

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		760
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	144.7
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.5
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	8.65
				277V	20.98
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.984
				277V	0.852
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3410
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		84.1
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		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%		-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	26.9
			N/A	<22	
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		277.0
(Goniophotometer – Section 4.2)			Non-Worst Case		120.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.045
(Goniophotometer – Section 4.2)			Non-Worst Case		0.083
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.5
(Goniophotometer – Section 4.2)			Non-Worst Case		9.8

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-03-28	STRP2H/MVS @10W3500K	-	250324006-S1
2	Goniophotometer Test	2025-03-28	STRP2H/MVS @10W3500K	-	250324006-S1
3	THD and PF Test	2025-03-28	STRP2H/MVS @10W3500K	-	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 @10W3500K, 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 @10W3500K	Sample ID	250324006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

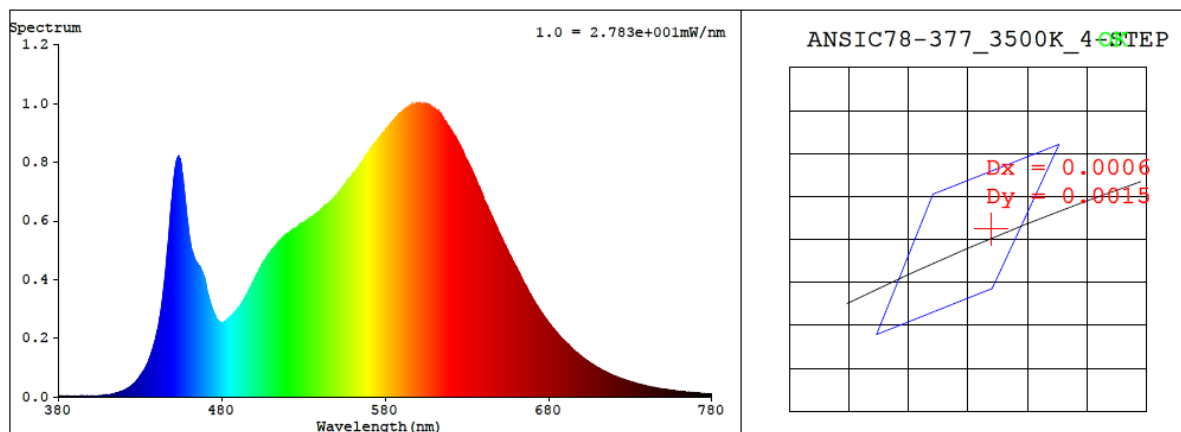
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at $25\pm 1^{\circ}\text{C}$.</p> <p>The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.</p> <p>The sample was measured using 4π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780nm.</p>

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
120.0	60	0.083	9.8	0.984
277.0	60	0.045	10.5	0.852

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3410	84.1	12	0.0005	1.6	85	95	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4111$ $y = 0.3948$ / $u' = 0.2378$ $v' = 0.5138$ ($duv=5.36e-04$)

