

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		1458
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	147.2
			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	20.00%	120V	7.76
		ANSI C82-77-10:2020		277V	8.08
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002	0.9	120V	0.995
		ANSI C82-77-10:2020		277V	0.956
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3419
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		83.8
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		11
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	29.1
			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 @20W3500K	-	250324006-S1
2	Goniophotometer Test	2025-03-28	STRP2H/MVS @20W3500K	-	250324006-S1
3	THD and PF Test	2025-03-28	STRP2H/MVS @20W3500K	-	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 @20W3500K, 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 @20W3500K	Sample ID	250324006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

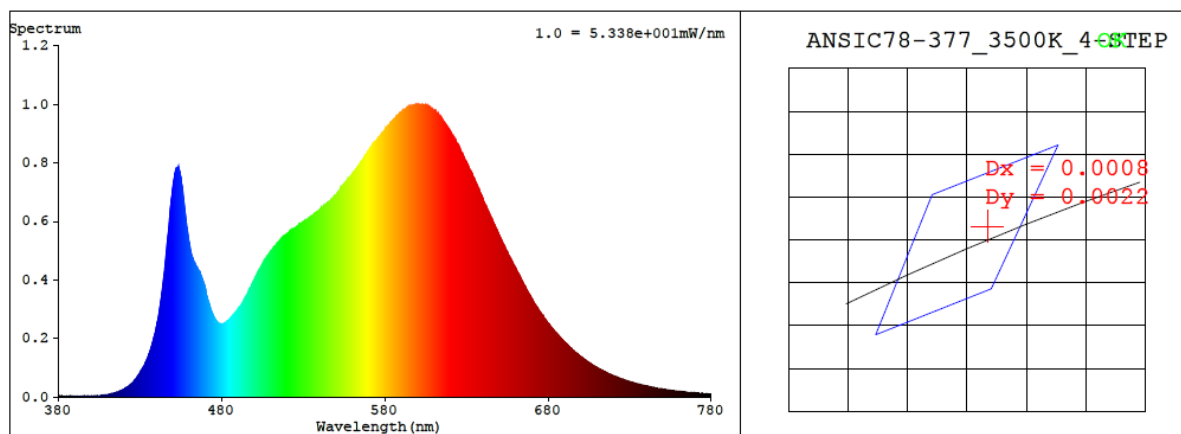
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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
3419	83.8	11	0.0008	1.4	85	95	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4108$ $y = 0.3952$ / $u' = 0.2374$ $v' = 0.5139$ ($duv=7.64e-04$)

