

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		1499
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	151.4
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		19.8
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	7.71
				277V	8.10
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.995
				277V	0.956
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4853
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		83.4
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		13
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		96
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%		62.5%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	29.2
			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		0.166
(Goniophotometer – Section 4.2)			Non-Worst Case		0.074
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		19.8
(Goniophotometer – Section 4.2)			Non-Worst Case		19.5

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-03-28	STRP2H/MVS @20W5000K	-	250324006-S1
2	Goniophotometer Test	2025-03-28	STRP2H/MVS @20W5000K	-	250324006-S1
3	THD and PF Test	2025-03-28	STRP2H/MVS @20W5000K	-	250324006-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. STRP2H/MVS @20W5000K, 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.	STRP2H/MVS @20W5000K	Sample ID	250324006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

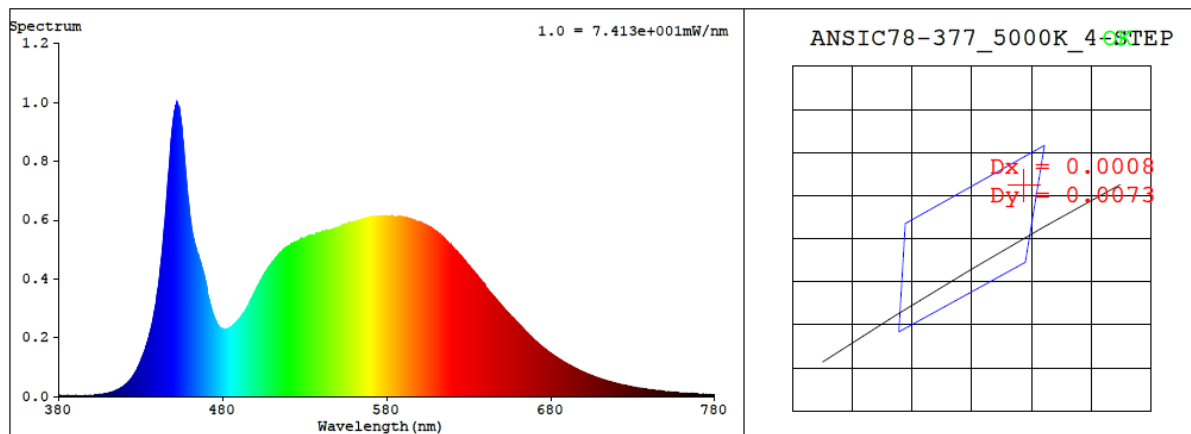
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.166	19.8	0.995
277.0	60	0.074	19.5	0.956

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4853	83.4	13	0.0033	3.4	84	96	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3502$ $y = 0.3623$ / $u' = 0.2107$ $v' = 0.4905$ ($duv=3.31e-03$)