CCT= 3410K Prcp WL: $L_d=581.0nm$ Purity=41.9%

Peak WL: $L_p=600nm$ FWHM: $=144.3nm$ Ratio:R=20.8% G=75.9% B=3.2%

Render Index: $R_a = 84.1$ AvgR = 78.4 TM30:Rf=85 Rg=95

EEL: 0.09906 A++ Highest

R1 =83 R2 =92 R3 =96 R4 =82 R5 =83 R6 =90 R7 =84

R8 =63 R9 =12 R10=81 R11=81 R12=67 R13=85 R14=99 R15=76

4.1 Integrating Sphere Test

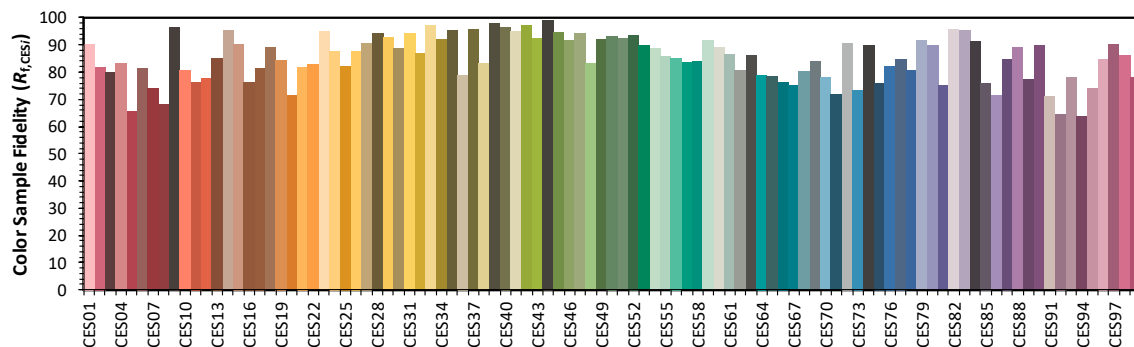
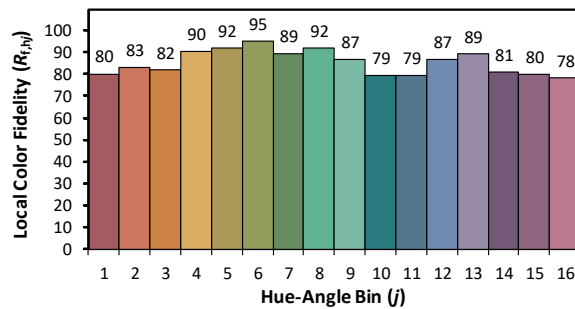
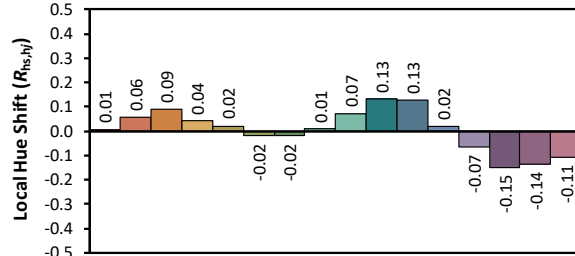
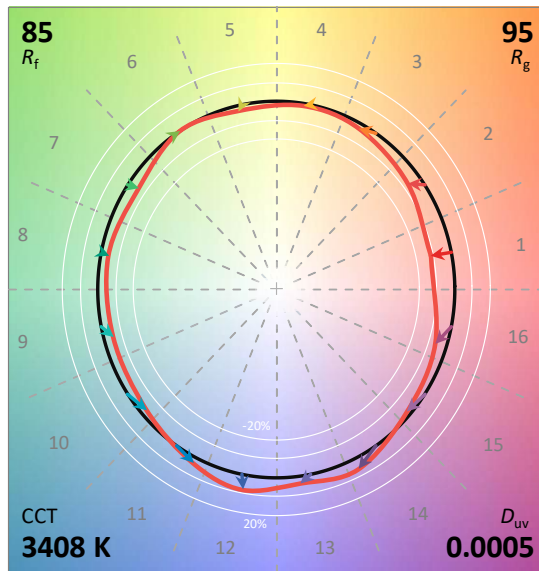
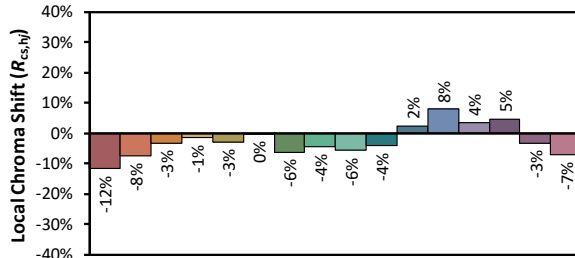
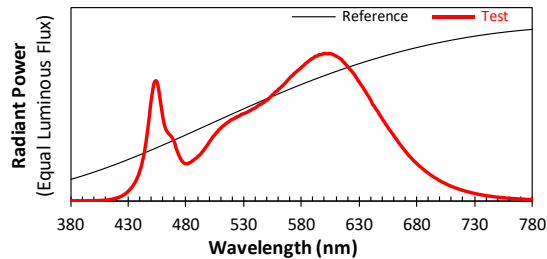
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/1

Model: STRP2H/MVS @10W3500K



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

x 0.4111
 y 0.3947
 u' 0.2378
 v' 0.5138

CIE 13.3-1995
(CRI)

