

Photometric Test Report

Relevant Standards

- ☒ ANSI/IES LM-79-2019
- ☒ ANSI C82.77-2017

Prepared For

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Issue Date: 2025-04-01

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		692
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	142.6
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		9.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	6.22
				277V	11.11
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.993
				277V	0.917
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3415
			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%		56.0%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	30.1
			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		0.038
(Goniophotometer – Section 4.2)			Non-Worst Case		0.078
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		9.7
(Goniophotometer – Section 4.2)			Non-Worst Case		9.3

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-03-29	STRP2/MVS @10W3500K	-	250324005-S1
2	Goniophotometer Test	2025-03-29	STRP2/MVS @10W3500K	-	250324005-S1
3	THD and PF Test	2025-03-29	STRP2/MVS @10W3500K	-	250324005-S1

Remark (If any):

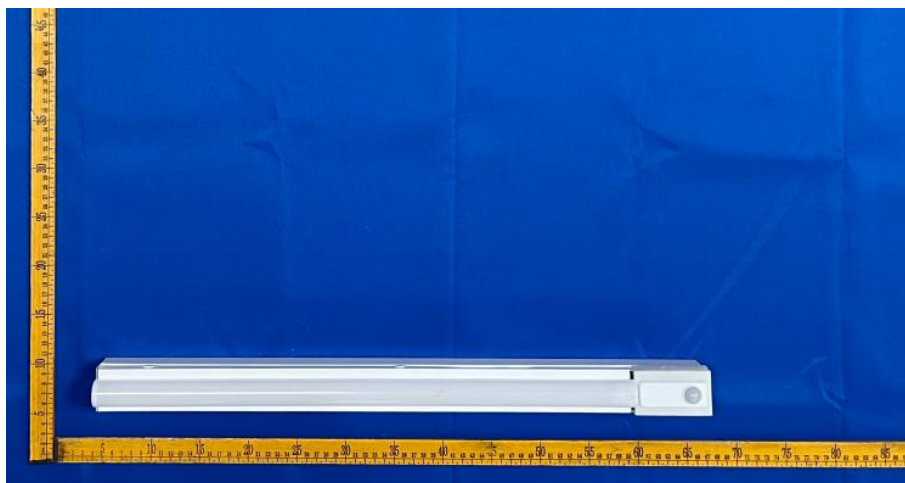
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3.0 Product Description

Luminaire Description: Model No. STRP2/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.	STRP2/MVS @10W3500K	Sample ID	250324005-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

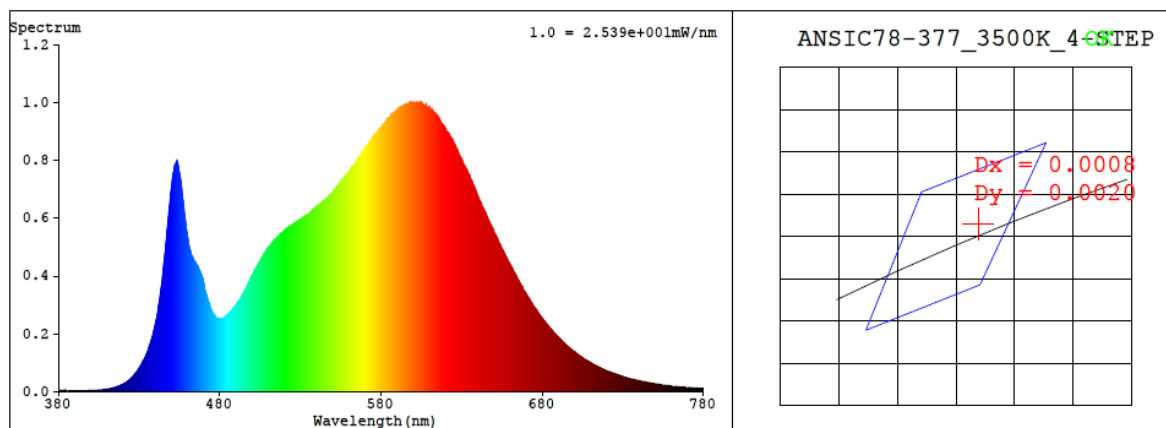
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.078	9.3	0.993
277.0	60	0.038	9.7	0.917

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3415	83.8	11	0.0007	1.5	85	95	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4110$ $y = 0.3951$ / $u' = 0.2376$ $v' = 0.5139$ ($duv=6.97e-04$)

