

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		782
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	150.4
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.4
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	8.55
				277V	21.20
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.984
				277V	0.849
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4044
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		85.1
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		18
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		85
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		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%		62.5%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	27.0
			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		0.044
(Goniophotometer – Section 4.2)			Non-Worst Case		0.081
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.4
(Goniophotometer – Section 4.2)			Non-Worst Case		9.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-03-28	STRP2H/MVS @10W4000K	-	250324006-S1
2	Goniophotometer Test	2025-03-28	STRP2H/MVS @10W4000K	-	250324006-S1
3	THD and PF Test	2025-03-28	STRP2H/MVS @10W4000K	-	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 @10W4000K, 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 @10W4000K	Sample ID	250324006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

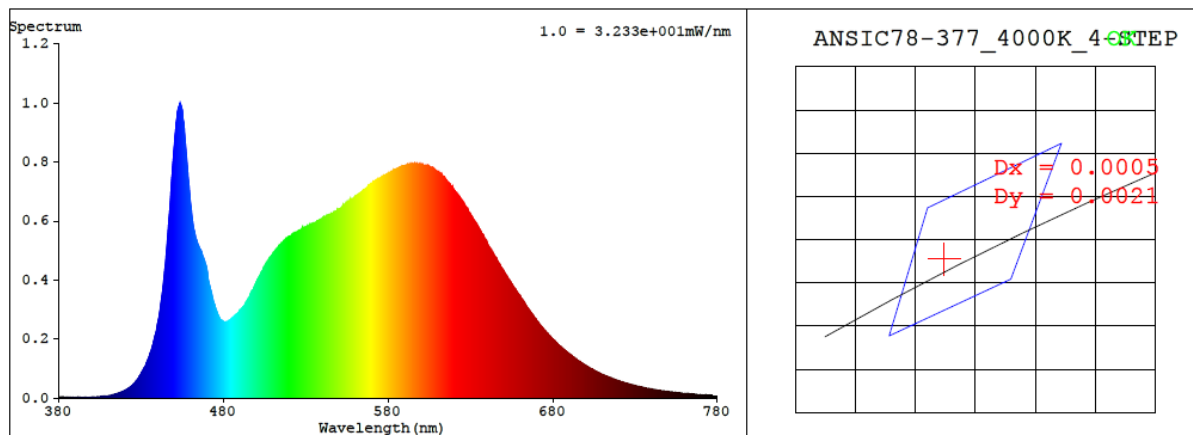
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.081	9.6	0.984
277.0	60	0.044	10.4	0.849

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4044	85.1	18	0.0008	1.3	85	95	-11%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3791$ $y = 0.3776$ / $u' = 0.2239$ $v' = 0.5018$ ($duv=8.14e-04$)