CCT= 3419K Prcp WL: $L_d=580.9nm$ Purity=41.9%

Peak WL: $L_p=600nm$ FWHM: $=144.2nm$ Ratio:R=20.7% G=76.1% B=3.2%

Render Index: $R_a = 83.8$ AvgR = 77.9 TM30:Rf=85 Rg=95

EEL: 0.09670 A++ Highest

R1 =82 R2 =91 R3 =97 R4 =82 R5 =82 R6 =89 R7 =85

R8 =62 R9 =11 R10=80 R11=81 R12=67 R13=85 R14=99 R15=75

4.1 Integrating Sphere Test

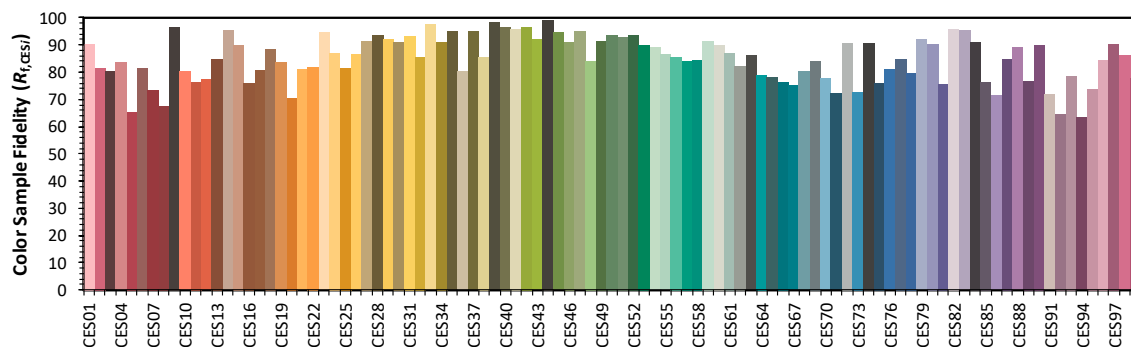
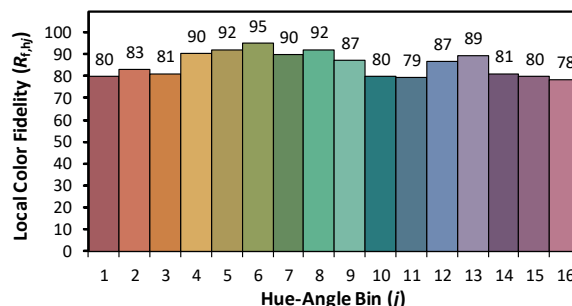
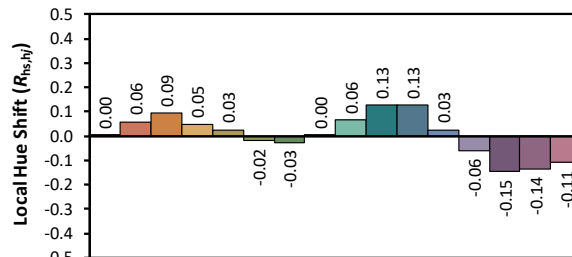
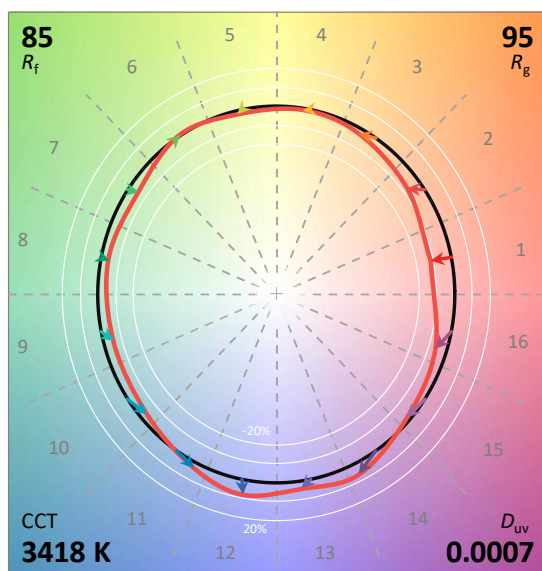
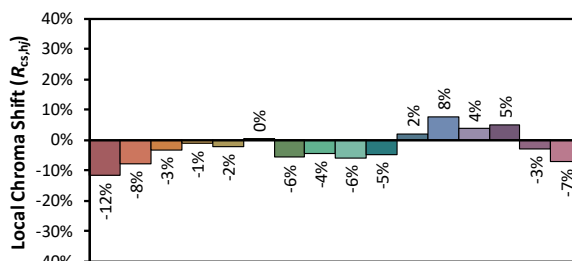
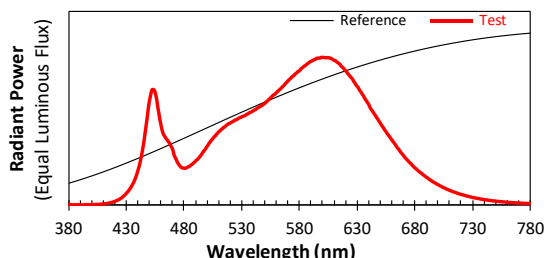
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/1

Model: STRP2H/MVS @20W3500K



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

x 0.4108
 y 0.3950
 u' 0.2375
 v' 0.5139

CIE 13.3-1995
(CRI)