CCT= 4853K Prcp WL: $L_d=571.6nm$ Purity=13.8%

Peak WL: $L_p=452nm$ FWHM: $=20.9nm$ Ratio:R=16.0% G=79.7% B=4.3%

Render Index: $R_a = 83.4$ AvgR = 76.3 TM30:Rf=84 Rg=95

EEL: 0.09388 A++ Highest

R1 =81 R2 =88 R3 =93 R4 =82 R5 =81 R6 =83 R7 =89

R8 =69 R9 =13 R10=72 R11=81 R12=55 R13=83 R14=96 R15=76

4.1 Integrating Sphere Test

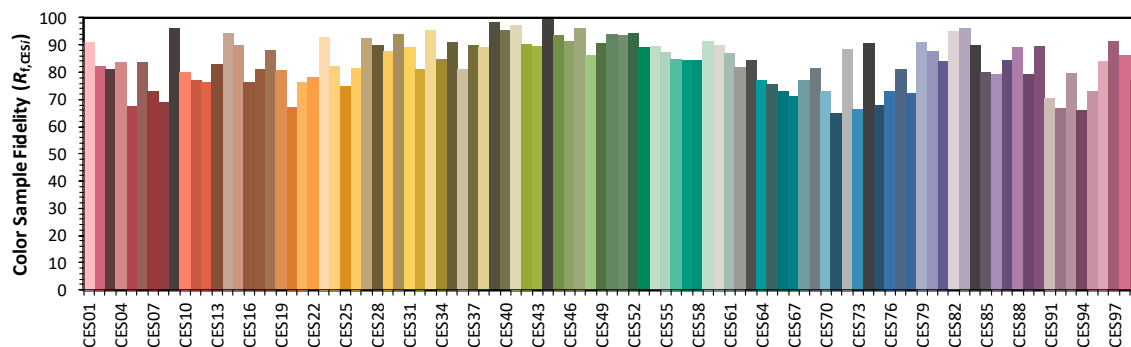
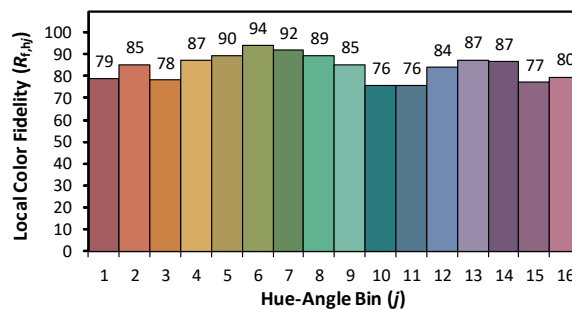
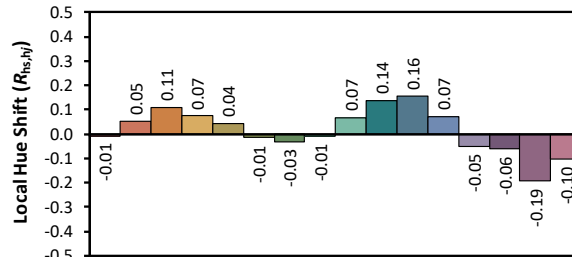
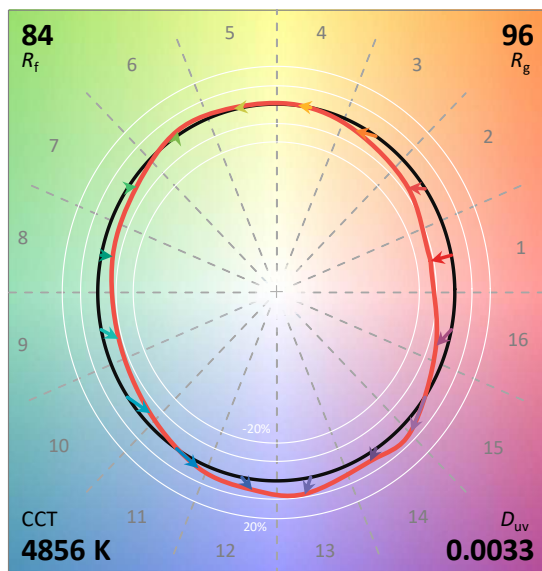
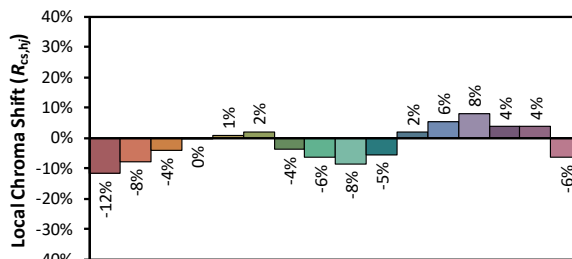
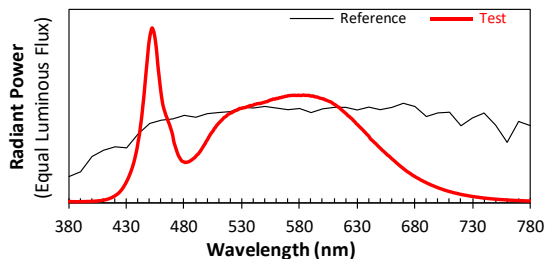
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/1

Model: STRP2H/MVS @20W5000K



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

x 0.3501
 y 0.3622
 u' 0.2107
 v' 0.4905

CIE 13.3-1995
(CRI)