CCT= 3415K Prcp WL: $L_d=580.9nm$ Purity=41.9%

Peak WL: $L_p=605nm$ FWHM: $=143.5nm$ 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: 0.10029 A++ Highest

R1 =82 R2 =92 R3 =96 R4 =82 R5 =82 R6 =89 R7 =84

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

4.1 Integrating Sphere Test

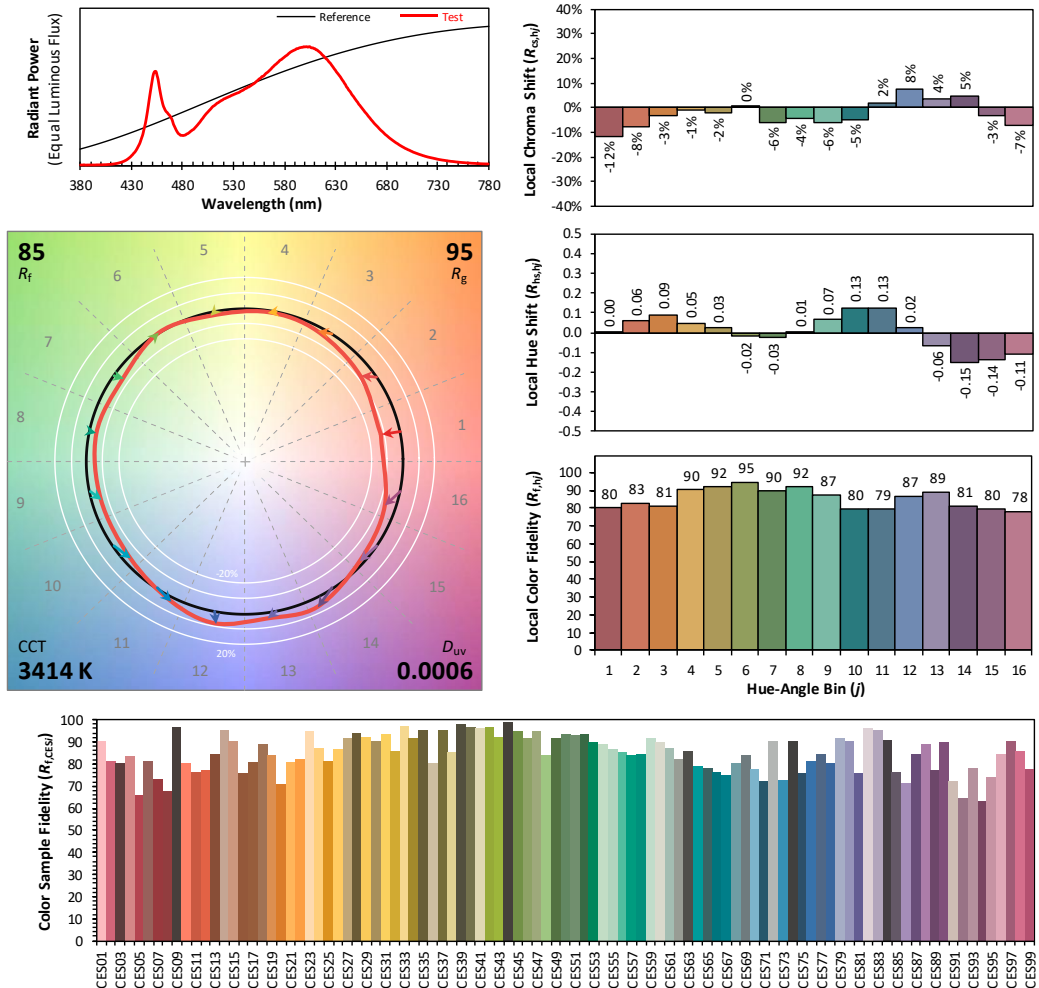
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/1

Model: STRP2/MVS @10W3500K



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

x 0.4110
 y 0.3950
 u' 0.2376
 v' 0.5139

CIE 13.3-1995
(CRI)