CCT= 4044K Prcp WL: $L_d=578.5nm$ Purity=27.1%

Peak WL: $L_p=454nm$ FWHM: $\approx 20.9nm$ Ratio: R=18.5% G=77.6% B=3.9%

Render Index: $R_a = 85.1$ AvgR = 79.1 TM30: $R_f=85$ $R_g=95$

EEL: 0.09534 A++ Highest

R1 =84 R2 =92 R3 =96 R4 =83 R5 =84 R6 =88 R7 =87

R8 =68 R9 =18 R10=80 R11=82 R12=62 R13=86 R14=98 R15=78

4.1 Integrating Sphere Test

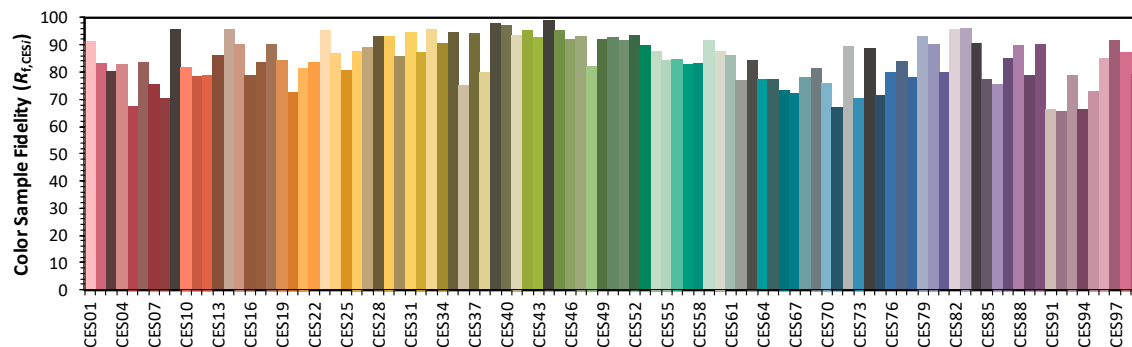
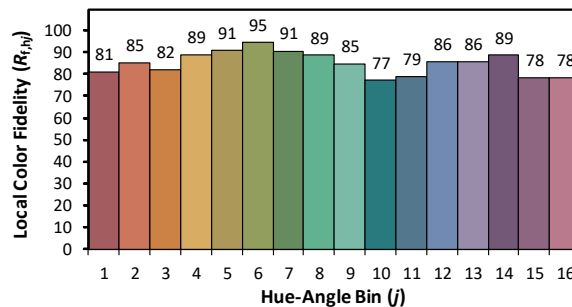
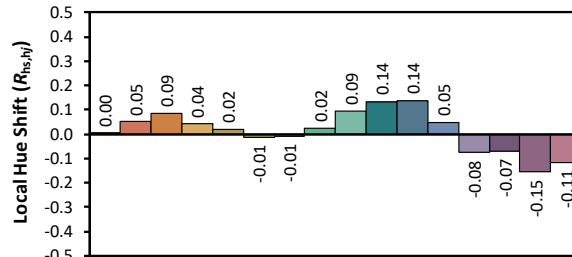
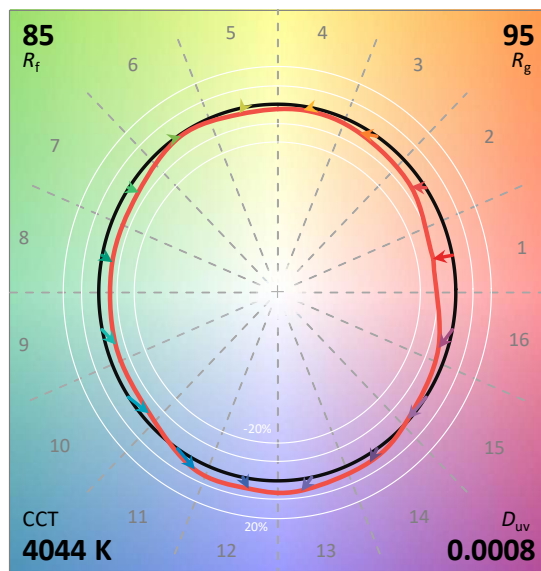
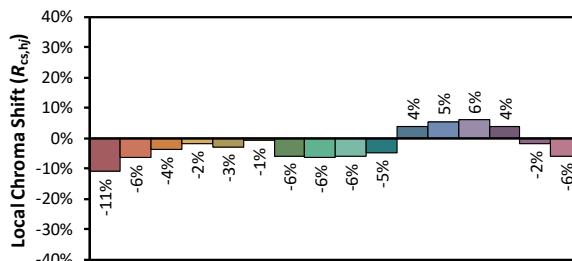
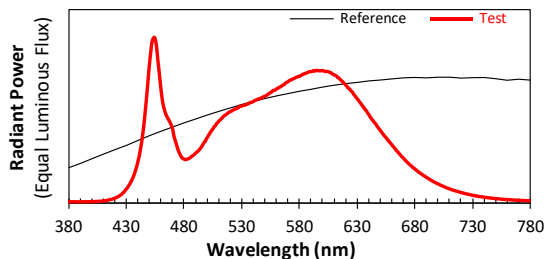
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/1

Model: STRP2H/MVS @10W4000K



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

x 0.3790
 y 0.3775
 u' 0.2239
 v' 0.5017

CIE 13.3-1995
(CRI)