R_a 84
 R_g 11

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	3.30E-06	447	5.44E-04	514	5.25E-04	581	9.20E-04	648	5.79E-04	715	8.60E-05
381	3.80E-06	448	6.03E-04	515	5.29E-04	582	9.26E-04	649	5.66E-04	716	8.32E-05
382	2.90E-06	449	6.67E-04	516	5.36E-04	583	9.32E-04	650	5.54E-04	717	8.02E-05
383	2.20E-06	450	7.13E-04	517	5.42E-04	584	9.39E-04	651	5.41E-04	718	7.76E-05
384	2.10E-06	451	7.50E-04	518	5.49E-04	585	9.44E-04	652	5.30E-04	719	7.49E-05
385	2.70E-06	452	7.80E-04	519	5.52E-04	586	9.50E-04	653	5.19E-04	720	7.25E-05
386	1.70E-06	453	7.81E-04	520	5.56E-04	587	9.58E-04	654	5.06E-04	721	7.08E-05
387	2.50E-06	454	7.77E-04	521	5.61E-04	588	9.62E-04	655	4.96E-04	722	6.84E-05
388	3.10E-06	455	7.54E-04	522	5.65E-04	589	9.69E-04	656	4.83E-04	723	6.64E-05
389	2.00E-06	456	7.18E-04	523	5.70E-04	590	9.72E-04	657	4.74E-04	724	6.38E-05
390	2.10E-06	457	6.64E-04	524	5.75E-04	591	9.77E-04	658	4.63E-04	725	6.19E-05
391	2.60E-06	458	6.19E-04	525	5.77E-04	592	9.81E-04	659	4.51E-04	726	6.01E-05
392	2.20E-06	459	5.73E-04	526	5.81E-04	593	9.82E-04	660	4.41E-04	727	5.80E-05
393	2.20E-06	460	5.34E-04	527	5.86E-04	594	9.88E-04	661	4.30E-04	728	5.60E-05
394	2.80E-06	461	5.00E-04	528	5.92E-04	595	9.93E-04	662	4.20E-04	729	5.42E-05
395	3.20E-06	462	4.78E-04	529	5.93E-04	596	9.93E-04	663	4.10E-04	730	5.22E-05
396	3.60E-06	463	4.65E-04	530	5.98E-04	597	9.94E-04	664	3.97E-04	731	5.07E-05
397	3.30E-06	464	4.52E-04	531	6.01E-04	598	9.95E-04	665	3.86E-04	732	4.91E-05
398	2.70E-06	465	4.43E-04	532	6.04E-04	599	9.99E-04	666	3.77E-04	733	4.77E-05
399	3.30E-06	466	4.31E-04	533	6.08E-04	600	9.99E-04	667	3.66E-04	734	4.60E-05
400	3.60E-06	467	4.21E-04	534	6.13E-04	601	9.99E-04	668	3.55E-04	735	4.50E-05
401	3.60E-06	468	4.07E-04	535	6.17E-04	602	9.96E-04	669	3.46E-04	736	4.33E-05
402	4.60E-06	469	3.91E-04	536	6.21E-04	603	9.97E-04	670	3.37E-04	737	4.13E-05
403	4.90E-06	470	3.75E-04	537	6.27E-04	604	9.96E-04	671	3.26E-04	738	4.04E-05
404	5.30E-06	471	3.43E-04	538	6.29E-04	605	9.97E-04	672	3.17E-04	739	3.91E-05
405	4.90E-06	472	3.24E-04	539	6.34E-04	606	9.95E-04	673	3.09E-04	740	3.78E-05
406	5.80E-06	473	3.09E-04	540	6.39E-04	607	9.93E-04	674	3.00E-04	741	3.71E-05
407	6.30E-06	474	2.90E-04	541	6.44E-04	608	9.89E-04	675	2.91E-04	742	3.51E-05
408	7.10E-06	475	2.78E-04	542	6.47E-04	609	9.84E-04	676	2.84E-04	743	3.45E-05
409	7.90E-06	476	2.67E-04	543	6.55E-04	610	9.78E-04	677	2.77E-04	744	3.28E-05
410	8.30E-06	477	2.59E-04	544	6.59E-04	611	9.77E-04	678	2.67E-04	745	3.22E-05
411	9.70E-06	478	2.52E-04	545	6.63E-04	612	9.70E-04	679	2.60E-04	746	3.10E-05
412	1.05E-05	479	2.51E-04	546	6.67E-04	613	9.64E-04	680	2.52E-04	747	3.00E-05
413	1.15E-05	480	2.50E-04	547	6.73E-04	614	9.58E-04	681	2.46E-04	748	2.89E-05