R_a 84
 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	3.20E-06	447	5.13E-04	514	5.23E-04	581	9.14E-04	648	5.82E-04	715	8.58E-05
381	2.90E-06	448	5.78E-04	515	5.28E-04	582	9.20E-04	649	5.69E-04	716	8.23E-05
382	3.30E-06	449	6.51E-04	516	5.33E-04	583	9.29E-04	650	5.57E-04	717	7.98E-05
383	5.00E-07	450	7.04E-04	517	5.40E-04	584	9.34E-04	651	5.44E-04	718	7.73E-05
384	2.50E-06	451	7.57E-04	518	5.46E-04	585	9.41E-04	652	5.34E-04	719	7.45E-05
385	2.80E-06	452	7.98E-04	519	5.51E-04	586	9.48E-04	653	5.21E-04	720	7.22E-05
386	2.90E-06	453	8.12E-04	520	5.54E-04	587	9.54E-04	654	5.10E-04	721	7.00E-05
387	2.20E-06	454	8.14E-04	521	5.57E-04	588	9.59E-04	655	4.98E-04	722	6.78E-05
388	1.80E-06	455	7.96E-04	522	5.61E-04	589	9.65E-04	656	4.86E-04	723	6.57E-05
389	2.20E-06	456	7.59E-04	523	5.66E-04	590	9.68E-04	657	4.77E-04	724	6.38E-05
390	2.60E-06	457	7.04E-04	524	5.72E-04	591	9.75E-04	658	4.64E-04	725	6.15E-05
391	2.10E-06	458	6.53E-04	525	5.73E-04	592	9.81E-04	659	4.54E-04	726	5.99E-05
392	2.00E-06	459	6.01E-04	526	5.78E-04	593	9.82E-04	660	4.44E-04	727	5.74E-05
393	2.70E-06	460	5.54E-04	527	5.82E-04	594	9.85E-04	661	4.32E-04	728	5.59E-05
394	2.60E-06	461	5.17E-04	528	5.88E-04	595	9.91E-04	662	4.22E-04	729	5.42E-05
395	2.90E-06	462	4.92E-04	529	5.91E-04	596	9.91E-04	663	4.11E-04	730	5.21E-05
396	2.90E-06	463	4.76E-04	530	5.93E-04	597	9.91E-04	664	3.99E-04	731	5.02E-05
397	3.20E-06	464	4.63E-04	531	5.96E-04	598	9.94E-04	665	3.89E-04	732	4.86E-05
398	2.90E-06	465	4.55E-04	532	6.00E-04	599	9.99E-04	666	3.78E-04	733	4.72E-05
399	3.30E-06	466	4.47E-04	533	6.02E-04	600	9.99E-04	667	3.68E-04	734	4.56E-05
400	3.50E-06	467	4.38E-04	534	6.08E-04	601	1.00E-03	668	3.57E-04	735	4.44E-05
401	3.60E-06	468	4.26E-04	535	6.12E-04	602	9.98E-04	669	3.48E-04	736	4.24E-05
402	3.80E-06	469	4.10E-04	536	6.15E-04	603	9.97E-04	670	3.38E-04	737	4.15E-05
403	4.20E-06	470	3.93E-04	537	6.22E-04	604	9.99E-04	671	3.28E-04	738	4.03E-05
404	4.30E-06	471	3.63E-04	538	6.24E-04	605	9.99E-04	672	3.18E-04	739	3.86E-05
405	4.50E-06	472	3.41E-04	539	6.28E-04	606	9.96E-04	673	3.09E-04	740	3.72E-05
406	4.90E-06	473	3.22E-04	540	6.33E-04	607	9.94E-04	674	3.01E-04	741	3.59E-05
407	5.10E-06	474	3.04E-04	541	6.39E-04	608	9.89E-04	675	2.93E-04	742	3.48E-05
408	5.70E-06	475	2.88E-04	542	6.44E-04	609	9.86E-04	676	2.84E-04	743	3.39E-05
409	6.30E-06	476	2.75E-04	543	6.51E-04	610	9.82E-04	677	2.76E-04	744	3.31E-05
410	7.50E-06	477	2.65E-04	544	6.54E-04	611	9.78E-04	678	2.68E-04	745	3.20E-05
411	7.70E-06	478	2.57E-04	545	6.58E-04	612	9.73E-04	679	2.61E-04	746	3.06E-05
412	8.80E-06	479	2.54E-04	546	6.62E-04	613	9.66E-04	680	2.53E-04	747	2.97E-05
413	9.70E-06	480	2.54E-04	547	6.68E-04	614	9.64E-04	681	2.46E-04	748	2.88E-05
