-04	733	3.63E-05
399	5.40E-06	466	4.87E-04	533	5.88E-04	600	7.95E-04	667	2.79E-04	734	3.53E-05
400	5.70E-06	467	4.72E-04	534	5.90E-04	601	7.93E-04	668	2.70E-04	735	3.41E-05
401	6.20E-06	468	4.50E-04	535	5.92E-04	602	7.92E-04	669	2.64E-04	736	3.29E-05
402	6.60E-06	469	4.31E-04	536	5.98E-04	603	7.88E-04	670	2.56E-04	737	3.20E-05
403	7.10E-06	470	4.08E-04	537	6.00E-04	604	7.85E-04	671	2.49E-04	738	3.10E-05
404	7.00E-06	471	3.73E-04	538	6.03E-04	605	7.84E-04	672	2.42E-04	739	2.98E-05
405	7.60E-06	472	3.48E-04	539	6.06E-04	606	7.83E-04	673	2.36E-04	740	2.93E-05
406	8.50E-06	473	3.26E-04	540	6.08E-04	607	7.78E-04	674	2.30E-04	741	2.82E-05
407	9.10E-06	474	3.08E-04	541	6.12E-04	608	7.73E-04	675	2.22E-04	742	2.73E-05
408	9.80E-06	475	2.90E-04	542	6.13E-04	609	7.70E-04	676	2.15E-04	743	2.60E-05
409	1.12E-05	476	2.78E-04	543	6.18E-04	610	7.68E-04	677	2.10E-04	744	2.56E-05
410	1.14E-05	477	2.69E-04	544	6.19E-04	611	7.62E-04	678	2.04E-04	745	2.46E-05
411	1.25E-05	478	2.61E-04	545	6.23E-04	612	7.55E-04	679	1.99E-04	746	2.38E-05
412	1.40E-05	479	2.55E-04	546	6.27E-04	613	7.52E-04	680	1.92E-04	747	2.30E-05
413	1.59E-05	480	2.51E-04	547	6.28E-04	614	7.45E-04	681	1.87E-04	748	2.26E-05
414	1.77E-05	481	2.51E-04	548	6.33E-04	615	7.38E-04	682	1.82E-04	749	2.15E-05
415	1.94E-05	482	2.54E-04	549	6.37E-04	616	7.31E-04	683	1.76E-04	750	2.13E-05
416	2.23E-05	483	2.56E-04	550	6.41E-04	617	7.23E-04	684	1.71E-04	751	2.05E-05
417	2.51E-05	484	2.58E-04	551	6.46E-04	618	7.15E-04	685	1.66E-04	752	1.94E-05
418	2.80E-05	485	2.62E-04	552	6.48E-04	619	7.08E-04	686	1.61E-04	753	1.91E-05
419	3.13E-05	486	2.68E-04	553	6.50E-04	620	6.98E-04	687	1.57E-04	754	1.86E-05
420	3.52E-05	487	2.72E-04	554	6.57E-04	621	6.94E-04	688	1.52E-04	755	1.79E-05
421	3.89E-05	488	2.79E-04	555	6.61E-04	622	6.84E-04	689	1.48E-04	756	1.77E-05
422	4.37E-05	489	2.85E-04	556	6.67E-04	623	6.77E-04	690	1.44E-04	757	1.67E-05
423	4.90E-05	490	2.91E-04	557	6.73E-04	624	6.68E-04	691	1.39E-04	758	1.63E-05
424	5.41E-05	491	2.98E-04	558	6.74E-04	625	6.59E-04	692	1.34E-04	759	1.58E-05
425	6.19E-05	492	3.06E-04	559	6.81E-04	626	6.53E-04	693	1.30E-04	760	1.53E-05
426	6.92E-05	493	3.14E-04	560	6.83E-04	627	6.41E-04	694	1.26E-04	761	1.47E-05
427	7.75E-05	494	3.26E-04	561	6.88E-04	628	6.31E-04	695	1.23E-04	762	1.42E-05
428	8.97E-05	495	3.34E-04	562	6.90E-04	629	6.22E-04	696	1.19E-04	763	1.40E-05
429	9.89E-05	496	3.45E-04	563	6.97E-04	630	6.13E-04	697	1.15E-04	764	1.35E-05
430	1.12E-04	497	3.57E-04	564	7.01E-04	631	6.04E-04	698	1.12E-04	765	1.32E-05
431	1.25E-04	498	3.68E-04	565	7.05E-04	632	5.93E-04	699	1.08E-04	766	1.27E-05
432	1.38E-04	499	3.80E-04	566	7.09E-04	633	5.85E-04	700	1.05E-04	767	1.23E-05
433	1.52E-04	500	3.92E-04	567	7.17E-04	634	5.75E-04	701	1.02E-04	768	1.22E-05
434	1.68E-04	501	4.04E-04	568	7.17E-04	635	5.65E-04	702	9.85E-05	769	1.20E-05
435	1.90E-04	502	4.15E-04	569	7.24E-04	636	5.56E-04	703	9.55E-05	770	1.11E-05
436	2.09E-04	503	4.25E-04	570	7.27E-04	637	5.46E-04	704	9.21E-05	771	1.10E-05
437	2.33E-04	504	4.35E-04	571	7.36E-04	638	5.35E-04	705	8.94E-05	772	1.08E-05
438	2.59E-04	505	4.45E-04	572	7.37E-04	639	5.26E-04	706	8.67E-05	773	1.03E-05
439	2.91E-04	506	4.55E-04	573	7.39E-04	640	5.14E-04	707	8.40E-05	774	1.01E-05
440	3.25E-04	507	4.63E-04	574	7.46E-04	641	5.02E-04	708	8.15E-05	775	9.80E-06
441	3.64E-04	508	4.73E-04	575	7.49E-04	642	4.93E-04	709	7.86E-05	776	9.40E-06
442	4.06E-04	509	4.81E-04	576	7.52E-04	643	4.84E-04	710	7.69E-05	777	8.90E-06
443	4.59E-04	510	4.88E-04	577	7.54E-04	644	4.76E-04	711	7.36E-05	778	8.90E-06
444	5.18E-04	511	4.96E-04	578	7.59E-04	645	4.66E-04	712	7.18E-05	779	8.90E-06
445	5.81E-04	512	5.03E-04	579	7.61E-04	646	4.57E-04	713	6.92E-05	780	8.90E-06
446	6.54E-04	513	5.09E-04	580	7.64E-04	647	4.46E-04	714	6.67E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP4H/MVS @40W4000K	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	0.321	38.2	0.993
NON-WORST CASE	277.0	60	0.140	37.2	0.956