414	1.34E-05	481	2.50E-04	548	6.77E-04	615	9.52E-04	682	2.39E-04	749	2.87E-05
415	1.48E-05	482	2.53E-04	549	6.83E-04	616	9.41E-04	683	2.32E-04	750	2.76E-05
416	1.69E-05	483	2.57E-04	550	6.89E-04	617	9.33E-04	684	2.25E-04	751	2.65E-05
417	1.88E-05	484	2.61E-04	551	6.98E-04	618	9.26E-04	685	2.19E-04	752	2.57E-05
418	2.11E-05	485	2.65E-04	552	7.03E-04	619	9.17E-04	686	2.13E-04	753	2.48E-05
419	2.34E-05	486	2.73E-04	553	7.12E-04	620	9.07E-04	687	2.06E-04	754	2.39E-05
420	2.61E-05	487	2.77E-04	554	7.19E-04	621	8.99E-04	688	2.01E-04	755	2.34E-05
421	3.05E-05	488	2.86E-04	555	7.27E-04	622	8.87E-04	689	1.94E-04	756	2.26E-05
422	3.29E-05	489	2.91E-04	556	7.34E-04	623	8.79E-04	690	1.89E-04	757	2.20E-05
423	3.65E-05	490	3.00E-04	557	7.43E-04	624	8.68E-04	691	1.84E-04	758	2.12E-05
424	4.16E-05	491	3.07E-04	558	7.47E-04	625	8.61E-04	692	1.78E-04	759	2.03E-05
425	4.62E-05	492	3.13E-04	559	7.53E-04	626	8.51E-04	693	1.72E-04	760	2.00E-05
426	5.17E-05	493	3.23E-04	560	7.62E-04	627	8.36E-04	694	1.67E-04	761	1.92E-05
427	5.87E-05	494	3.33E-04	561	7.68E-04	628	8.26E-04	695	1.61E-04	762	1.87E-05
428	6.57E-05	495	3.43E-04	562	7.76E-04	629	8.12E-04	696	1.57E-04	763	1.80E-05
429	7.35E-05	496	3.55E-04	563	7.83E-04	630	8.03E-04	697	1.52E-04	764	1.74E-05
430	8.26E-05	497	3.67E-04	564	7.90E-04	631	7.92E-04	698	1.48E-04	765	1.70E-05
431	9.08E-05	498	3.76E-04	565	8.00E-04	632	7.77E-04	699	1.43E-04	766	1.66E-05
432	1.01E-04	499	3.89E-04	566	8.06E-04	633	7.68E-04	700	1.38E-04	767	1.60E-05
433	1.12E-04	500	3.99E-04	567	8.14E-04	634	7.55E-04	701	1.35E-04	768	1.56E-05
434	1.24E-04	501	4.12E-04	568	8.24E-04	635	7.43E-04	702	1.30E-04	769	1.47E-05
435	1.39E-04	502	4.24E-04	569	8.32E-04	636	7.30E-04	703	1.26E-04	770	1.46E-05
436	1.53E-04	503	4.33E-04	570	8.41E-04	637	7.15E-04	704	1.21E-04	771	1.40E-05
437	1.71E-04	504	4.43E-04	571	8.49E-04	638	7.05E-04	705	1.18E-04	772	1.38E-05
438	1.91E-04	505	4.52E-04	572	8.55E-04	639	6.91E-04	706	1.15E-04	773	1.30E-05
439	2.13E-04	506	4.63E-04	573	8.64E-04	640	6.81E-04	707	1.10E-04	774	1.28E-05
440	2.40E-04	507	4.69E-04	574	8.71E-04	641	6.62E-04	708	1.07E-04	775	1.23E-05
441	2.67E-04	508	4.81E-04	575	8.76E-04	642	6.48E-04	709	1.04E-04	776	1.19E-05
442	3.01E-04	509	4.87E-04	576	8.85E-04	643	6.39E-04	710	1.01E-04	777	1.18E-05
443	3.39E-04	510	4.97E-04	577	8.91E-04	644	6.26E-04	711	9.71E-05	778	1.13E-05
444	3.83E-04	511	5.02E-04	578	8.99E-04	645	6.14E-04	712	9.42E-05	779	1.12E-05
445	4.30E-04	512	5.11E-04	579	9.05E-04	646	6.03E-04	713	9.17E-05	780	1.12E-05
446	4.88E-04	513	5.16E-04	580	9.09E-04	647	5.91E-04	714	8.79E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2H/MVS @20W3500K	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