414	1.12E-05	481	2.53E-04	548	6.72E-04	615	9.56E-04	682	2.39E-04	749	2.78E-05
415	1.24E-05	482	2.56E-04	549	6.81E-04	616	9.44E-04	683	2.32E-04	750	2.70E-05
416	1.40E-05	483	2.61E-04	550	6.84E-04	617	9.39E-04	684	2.26E-04	751	2.62E-05
417	1.58E-05	484	2.64E-04	551	6.92E-04	618	9.28E-04	685	2.19E-04	752	2.53E-05
418	1.81E-05	485	2.71E-04	552	6.98E-04	619	9.20E-04	686	2.13E-04	753	2.47E-05
419	1.94E-05	486	2.76E-04	553	7.06E-04	620	9.11E-04	687	2.06E-04	754	2.40E-05
420	2.20E-05	487	2.82E-04	554	7.13E-04	621	9.03E-04	688	2.00E-04	755	2.31E-05
421	2.46E-05	488	2.89E-04	555	7.22E-04	622	8.91E-04	689	1.95E-04	756	2.22E-05
422	2.77E-05	489	2.93E-04	556	7.28E-04	623	8.85E-04	690	1.89E-04	757	2.16E-05
423	3.11E-05	490	3.02E-04	557	7.38E-04	624	8.75E-04	691	1.84E-04	758	2.06E-05
424	3.42E-05	491	3.09E-04	558	7.43E-04	625	8.65E-04	692	1.77E-04	759	2.01E-05
425	3.94E-05	492	3.16E-04	559	7.47E-04	626	8.56E-04	693	1.72E-04	760	1.94E-05
426	4.39E-05	493	3.25E-04	560	7.59E-04	627	8.41E-04	694	1.67E-04	761	1.90E-05
427	4.93E-05	494	3.35E-04	561	7.63E-04	628	8.30E-04	695	1.61E-04	762	1.84E-05
428	5.56E-05	495	3.44E-04	562	7.71E-04	629	8.17E-04	696	1.57E-04	763	1.80E-05
429	6.20E-05	496	3.56E-04	563	7.78E-04	630	8.07E-04	697	1.52E-04	764	1.73E-05
430	7.03E-05	497	3.66E-04	564	7.85E-04	631	7.94E-04	698	1.48E-04	765	1.68E-05
431	7.80E-05	498	3.76E-04	565	7.94E-04	632	7.83E-04	699	1.41E-04	766	1.62E-05
432	8.66E-05	499	3.89E-04	566	8.01E-04	633	7.73E-04	700	1.38E-04	767	1.57E-05
433	9.56E-05	500	4.00E-04	567	8.10E-04	634	7.60E-04	701	1.33E-04	768	1.52E-05
434	1.07E-04	501	4.12E-04	568	8.20E-04	635	7.47E-04	702	1.30E-04	769	1.45E-05
435	1.19E-04	502	4.23E-04	569	8.27E-04	636	7.35E-04	703	1.25E-04	770	1.43E-05
436	1.33E-04	503	4.34E-04	570	8.36E-04	637	7.21E-04	704	1.22E-04	771	1.37E-05
437	1.50E-04	504	4.44E-04	571	8.45E-04	638	7.10E-04	705	1.17E-04	772	1.37E-05
438	1.67E-04	505	4.52E-04	572	8.50E-04	639	6.97E-04	706	1.14E-04	773	1.32E-05
439	1.87E-04	506	4.63E-04	573	8.59E-04	640	6.85E-04	707	1.10E-04	774	1.25E-05
440	2.13E-04	507	4.69E-04	574	8.67E-04	641	6.65E-04	708	1.07E-04	775	1.20E-05
441	2.35E-04	508	4.81E-04	575	8.73E-04	642	6.51E-04	709	1.03E-04	776	1.16E-05
442	2.71E-04	509	4.87E-04	576	8.80E-04	643	6.43E-04	710	9.95E-05	777	1.14E-05
443	3.05E-04	510	4.95E-04	577	8.87E-04	644	6.29E-04	711	9.71E-05	778	1.13E-05
444	3.48E-04	511	5.03E-04	578	8.92E-04	645	6.18E-04	712	9.40E-05	779	1.13E-05
445	3.97E-04	512	5.09E-04	579	9.00E-04	646	6.09E-04	713	9.03E-05	780	1.13E-05
446	4.54E-04	513	5.15E-04	580	9.06E-04	647	5.94E-04	714	8.80E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2H/MVS @10W3500K	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	277.0	60	0.045	10.5	0.852
NON-WORST CASE	120.0	60	0.083	9.8	0.984