R_a 84
 R_9 10

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	2.50E-06	447	5.39E-04	514	5.24E-04	581	9.20E-04	648	5.77E-04	715	8.48E-05
381	2.50E-06	448	5.97E-04	515	5.27E-04	582	9.25E-04	649	5.64E-04	716	8.15E-05
382	2.10E-06	449	6.52E-04	516	5.34E-04	583	9.31E-04	650	5.52E-04	717	7.94E-05
383	3.80E-06	450	7.04E-04	517	5.39E-04	584	9.40E-04	651	5.40E-04	718	7.63E-05
384	2.70E-06	451	7.54E-04	518	5.46E-04	585	9.47E-04	652	5.30E-04	719	7.41E-05
385	1.10E-06	452	7.82E-04	519	5.49E-04	586	9.54E-04	653	5.15E-04	720	7.16E-05
386	2.00E-06	453	7.92E-04	520	5.56E-04	587	9.59E-04	654	5.06E-04	721	6.92E-05
387	2.30E-06	454	7.89E-04	521	5.61E-04	588	9.64E-04	655	4.94E-04	722	6.73E-05
388	2.20E-06	455	7.56E-04	522	5.63E-04	589	9.68E-04	656	4.84E-04	723	6.52E-05
389	2.70E-06	456	7.23E-04	523	5.69E-04	590	9.72E-04	657	4.72E-04	724	6.33E-05
390	2.50E-06	457	6.69E-04	524	5.72E-04	591	9.76E-04	658	4.61E-04	725	6.15E-05
391	2.60E-06	458	6.21E-04	525	5.76E-04	592	9.83E-04	659	4.49E-04	726	5.98E-05
392	2.40E-06	459	5.75E-04	526	5.80E-04	593	9.83E-04	660	4.40E-04	727	5.76E-05
393	2.20E-06	460	5.37E-04	527	5.83E-04	594	9.87E-04	661	4.30E-04	728	5.60E-05
394	2.30E-06	461	5.04E-04	528	5.89E-04	595	9.91E-04	662	4.18E-04	729	5.38E-05
395	2.80E-06	462	4.83E-04	529	5.91E-04	596	9.92E-04	663	4.07E-04	730	5.17E-05
396	3.50E-06	463	4.65E-04	530	5.96E-04	597	9.95E-04	664	3.98E-04	731	4.99E-05
397	3.20E-06	464	4.52E-04	531	5.99E-04	598	9.95E-04	665	3.86E-04	732	4.83E-05
398	3.60E-06	465	4.44E-04	532	6.03E-04	599	9.99E-04	666	3.76E-04	733	4.68E-05
399	3.60E-06	466	4.32E-04	533	6.07E-04	600	9.98E-04	667	3.66E-04	734	4.53E-05
400	3.60E-06	467	4.23E-04	534	6.10E-04	601	9.99E-04	668	3.55E-04	735	4.38E-05
401	4.30E-06	468	4.12E-04	535	6.13E-04	602	1.00E-03	669	3.46E-04	736	4.27E-05
402	4.00E-06	469	3.96E-04	536	6.17E-04	603	9.96E-04	670	3.37E-04	737	4.15E-05
403	4.70E-06	470	3.78E-04	537	6.23E-04	604	9.99E-04	671	3.29E-04	738	4.00E-05
404	4.70E-06	471	3.48E-04	538	6.28E-04	605	9.99E-04	672	3.20E-04	739	3.87E-05
405	5.10E-06	472	3.29E-04	539	6.32E-04	606	9.92E-04	673	3.10E-04	740	3.78E-05
406	5.80E-06	473	3.11E-04	540	6.37E-04	607	9.90E-04	674	3.01E-04	741	3.58E-05
407	6.50E-06	474	2.93E-04	541	6.43E-04	608	9.90E-04	675	2.93E-04	742	3.49E-05
408	6.60E-06	475	2.79E-04	542	6.47E-04	609	9.84E-04	676	2.85E-04	743	3.35E-05
409	7.70E-06	476	2.67E-04	543	6.51E-04	610	9.83E-04	677	2.77E-04	744	3.26E-05
410	8.50E-06	477	2.61E-04	544	6.58E-04	611	9.74E-04	678	2.68E-04	745	3.20E-05
411	9.10E-06	478	2.53E-04	545	6.60E-04	612	9.73E-04	679	2.60E-04	746	3.10E-05
412	1.05E-05	479	2.53E-04	546	6.66E-04	613	9.65E-04	680	2.53E-04	747	3.00E-05
413	1.16E-05	480	2.51E-04	547	6.71E-04	614	9.58E-04	681	2.46E-04	748	2.87E-05
