

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

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Issue Date: 2025-01-04

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		455
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	142.1
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		6.4
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	7.76
				277V	18.36
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.981
				277V	0.841
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4915
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		83.7
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		14
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		84
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		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%		55.6%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	28.4
			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		0.027
(Goniophotometer – Section 4.2)			Non-Worst Case		0.049
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		6.4
(Goniophotometer – Section 4.2)			Non-Worst Case		5.8

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-01-02	STRP2 @6W5000K	-	241225003-S1
2	Goniophotometer Test	2025-01-02	STRP2 @6W5000K	-	241225003-S1
3	THD and PF Test	2025-01-02	STRP2 @6W5000K	-	241225003-S1

Remark (If any):

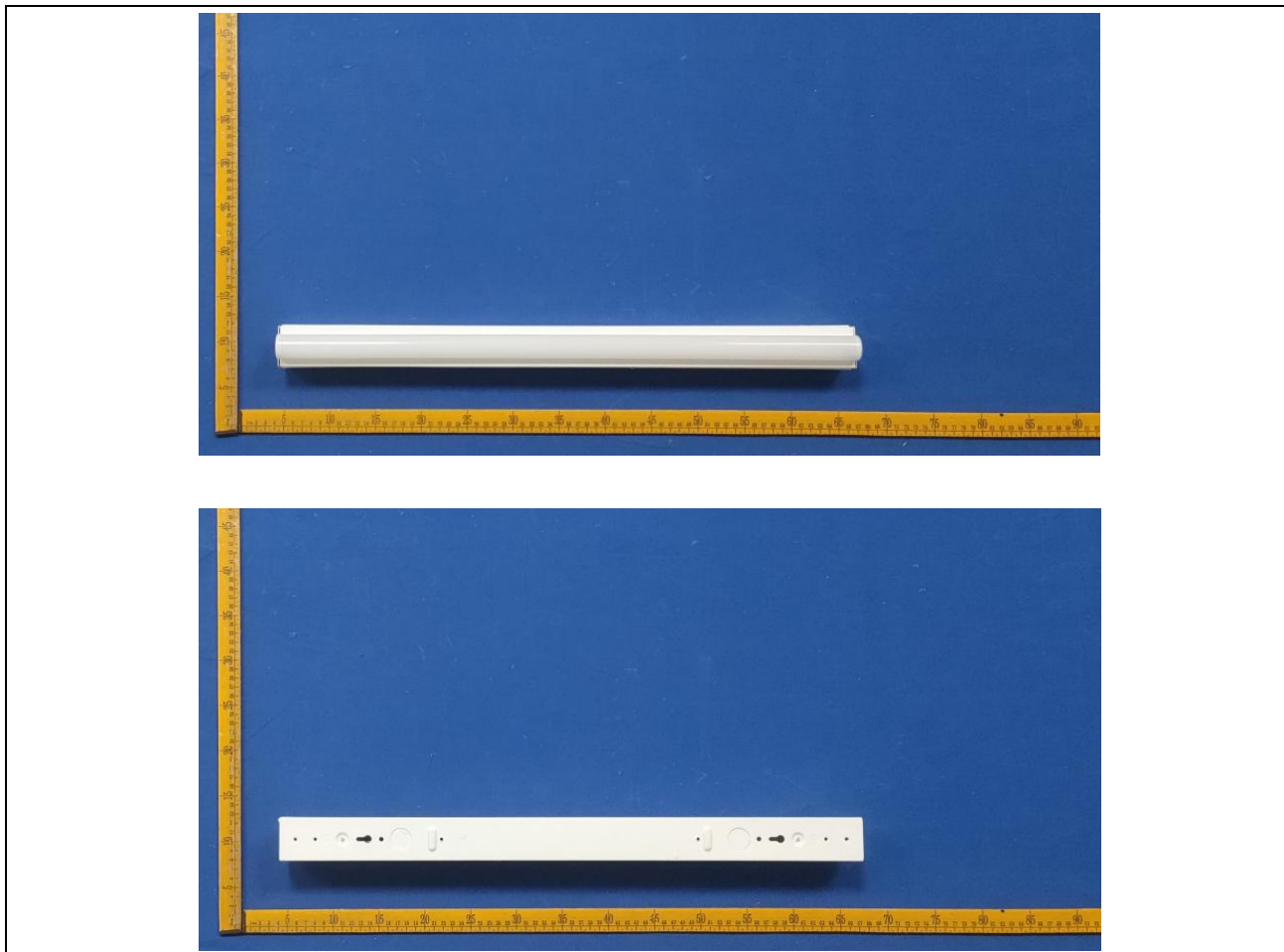
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3.0 Product Description