R_a 83
 R_g 13

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	4.00E-06	447	7.55E-04	514	4.81E-04	581	6.12E-04	648	3.22E-04	715	5.25E-05
381	4.20E-06	448	8.24E-04	515	4.87E-04	582	6.12E-04	649	3.16E-04	716	5.08E-05
382	3.50E-06	449	8.95E-04	516	4.91E-04	583	6.14E-04	650	3.09E-04	717	4.93E-05
383	3.20E-06	450	9.44E-04	517	4.97E-04	584	6.13E-04	651	3.02E-04	718	4.77E-05
384	2.90E-06	451	9.77E-04	518	5.02E-04	585	6.12E-04	652	2.97E-04	719	4.64E-05
385	3.10E-06	452	9.98E-04	519	5.07E-04	586	6.12E-04	653	2.91E-04	720	4.45E-05
386	2.60E-06	453	9.87E-04	520	5.11E-04	587	6.13E-04	654	2.85E-04	721	4.33E-05
387	2.80E-06	454	9.63E-04	521	5.12E-04	588	6.11E-04	655	2.78E-04	722	4.22E-05
388	3.00E-06	455	9.21E-04	522	5.17E-04	589	6.11E-04	656	2.71E-04	723	4.08E-05
389	3.40E-06	456	8.66E-04	523	5.20E-04	590	6.08E-04	657	2.67E-04	724	3.95E-05
390	3.40E-06	457	7.90E-04	524	5.24E-04	591	6.08E-04	658	2.61E-04	725	3.85E-05
391	3.50E-06	458	7.30E-04	525	5.26E-04	592	6.09E-04	659	2.55E-04	726	3.74E-05
392	3.50E-06	459	6.70E-04	526	5.29E-04	593	6.04E-04	660	2.49E-04	727	3.59E-05
393	3.70E-06	460	6.18E-04	527	5.32E-04	594	6.04E-04	661	2.44E-04	728	3.48E-05
394	3.70E-06	461	5.73E-04	528	5.38E-04	595	6.03E-04	662	2.38E-04	729	3.37E-05
395	3.80E-06	462	5.42E-04	529	5.37E-04	596	6.01E-04	663	2.32E-04	730	3.26E-05
396	4.30E-06	463	5.21E-04	530	5.38E-04	597	5.98E-04	664	2.26E-04	731	3.18E-05
397	4.20E-06	464	4.99E-04	531	5.40E-04	598	5.96E-04	665	2.20E-04	732	3.09E-05
398	4.30E-06	465	4.83E-04	532	5.42E-04	599	5.94E-04	666	2.14E-04	733	2.98E-05
399	4.80E-06	466	4.64E-04	533	5.43E-04	600	5.93E-04	667	2.09E-04	734	2.91E-05
400	5.20E-06	467	4.48E-04	534	5.46E-04	601	5.91E-04	668	2.03E-04	735	2.80E-05
401	5.50E-06	468	4.27E-04	535	5.48E-04	602	5.87E-04	669	1.98E-04	736	2.72E-05
402	5.90E-06	469	4.06E-04	536	5.48E-04	603	5.85E-04	670	1.93E-04	737	2.61E-05
403	6.40E-06	470	3.82E-04	537	5.54E-04	604	5.82E-04	671	1.87E-04	738	2.56E-05
404	6.80E-06	471	3.45E-04	538	5.53E-04	605	5.80E-04	672	1.82E-04	739	2.43E-05
405	7.30E-06	472	3.23E-04	539	5.54E-04	606	5.77E-04	673	1.77E-04	740	2.36E-05
406	8.30E-06	473	3.02E-04	540	5.57E-04	607	5.74E-04	674	1.73E-04	741	2.32E-05
407	8.50E-06	474	2.83E-04	541	5.61E-04	608	5.71E-04	675	1.68E-04	742	2.24E-05
408	9.70E-06	475	2.66E-04	542	5.61E-04	609	5.65E-04	676	1.64E-04	743	2.18E-05
409	1.08E-05	476	2.55E-04	543	5.64E-04	610	5.61E-04	677	1.60E-04	744	2.10E-05
410	1.15E-05	477	2.44E-04	544	5.65E-04	611	5.58E-04	678	1.54E-04	745	2.04E-05
411	1.29E-05	478	2.36E-04	545	5.65E-04	612	5.53E-04	679	1.51E-04	746	1.96E-05
412	1.45E-05	479	2.32E-04	546	5.66E-04	613	5.47E-04	680	1.47E-04	747	1.91E-05
413	1.64E-05	480	2.30E-04	547	5.68E-04	614	5.44E-04	681	1.43E-04	748	1.86E-05