414	1.33E-05	481	2.51E-04	548	6.77E-04	615	9.51E-04	682	2.39E-04	749	2.77E-05
415	1.48E-05	482	2.54E-04	549	6.83E-04	616	9.43E-04	683	2.31E-04	750	2.70E-05
416	1.64E-05	483	2.56E-04	550	6.88E-04	617	9.32E-04	684	2.25E-04	751	2.60E-05
417	1.85E-05	484	2.63E-04	551	6.95E-04	618	9.25E-04	685	2.18E-04	752	2.51E-05
418	2.05E-05	485	2.66E-04	552	7.03E-04	619	9.17E-04	686	2.12E-04	753	2.44E-05
419	2.33E-05	486	2.72E-04	553	7.11E-04	620	9.07E-04	687	2.06E-04	754	2.35E-05
420	2.56E-05	487	2.79E-04	554	7.17E-04	621	8.98E-04	688	1.99E-04	755	2.28E-05
421	2.92E-05	488	2.87E-04	555	7.26E-04	622	8.91E-04	689	1.93E-04	756	2.23E-05
422	3.24E-05	489	2.93E-04	556	7.32E-04	623	8.80E-04	690	1.87E-04	757	2.15E-05
423	3.63E-05	490	2.99E-04	557	7.38E-04	624	8.69E-04	691	1.83E-04	758	2.07E-05
424	4.06E-05	491	3.04E-04	558	7.48E-04	625	8.61E-04	692	1.76E-04	759	2.01E-05
425	4.53E-05	492	3.14E-04	559	7.50E-04	626	8.49E-04	693	1.70E-04	760	1.94E-05
426	5.11E-05	493	3.23E-04	560	7.57E-04	627	8.37E-04	694	1.65E-04	761	1.87E-05
427	5.77E-05	494	3.33E-04	561	7.67E-04	628	8.25E-04	695	1.60E-04	762	1.85E-05
428	6.46E-05	495	3.43E-04	562	7.76E-04	629	8.12E-04	696	1.55E-04	763	1.77E-05
429	7.20E-05	496	3.54E-04	563	7.81E-04	630	8.02E-04	697	1.51E-04	764	1.69E-05
430	8.14E-05	497	3.64E-04	564	7.88E-04	631	7.88E-04	698	1.46E-04	765	1.68E-05
431	8.96E-05	498	3.76E-04	565	7.97E-04	632	7.78E-04	699	1.41E-04	766	1.62E-05
432	1.01E-04	499	3.88E-04	566	8.05E-04	633	7.67E-04	700	1.37E-04	767	1.60E-05
433	1.09E-04	500	3.98E-04	567	8.13E-04	634	7.56E-04	701	1.33E-04	768	1.52E-05
434	1.21E-04	501	4.11E-04	568	8.24E-04	635	7.44E-04	702	1.29E-04	769	1.44E-05
435	1.35E-04	502	4.21E-04	569	8.31E-04	636	7.30E-04	703	1.26E-04	770	1.42E-05
436	1.51E-04	503	4.32E-04	570	8.40E-04	637	7.17E-04	704	1.21E-04	771	1.41E-05
437	1.68E-04	504	4.41E-04	571	8.48E-04	638	7.06E-04	705	1.17E-04	772	1.33E-05
438	1.85E-04	505	4.50E-04	572	8.54E-04	639	6.91E-04	706	1.13E-04	773	1.27E-05
439	2.09E-04	506	4.60E-04	573	8.63E-04	640	6.79E-04	707	1.09E-04	774	1.25E-05
440	2.35E-04	507	4.69E-04	574	8.70E-04	641	6.61E-04	708	1.06E-04	775	1.20E-05
441	2.60E-04	508	4.78E-04	575	8.80E-04	642	6.51E-04	709	1.03E-04	776	1.19E-05
442	2.98E-04	509	4.89E-04	576	8.87E-04	643	6.36E-04	710	9.97E-05	777	1.15E-05
443	3.33E-04	510	4.97E-04	577	8.91E-04	644	6.26E-04	711	9.65E-05	778	1.13E-05
444	3.75E-04	511	5.02E-04	578	8.99E-04	645	6.15E-04	712	9.32E-05	779	1.13E-05
445	4.25E-04	512	5.09E-04	579	9.06E-04	646	5.99E-04	713	9.03E-05	780	1.13E-05
446	4.79E-04	513	5.16E-04	580	9.12E-04	647	5.88E-04	714	8.75E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2/MVS @10W3500K	Sample ID	250324005-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.7	Humidity (%RH)	41.3