R_a 85
 R_g 19

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	3.50E-06	447	6.10E-04	514	5.17E-04	581	7.63E-04	648	4.51E-04	715	6.92E-05
381	2.40E-06	448	6.87E-04	515	5.22E-04	582	7.67E-04	649	4.41E-04	716	6.68E-05
382	3.50E-06	449	7.71E-04	516	5.27E-04	583	7.71E-04	650	4.33E-04	717	6.48E-05
383	3.40E-06	450	8.45E-04	517	5.32E-04	584	7.73E-04	651	4.23E-04	718	6.28E-05
384	2.90E-06	451	9.10E-04	518	5.38E-04	585	7.75E-04	652	4.14E-04	719	6.08E-05
385	2.70E-06	452	9.65E-04	519	5.42E-04	586	7.79E-04	653	4.05E-04	720	5.86E-05
386	3.00E-06	453	9.85E-04	520	5.47E-04	587	7.82E-04	654	3.97E-04	721	5.70E-05
387	2.90E-06	454	9.93E-04	521	5.49E-04	588	7.84E-04	655	3.88E-04	722	5.53E-05
388	2.00E-06	455	9.77E-04	522	5.54E-04	589	7.86E-04	656	3.79E-04	723	5.35E-05
389	2.90E-06	456	9.33E-04	523	5.58E-04	590	7.86E-04	657	3.71E-04	724	5.15E-05
390	2.90E-06	457	8.61E-04	524	5.61E-04	591	7.89E-04	658	3.63E-04	725	5.01E-05
391	2.60E-06	458	7.98E-04	525	5.63E-04	592	7.92E-04	659	3.54E-04	726	4.87E-05
392	3.30E-06	459	7.31E-04	526	5.68E-04	593	7.90E-04	660	3.46E-04	727	4.70E-05
393	3.20E-06	460	6.67E-04	527	5.70E-04	594	7.92E-04	661	3.37E-04	728	4.56E-05
394	2.90E-06	461	6.14E-04	528	5.78E-04	595	7.94E-04	662	3.30E-04	729	4.39E-05
395	3.00E-06	462	5.77E-04	529	5.78E-04	596	7.92E-04	663	3.21E-04	730	4.21E-05
396	3.60E-06	463	5.52E-04	530	5.80E-04	597	7.92E-04	664	3.12E-04	731	4.09E-05
397	3.30E-06	464	5.30E-04	531	5.82E-04	598	7.91E-04	665	3.04E-04	732	3.98E-05
398	3.40E-06	465	5.15E-04	532	5.84E-04	599	7.93E-04	666	2.96E-04	733	3.83E-05
399	3.50E-06	466	5.02E-04	533	5.86E-04	600	7.93E-04	667	2.88E-04	734	3.72E-05
400	4.10E-06	467	4.90E-04	534	5.90E-04	601	7.91E-04	668	2.80E-04	735	3.59E-05
401	4.30E-06	468	4.76E-04	535	5.92E-04	602	7.88E-04	669	2.72E-04	736	3.46E-05
402	4.40E-06	469	4.58E-04	536	5.95E-04	603	7.88E-04	670	2.66E-04	737	3.40E-05
403	4.80E-06	470	4.38E-04	537	6.00E-04	604	7.88E-04	671	2.58E-04	738	3.30E-05
404	4.80E-06	471	3.99E-04	538	6.01E-04	605	7.86E-04	672	2.50E-04	739	3.15E-05
405	5.40E-06	472	3.75E-04	539	6.04E-04	606	7.82E-04	673	2.43E-04	740	3.04E-05
406	5.70E-06	473	3.53E-04	540	6.07E-04	607	7.81E-04	674	2.37E-04	741	2.94E-05
407	6.10E-06	474	3.28E-04	541	6.12E-04	608	7.75E-04	675	2.30E-04	742	2.89E-05
408	6.90E-06	475	3.09E-04	542	6.15E-04	609	7.70E-04	676	2.23E-04	743	2.75E-05
409	7.30E-06	476	2.92E-04	543	6.18E-04	610	7.68E-04	677	2.18E-04	744	2.68E-05
410	8.10E-06	477	2.79E-04	544	6.21E-04	611	7.64E-04	678	2.11E-04	745	2.61E-05
411	9.00E-06	478	2.68E-04	545	6.23E-04	612	7.60E-04	679	2.06E-04	746	2.51E-05
412	1.04E-05	479	2.63E-04	546	6.25E-04	613	7.51E-04	680	2.00E-04	747	2.46E-05
413	1.15E-05	480	2.59E-04	547	6.30E-04	614	7.49E-04	681	1.95E-04	748	2.35E-05