414	1.85E-05	481	2.27E-04	548	5.70E-04	615	5.38E-04	682	1.39E-04	749	1.78E-05
415	2.08E-05	482	2.29E-04	549	5.72E-04	616	5.32E-04	683	1.36E-04	750	1.76E-05
416	2.36E-05	483	2.30E-04	550	5.74E-04	617	5.26E-04	684	1.32E-04	751	1.69E-05
417	2.61E-05	484	2.32E-04	551	5.76E-04	618	5.20E-04	685	1.28E-04	752	1.64E-05
418	2.98E-05	485	2.36E-04	552	5.77E-04	619	5.15E-04	686	1.25E-04	753	1.57E-05
419	3.30E-05	486	2.40E-04	553	5.81E-04	620	5.09E-04	687	1.21E-04	754	1.52E-05
420	3.71E-05	487	2.45E-04	554	5.83E-04	621	5.03E-04	688	1.18E-04	755	1.50E-05
421	4.19E-05	488	2.50E-04	555	5.86E-04	622	4.95E-04	689	1.15E-04	756	1.43E-05
422	4.66E-05	489	2.56E-04	556	5.87E-04	623	4.92E-04	690	1.11E-04	757	1.42E-05
423	5.21E-05	490	2.63E-04	557	5.91E-04	624	4.85E-04	691	1.08E-04	758	1.34E-05
424	5.87E-05	491	2.70E-04	558	5.91E-04	625	4.80E-04	692	1.05E-04	759	1.32E-05
425	6.62E-05	492	2.76E-04	559	5.91E-04	626	4.73E-04	693	1.02E-04	760	1.28E-05
426	7.45E-05	493	2.84E-04	560	5.95E-04	627	4.66E-04	694	9.90E-05	761	1.22E-05
427	8.35E-05	494	2.93E-04	561	5.94E-04	628	4.60E-04	695	9.61E-05	762	1.20E-05
428	9.48E-05	495	3.03E-04	562	5.97E-04	629	4.51E-04	696	9.37E-05	763	1.15E-05
429	1.06E-04	496	3.14E-04	563	5.99E-04	630	4.46E-04	697	9.06E-05	764	1.12E-05
430	1.19E-04	497	3.25E-04	564	5.99E-04	631	4.39E-04	698	8.82E-05	765	1.08E-05
431	1.32E-04	498	3.35E-04	565	6.03E-04	632	4.32E-04	699	8.55E-05	766	1.09E-05
432	1.47E-04	499	3.48E-04	566	6.03E-04	633	4.26E-04	700	8.30E-05	767	1.02E-05
433	1.64E-04	500	3.57E-04	567	6.05E-04	634	4.19E-04	701	8.02E-05	768	9.90E-06
434	1.81E-04	501	3.70E-04	568	6.07E-04	635	4.13E-04	702	7.79E-05	769	9.70E-06
435	2.01E-04	502	3.82E-04	569	6.07E-04	636	4.06E-04	703	7.59E-05	770	9.20E-06
436	2.22E-04	503	3.92E-04	570	6.10E-04	637	3.99E-04	704	7.35E-05	771	8.90E-06
437	2.48E-04	504	4.01E-04	571	6.10E-04	638	3.91E-04	705	7.07E-05	772	8.80E-06
438	2.77E-04	505	4.09E-04	572	6.11E-04	639	3.85E-04	706	6.90E-05	773	8.60E-06
439	3.08E-04	506	4.21E-04	573	6.12E-04	640	3.78E-04	707	6.68E-05	774	8.20E-06
440	3.48E-04	507	4.28E-04	574	6.12E-04	641	3.68E-04	708	6.50E-05	775	8.00E-06
441	3.83E-04	508	4.39E-04	575	6.12E-04	642	3.59E-04	709	6.26E-05	776	7.70E-06
442	4.35E-04	509	4.46E-04	576	6.13E-04	643	3.54E-04	710	6.11E-05	777	7.50E-06
443	4.85E-04	510	4.54E-04	577	6.12E-04	644	3.48E-04	711	5.91E-05	778	7.30E-06
444	5.47E-04	511	4.60E-04	578	6.12E-04	645	3.41E-04	712	5.77E-05	779	7.30E-06
445	6.09E-04	512	4.68E-04	579	6.13E-04	646	3.36E-04	713	5.56E-05	780	7.40E-06
446	6.83E-04	513	4.74E-04	580	6.11E-04	647	3.29E-04	714	5.37E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2H/MVS @20W5000K	Sample ID	250324006-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	120.0	60	0.166	19.8	0.995
NON-WORST CASE	277.0	60	0.074	19.5	0.956