Test Result

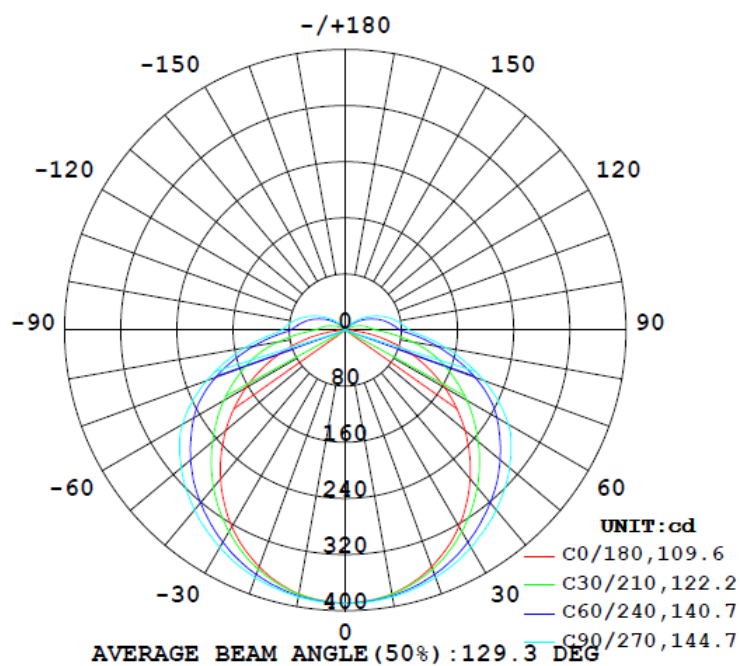
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
1519	760	162.2	162.2	109.8	144.6	144.7