414	1.36E-05	481	2.57E-04	548	6.32E-04	615	7.41E-04	682	1.89E-04	749	2.29E-05
415	1.46E-05	482	2.59E-04	549	6.36E-04	616	7.34E-04	683	1.83E-04	750	2.23E-05
416	1.61E-05	483	2.61E-04	550	6.38E-04	617	7.28E-04	684	1.78E-04	751	2.14E-05
417	1.79E-05	484	2.63E-04	551	6.42E-04	618	7.21E-04	685	1.74E-04	752	2.06E-05
418	2.00E-05	485	2.68E-04	552	6.46E-04	619	7.14E-04	686	1.68E-04	753	2.02E-05
419	2.24E-05	486	2.74E-04	553	6.53E-04	620	7.06E-04	687	1.64E-04	754	1.98E-05
420	2.53E-05	487	2.79E-04	554	6.57E-04	621	6.99E-04	688	1.59E-04	755	1.85E-05
421	2.85E-05	488	2.84E-04	555	6.61E-04	622	6.89E-04	689	1.55E-04	756	1.83E-05
422	3.15E-05	489	2.89E-04	556	6.66E-04	623	6.84E-04	690	1.50E-04	757	1.79E-05
423	3.56E-05	490	2.97E-04	557	6.73E-04	624	6.76E-04	691	1.46E-04	758	1.72E-05
424	4.00E-05	491	3.03E-04	558	6.74E-04	625	6.68E-04	692	1.41E-04	759	1.66E-05
425	4.45E-05	492	3.08E-04	559	6.76E-04	626	6.62E-04	693	1.37E-04	760	1.62E-05
426	5.03E-05	493	3.16E-04	560	6.84E-04	627	6.49E-04	694	1.33E-04	761	1.59E-05
427	5.75E-05	494	3.25E-04	561	6.85E-04	628	6.42E-04	695	1.28E-04	762	1.53E-05
428	6.39E-05	495	3.35E-04	562	6.91E-04	629	6.31E-04	696	1.25E-04	763	1.47E-05
429	7.35E-05	496	3.46E-04	563	6.94E-04	630	6.23E-04	697	1.21E-04	764	1.45E-05
430	8.19E-05	497	3.58E-04	564	6.98E-04	631	6.14E-04	698	1.18E-04	765	1.38E-05
431	9.11E-05	498	3.66E-04	565	7.04E-04	632	6.04E-04	699	1.14E-04	766	1.34E-05
432	1.02E-04	499	3.79E-04	566	7.06E-04	633	5.95E-04	700	1.11E-04	767	1.29E-05
433	1.13E-04	500	3.91E-04	567	7.11E-04	634	5.86E-04	701	1.08E-04	768	1.26E-05
434	1.27E-04	501	4.03E-04	568	7.19E-04	635	5.77E-04	702	1.04E-04	769	1.22E-05
435	1.42E-04	502	4.13E-04	569	7.22E-04	636	5.67E-04	703	1.01E-04	770	1.17E-05
436	1.57E-04	503	4.25E-04	570	7.26E-04	637	5.57E-04	704	9.81E-05	771	1.14E-05
437	1.77E-04	504	4.35E-04	571	7.32E-04	638	5.50E-04	705	9.48E-05	772	1.11E-05
438	1.99E-04	505	4.44E-04	572	7.35E-04	639	5.37E-04	706	9.13E-05	773	1.11E-05
439	2.22E-04	506	4.56E-04	573	7.39E-04	640	5.29E-04	707	8.88E-05	774	1.02E-05
440	2.53E-04	507	4.61E-04	574	7.42E-04	641	5.16E-04	708	8.60E-05	775	1.01E-05
441	2.80E-04	508	4.74E-04	575	7.45E-04	642	5.06E-04	709	8.31E-05	776	9.70E-06
442	3.20E-04	509	4.80E-04	576	7.49E-04	643	4.97E-04	710	8.03E-05	777	9.40E-06
443	3.60E-04	510	4.89E-04	577	7.52E-04	644	4.88E-04	711	7.82E-05	778	9.30E-06
444	4.13E-04	511	4.95E-04	578	7.55E-04	645	4.79E-04	712	7.54E-05	779	9.30E-06
445	4.68E-04	512	5.02E-04	579	7.58E-04	646	4.72E-04	713	7.35E-05	780	9.30E-06
446	5.38E-04	513	5.09E-04	580	7.58E-04	647	4.60E-04	714	7.10E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2H/MVS @10W4000K	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	0.044	10.4	0.849
NON-WORST CASE	120.0	60	0.081	9.6	0.984