Test Result

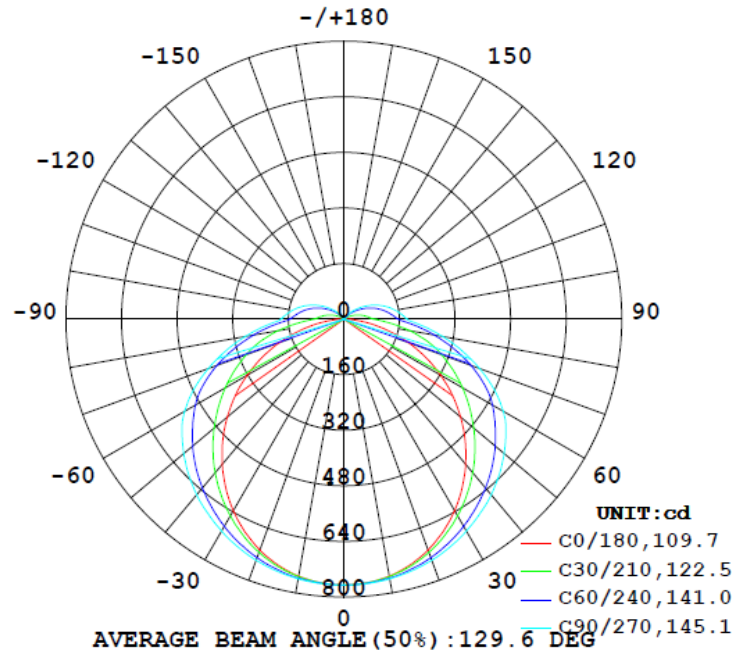
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
2998	1499	162.1	162.1	109.9	145.0	151.4