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	0.038	9.7	0.917
NON-WORST CASE	120.0	60	0.078	9.3	0.993

Test Result

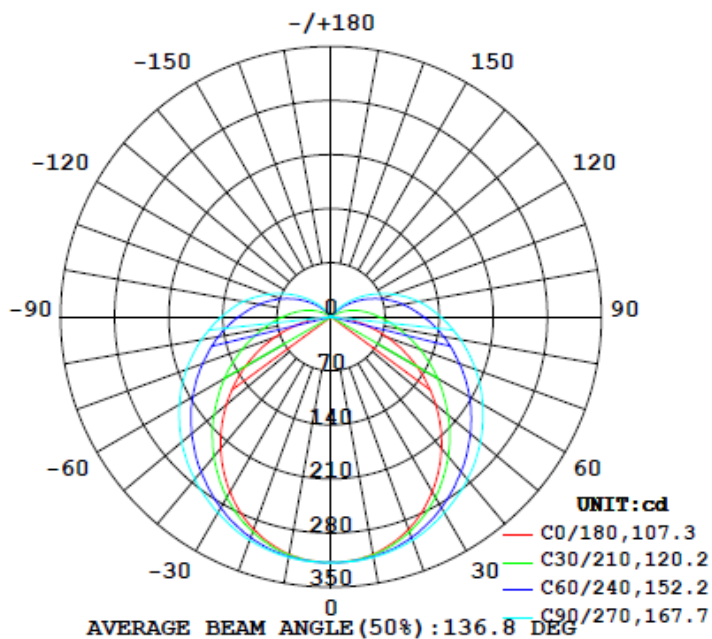
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
1383	692	160.6	160.6	107.2	167.6	142.6