Test Result

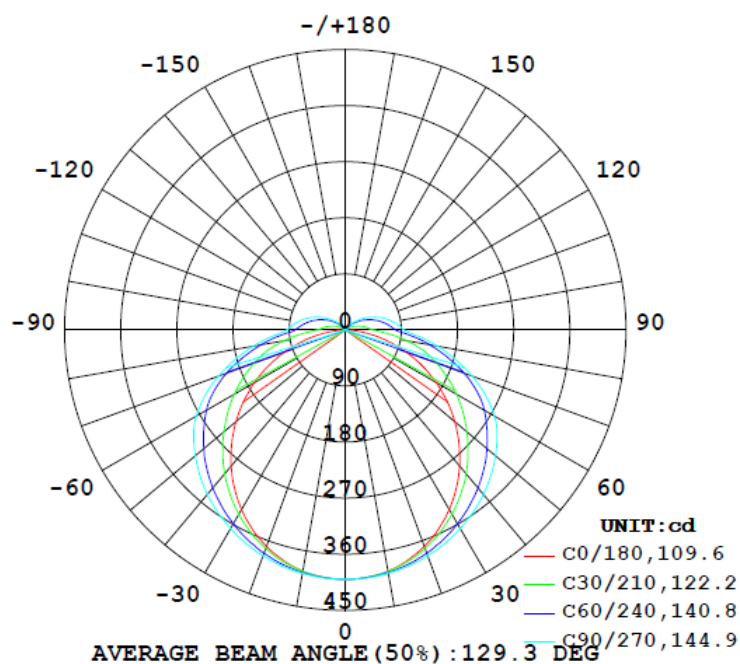
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
1564	782	161.5	161.5	109.5	144.7	150.4