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
62.5%	24.0	29.2

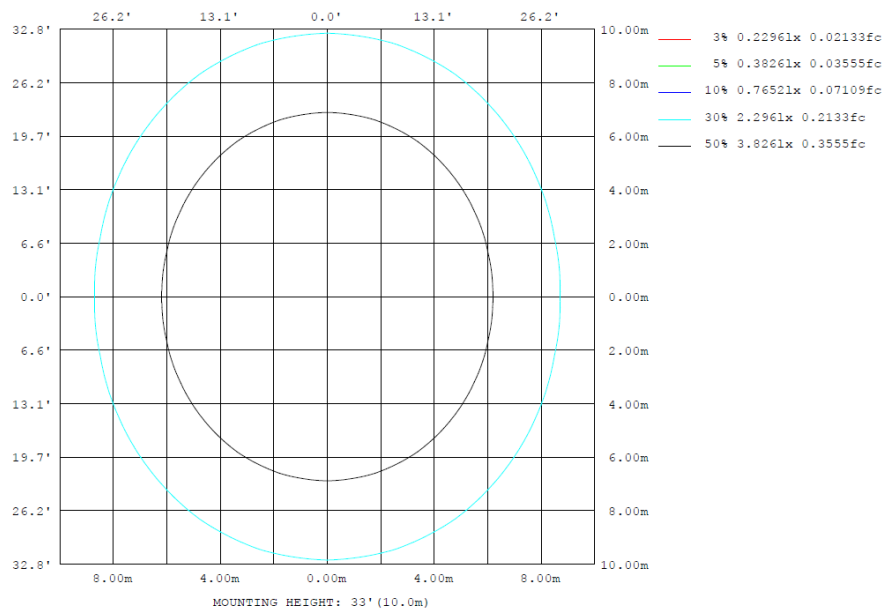
4.2 Goniophotometer Test

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	%lum, lamp
10	751.0	754.8	759.0	754.8	751.0	754.8	759.0	754.8	0- 10	72.56	72.56	2.42, 2.42
20	707.3	722.6	738.6	722.6	707.3	722.6	738.6	722.6	10- 20	209.4	282.0	9.41, 9.41
30	637.2	671.3	704.6	671.3	637.2	671.3	704.6	671.3	20- 30	322.5	604.4	20.2, 20.2
40	545.0	604.7	659.5	604.7	545.0	604.7	659.5	604.7	30- 40	400.3	1005	33.5, 33.5
50	438.5	530.3	602.3	530.3	438.5	530.3	602.3	530.3	40- 50	437.2	1442	48.1, 48.1
60	321.0	447.2	529.4	447.2	321.0	447.2	529.4	447.2	50- 60	431.9	1874	62.5, 62.5
70	197.7	354.3	415.3	354.3	197.7	354.3	415.3	354.3	60- 70	382.9	2257	75.3, 75.3
80	79.23	233.3	289.0	233.3	79.23	233.3	289.0	233.3	70- 80	289.2	2546	84.9, 84.9
90	6.183	125.5	181.7	125.5	6.183	125.5	181.7	125.5	80- 90	174.0	2720	90.7, 90.7
100	5.112	96.27	150.1	96.27	5.112	96.27	150.1	96.27	90-100	108.6	2828	94.4, 94.4
110	5.141	66.61	114.8	66.61	5.141	66.61	114.8	66.61	100-110	78.50	2907	97, 97
120	5.171	38.31	77.80	38.31	5.171	38.31	77.80	38.31	110-120	49.67	2957	98.6, 98.6
130	5.374	13.96	43.73	13.96	5.374	13.96	43.73	13.96	120-130	25.96	2983	99.5, 99.5
140	5.611	3.881	14.28	3.881	5.611	3.881	14.28	3.881	130-140	9.948	2993	99.8, 99.8
150	5.652	3.342	1.840	3.342	5.652	3.342	1.840	3.342	140-150	2.699	2995	99.9, 99.9
160	5.387	2.578	1.807	2.578	5.387	2.578	1.807	2.578	150-160	1.456	2997	100, 100
170	5.544	2.779	1.864	2.779	5.544	2.779	1.864	2.779	160-170	0.8154	2997	100, 100
180	5.563	2.785	2.608	2.785	5.563	2.785	2.608	2.785	170-180	0.3047	2998	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	72.56	0-10	72.56	2.42%
10-20	209.40	0-20	281.96	9.41%
20-30	322.48	0-30	604.44	20.16%
30-40	400.34	0-40	1004.78	33.52%
40-50	437.16	0-50	1441.94	48.10%
50-60	431.91	0-60	1873.85	62.51%
60-70	382.87	0-70	2256.72	75.29%
70-80	289.17	0-80	2545.89	84.93%
80-90	173.97	0-90	2719.86	90.74%
90-100	108.59	0-100	2828.45	94.36%
100-110	78.50	0-110	2906.95	96.98%
110-120	49.67	0-120	2956.62	98.64%
120-130	25.96	0-130	2982.58	99.50%
130-140	9.95	0-140	2992.53	99.83%
140-150	2.70	0-150	2995.23	99.92%
150-160	1.46	0-160	2996.69	99.97%
160-170	0.82	0-170	2997.51	100.00%
170-180	0.31	0-180	2997.82	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	15.7	17.3	16.2	17.7	18.3	18.8	20.3	19.3	20.8	21.3
	3H	17.3	18.7	17.8	19.2	19.8	21.4	22.8	21.9	23.3	23.8
	4H	17.8	19.2	18.4	19.7	20.3	22.5	23.9	23.1	24.4	25.0
	6H	18.2	19.4	18.7	20.0	20.6	23.7	24.9	24.2	25.5	26.1
	8H	18.3	19.5	18.8	20.0	20.6	24.3	25.5	24.8	26.0	26.6
	12H	18.3	19.5	18.9	20.0	20.6	24.9	26.0	25.4	26.5	27.2
4H	2H	17.0	18.3	17.5	18.8	19.4	19.2	20.6	19.7	21.1	21.7
	3H	18.9	20.0	19.4	20.6	21.2	22.1	23.2	22.6	23.8	24.4
	4H	19.6	20.6	20.2	21.2	21.8	23.4	24.5	24.0	25.0	25.7
	6H	20.1	21.0	20.7	21.6	22.2	24.8	25.7	25.4	26.3	26.9
	8H	20.2	21.1	20.8	21.7	22.3	25.4	26.3	26.0	26.9	27.6
	12H	20.3	21.1	20.9	21.7	22.4	26.1	26.9	26.7	27.6	28.2
8H	4H	20.5	21.4	21.1	22.0	22.6	23.7	24.5	24.3	25.1	25.8
	6H	21.2	22.0	21.8	22.6	23.3	25.2	25.9	25.8	26.6	27.2
	8H	21.5	22.2	22.1	22.8	23.5	26.0	26.7	26.6	27.3	28.0
	12H	21.6	22.3	22.3	22.9	23.6	26.9	27.5	27.5	28.1	28.8
12H	4H	20.7	21.5	21.3	22.1	22.8	23.7	24.5	24.3	25.1	25.8
	6H	21.6	22.2	22.2	22.9	23.6	25.3	25.9	25.9	26.5	27.3
	8H	21.9	22.5	22.6	23.2	23.9	26.1	26.7	26.7	27.4	28.1