Zonal Lumen Requirement	UGR	
(0° - 60°)	Crosswise	Endwise
56.0%	22.1	30.1

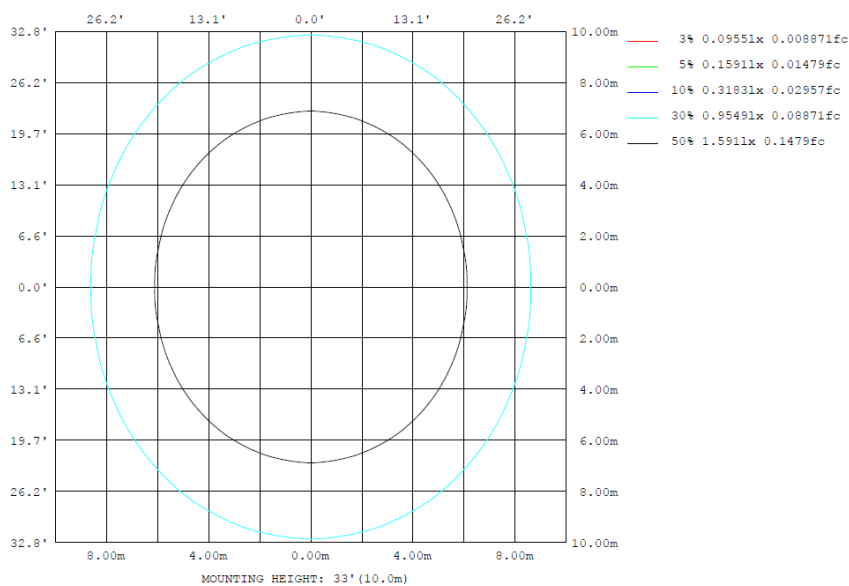
4.2 Goniophotometer Test

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	312.1	314.0	316.2	314.0	312.1	314.0	316.2	314.0	0- 10	30.18	30.18	2.18, 2.18
20	292.9	300.2	307.9	300.2	292.9	300.2	307.9	300.2	10- 20	87.06	117.2	8.48, 8.48
30	261.6	278.0	292.7	278.0	261.6	278.0	292.7	278.0	20- 30	133.7	250.9	18.1, 18.1
40	222.4	248.9	274.4	248.9	222.4	248.9	274.4	248.9	30- 40	165.1	416.1	30.1, 30.1
50	177.0	217.9	252.3	217.9	177.0	217.9	252.3	217.9	40- 50	179.8	595.9	43.1, 43.1
60	127.8	184.8	226.4	184.8	127.8	184.8	226.4	184.8	50- 60	178.0	773.8	56, 56
70	77.59	152.0	199.0	152.0	77.59	152.0	199.0	152.0	60- 70	162.1	935.9	67.7, 67.7
80	30.90	121.6	170.3	121.6	30.90	121.6	170.3	121.6	70- 80	136.5	1072	77.5, 77.5
90	3.638	94.44	142.0	94.44	3.638	94.44	142.0	94.44	80- 90	107.6	1180	85.3, 85.3
100	2.421	71.32	115.1	71.32	2.421	71.32	115.1	71.32	90-100	81.76	1262	91.2, 91.2
110	2.421	48.05	85.67	48.05	2.421	48.05	85.67	48.05	100-110	57.85	1320	95.4, 95.4
120	2.421	27.43	57.48	27.43	2.421	27.43	57.48	27.43	110-120	35.82	1355	98, 98
130	2.421	9.454	32.32	9.454	2.421	9.454	32.32	9.454	120-130	18.35	1374	99.3, 99.3
140	2.561	1.901	10.43	1.901	2.561	1.901	10.43	1.901	130-140	6.691	1381	99.8, 99.8
150	2.422	1.283	1.075	1.283	2.422	1.283	1.075	1.283	140-150	1.407	1382	99.9, 99.9
160	2.022	1.083	0.9962	1.083	2.022	1.083	0.9962	1.083	150-160	0.5826	1383	100, 100
170	1.955	1.038	0.9518	1.038	1.955	1.038	0.9518	1.038	160-170	0.3355	1383	100, 100
180	2.421	1.188	0.9240	1.188	2.421	1.188	0.9240	1.188	170-180	0.1157	1383	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	30.18	0-10	30.18	2.18%
10-20	87.06	0-20	117.24	8.48%
20-30	133.68	0-30	250.92	18.14%
30-40	165.15	0-40	416.07	30.09%
40-50	179.81	0-50	595.88	43.09%
50-60	177.97	0-60	773.85	55.96%
60-70	162.10	0-70	935.95	67.68%
70-80	136.50	0-80	1072.45	77.55%
80-90	107.62	0-90	1180.07	85.33%
90-100	81.76	0-100	1261.83	91.25%
100-110	57.85	0-110	1319.68	95.43%
110-120	35.82	0-120	1355.50	98.02%
120-130	18.35	0-130	1373.85	99.35%
130-140	6.69	0-140	1380.54	99.83%
140-150	1.41	0-150	1381.95	99.93%
150-160	0.58	0-160	1382.53	99.98%
160-170	0.34	0-170	1382.87	100.00%
170-180	0.12	0-180	1382.99	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	16.9	18.3	17.5	18.9	19.6	21.0	22.5	21.6	23.1	23.7
	3H	18.3	19.6	18.8	20.2	20.9	24.0	25.3	24.6	25.9	26.6
	4H	18.7	20.0	19.3	20.6	21.3	25.5	26.8	26.1	27.4	28.1
	6H	19.0	20.1	19.6	20.8	21.5	27.2	28.3	27.8	29.0	29.7
	8H	19.0	20.1	19.6	20.8	21.5	28.0	29.1	28.6	29.8	30.5
	12H	19.0	20.1	19.7	20.8	21.5	29.0	30.0	29.6	30.7	31.4
4H	2H	18.2	19.5	18.8	20.1	20.8	21.4	22.6	22.0	23.2	23.9
	3H	19.9	21.0	20.5	21.6	22.4	24.6	25.6	25.2	26.3	27.0
	4H	20.5	21.5	21.1	22.1	22.9	26.2	27.2	26.9	27.9	28.6
	6H	20.9	21.8	21.5	22.5	23.2	28.1	28.9	28.7	29.6	30.4
	8H	21.0	21.8	21.6	22.5	23.3	29.0	29.9	29.7	30.5	31.3
	12H	21.0	21.8	21.7	22.5	23.3	30.1	30.8	30.8	31.6	32.3
8H	4H	21.7	22.5	22.3	23.2	24.0	26.4	27.2	27.1	27.9	28.7
	6H	22.3	23.0	23.0	23.8	24.5	28.4	29.1	29.1	29.8	30.6
	8H	22.5	23.2	23.2	23.9	24.7	29.5	30.1	30.2	30.8	31.6
	12H	22.7	23.3	23.4	24.0	24.8	30.7	31.3	31.4	32.0	32.9
12H	4H	22.0	22.8	22.7	23.5	24.3	26.4	27.2	27.1	27.9	28.7
	6H	22.9	23.5	23.6	24.2	25.1	28.4	29.1	29.1	29.8	30.6
	8H	23.2	23.8	23.9	24.5	25.4	29.6	30.2	30.3	30.9	31.7