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
62.5%	21.8	27.0

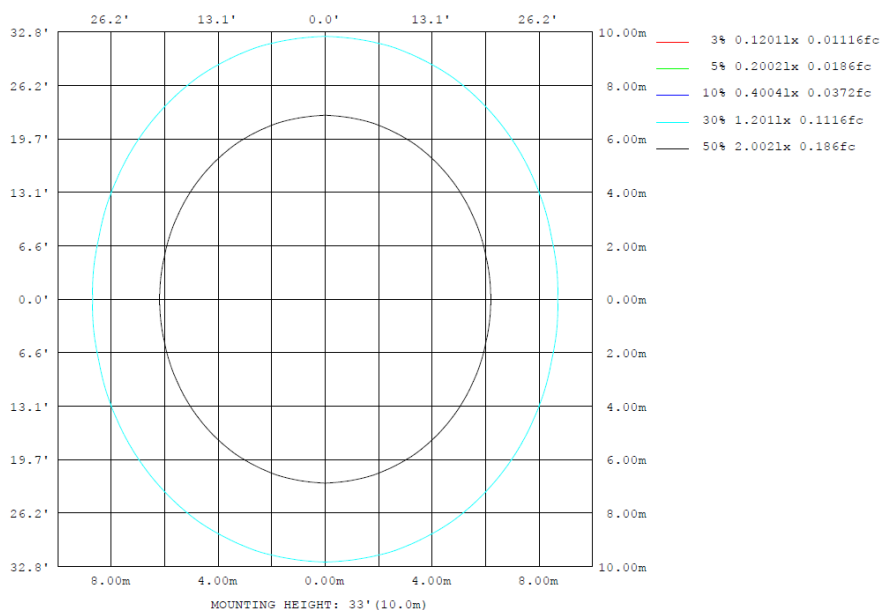
4.2 Goniophotometer Test

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	Φ lum, lamp
10	392.9	394.2	396.7	394.2	392.9	394.2	396.7	394.2	0- 10	37.93	37.93	2.43, 2.43
20	369.7	377.1	385.8	377.1	369.7	377.1	385.8	377.1	10- 20	109.4	147.3	9.42, 9.42
30	333.1	350.5	368.0	350.5	333.1	350.5	368.0	350.5	20- 30	168.4	315.7	20.2, 20.2
40	284.9	315.6	344.4	315.6	284.9	315.6	344.4	315.6	30- 40	209.0	524.8	33.6, 33.6
50	229.1	276.4	314.3	276.4	229.1	276.4	314.3	276.4	40- 50	228.1	752.9	48.1, 48.1
60	167.8	233.1	275.9	233.1	167.8	233.1	275.9	233.1	50- 60	225.2	978.1	62.5, 62.5
70	103.5	184.3	216.4	184.3	103.5	184.3	216.4	184.3	60- 70	199.5	1178	75.3, 75.3
80	41.56	121.4	149.9	121.4	41.56	121.4	149.9	121.4	70- 80	150.5	1328	84.9, 84.9
90	3.812	64.78	93.97	64.78	3.812	64.78	93.97	64.78	80- 90	90.33	1419	90.7, 90.7
100	3.124	49.76	77.50	49.76	3.124	49.76	77.50	49.76	90-100	56.39	1475	94.3, 94.3
110	3.124	34.51	59.14	34.51	3.124	34.51	59.14	34.51	100-110	40.76	1516	96.9, 96.9
120	3.124	20.32	39.98	20.32	3.124	20.32	39.98	20.32	110-120	25.87	1542	98.6, 98.6
130	3.124	7.571	23.03	7.571	3.124	7.571	23.03	7.571	120-130	13.71	1555	99.5, 99.5
140	3.124	2.330	7.601	2.330	3.124	2.330	7.601	2.330	130-140	5.409	1561	99.8, 99.8
150	3.124	1.959	1.253	1.959	3.124	1.959	1.253	1.959	140-150	1.583	1562	99.9, 99.9
160	3.020	1.584	1.205	1.584	3.020	1.584	1.205	1.584	150-160	0.8820	1563	100, 100
170	2.970	1.529	1.156	1.529	2.970	1.529	1.156	1.529	160-170	0.4870	1564	100, 100
180	2.935	1.490	1.123	1.490	2.935	1.490	1.123	1.490	170-180	0.1593	1564	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	37.93	0-10	37.93	2.43%
10-20	109.40	0-20	147.33	9.42%
20-30	168.40	0-30	315.73	20.19%
30-40	209.03	0-40	524.76	33.56%
40-50	228.13	0-50	752.89	48.15%
50-60	225.23	0-60	978.12	62.56%
60-70	199.54	0-70	1177.66	75.32%
70-80	150.53	0-80	1328.19	84.94%
80-90	90.33	0-90	1418.52	90.72%
90-100	56.39	0-100	1474.91	94.33%
100-110	40.76	0-110	1515.67	96.93%
110-120	25.87	0-120	1541.54	98.59%
120-130	13.71	0-130	1555.25	99.47%
130-140	5.41	0-140	1560.66	99.81%
140-150	1.58	0-150	1562.24	99.91%
150-160	0.88	0-160	1563.12	99.97%
160-170	0.49	0-170	1563.61	100.00%
170-180	0.16	0-180	1563.77	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	21.3	22.7	21.9	23.2	23.8
	4H	17.8	19.2	18.4	19.7	20.3	22.5	23.9	23.0	24.4	25.0
	6H	18.2	19.5	18.7	20.0	20.6	23.7	24.9	24.2	25.5	26.0
	8H	18.3	19.5	18.8	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	27.2
4H	2H	17.0	18.3	17.5	18.8	19.4	19.2	20.6	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	25.7
	6H	20.1	21.0	20.7	21.6	22.3	24.8	25.7	25.3	26.3	26.9
	8H	20.2	21.1	20.8	21.7	22.3	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	23.7	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	26.6	27.2
	8H	21.5	22.2	22.1	22.8	23.5	26.0	26.6	26.6	27.3	28.0
	12H	21.6	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	25.8
	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	22.5	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	17.3	18.9	17.8	19.3	19.9	20.4	21.9	20.9	22.4	22.9
	3H	18.9	20.3	19.4	20.8	21.4	22.9	24.3	23.5	24.8	25.4
	4H	19.4	20.8	20.0	21.3	21.9	24.1	25.5	24.6	26.0	26.6
	6H	19.8	21.1	20.3	21.6	22.2	25.3	26.5	25.8	27.1	27.6
	8H	19.9	21.1	20.4	21.6	22.2	25.8	27.0	26.4	27.6	28.2
	12H	19.9	21.1	20.5	21.6	22.3	26.4	27.6	27.0	28.1	28.8
4H	2H	18.6	19.9	19.1	20.4	21.0	20.8	22.2	21.3	22.7	23.2
	3H	20.5	21.6	21.0	22.2	22.8	23.7	24.8	24.2	25.4	26.0
	4H	21.2	22.2	21.8	22.8	23.4	25.0	26.0	25.6	26.6	27.3
	6H	21.7	22.6	22.3	23.2	23.9	26.4	27.3	26.9	27.9	28.5
	8H	21.8	22.7	22.4	23.3	23.9	27.0	27.9	27.6	28.5	29.1
	12H	21.9	22.7	22.5	23.3	24.0	27.7	28.5	28.3	29.1	29.8
8H	4H	22.1	23.0	22.7	23.6	24.2	25.3	26.1	25.8	26.7	27.4
	6H	22.8	23.6	23.4	24.2	24.9	26.8	27.5	27.4	28.2	28.8
	8H	23.1	23.8	23.7	24.4	25.1	27.6	28.2	28.2	28.9	29.6
	12H	23.2	23.9	23.9	24.5	25.2	28.4	29.0	29.1	29.7	30.4
12H	4H	22.3	23.1	22.9	23.7	24.4	25.3	26.1	25.9	26.7	27.4
	6H	23.2	23.8	23.8	24.5	25.2	26.8	27.5	27.5	28.1	28.8
	8H	23.5	24.1	24.1	24.8	25.5	27.7	28.3	28.3	28.9	29.7