Maximum UGR = 28.8

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	19.5	21.1	20.0	21.5	22.1	22.6	24.1	23.1	24.6	25.1
	3H	21.1	22.5	21.6	23.0	23.6	25.2	26.6	25.7	27.1	27.6
	4H	21.6	23.0	22.2	23.5	24.1	26.3	27.7	26.9	28.2	28.8
	6H	22.0	23.2	22.5	23.8	24.4	27.5	28.7	28.0	29.3	29.9
	8H	22.1	23.3	22.6	23.8	24.4	28.1	29.3	28.6	29.8	30.4
	12H	22.1	23.3	22.7	23.8	24.4	28.7	29.8	29.2	30.3	31.0
4H	2H	20.8	22.1	21.3	22.6	23.2	23.0	24.4	23.5	24.9	25.5
	3H	22.7	23.8	23.2	24.4	25.0	25.9	27.0	26.4	27.6	28.2
	4H	23.4	24.4	24.0	25.0	25.6	27.2	28.3	27.8	28.8	29.5
	6H	23.9	24.8	24.5	25.4	26.0	28.6	29.5	29.2	30.1	30.7
	8H	24.0	24.9	24.6	25.5	26.1	29.2	30.1	29.8	30.7	31.4
	12H	24.1	24.9	24.7	25.5	26.2	29.9	30.7	30.5	31.4	32.0
8H	4H	24.3	25.2	24.9	25.8	26.4	27.5	28.3	28.1	28.9	29.6
	6H	25.0	25.8	25.6	26.4	27.1	29.0	29.7	29.6	30.4	31.0
	8H	25.3	26.0	25.9	26.6	27.3	29.8	30.5	30.4	31.1	31.8
	12H	25.4	26.1	26.1	26.7	27.4	30.7	31.3	31.3	31.9	32.6
12H	4H	24.5	25.3	25.1	25.9	26.6	27.5	28.3	28.1	28.9	29.6
	6H	25.4	26.0	26.0	26.7	27.4	29.1	29.7	29.7	30.3	31.1
	8H	25.7	26.3	26.4	27.0	27.7	29.9	30.5	30.5	31.2	31.9

Maximum UGR = 32.6

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	765	765	765	765	766	765	765	765	766	765	765	765	765	765	765	765	766	765	765
5	762	762	762	763	763	764	764	764	763	763	762	762	762	762	762	763	763	764	764
10	751	751	752	755	757	758	759	758	757	755	752	751	751	751	752	755	757	758	759
15	733	734	737	741	746	750	750	750	746	741	737	734	733	734	737	741	746	750	750
20	707	709	715	723	731	736	739	736	731	723	715	709	707	709	715	723	731	736	739
25	675	678	687	699	712	720	723	720	712	699	687	678	675	678	687	699	712	720	723
30	637	641	654	671	689	700	705	700	689	671	654	641	637	641	654	671	689	700	705
35	593	599	617	640	663	678	683	678	663	640	617	599	593	599	617	640	663	678	683
40	545	553	577	605	634	653	660	653	634	605	577	553	545	553	577	605	634	653	660
45	494	504	533	568	603	625	632	625	603	568	533	504	494	504	533	568	603	625	632
50	438	452	488	530	568	594	602	594	568	530	488	452	438	452	488	530	568	594	602
55	381	398	441	490	532	560	569	560	532	490	441	398	381	398	441	490	532	560	569
60	321	343	395	447	494	522	529	522	494	447	395	343	321	343	395	447	494	522	529
65	260	288	347	405	447	470	476	470	447	405	347	288	260	288	347	405	447	470	476
70	198	234	299	354	389	410	415	410	389	354	299	234	198	234	299	354	389	410	415
75	137	182	250	295	327	347	352	347	327	295	250	182	137	182	250	295	327	347	352
80	79.2	132	192	233	265	284	289	284	265	233	192	132	79.2	132	192	233	265	284	289
85	31.6	83.8	134	174	204	223	228	223	204	174	134	83.8	31.6	83.8	134	174	204	223	228
90	6.18	40.6	85.9	125	156	175	182	175	156	125	85.9	40.6	6.18	40.6	85.9	125	156	175	182
95	5.10	29.1	71.7	110	140	160	166	160	140	110	71.7	29.1	5.10	29.1	71.7	110	140	160	166
100	5.11	19.5	59.2	96.3	125	144	150	144	125	96.3	59.2	19.5	5.11	19.5	59.2	96.3	125	144	150
105	5.13	11.4	46.6	81.6	109	127	133	127	109	81.6	46.6	11.4	5.13	11.4	46.6	81.6	109	127	133
110	5.14	5.82	34.5	66.6	92.8	109	115	109	92.8	66.6	34.5	5.82	5.14	5.82	34.5	66.6	92.8	109	115
115	5.16	5.42	23.7	52.0	75.9	91.1	96.1	91.1	75.9	52.0	23.7	5.42	5.16	5.42	23.7	52.0	75.9	91.1	96.1
120	5.17	5.28	13.6	38.3	59.9	73.4	77.8	73.4	59.9	38.3	13.6	5.28	5.17	5.28	13.6	38.3	59.9	73.4	77.8
125	5.22	5.22	5.70	25.7	44.4	56.7	60.4	56.7	44.4	25.7	5.70	5.22	5.22	5.22	5.70	25.7	44.4	56.7	60.4
130	5.37	5.15	4.75	14.0	30.1	40.5	43.7	40.5	30.1	14.0	4.75	5.15	5.37	5.15	4.75	14.0	30.1	40.5	43.7
135	5.53	5.07	4.53	4.94	16.6	25.6	28.8	25.6	16.6	4.94	4.53	5.07	5.53	5.07	4.53	4.94	16.6	25.6	28.8
140	5.61	4.99	4.38	3.88	5.15	11.7	14.3	11.7	5.15	3.88	4.38	4.99	5.61	4.99	4.38	3.88	5.15	11.7	14.3
145	5.65	4.91	4.22	3.72	3.09	2.43	3.00	2.43	3.09	3.72	4.22	4.91	5.65	4.91	4.22	3.72	3.09	2.43	3.00
150	5.65	4.60	3.91	3.34	2.88	1.95	1.84	1.95	2.88	3.34	3.91	4.60	5.65	4.60	3.91	3.34	2.88	1.95	1.84
155	5.47	4.31	3.35	3.03	2.60	1.89	1.78	1.89	2.60	3.03	3.35	4.31	5.47	4.31	3.35	3.03	2.60	1.89	1.78
160	5.39	3.94	2.98	2.58	2.23	1.80	1.81	1.80	2.23	2.58	2.98	3.94	5.39	3.94	2.98	2.58	2.23	1.80	1.81
165	5.45	4.01	3.04	2.46	2.18	1.78	1.84	1.78	2.18	2.46	3.04	4.01	5.45	4.01	3.04	2.46	2.18	1.78	1.84
170	5.54	4.03	3.13	2.78	2.50	2.23	1.86	2.23	2.50	2.78	3.13	4.03	5.54	4.03	3.13	2.78	2.50	2.23	1.86
175	5.56	4.25	3.17	2.78	2.60	2.61	2.42	2.61	2.60	2.78	3.17	4.25	5.56	4.25	3.17	2.78	2.60	2.61	2.42
180	5.56	4.31	3.17	2.78	2.97	2.70	2.61	2.70	2.97	2.78	3.17	4.31	5.56	4.31	3.17	2.78	2.97	2.70	2.61