Maximum UGR = 32.9

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	18.0	19.4	18.6	20.0	20.7	22.1	23.6	22.7	24.2	24.8
	3H	19.4	20.7	19.9	21.3	22.0	25.1	26.4	25.7	27.0	27.7
	4H	19.8	21.1	20.4	21.7	22.4	26.6	27.9	27.2	28.5	29.2
	6H	20.1	21.2	20.7	21.9	22.6	28.3	29.4	28.9	30.1	30.8
	8H	20.1	21.2	20.7	21.9	22.6	29.1	30.2	29.7	30.9	31.6
	12H	20.1	21.2	20.8	21.9	22.6	30.1	31.1	30.7	31.8	32.5
4H	2H	19.3	20.6	19.9	21.2	21.9	22.5	23.7	23.1	24.3	25.0
	3H	21.0	22.1	21.6	22.7	23.5	25.7	26.7	26.3	27.4	28.1
	4H	21.6	22.6	22.2	23.2	24.0	27.3	28.3	28.0	29.0	29.7
	6H	22.0	22.9	22.6	23.6	24.3	29.2	30.0	29.8	30.7	31.5
	8H	22.1	22.9	22.7	23.6	24.4	30.1	31.0	30.8	31.6	32.4
	12H	22.1	22.9	22.8	23.6	24.4	31.2	31.9	31.9	32.7	33.4
8H	4H	22.8	23.6	23.4	24.3	25.1	27.5	28.3	28.2	29.0	29.8
	6H	23.4	24.1	24.1	24.9	25.6	29.5	30.2	30.2	30.9	31.7
	8H	23.6	24.3	24.3	25.0	25.8	30.6	31.2	31.3	31.9	32.7
	12H	23.8	24.4	24.5	25.1	25.9	31.8	32.4	32.5	33.1	34.0
12H	4H	23.1	23.9	23.8	24.6	25.4	27.5	28.3	28.2	29.0	29.8
	6H	24.0	24.6	24.7	25.3	26.2	29.5	30.2	30.2	30.9	31.7
	8H	24.3	24.9	25.0	25.6	26.5	30.7	31.3	31.4	32.0	32.8

Maximum UGR = 34.0

4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
γ (DEG)	0	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318
5	317	317	317	317	317	318	318	318	318	317	317	317	317	317	317	317	317	317	318
10	312	313	313	314	315	315	316	315	315	314	313	313	312	313	313	314	315	315	316
15	304	304	306	309	311	312	313	312	311	309	306	304	304	304	306	309	311	312	313
20	293	294	296	300	304	306	308	306	304	300	296	294	293	294	296	300	304	306	308
25	279	280	284	290	296	299	301	299	296	290	284	280	279	280	284	290	296	299	301
30	262	264	270	278	286	291	293	291	286	278	270	264	262	264	270	278	286	291	293
35	243	245	253	264	274	281	284	281	274	264	253	245	243	245	253	264	274	281	284
40	222	226	236	249	262	271	274	271	262	249	236	226	222	226	236	249	262	271	274
45	200	205	217	233	249	260	264	260	249	233	217	205	200	205	217	233	249	260	264
50	177	183	198	218	235	248	252	248	235	218	198	183	177	183	198	218	235	248	252
55	153	161	178	201	221	235	239	235	221	201	178	161	153	161	178	201	221	235	239
60	128	138	159	185	207	221	226	221	207	185	159	138	128	138	159	185	207	221	226
65	103	115	141	168	192	208	213	208	192	168	141	115	103	115	141	168	192	208	213
70	77.6	92.6	122	152	177	194	199	194	177	152	122	92.6	77.6	92.6	122	152	177	194	199
75	53.1	72.0	105	137	162	179	185	179	162	137	105	72.0	53.1	72.0	105	137	162	179	185
80	30.9	53.7	89.1	122	148	165	170	165	148	122	89.1	53.7	30.9	53.7	89.1	122	148	165	170
85	12.9	38.5	75.2	108	134	150	156	150	134	108	75.2	38.5	12.9	38.5	75.2	108	134	150	156
90	3.64	27.5	62.2	94.4	120	136	142	136	120	94.4	62.2	27.5	3.64	27.5	62.2	94.4	120	136	142
95	2.70	19.5	52.0	82.7	107	122	129	122	107	82.7	52.0	19.5	2.70	19.5	52.0	82.7	107	122	129
100	2.42	13.0	42.0	71.3	94.4	109	115	109	94.4	71.3	42.0	13.0	2.42	13.0	42.0	71.3	94.4	109	115
105	2.42	7.30	32.6	59.4	81.4	95.1	100	95.1	81.4	59.4	32.6	7.30	2.42	7.30	32.6	59.4	81.4	95.1	100
110	2.42	3.24	24.1	48.1	68.2	80.8	85.7	80.8	68.2	48.1	24.1	3.24	2.42	3.24	24.1	48.1	68.2	80.8	85.7
115	2.42	2.75	15.9	37.4	55.6	66.8	71.2	66.8	55.6	37.4	15.9	2.75	2.42	2.75	15.9	37.4	55.6	66.8	71.2
120	2.42	2.57	8.90	27.4	43.4	53.6	57.5	53.6	43.4	27.4	8.90	2.57	2.42	2.57	8.90	27.4	43.4	53.6	57.5
125	2.42	2.56	3.13	18.1	32.1	41.3	44.3	41.3	32.1	18.1	3.13	2.56	2.42	2.56	3.13	18.1	32.1	41.3	44.3
130	2.42	2.45	2.39	9.45	21.5	29.7	32.3	29.7	21.5	9.45	2.39	2.45	2.42	2.45	2.39	9.45	21.5	29.7	32.3
135	2.42	2.35	2.33	2.68	11.6	18.7	21.0	18.7	11.6	2.68	2.33	2.35	2.42	2.35	2.33	2.68	11.6	18.7	21.0
140	2.56	2.33	2.09	1.90	3.15	8.44	10.4	8.44	3.15	1.90	2.09	2.33	2.56	2.33	2.09	1.90	3.15	8.44	10.4
145	2.68	2.31	1.92	1.55	1.68	1.47	1.69	1.47	1.68	1.55	1.92	2.31	2.68	2.31	1.92	1.55	1.68	1.47	1.69
150	2.42	1.57	1.32	1.28	1.41	1.18	1.07	1.18	1.41	1.28	1.32	1.57	2.42	1.57	1.32	1.28	1.41	1.18	1.07
155	1.96	1.29	1.06	1.20	1.10	1.10	1.02	1.10	1.10	1.20	1.06	1.29	1.96	1.29	1.06	1.20	1.10	1.10	1.02
160	2.02	1.29	1.10	1.08	1.10	1.00	1.10	1.08	1.08	1.10	1.29	2.02	1.29	1.10	1.08	1.08	1.10	1.00	1.10
165	1.99	1.29	1.10	1.06	1.06	1.10	0.97	1.10	1.06	1.06	1.10	1.29	1.99	1.29	1.10	1.06	1.06	1.10	0.97
170	1.96	1.29	1.10	1.04	1.04	1.10	0.95	1.10	1.04	1.04	1.10	1.29	1.96	1.29	1.10	1.04	1.04	1.10	0.95
175	2.33	1.48	1.10	1.01	1.02	1.10	0.93	1.10	1.02	1.01	1.10	1.48	2.33	1.48	1.10	1.01	1.02	1.10	0.93
180	2.42	1.48	1.10	1.19	1.01	1.10	0.92	1.10	1.01	1.19	1.10	1.48	2.42	1.48	1.10	1.19	1.01	1.10	0.92