Test Result

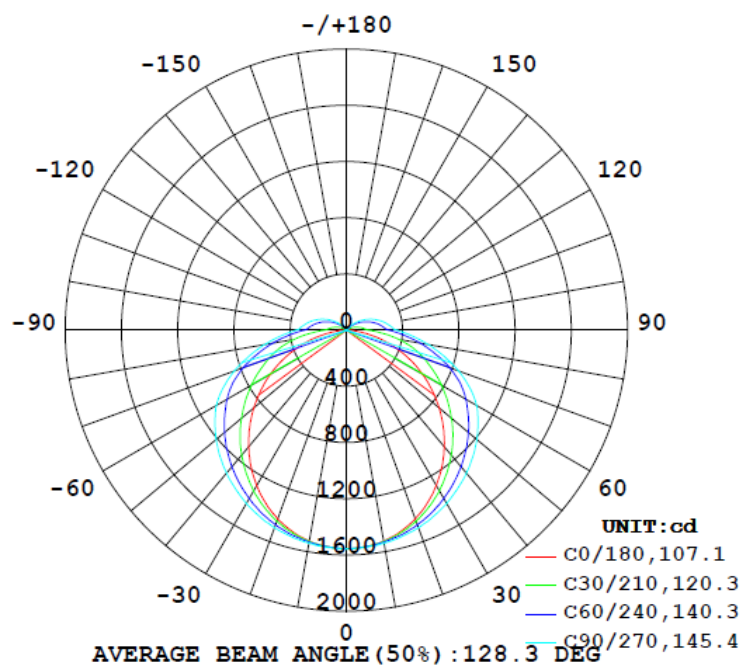
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
5958	1490	160.7	160.7	107.3	145.3	156.0