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	765	766	765	765	765														
5	764	763	763	762	762														
10	758	757	755	752	751														
15	750	746	741	737	734														
20	736	731	723	715	709														
25	720	712	699	687	678														
30	700	689	671	654	641														
35	678	663	640	617	599														
40	653	634	605	577	553														
45	625	603	568	533	504														
50	594	568	530	488	452														
55	560	532	490	441	398														
60	522	494	447	395	343														
65	470	447	405	347	288														
70	410	389	354	299	234														
75	347	327	295	250	182														
80	284	265	233	192	132														
85	223	204	174	134	83.8														
90	175	156	125	85.9	40.6														
95	160	140	110	71.7	29.1														
100	144	125	96.3	59.2	19.5														
105	127	109	81.6	46.6	11.4														
110	109	92.8	66.6	34.5	5.82														
115	91.1	75.9	52.0	23.7	5.42														
120	73.4	59.9	38.3	13.6	5.28														
125	56.7	44.4	25.7	5.70	5.22														
130	40.5	30.1	14.0	4.75	5.15														
135	25.6	16.6	4.94	4.53	5.07														
140	11.7	5.15	3.88	4.38	4.99														
145	2.43	3.09	3.72	4.22	4.91														
150	1.95	2.88	3.34	3.91	4.60														
155	1.89	2.60	3.03	3.35	4.31														
160	1.80	2.23	2.58	2.98	3.94														
165	1.78	2.18	2.46	3.04	4.01														
170	2.23	2.50	2.78	3.13	4.03														
175	2.61	2.60	2.78	3.17	4.25														
180	2.70	2.97	2.78	3.17	4.31														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2H/MVS @20W5000K	Sample ID	250324006-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	0.166	19.8	0.995	7.71
277.0	60	0.074	19.5	0.956	8.10

5.0 Equipment List:

Equipment ID	Equipment Name	Last Cal.	Due Cal.
NTC-F01-001	Goniophotometer System	2024-11-07	2025-11-06
NTC-F01-006	2.0 meter Integrating Sphere	2024-11-07	2025-11-06
NTC-F01-012	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-013	Standard Lamp	2024-10-28	2025-10-27
NTC-F01-031	Digital Power Meter	2024-08-06	2025-08-05
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

*****End of Report*****