Maximum UGR = 30.4

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	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
5	399	398	398	399	399	399	399	399	399	399	398	398	399	398	398	399	399	399	399
10	393	393	393	394	395	396	397	396	395	394	393	393	393	393	393	394	395	396	397
15	383	383	385	387	389	391	392	391	389	387	385	383	383	383	385	387	389	391	392
20	370	370	373	377	381	384	386	384	381	377	373	370	370	370	373	377	381	384	386
25	353	354	359	365	371	376	378	376	371	365	359	354	353	354	359	365	371	376	378
30	333	335	342	350	359	365	368	365	359	350	342	335	333	335	342	350	359	365	368
35	310	313	322	334	346	354	357	354	346	334	322	313	310	313	322	334	346	354	357
40	285	289	301	316	331	341	344	341	331	316	301	289	285	289	301	316	331	341	344
45	258	263	278	297	315	326	330	326	315	297	278	263	258	263	278	297	315	326	330
50	229	236	254	276	297	310	314	310	297	276	254	236	229	236	254	276	297	310	314
55	199	208	230	255	277	292	297	292	277	255	230	208	199	208	230	255	277	292	297
60	168	179	206	233	257	272	276	272	257	233	206	179	168	179	206	233	257	272	276
65	136	150	181	211	233	245	248	245	233	211	181	150	136	150	181	211	233	245	248
70	104	122	156	184	203	213	216	213	203	184	156	122	104	122	156	184	203	213	216
75	71.7	95.0	130	154	170	180	183	180	170	154	130	95.0	71.7	95.0	130	154	170	180	183
80	41.6	69.1	100.0	121	137	147	150	147	137	121	100.0	69.1	41.6	69.1	100.0	121	137	147	150
85	16.8	43.7	69.7	90.3	106	116	118	116	106	90.3	69.7	43.7	16.8	43.7	69.7	90.3	106	116	118
90	3.81	21.6	44.5	64.8	80.9	90.9	94.0	90.9	80.9	64.8	44.5	21.6	3.81	21.6	44.5	64.8	80.9	90.9	94.0
95	3.12	15.7	37.3	56.8	72.5	82.7	85.9	82.7	72.5	56.8	37.3	15.7	3.12	15.7	37.3	56.8	72.5	82.7	85.9
100	3.12	10.7	31.1	49.8	64.5	74.1	77.5	74.1	64.5	49.8	31.1	10.7	3.12	10.7	31.1	49.8	64.5	74.1	77.5
105	3.12	6.52	24.5	42.2	56.4	65.3	68.6	65.3	56.4	42.2	24.5	6.52	3.12	6.52	24.5	42.2	56.4	65.3	68.6
110	3.12	3.49	18.4	34.5	47.8	56.2	59.1	56.2	47.8	34.5	18.4	3.49	3.12	3.49	18.4	34.5	47.8	56.2	59.1
115	3.12	3.26	12.6	27.3	39.3	46.8	49.4	46.8	39.3	27.3	12.6	3.26	3.12	3.26	12.6	27.3	39.3	46.8	49.4
120	3.12	3.21	7.49	20.3	31.3	37.9	40.0	37.9	31.3	20.3	7.49	3.21	3.12	3.21	7.49	20.3	31.3	37.9	40.0
125	3.12	3.09	3.47	13.6	23.4	29.3	31.4	29.3	23.4	13.6	3.47	3.09	3.12	3.09	3.47	13.6	23.4	29.3	31.4
130	3.12	3.05	2.99	7.57	15.9	21.2	23.0	21.2	15.9	7.57	2.99	3.05	3.12	3.05	2.99	7.57	15.9	21.2	23.0
135	3.12	3.04	2.70	2.90	9.00	13.4	15.2	13.4	9.00	2.90	2.70	3.04	3.12	3.04	2.70	2.90	9.00	13.4	15.2
140	3.12	3.02	2.51	2.33	3.01	6.38	7.60	6.38	3.01	2.33	2.51	3.02	3.12	3.02	2.51	2.33	3.01	6.38	7.60
145	3.12	3.01	2.43	2.27	1.87	1.69	1.79	1.69	1.87	2.27	2.43	3.01	3.12	3.01	2.43	2.27	1.87	1.69	1.79
150	3.12	2.77	2.06	1.96	1.68	1.36	1.25	1.36	1.68	1.96	2.06	2.77	3.12	2.77	2.06	1.96	1.68	1.36	1.25
155	3.12	2.64	2.00	1.86	1.65	1.26	1.23	1.26	1.65	1.86	2.00	2.64	3.12	2.64	2.00	1.86	1.65	1.26	1.23
160	3.02	2.38	1.78	1.58	1.40	1.21	1.20	1.21	1.40	1.58	1.78	2.38	3.02	2.38	1.78	1.58	1.40	1.21	1.20
165	2.99	2.34	1.75	1.56	1.37	1.18	1.18	1.18	1.37	1.56	1.75	2.34	2.99	2.34	1.75	1.56	1.37	1.18	1.18
170	2.97	2.31	1.72	1.53	1.34	1.16	1.16	1.16	1.34	1.53	1.72	2.31	2.97	2.31	1.72	1.53	1.34	1.16	1.16
175	2.94	2.27	1.69	1.50	1.32	1.13	1.13	1.13	1.32	1.50	1.69	2.27	2.94	2.27	1.69	1.50	1.32	1.13	1.13
180	2.93	2.26	1.68	1.49	1.31	1.12	1.12	1.12	1.31	1.49	1.68	2.26	2.93	2.26	1.68	1.49	1.31	1.12	1.12