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
63.1%	23.8	29.5

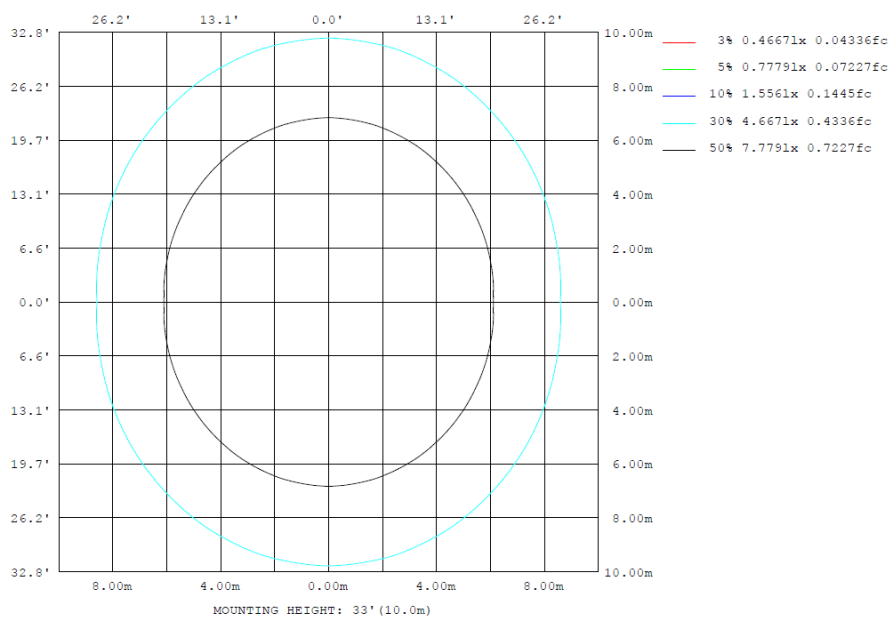
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	± zone	± total	±lum, lamp
10	1524	1529	1540	1529	1524	1529	1540	1529	0- 10	147.2	147.2	2.47, 2.47
20	1430	1458	1497	1458	1430	1458	1497	1458	10- 20	423.9	571.1	9.59, 9.59
30	1277	1352	1424	1352	1277	1352	1424	1352	20- 30	650.9	1222	20.5, 20.5
40	1083	1214	1327	1214	1083	1214	1327	1214	30- 40	804.7	2027	34, 34
50	861.0	1057	1211	1057	861.0	1057	1211	1057	40- 50	874.7	2901	48.7, 48.7
60	623.3	886.0	1068	886.0	623.3	886.0	1068	886.0	50- 60	859.5	3761	63.1, 63.1
70	377.7	702.2	848.9	702.2	377.7	702.2	848.9	702.2	60- 70	761.9	4523	75.9, 75.9
80	146.0	462.8	591.7	462.8	146.0	462.8	591.7	462.8	70- 80	576.4	5099	85.6, 85.6
90	6.202	236.4	355.8	236.4	6.202	236.4	355.8	236.4	80- 90	344.7	5444	91.4, 91.4
100	5.704	178.6	287.0	178.6	5.704	178.6	287.0	178.6	90-100	202.6	5646	94.8, 94.8
110	7.269	124.0	221.0	124.0	7.269	124.0	221.0	124.0	100-110	146.8	5793	97.2, 97.2
120	7.594	71.50	150.8	71.50	7.594	71.50	150.8	71.50	110-120	92.99	5886	98.8, 98.8
130	7.726	24.26	85.16	24.26	7.726	24.26	85.16	24.26	120-130	48.03	5934	99.6, 99.6
140	7.663	3.603	27.40	3.603	7.663	3.603	27.40	3.603	130-140	17.29	5952	99.9, 99.9
150	7.564	3.200	2.076	3.200	7.564	3.200	2.076	3.200	140-150	3.478	5955	99.9, 99.9
160	6.373	2.996	2.208	2.996	6.373	2.996	2.208	2.996	150-160	1.782	5957	100, 100
170	8.738	3.602	2.991	3.602	8.738	3.602	2.991	3.602	160-170	1.119	5958	100, 100
180	9.756	4.250	3.492	4.250	9.756	4.250	3.492	4.250	170-180	0.4727	5958	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	147.23	0-10	147.23	2.47%
10-20	423.89	0-20	571.12	9.59%
20-30	650.87	0-30	1221.99	20.51%
30-40	804.71	0-40	2026.70	34.02%
40-50	874.65	0-50	2901.35	48.70%
50-60	859.48	0-60	3760.83	63.12%
60-70	761.88	0-70	4522.71	75.91%
70-80	576.44	0-80	5099.15	85.59%
80-90	344.69	0-90	5443.84	91.37%
90-100	202.61	0-100	5646.45	94.77%
100-110	146.83	0-110	5793.28	97.24%
110-120	92.99	0-120	5886.27	98.80%
120-130	48.03	0-130	5934.30	99.60%
130-140	17.29	0-140	5951.59	99.89%
140-150	3.48	0-150	5955.07	99.95%
150-160	1.78	0-160	5956.85	99.98%
160-170	1.12	0-170	5957.97	100.00%
170-180	0.47	0-180	5958.44	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			
		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	16.2	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	18.7
	3H	16.3	17.5	16.9	18.0	18.6	19.7	20.9	20.3	21.4
	4H	17.0	18.1	17.6	18.6	19.3	21.1	22.2	21.7	22.7
	6H	17.5	18.4	18.1	19.0	19.7	22.5	23.5	23.1	24.1
	8H	17.6	18.5	18.2	19.1	19.8	23.3	24.1	23.8	24.7
	12H	17.7	18.5	18.3	19.1	19.8	24.0	24.8	24.6	25.4
8H	4H	18.0	18.8	18.6	19.4	20.1	21.4	22.2	22.0	22.8
	6H	18.7	19.4	19.3	20.1	20.7	23.0	23.7	23.6	24.3
	8H	18.9	19.6	19.6	20.3	20.9	23.8	24.5	24.4	25.1
	12H	19.1	19.7	19.7	20.3	21.1	24.7	25.3	25.4	26.0
12H	4H	18.2	19.0	18.8	19.6	20.3	21.4	22.2	22.0	22.8
	6H	19.1	19.7	19.7	20.3	21.1	23.0	23.7	23.7	24.3
	8H	19.4	20.0	20.0	20.6	21.4	23.9	24.5	24.5	25.1