Luminaire Description: Model No. STRP2 @6W5000K, 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 @6W5000K	Sample ID	241225003-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

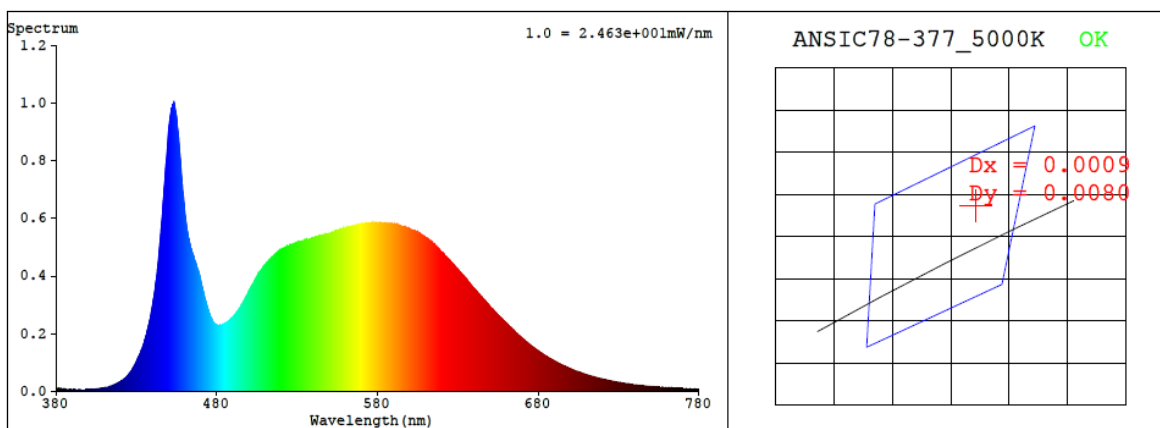
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.049	5.8	0.981
277.0	60	0.027	6.4	0.841

CCT (K)	CRI	R9	Duv	Rf	Rg	IES Rcs,h1
4915	83.7	14	0.0036	84	95	-12%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3485$ $y = 0.3616$ / $u' = 0.2099$ $v' = 0.4900$ ($duv=3.62e-03$)