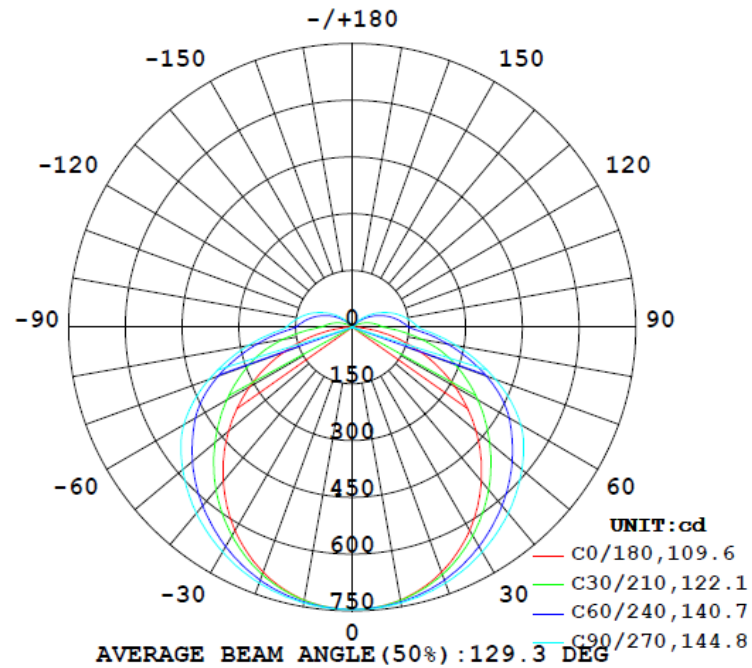
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
2915	1458	161.6	161.6	109.6	144.7	147.2