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
62.5%	21.7	26.9

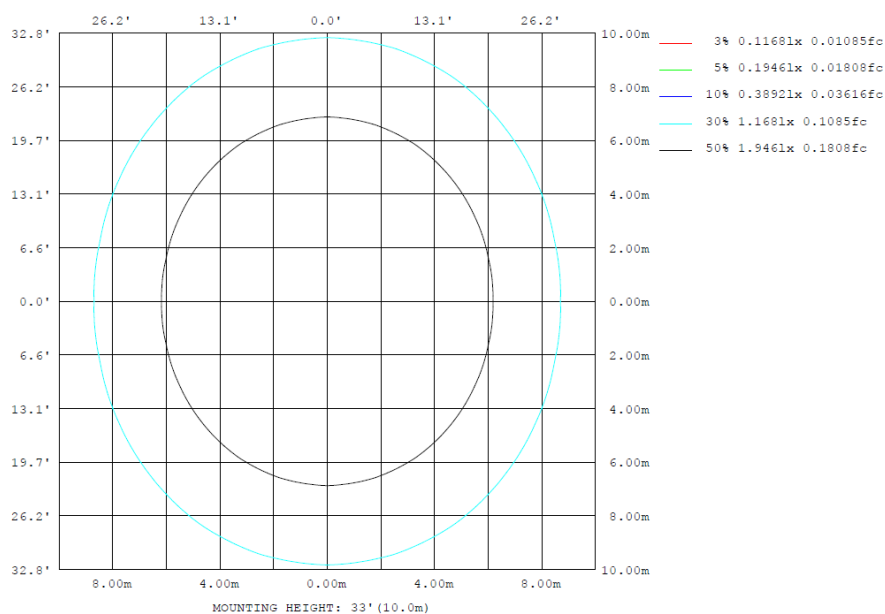
4.2 Goniophotometer Test

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	381.6	383.3	386.2	383.3	381.6	383.3	386.2	383.3	0- 10	36.87	36.87	2.43,2.43
20	359.0	366.7	375.5	366.7	359.0	366.7	375.5	366.7	10- 20	106.3	143.2	9.43,9.43
30	323.5	340.5	357.6	340.5	323.5	340.5	357.6	340.5	20- 30	163.6	306.8	20.2,20.2
40	276.8	306.7	334.5	306.7	276.8	306.7	334.5	306.7	30- 40	203.0	509.8	33.6,33.6
50	222.6	268.4	305.3	268.4	222.6	268.4	305.3	268.4	40- 50	221.5	731.4	48.1,48.1
60	163.0	226.1	268.1	226.1	163.0	226.1	268.1	226.1	50- 60	218.7	950.0	62.5,62.5
70	100.7	179.1	210.0	179.1	100.7	179.1	210.0	179.1	60- 70	193.7	1144	75.3,75.3
80	40.60	117.9	145.5	117.9	40.60	117.9	145.5	117.9	70- 80	146.2	1290	84.9,84.9
90	4.011	63.09	90.96	63.09	4.011	63.09	90.96	63.09	80- 90	87.75	1378	90.7,90.7
100	3.309	48.52	75.06	48.52	3.309	48.52	75.06	48.52	90-100	54.76	1432	94.3,94.3
110	3.309	33.73	57.26	33.73	3.309	33.73	57.26	33.73	100-110	39.65	1472	96.9,96.9
120	3.309	19.83	38.85	19.83	3.309	19.83	38.85	19.83	110-120	25.29	1497	98.6,98.6
130	3.309	7.573	22.09	7.573	3.309	7.573	22.09	7.573	120-130	13.45	1511	99.4,99.4
140	3.309	2.461	7.322	2.461	3.309	2.461	7.322	2.461	130-140	5.345	1516	99.8,99.8
150	3.309	1.987	1.222	1.987	3.309	1.987	1.222	1.987	140-150	1.606	1518	99.9,99.9
160	2.932	1.657	1.116	1.657	2.932	1.657	1.116	1.657	150-160	0.8814	1519	100,100
170	2.918	1.613	1.065	1.613	2.918	1.613	1.065	1.613	160-170	0.4805	1519	100,100
180	2.836	1.582	1.029	1.582	2.836	1.582	1.029	1.582	170-180	0.1576	1519	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	36.87	0-10	36.87	2.43%
10-20	106.32	0-20	143.19	9.43%
20-30	163.63	0-30	306.82	20.20%
30-40	203.01	0-40	509.83	33.56%
40-50	221.53	0-50	731.36	48.14%
50-60	218.66	0-60	950.02	62.54%
60-70	193.68	0-70	1143.70	75.29%
70-80	146.17	0-80	1289.87	84.91%
80-90	87.75	0-90	1377.62	90.69%
90-100	54.76	0-100	1432.38	94.29%
100-110	39.65	0-110	1472.03	96.90%
110-120	25.29	0-120	1497.32	98.57%
120-130	13.45	0-130	1510.77	99.45%
130-140	5.35	0-140	1516.12	99.80%
140-150	1.61	0-150	1517.73	99.91%
150-160	0.88	0-160	1518.61	99.97%
160-170	0.48	0-170	1519.09	100.00%
170-180	0.16	0-180	1519.25	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	18.7	20.3	19.2	20.8	21.3
	3H	17.3	18.7	17.8	19.2	19.8	21.3	22.7	21.8	23.2	23.8
	4H	17.8	19.2	18.4	19.7	20.3	22.5	23.8	23.0	24.4	24.9
	6H	18.2	19.5	18.7	20.0	20.6	23.7	24.9	24.2	25.4	26.0
	8H	18.3	19.5	18.9	20.0	20.6	24.2	25.4	24.8	26.0	26.6
	12H	18.3	19.5	18.9	20.0	20.7	24.8	26.0	25.4	26.5	27.1
4H	2H	17.0	18.3	17.5	18.8	19.4	19.2	20.5	19.7	21.1	21.6
	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	24.4	24.0	25.0	25.6
	6H	20.1	21.0	20.7	21.6	22.3	24.7	25.7	25.3	26.3	26.9
	8H	20.2	21.1	20.8	21.7	22.4	25.4	26.3	26.0	26.9	27.5
	12H	20.3	21.1	20.9	21.7	22.4	26.1	26.9	26.7	27.5	28.2
8H	4H	20.5	21.4	21.1	22.0	22.6	23.6	24.5	24.2	25.1	25.8
	6H	21.2	22.0	21.8	22.6	23.3	25.2	25.9	25.8	26.5	27.2
	8H	21.5	22.2	22.1	22.8	23.5	26.0	26.6	26.6	27.3	28.0
	12H	21.7	22.3	22.3	22.9	23.6	26.8	27.4	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	25.7
	6H	21.6	22.2	22.2	22.9	23.6	25.2	25.9	25.9	26.5	27.2
	8H	21.9	22.5	22.6	23.2	23.9	26.1	26.7	26.7	27.3	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	17.2	18.8	17.7	19.2	19.8	20.2	21.8	20.7	22.3	22.8
	3H	18.8	20.2	19.3	20.7	21.3	22.8	24.2	23.3	24.7	25.3
	4H	19.3	20.7	19.9	21.2	21.8	24.0	25.3	24.5	25.9	26.4
	6H	19.7	21.0	20.2	21.5	22.1	25.2	26.4	25.7	26.9	27.5
	8H	19.8	21.0	20.4	21.5	22.1	25.7	26.9	26.3	27.5	28.1
	12H	19.8	21.0	20.4	21.5	22.2	26.3	27.5	26.9	28.0	28.6
4H	2H	18.5	19.8	19.0	20.3	20.9	20.7	22.0	21.2	22.6	23.1
	3H	20.4	21.5	20.9	22.1	22.7	23.6	24.7	24.1	25.3	25.9
	4H	21.1	22.1	21.7	22.7	23.3	24.9	25.9	25.5	26.5	27.1
	6H	21.6	22.5	22.2	23.1	23.8	26.2	27.2	26.8	27.8	28.4
	8H	21.7	22.6	22.3	23.2	23.9	26.9	27.8	27.5	28.4	29.0
	12H	21.8	22.6	22.4	23.2	23.9	27.6	28.4	28.2	29.0	29.7
8H	4H	22.0	22.9	22.6	23.5	24.1	25.1	26.0	25.7	26.6	27.3
	6H	22.7	23.5	23.3	24.1	24.8	26.7	27.4	27.3	28.0	28.7
	8H	23.0	23.7	23.6	24.3	25.0	27.5	28.1	28.1	28.8	29.5
	12H	23.2	23.8	23.8	24.4	25.1	28.3	28.9	29.0	29.6	30.3
12H	4H	22.2	23.0	22.8	23.6	24.3	25.2	26.0	25.8	26.6	27.2
	6H	23.1	23.7	23.7	24.4	25.1	26.7	27.4	27.4	28.0	28.7
	8H	23.4	24.0	24.1	24.7	25.4	27.6	28.2	28.2	28.8	29.6