CCT= 4915K Prcp WL: $L_d=570.7nm$ Purity=13.1%

Peak WL: $L_p=453nm$ FWHM: $=19.5nm$ Ratio: $R=15.9\%$ $G=79.6\%$ $B=4.5\%$

Render Index: $R_a = 83.7$ AvgR = 76.6 TM30: $R_f=84$ $R_g=95$

EEL: 0.09064 A++ Highest

R1 =82 R2 =89 R3 =94 R4 =82 R5 =81 R6 =84 R7 =89

R8 =69 R9 =14 R10=73 R11=81 R12=55 R13=84 R14=97 R15=77

4.1 Integrating Sphere Test

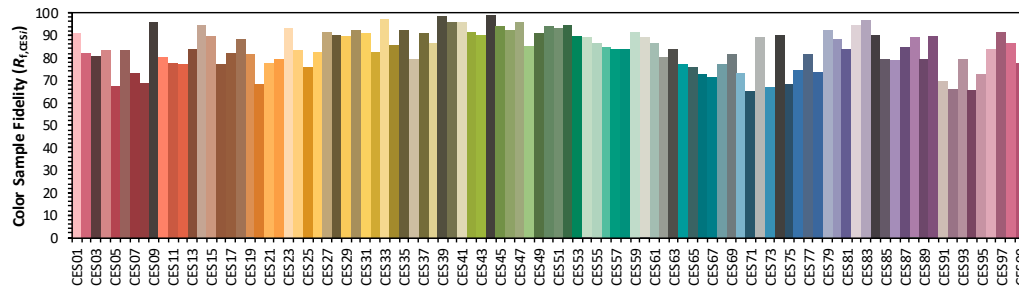
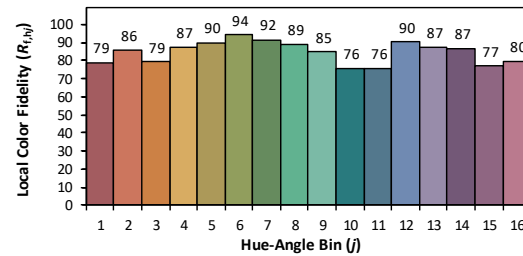
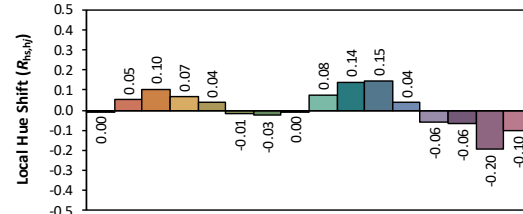
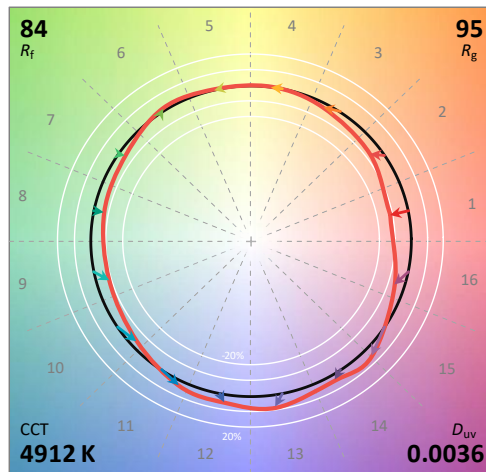
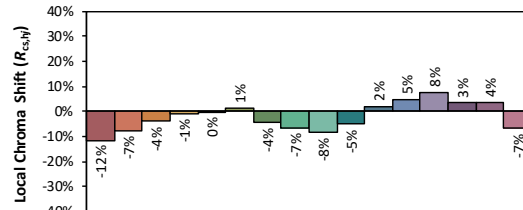
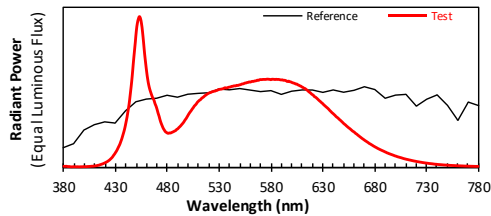
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/1/4