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
62.5%	23.9	29.1

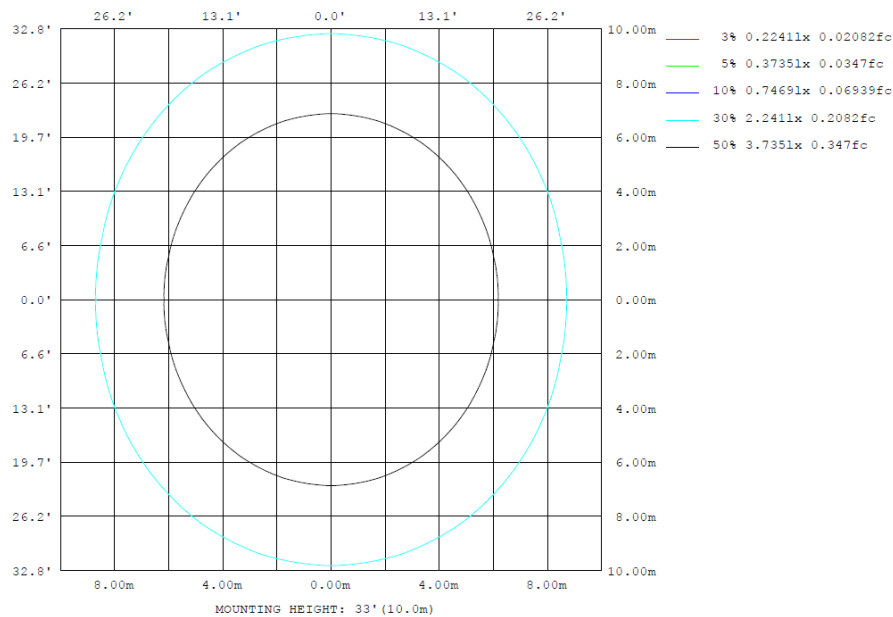
4.2 Goniophotometer Test

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	732.5	735.6	740.0	735.6	732.5	735.6	740.0	735.6	0- 10	70.73	70.73	2.43,2.43
20	689.2	703.3	719.7	703.3	689.2	703.3	719.7	703.3	10- 20	204.0	274.7	9.42,9.42
30	620.4	653.3	686.3	653.3	620.4	653.3	686.3	653.3	20- 30	313.9	588.7	20.2,20.2
40	531.3	588.1	641.7	588.1	531.3	588.1	641.7	588.1	30- 40	389.4	978.1	33.6,33.6
50	426.9	514.8	585.3	514.8	426.9	514.8	585.3	514.8	40- 50	424.9	1403	48.1,48.1
60	313.0	434.4	514.4	434.4	313.0	434.4	514.4	434.4	50- 60	419.6	1823	62.5,62.5
70	192.9	343.7	403.2	343.7	192.9	343.7	403.2	343.7	60- 70	371.8	2194	75.3,75.3
80	78.04	226.2	279.6	226.2	78.04	226.2	279.6	226.2	70- 80	280.7	2475	84.9,84.9
90	7.199	121.4	174.8	121.4	7.199	121.4	174.8	121.4	80- 90	168.8	2644	90.7,90.7
100	6.052	93.35	144.2	93.35	6.052	93.35	144.2	93.35	90-100	105.3	2749	94.3,94.3
110	5.957	64.82	110.3	64.82	5.957	64.82	110.3	64.82	100-110	76.21	2825	96.9,96.9
120	5.957	37.65	74.70	37.65	5.957	37.65	74.70	37.65	110-120	48.39	2874	98.6,98.6
130	6.145	14.07	42.18	14.07	6.145	14.07	42.18	14.07	120-130	25.53	2899	99.5,99.5
140	6.052	4.284	13.76	4.284	6.052	4.284	13.76	4.284	130-140	10.03	2909	99.8,99.8
150	6.052	3.726	1.962	3.726	6.052	3.726	1.962	3.726	140-150	2.895	2912	99.9,99.9
160	5.299	2.889	1.686	2.889	5.299	2.889	1.686	2.889	150-160	1.552	2914	100,100
170	5.579	2.884	1.778	2.884	5.579	2.884	1.778	2.884	160-170	0.8208	2915	100,100
180	5.579	2.979	2.806	2.979	5.579	2.979	2.806	2.979	170-180	0.3049	2915	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	70.73	0-10	70.73	2.43%
10-20	203.98	0-20	274.71	9.43%
20-30	313.95	0-30	588.66	20.20%
30-40	389.42	0-40	978.08	33.56%
40-50	424.94	0-50	1403.02	48.14%
50-60	419.61	0-60	1822.63	62.53%
60-70	371.81	0-70	2194.44	75.29%
70-80	280.70	0-80	2475.14	84.92%
80-90	168.78	0-90	2643.92	90.71%
90-100	105.25	0-100	2749.17	94.32%
100-110	76.21	0-110	2825.38	96.94%
110-120	48.39	0-120	2873.77	98.60%
120-130	25.53	0-130	2899.30	99.48%
130-140	10.03	0-140	2909.33	99.82%
140-150	2.90	0-150	2912.23	99.92%
150-160	1.55	0-160	2913.78	99.97%
160-170	0.82	0-170	2914.60	100.00%
170-180	0.31	0-180	2914.91	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				
	2H	15.7	17.3	16.2	17.7	18.3	18.7	20.3	19.2	20.8
	3H	17.3	18.7	17.8	19.2	19.8	21.3	22.7	21.9	23.2
	4H	17.8	19.2	18.4	19.7	20.3	22.5	23.9	23.0	24.4
	6H	18.2	19.5	18.7	20.0	20.6	23.7	24.9	24.2	25.5
	8H	18.3	19.5	18.8	20.0	20.6	24.2	25.4	24.8	26.0
	12H	18.3	19.5	18.9	20.0	20.7	24.8	26.0	25.4	26.5
4H	2H	17.0	18.3	17.5	18.8	19.4	19.2	20.5	19.7	21.1
	3H	18.9	20.0	19.4	20.6	21.2	22.1	23.2	22.6	23.8
	4H	19.6	20.6	20.2	21.2	21.8	23.4	24.4	24.0	25.0
	6H	20.1	21.0	20.7	21.6	22.3	24.8	25.7	25.3	26.3
	8H	20.2	21.1	20.8	21.7	22.3	25.4	26.3	26.0	26.9
	12H	20.3	21.1	20.9	21.7	22.4	26.1	26.9	26.7	27.5
8H	4H	20.5	21.4	21.1	22.0	22.6	23.7	24.5	24.2	25.1
	6H	21.2	22.0	21.8	22.6	23.3	25.2	25.9	25.8	26.6
	8H	21.5	22.2	22.1	22.8	23.5	26.0	26.6	26.6	27.3
	12H	21.7	22.3	22.3	22.9	23.6	26.8	27.4	27.5	28.1
12H	4H	20.7	21.5	21.3	22.1	22.8	23.7	24.5	24.3	25.1
	6H	21.6	22.2	22.2	22.9	23.6	25.2	25.9	25.9	26.5
	8H	21.9	22.5	22.6	23.2	23.9	26.1	26.7	26.7	27.3