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	Y=2H	UGR Viewed Crosswise					UGR Viewed Endwise			
		19.4	20.9	19.9	21.4	22.0	22.5	24.1	23.0	24.6
	3H	21.0	22.4	21.5	22.9	23.4	25.2	26.6	25.7	27.1
	4H	21.5	22.8	22.0	23.3	23.9	26.5	27.8	27.0	28.3
	6H	21.8	23.0	22.4	23.6	24.2	27.7	28.9	28.2	29.5
	8H	21.9	23.1	22.4	23.6	24.2	28.3	29.5	28.8	30.0
	12H	21.9	23.0	22.5	23.6	24.2	28.9	30.1	29.5	30.6
4H	2H	20.7	22.0	21.2	22.5	23.1	23.0	24.3	23.5	24.9
	3H	22.5	23.7	23.1	24.2	24.8	25.9	27.1	26.5	27.6
	4H	23.2	24.3	23.8	24.8	25.5	27.3	28.4	27.9	28.9
	6H	23.7	24.6	24.3	25.2	25.9	28.7	29.7	29.3	30.3
	8H	23.8	24.7	24.4	25.3	26.0	29.5	30.3	30.0	30.9
	12H	23.9	24.7	24.5	25.3	26.0	30.2	31.0	30.8	31.6
8H	4H	24.2	25.0	24.8	25.6	26.3	27.6	28.4	28.2	29.0
	6H	24.9	25.6	25.5	26.3	26.9	29.2	29.9	29.8	30.5
	8H	25.1	25.8	25.8	26.5	27.1	30.0	30.7	30.6	31.3
	12H	25.3	25.9	25.9	26.5	27.3	30.9	31.5	31.6	32.2
12H	4H	24.4	25.2	25.0	25.8	26.5	27.6	28.4	28.2	29.0
	6H	25.3	25.9	25.9	26.5	27.3	29.2	29.9	29.9	30.5
	8H	25.6	26.2	26.2	26.8	27.6	30.1	30.7	30.7	31.3