Model: STRP2 @6W5000K



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

x 0.3484
 y 0.3615
 u' 0.2099
 v' 0.4899

CIE 13.3-1995
(CRI)
 R_a 84
 R_g 14

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	9.70E-06	447	6.83E-04	514	4.62E-04	581	5.83E-04	648	3.07E-04	715	4.94E-05
381	8.90E-06	448	7.56E-04	515	4.67E-04	582	5.83E-04	649	3.01E-04	716	4.77E-05
382	9.70E-06	449	8.27E-04	516	4.73E-04	583	5.83E-04	650	2.93E-04	717	4.62E-05
383	9.00E-06	450	9.03E-04	517	4.78E-04	584	5.81E-04	651	2.87E-04	718	4.47E-05
384	7.40E-06	451	9.52E-04	518	4.83E-04	585	5.83E-04	652	2.82E-04	719	4.34E-05
385	7.80E-06	452	9.81E-04	519	4.88E-04	586	5.82E-04	653	2.75E-04	720	4.21E-05
386	6.60E-06	453	9.96E-04	520	4.91E-04	587	5.82E-04	654	2.70E-04	721	4.06E-05
387	6.00E-06	454	9.83E-04	521	4.95E-04	588	5.81E-04	655	2.64E-04	722	3.95E-05
388	5.70E-06	455	9.49E-04	522	4.96E-04	589	5.80E-04	656	2.59E-04	723	3.84E-05
389	6.60E-06	456	8.94E-04	523	5.00E-04	590	5.79E-04	657	2.53E-04	724	3.70E-05
390	6.40E-06	457	8.24E-04	524	5.02E-04	591	5.79E-04	658	2.47E-04	725	3.61E-05
391	6.70E-06	458	7.50E-04	525	5.04E-04	592	5.76E-04	659	2.41E-04	726	3.47E-05
392	6.00E-06	459	6.89E-04	526	5.05E-04	593	5.77E-04	660	2.37E-04	727	3.37E-05
393	6.40E-06	460	6.31E-04	527	5.08E-04	594	5.75E-04	661	2.32E-04	728	3.26E-05
394	6.00E-06	461	5.82E-04	528	5.10E-04	595	5.72E-04	662	2.25E-04	729	3.17E-05
395	5.80E-06	462	5.44E-04	529	5.14E-04	596	5.68E-04	663	2.21E-04	730	3.06E-05
396	6.20E-06	463	5.17E-04	530	5.16E-04	597	5.71E-04	664	2.15E-04	731	2.99E-05
397	6.30E-06	464	4.95E-04	531	5.17E-04	598	5.67E-04	665	2.10E-04	732	2.89E-05
398	6.30E-06	465	4.75E-04	532	5.18E-04	599	5.66E-04	666	2.04E-04	733	2.78E-05
399	7.10E-06	466	4.58E-04	533	5.20E-04	600	5.63E-04	667	1.99E-04	734	2.71E-05
400	7.00E-06	467	4.46E-04	534	5.21E-04	601	5.60E-04	668	1.93E-04	735	2.64E-05
401	7.10E-06	468	4.23E-04	535	5.25E-04	602	5.58E-04	669	1.89E-04	736	2.56E-05
402	7.20E-06	469	4.06E-04	536	5.27E-04	603	5.56E-04	670	1.84E-04	737	2.47E-05
403	8.00E-06	470	3.85E-04	537	5.25E-04	604	5.52E-04	671	1.79E-04	738	2.37E-05
404	8.10E-06	471	3.60E-04	538	5.27E-04	605	5.52E-04	672	1.74E-04	739	2.31E-05
405	8.70E-06	472	3.39E-04	539	5.30E-04	606	5.47E-04	673	1.70E-04	740	2.25E-05
406	9.20E-06	473	3.13E-04	540	5.32E-04	607	5.44E-04	674	1.65E-04	741	2.17E-05
407	9.90E-06	474	2.93E-04	541	5.32E-04	608	5.40E-04	675	1.60E-04	742	2.10E-05
408	9.90E-06	475	2.76E-04	542	5.36E-04	609	5.37E-04	676	1.57E-04	743	2.06E-05
409	1.09E-05	476	2.60E-04	543	5.36E-04	610	5.32E-04	677	1.52E-04	744	2.01E-05
410	1.17E-05	477	2.49E-04	544	5.39E-04	611	5.29E-04	678	1.48E-04	745	1.95E-05
411	1.29E-05	478	2.38E-04	545	5.40E-04	612	5.24E-04	679	1.43E-04	746	1.89E-05
412	1.40E-05	479	2.33E-04	546	5.40E-04	613	5.22E-04	680	1.40E-04	747	1.82E-05