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										
X=2H	Y=2H	UGR Viewed Crosswise				UGR Viewed Endwise				
	2H	19.4	21.0	19.9	21.4	22.0	22.4	24.0	22.9	24.5
	3H	21.0	22.4	21.5	22.9	23.5	25.0	26.4	25.6	26.9
	4H	21.5	22.9	22.1	23.4	24.0	26.2	27.6	26.7	28.1
	6H	21.9	23.2	22.4	23.7	24.3	27.4	28.6	27.9	29.2
	8H	22.0	23.2	22.5	23.7	24.3	27.9	29.1	28.5	29.7
	12H	22.0	23.2	22.6	23.7	24.4	28.5	29.7	29.1	30.2
4H	2H	20.7	22.0	21.2	22.5	23.1	22.9	24.2	23.4	24.8
	3H	22.6	23.7	23.1	24.3	24.9	25.8	26.9	26.3	27.5
	4H	23.3	24.3	23.9	24.9	25.5	27.1	28.1	27.7	28.7
	6H	23.8	24.7	24.4	25.3	26.0	28.5	29.4	29.0	30.0
	8H	23.9	24.8	24.5	25.4	26.0	29.1	30.0	29.7	30.6
	12H	24.0	24.8	24.6	25.4	26.1	29.8	30.6	30.4	31.2
8H	4H	24.2	25.1	24.8	25.7	26.3	27.4	28.2	27.9	28.8
	6H	24.9	25.7	25.5	26.3	27.0	28.9	29.6	29.5	30.3
	8H	25.2	25.9	25.8	26.5	27.2	29.7	30.3	30.3	31.0
	12H	25.4	26.0	26.0	26.6	27.3	30.5	31.1	31.2	31.8
12H	4H	24.4	25.2	25.0	25.8	26.5	27.4	28.2	28.0	28.8
	6H	25.3	25.9	25.9	26.6	27.3	28.9	29.6	29.6	30.2
	8H	25.6	26.2	26.3	26.9	27.6	29.8	30.4	30.4	31.0

Maximum UGR = 32.5

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	747	746	746	746	746	746	746	746	746	746	746	746	747	746	746	746	746	746	746
5	743	743	743	744	744	745	745	745	744	744	743	743	743	743	743	744	744	745	745
10	732	732	733	736	737	739	740	739	737	736	733	732	732	732	733	736	737	739	740
15	714	715	717	722	726	730	731	730	726	722	717	715	714	715	717	722	726	730	731
20	689	690	696	703	711	717	720	717	711	703	696	690	689	690	696	703	711	717	720
25	658	660	669	681	692	701	705	701	692	681	669	660	658	660	669	681	692	701	705
30	620	624	636	653	670	681	686	681	670	653	636	624	620	624	636	653	670	681	686
35	578	583	600	622	644	659	665	659	644	622	600	583	578	583	600	622	644	659	665
40	531	538	561	588	616	635	642	635	616	588	561	538	531	538	561	588	616	635	642
45	481	490	518	552	585	607	615	607	585	552	518	490	481	490	518	552	585	607	615
50	427	440	474	515	552	577	585	577	552	515	474	440	427	440	474	515	552	577	585
55	371	387	429	476	516	544	553	544	516	476	429	387	371	387	429	476	516	544	553
60	313	334	383	434	479	507	514	507	479	434	383	334	313	334	383	434	479	507	514
65	253	280	337	393	433	456	463	456	433	393	337	280	253	280	337	393	433	456	463
70	193	227	290	344	377	397	403	397	377	344	290	227	193	227	290	344	377	397	403
75	134	177	243	286	317	336	341	336	317	286	243	177	134	177	243	286	317	336	341
80	78.0	129	187	226	256	275	280	275	256	226	187	129	78.0	129	187	226	256	275	280
85	31.7	82.1	131	169	198	215	221	215	198	169	131	82.1	31.7	82.1	131	169	198	215	221
90	7.20	40.2	83.8	121	150	169	175	169	150	121	83.8	40.2	7.20	40.2	83.8	121	150	169	175
95	6.15	29.4	70.0	107	135	154	160	154	135	107	70.0	29.4	6.15	29.4	70.0	107	135	154	160
100	6.05	20.2	57.9	93.4	121	138	144	138	121	93.4	57.9	20.2	6.05	20.2	57.9	93.4	121	138	144
105	6.05	12.4	45.7	79.1	106	122	128	122	106	79.1	45.7	12.4	6.05	12.4	45.7	79.1	106	122	128
110	5.96	6.86	33.9	64.8	89.4	105	110	105	89.4	64.8	33.9	6.86	5.96	6.86	33.9	64.8	89.4	105	110
115	5.96	6.48	23.6	50.9	73.5	87.7	92.1	87.7	73.5	50.9	23.6	6.48	5.96	6.48	23.6	50.9	73.5	87.7	92.1
120	5.96	6.20	13.9	37.7	58.0	74.7	70.8	58.0	37.7	13.9	6.20	5.96	6.20	13.9	37.7	58.0	74.7	70.8	74.7
125	5.96	6.01	6.45	25.6	43.2	54.7	58.0	54.7	43.2	25.6	6.45	6.01	5.96	6.01	6.45	25.6	43.2	54.7	58.0
130	6.14	5.83	5.42	14.1	29.4	39.3	42.2	39.3	29.4	14.1	5.42	5.83	6.14	5.83	5.42	14.1	29.4	39.3	42.2
135	6.05	5.64	5.23	5.32	16.5	25.0	27.6	25.0	16.5	5.32	5.23	5.64	6.05	5.64	5.23	5.32	16.5	25.0	27.6
140	6.05	5.73	5.04	4.28	5.43	11.6	13.8	11.6	5.43	4.28	5.04	5.73	6.05	5.73	5.04	4.28	5.43	11.6	13.8
145	6.05	5.36	4.67	4.00	3.26	2.62	2.91	2.62	3.26	4.00	4.67	5.36	6.05	5.36	4.67	4.00	3.26	2.62	2.91
150	6.05	5.07	4.21	3.73	2.99	2.05	1.96	2.05	2.99	3.73	4.21	5.07	6.05	5.07	4.21	3.73	2.99	2.05	1.96
155	5.86	4.60	3.65	3.26	2.80	1.96	1.78	1.96	2.80	3.26	3.65	4.60	5.86	4.60	3.65	3.26	2.80	1.96	1.78
160	5.30	4.14	3.27	2.89	2.33	1.87	1.69	1.87	2.33	2.89	3.27	4.14	5.30	4.14	3.27	2.89	2.33	1.87	1.69
165	5.48	3.95	3.08	2.61	2.14	1.87	1.68	1.87	2.14	2.61	3.08	3.95	5.48	3.95	3.08	2.61	2.14	1.87	1.68
170	5.58	4.04	3.08	2.88	2.42	2.05	1.78	2.05	2.42	2.88	3.08	4.04	5.58	4.04	3.08	2.88	2.42	2.05	1.78
175	5.58	4.23	3.17	2.98	2.70	2.61	2.43	2.61	2.70	2.98	3.17	4.23	5.58	4.23	3.17	2.98	2.70	2.61	2.43
180	5.58	4.23	3.17	2.98	2.80	2.71	2.81	2.71	2.80	2.98	3.17	4.23	5.58	4.23	3.17	2.98	2.80	2.71	2.81