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	400	400	400	400	400														
5	399	399	399	398	398														
10	396	395	394	393	393														
15	391	389	387	385	383														
20	384	381	377	373	370														
25	376	371	365	359	354														
30	365	359	350	342	335														
35	354	346	334	322	313														
40	341	331	316	301	289														
45	326	315	297	278	263														
50	310	297	276	254	236														
55	292	277	255	230	208														
60	272	257	233	206	179														
65	245	233	211	181	150														
70	213	203	184	156	122														
75	180	170	154	130	95.0														
80	147	137	121	100.0	69.1														
85	116	106	90.3	69.7	43.7														
90	90.9	80.9	64.8	44.5	21.6														
95	82.7	72.5	56.8	37.3	15.7														
100	74.1	64.5	49.8	31.1	10.7														
105	65.3	56.4	42.2	24.5	6.52														
110	56.2	47.8	34.5	18.4	3.49														
115	46.8	39.3	27.3	12.6	3.26														
120	37.9	31.3	20.3	7.49	3.21														
125	29.3	23.4	13.6	3.47	3.09														
130	21.2	15.9	7.57	2.99	3.05														
135	13.4	9.00	2.90	2.70	3.04														
140	6.38	3.01	2.33	2.51	3.02														
145	1.69	1.87	2.27	2.43	3.01														
150	1.36	1.68	1.96	2.06	2.77														
155	1.26	1.65	1.86	2.00	2.64														
160	1.21	1.40	1.58	1.78	2.38														
165	1.18	1.37	1.56	1.75	2.34														
170	1.16	1.34	1.53	1.72	2.31														
175	1.13	1.32	1.50	1.69	2.27														
180	1.12	1.31	1.49	1.68	2.26														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2H/MVS @10W4000K	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	0.081	9.6	0.984	8.55
277.0	60	0.044	10.4	0.849	21.20

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*****