Maximum UGR = 32.9

4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
y (DEG)	0	1554	1555	1555	1555	1555	1555	1555	1555	1555	1555	1555	1554	1555	1555	1555	1555	1555	1556
5	1549	1547	1547	1549	1547	1550	1552	1550	1547	1549	1547	1547	1549	1547	1547	1549	1547	1550	1552
10	1524	1525	1526	1529	1532	1538	1540	1538	1532	1529	1526	1525	1524	1525	1526	1529	1532	1538	1540
15	1484	1488	1492	1498	1508	1516	1521	1516	1508	1498	1492	1488	1484	1488	1492	1498	1508	1516	1521
20	1430	1436	1447	1458	1474	1488	1497	1488	1474	1458	1447	1436	1430	1436	1447	1458	1474	1488	1497
25	1359	1371	1387	1409	1433	1452	1463	1452	1433	1409	1387	1371	1359	1371	1387	1409	1433	1452	1463
30	1277	1296	1322	1352	1384	1412	1424	1412	1384	1352	1322	1296	1277	1296	1322	1352	1384	1412	1424
35	1185	1209	1243	1286	1329	1362	1377	1362	1329	1286	1243	1209	1185	1209	1243	1286	1329	1362	1377
40	1083	1113	1160	1214	1270	1312	1327	1312	1270	1214	1160	1113	1083	1113	1160	1214	1270	1312	1327
45	974	1010	1070	1135	1202	1254	1273	1254	1202	1135	1070	1010	974	1010	1070	1135	1202	1254	1273
50	861	902	976	1057	1132	1188	1211	1188	1132	1057	976	902	861	902	976	1057	1132	1188	1211
55	743	792	878	972	1058	1119	1142	1119	1058	972	878	792	743	792	878	972	1058	1119	1142
60	623	680	781	886	981	1044	1068	1044	981	886	781	680	623	680	781	886	981	1044	1068
65	501	568	683	798	893	948	969	948	893	798	683	568	501	568	683	798	893	948	969
70	378	458	587	702	781	829	849	829	781	702	587	458	378	458	587	702	781	829	849
75	258	354	490	587	656	701	720	701	656	587	490	354	258	354	490	587	656	701	720
80	146	255	376	463	532	574	592	574	532	463	376	255	146	255	376	463	532	574	592
85	54.2	158	260	344	409	452	469	452	409	344	260	158	54.2	158	260	344	409	452	469
90	6.20	69.7	158	236	300	341	356	341	300	236	158	69.7	6.20	69.7	158	236	300	341	356
95	5.02	48.3	130	205	264	302	318	302	264	205	130	48.3	5.02	48.3	130	205	264	302	318
100	5.70	31.7	107	179	237	272	287	272	237	179	107	31.7	5.70	31.7	107	179	237	272	287
105	6.90	17.2	83.4	152	207	241	255	241	207	152	83.4	17.2	6.90	17.2	83.4	152	207	241	255
110	7.27	6.49	61.3	124	176	209	221	209	176	124	61.3	6.49	7.27	6.49	61.3	124	176	209	221
115	7.45	5.87	41.0	97.1	144	175	186	175	144	97.1	41.0	5.87	7.45	5.87	41.0	97.1	144	175	186
120	7.59	5.91	22.4	71.5	114	141	151	141	114	71.5	22.4	5.91	7.59	5.91	22.4	71.5	114	141	151
125	7.80	6.00	6.71	46.7	84.4	109	117	109	84.4	46.7	6.71	6.00	7.80	6.00	6.71	46.7	84.4	109	117
130	7.73	6.30	4.98	24.3	56.1	78.0	85.2	78.0	56.1	24.3	4.98	6.30	7.73	6.30	4.98	24.3	56.1	78.0	85.2
135	7.69	6.57	4.83	5.47	30.1	48.7	55.3	48.7	30.1	5.47	4.83	6.57	7.69	6.57	4.83	5.47	30.1	48.7	55.3
140	7.66	6.75	4.67	3.60	7.16	21.7	27.4	21.7	7.16	3.60	4.67	6.75	7.66	6.75	4.67	3.60	7.16	21.7	27.4
145	7.70	6.71	4.52	3.49	2.93	2.83	3.92	2.83	2.93	3.49	4.52	6.71	7.70	6.71	4.52	3.49	2.93	2.83	3.92
150	7.56	6.62	4.15	3.20	2.75	2.72	2.08	2.72	2.75	3.20	4.15	6.62	7.56	6.62	4.15	3.20	2.75	2.72	2.08
155	7.09	6.29	3.79	3.05	2.65	2.72	2.14	2.72	2.65	3.05	3.79	6.29	7.09	6.29	3.79	3.05	2.65	2.72	2.14
160	6.37	5.76	3.44	3.00	2.74	2.72	2.21	2.72	2.74	3.00	3.44	5.76	6.37	5.76	3.44	3.00	2.74	2.72	2.21
165	6.90	6.38	3.57	3.10	2.84	2.86	2.73	2.86	2.84	3.10	3.57	6.38	6.90	6.38	3.57	3.10	2.84	2.86	2.73
170	8.74	7.40	4.24	3.60	3.25	3.09	2.99	3.09	3.25	3.60	4.24	7.40	8.74	7.40	4.24	3.60	3.25	3.09	2.99
175	9.37	8.05	4.74	4.07	3.72	3.56	3.39	3.56	3.72	4.07	4.74	8.05	9.37	8.05	4.74	4.07	3.72	3.56	3.39
180	9.76	8.14	4.80	4.25	3.91	3.84	3.49	3.84	3.91	4.25	4.80	8.14	9.76	8.14	4.80	4.25	3.91	3.84	3.49