Maximum UGR = 30.3

4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	389	389	389	389	389	389	389	389	389	389	389	389	389	389	389	389	389	389	389
5	387	387	387	388	388	388	388	388	388	388	387	387	387	387	387	388	388	388	388
10	382	382	382	383	385	385	386	385	385	383	382	382	382	382	382	383	385	385	386
15	372	372	374	376	379	380	381	380	379	376	374	372	372	372	374	376	379	380	381
20	359	360	363	367	371	373	375	373	371	367	363	360	359	360	363	367	371	373	375
25	343	344	348	355	361	365	367	365	361	355	348	344	343	344	348	355	361	365	367
30	323	325	332	340	349	355	358	355	349	340	332	325	323	325	332	340	349	355	358
35	301	304	313	324	336	344	347	344	336	324	313	304	301	304	313	324	336	344	347
40	277	281	292	307	321	331	334	331	321	307	292	281	277	281	292	307	321	331	334
45	250	255	270	288	306	316	321	316	306	288	270	255	250	255	270	288	306	316	321
50	223	229	247	268	288	301	305	301	288	268	247	229	223	229	247	268	288	301	305
55	193	202	223	248	269	283	289	283	269	248	223	202	193	202	223	248	269	283	289
60	163	174	200	226	249	264	268	264	249	226	200	174	163	174	200	226	249	264	268
65	132	146	175	205	226	237	241	237	226	205	175	146	132	146	175	205	226	237	241
70	101	119	152	179	197	207	210	207	197	179	152	119	101	119	152	179	197	207	210
75	69.7	92.2	127	149	165	175	178	175	165	149	127	92.2	69.7	92.2	127	149	165	175	178
80	40.6	67.3	97.3	118	133	143	145	143	133	118	97.3	67.3	40.6	67.3	97.3	118	133	143	145
85	16.6	42.7	67.8	87.7	103	112	115	112	103	87.7	67.8	42.7	16.6	42.7	67.8	87.7	103	112	115
90	4.01	21.1	43.6	63.1	78.3	87.8	91.0	87.8	78.3	63.1	43.6	21.1	4.01	21.1	43.6	63.1	78.3	87.8	91.0
95	3.31	15.4	36.5	55.4	70.3	79.9	83.1	79.9	70.3	55.4	36.5	15.4	3.31	15.4	36.5	55.4	70.3	79.9	83.1
100	3.31	10.6	30.6	48.5	62.4	71.7	75.1	71.7	62.4	48.5	30.6	10.6	3.31	10.6	30.6	48.5	62.4	71.7	75.1
105	3.31	6.60	24.0	41.2	54.8	63.2	66.6	63.2	54.8	41.2	24.0	6.60	3.31	6.60	24.0	41.2	54.8	63.2	66.6
110	3.31	3.67	18.1	33.7	46.4	54.3	57.3	54.3	46.4	33.7	18.1	3.67	3.31	3.67	18.1	33.7	46.4	54.3	57.3
115	3.31	3.48	12.5	26.6	38.1	45.6	48.0	45.6	38.1	26.6	12.5	3.48	3.31	3.48	12.5	26.6	38.1	45.6	48.0
120	3.31	3.37	7.57	19.8	30.4	36.9	38.8	36.9	30.4	19.8	7.57	3.37	3.31	3.37	7.57	19.8	30.4	36.9	38.8
125	3.31	3.22	3.55	13.3	22.8	28.8	30.4	28.8	22.8	13.3	3.55	3.22	3.31	3.22	3.55	13.3	22.8	28.8	30.4
130	3.31	3.18	2.90	7.57	15.6	20.8	22.1	20.8	15.6	7.57	2.90	3.18	3.31	3.18	2.90	7.57	15.6	20.8	22.1
135	3.31	3.13	2.77	3.08	8.70	13.3	14.4	13.3	8.70	3.08	2.77	3.13	3.31	3.13	2.77	3.08	8.70	13.3	14.4
140	3.31	3.10	2.62	2.46	2.99	6.29	7.32	6.29	2.99	2.46	2.62	3.10	3.31	3.10	2.62	2.46	2.99	6.29	7.32
145	3.31	2.95	2.54	2.23	1.96	1.68	1.69	1.68	1.96	2.23	2.54	2.95	3.31	2.95	2.54	2.23	1.96	1.68	1.69
150	3.31	2.81	2.34	1.99	1.73	1.28	1.22	1.28	1.73	1.99	2.34	2.81	3.31	2.81	2.34	1.99	1.73	1.28	1.22
155	3.31	2.65	2.06	1.77	1.48	1.18	1.10	1.18	1.48	1.77	2.06	2.65	3.31	2.65	2.06	1.77	1.48	1.18	1.10
160	2.93	2.26	1.85	1.66	1.40	1.15	1.12	1.15	1.40	1.66	1.85	2.26	2.93	2.26	1.85	1.66	1.40	1.15	1.12
165	2.98	2.23	1.83	1.64	1.28	1.14	1.09	1.14	1.28	1.64	1.83	2.23	2.98	2.23	1.83	1.64	1.28	1.14	1.09
170	2.92	2.20	1.81	1.61	1.25	1.13	1.06	1.13	1.25	1.61	1.81	2.20	2.92	2.20	1.81	1.61	1.25	1.13	1.06
175	2.86	2.17	1.78	1.59	1.22	1.12	1.04	1.12	1.22	1.59	1.78	2.17	2.86	2.17	1.78	1.59	1.22	1.12	1.04
180	2.84	2.17	1.77	1.58	1.21	1.12	1.03	1.12	1.21	1.58	1.77	2.17	2.84	2.17	1.77	1.58	1.21	1.12	1.03