413	1.60E-05	480	2.29E-04	547	5.43E-04	614	5.16E-04	681	1.36E-04	748	1.79E-05
414	1.70E-05	481	2.27E-04	548	5.42E-04	615	5.11E-04	682	1.32E-04	749	1.73E-05
415	1.99E-05	482	2.29E-04	549	5.45E-04	616	5.05E-04	683	1.28E-04	750	1.70E-05
416	2.19E-05	483	2.29E-04	550	5.47E-04	617	4.99E-04	684	1.25E-04	751	1.64E-05
417	2.44E-05	484	2.32E-04	551	5.48E-04	618	4.94E-04	685	1.21E-04	752	1.60E-05
418	2.69E-05	485	2.35E-04	552	5.52E-04	619	4.87E-04	686	1.18E-04	753	1.54E-05
419	3.01E-05	486	2.38E-04	553	5.53E-04	620	4.82E-04	687	1.15E-04	754	1.53E-05
420	3.33E-05	487	2.42E-04	554	5.55E-04	621	4.78E-04	688	1.12E-04	755	1.48E-05
421	3.70E-05	488	2.45E-04	555	5.58E-04	622	4.69E-04	689	1.09E-04	756	1.46E-05
422	4.06E-05	489	2.53E-04	556	5.59E-04	623	4.65E-04	690	1.05E-04	757	1.43E-05
423	4.55E-05	490	2.56E-04	557	5.62E-04	624	4.60E-04	691	1.02E-04	758	1.38E-05
424	5.05E-05	491	2.64E-04	558	5.62E-04	625	4.54E-04	692	9.85E-05	759	1.34E-05
425	5.69E-05	492	2.70E-04	559	5.66E-04	626	4.47E-04	693	9.61E-05	760	1.31E-05
426	6.34E-05	493	2.78E-04	560	5.64E-04	627	4.40E-04	694	9.30E-05	761	1.29E-05
427	7.10E-05	494	2.86E-04	561	5.67E-04	628	4.35E-04	695	9.06E-05	762	1.23E-05
428	8.14E-05	495	2.94E-04	562	5.69E-04	629	4.28E-04	696	8.80E-05	763	1.24E-05
429	9.04E-05	496	3.03E-04	563	5.69E-04	630	4.23E-04	697	8.56E-05	764	1.19E-05
430	1.01E-04	497	3.14E-04	564	5.71E-04	631	4.15E-04	698	8.31E-05	765	1.18E-05
431	1.12E-04	498	3.23E-04	565	5.72E-04	632	4.09E-04	699	8.04E-05	766	1.14E-05
432	1.26E-04	499	3.35E-04	566	5.74E-04	633	4.03E-04	700	7.76E-05	767	1.11E-05
433	1.40E-04	500	3.46E-04	567	5.77E-04	634	3.97E-04	701	7.59E-05	768	1.08E-05
434	1.54E-04	501	3.58E-04	568	5.76E-04	635	3.91E-04	702	7.30E-05	769	1.07E-05
435	1.72E-04	502	3.68E-04	569	5.80E-04	636	3.84E-04	703	7.10E-05	770	1.04E-05
436	1.92E-04	503	3.77E-04	570	5.81E-04	637	3.76E-04	704	6.91E-05	771	1.02E-05
437	2.15E-04	504	3.87E-04	571	5.81E-04	638	3.70E-04	705	6.72E-05	772	1.00E-05
438	2.38E-04	505	3.96E-04	572	5.82E-04	639	3.63E-04	706	6.53E-05	773	9.70E-06
439	2.65E-04	506	4.07E-04	573	5.82E-04	640	3.57E-04	707	6.30E-05	774	9.60E-06
440	2.99E-04	507	4.13E-04	574	5.82E-04	641	3.51E-04	708	6.08E-05	775	9.40E-06
441	3.33E-04	508	4.21E-04	575	5.82E-04	642	3.44E-04	709	5.89E-05	776	9.20E-06
442	3.76E-04	509	4.32E-04	576	5.83E-04	643	3.37E-04	710	5.73E-05	777	9.00E-06
443	4.19E-04	510	4.38E-04	577	5.84E-04	644	3.32E-04	711	5.54E-05	778	8.80E-06
444	4.76E-04	511	4.45E-04	578	5.83E-04	645	3.26E-04	712	5.42E-05	779	8.80E-06
445	5.36E-04	512	4.49E-04	579	5.82E-04	646	3.19E-04	713	5.23E-05	780	8.90E-06
446	6.03E-04	513	4.57E-04	580	5.80E-04	647	3.13E-04	714	5.08E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	STRP2 @6W5000K	Sample ID	241225003-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	0.027	6.4	0.841
NON-WORST CASE	120.0	60	0.049	5.8	0.981