Table--2

UNIT: cd

C (DEG)	285	300	315	330	345														
y (DEG)	0	1555	1555	1555	1555														
5	1550	1547	1549	1547	1547														
10	1538	1532	1529	1526	1525														
15	1516	1508	1498	1492	1488														
20	1488	1474	1458	1447	1436														
25	1452	1433	1409	1387	1371														
30	1412	1384	1352	1322	1296														
35	1362	1329	1286	1243	1209														
40	1312	1270	1214	1160	1113														
45	1254	1202	1135	1070	1010														
50	1188	1132	1057	976	902														
55	1119	1058	972	878	792														
60	1044	981	886	781	680														
65	948	893	798	683	568														
70	829	781	702	587	458														
75	701	656	587	490	354														
80	574	532	463	376	255														
85	452	409	344	260	158														
90	341	300	236	158	69.7														
95	302	264	205	130	48.3														
100	272	237	179	107	31.7														
105	241	207	152	83.4	17.2														
110	209	176	124	61.3	6.49														
115	175	144	97.1	41.0	5.87														
120	141	114	71.5	22.4	5.91														
125	109	84.4	46.7	6.71	6.00														
130	78.0	56.1	24.3	4.98	6.30														
135	48.7	30.1	5.47	4.83	6.57														
140	21.7	7.16	3.60	4.67	6.75														
145	2.83	2.93	3.49	4.52	6.71														
150	2.72	2.75	3.20	4.15	6.62														
155	2.72	2.65	3.05	3.79	6.29														
160	2.72	2.74	3.00	3.44	5.76														
165	2.86	2.84	3.10	3.57	6.38														
170	3.09	3.25	3.60	4.24	7.40														
175	3.56	3.72	4.07	4.74	8.05														
180	3.84	3.91	4.25	4.80	8.14														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP4H/MVS @40W4000K	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	0.321	38.2	0.993	9.87
277.0	60	0.140	37.2	0.956	6.57

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*****