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	746	746	746	746	746														
5	745	744	744	743	743														
10	739	737	736	733	732														
15	730	726	722	717	715														
20	717	711	703	696	690														
25	701	692	681	669	660														
30	681	670	653	636	624														
35	659	644	622	600	583														
40	635	616	588	561	538														
45	607	585	552	518	490														
50	577	552	515	474	440														
55	544	516	476	429	387														
60	507	479	434	383	334														
65	456	433	393	337	280														
70	397	377	344	290	227														
75	336	317	286	243	177														
80	275	256	226	187	129														
85	215	198	169	131	82.1														
90	169	150	121	83.8	40.2														
95	154	135	107	70.0	29.4														
100	138	121	93.4	57.9	20.2														
105	122	106	79.1	45.7	12.4														
110	105	89.4	64.8	33.9	6.86														
115	87.7	73.5	50.9	23.6	6.48														
120	70.8	58.0	37.7	13.9	6.20														
125	54.7	43.2	25.6	6.45	6.01														
130	39.3	29.4	14.1	5.42	5.83														
135	25.0	16.5	5.32	5.23	5.64														
140	11.6	5.43	4.28	5.04	5.73														
145	2.62	3.26	4.00	4.67	5.36														
150	2.05	2.99	3.73	4.21	5.07														
155	1.96	2.80	3.26	3.65	4.60														
160	1.87	2.33	2.89	3.27	4.14														
165	1.87	2.14	2.61	3.08	3.95														
170	2.05	2.42	2.88	3.08	4.04														
175	2.61	2.70	2.98	3.17	4.23														
180	2.71	2.80	2.98	3.17	4.23														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2H/MVS @20W3500K	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	7.76
277.0	60	0.074	19.5	0.956	8.08

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*****