Table--2

UNIT: cd

C (DEG)	285	300	315	330	345														
γ (DEG)	0	318	318	318	318	318													
5	318	317	317	317	317														
10	315	315	314	313	313														
15	312	311	309	306	304														
20	306	304	300	296	294														
25	299	296	290	284	280														
30	291	286	278	270	264														
35	281	274	264	253	245														
40	271	262	249	236	226														
45	260	249	233	217	205														
50	248	235	218	198	183														
55	235	221	201	178	161														
60	221	207	185	159	138														
65	208	192	168	141	115														
70	194	177	152	122	92.6														
75	179	162	137	105	72.0														
80	165	148	122	89.1	53.7														
85	150	134	108	75.2	38.5														
90	136	120	94.4	62.2	27.5														
95	122	107	82.7	52.0	19.5														
100	109	94.4	71.3	42.0	13.0														
105	95.1	81.4	59.4	32.6	7.30														
110	80.8	68.2	48.1	24.1	3.24														
115	66.8	55.6	37.4	15.9	2.75														
120	53.6	43.4	27.4	8.90	2.57														
125	41.3	32.1	18.1	3.13	2.56														
130	29.7	21.5	9.45	2.39	2.45														
135	18.7	11.6	2.68	2.33	2.35														
140	8.44	3.15	1.90	2.09	2.33														
145	1.47	1.68	1.55	1.92	2.31														
150	1.18	1.41	1.28	1.32	1.57														
155	1.10	1.10	1.20	1.06	1.29														
160	1.10	1.08	1.08	1.10	1.29														
165	1.10	1.06	1.06	1.10	1.29														
170	1.10	1.04	1.04	1.10	1.29														
175	1.10	1.02	1.01	1.10	1.48														
180	1.10	1.01	1.19	1.10	1.48														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2/MVS @10W3500K	Sample ID	250324005-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	0.078	9.3	0.993	6.22
277.0	60	0.038	9.7	0.917	11.11

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*****