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	389	389	389	389	389														
5	388	388	388	387	387														
10	385	385	383	382	382														
15	380	379	376	374	372														
20	373	371	367	363	360														
25	365	361	355	348	344														
30	355	349	340	332	325														
35	344	336	324	313	304														
40	331	321	307	292	281														
45	316	306	288	270	255														
50	301	288	268	247	229														
55	283	269	248	223	202														
60	264	249	226	200	174														
65	237	226	205	175	146														
70	207	197	179	152	119														
75	175	165	149	127	92.2														
80	143	133	118	97.3	67.3														
85	112	103	87.7	67.8	42.7														
90	87.8	78.3	63.1	43.6	21.1														
95	79.9	70.3	55.4	36.5	15.4														
100	71.7	62.4	48.5	30.6	10.6														
105	63.2	54.8	41.2	24.0	6.60														
110	54.3	46.4	33.7	18.1	3.67														
115	45.6	38.1	26.6	12.5	3.48														
120	36.9	30.4	19.8	7.57	3.37														
125	28.8	22.8	13.3	3.55	3.22														
130	20.8	15.6	7.57	2.90	3.18														
135	13.3	8.70	3.08	2.77	3.13														
140	6.29	2.99	2.46	2.62	3.10														
145	1.68	1.96	2.23	2.54	2.95														
150	1.28	1.73	1.99	2.34	2.81														
155	1.18	1.48	1.77	2.06	2.65														
160	1.15	1.40	1.66	1.85	2.26														
165	1.14	1.28	1.64	1.83	2.23														
170	1.13	1.25	1.61	1.81	2.20														
175	1.12	1.22	1.59	1.78	2.17														
180	1.12	1.21	1.58	1.77	2.17														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2H/MVS @10W3500K	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 $25 \pm 1^{\circ}\text{C}$. The sample measurements were made using a digital power meter and power supply. The sample was operated at rated voltage and was stabilized before measurement. The total harmonic distortion was calculated.</p>

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	iTHD(%)
120.0	60	0.083	9.8	0.984	8.65
277.0	60	0.045	10.5	0.852	20.98

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*****