Test Result

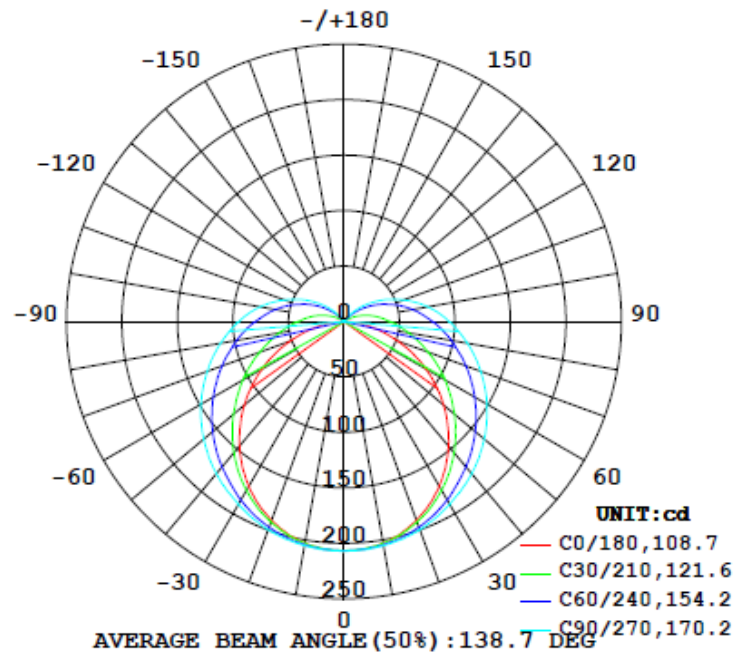
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
909	455	161.8	161.8	109.0	170.2	142.1

Zonal Lumen Requirement (0°-60°)	UGR	
	Crosswise	Endwise
55.6%	20.3	28.4

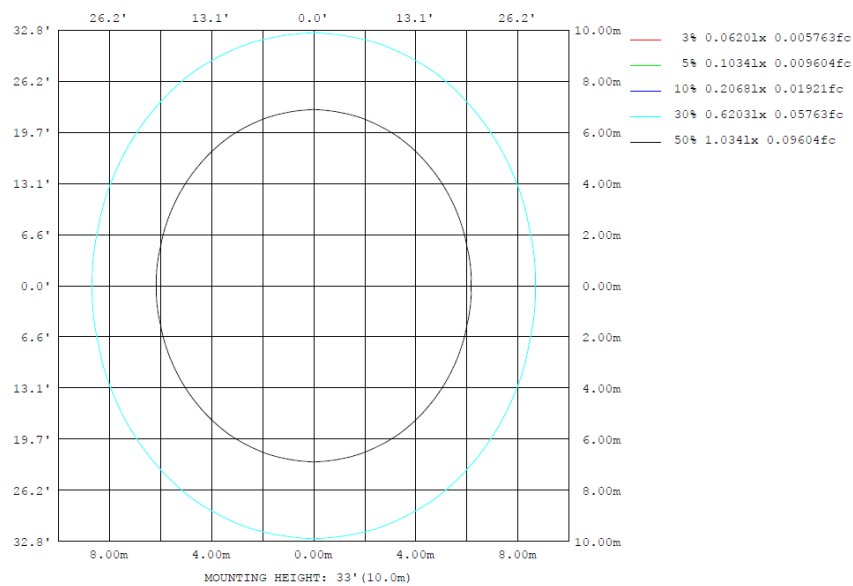
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

Zonal Lumen Summary

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	φ zone	φ total	%lum, lamp
10	202.8	203.5	205.1	203.5	202.8	203.5	205.1	203.5	0- 10	19.59	19.59	2.15, 2.15
20	190.9	194.8	199.7	194.8	190.9	194.8	199.7	194.8	10- 20	56.53	76.12	8.37, 8.37
30	171.5	180.6	190.4	180.6	171.5	180.6	190.4	180.6	20- 30	86.95	163.1	17.9, 17.9
40	146.5	162.3	178.9	162.3	146.5	162.3	178.9	162.3	30- 40	107.7	270.8	29.8, 29.8
50	117.3	142.4	164.9	142.4	117.3	142.4	164.9	142.4	40- 50	117.7	388.5	42.7, 42.7
60	85.16	121.6	148.8	121.6	85.16	121.6	148.8	121.6	50- 60	117.0	505.5	55.6, 55.6
70	51.79	100.5	131.0	100.5	51.79	100.5	131.0	100.5	60- 70	106.9	612.4	67.4, 67.4
80	20.71	80.63	112.8	80.63	20.71	80.63	112.8	80.63	70- 80	90.35	702.7	77.3, 77.3
90	2.367	62.96	94.93	62.96	2.367	62.96	94.93	62.96	80- 90	71.54	774.3	85.2, 85.2
100	1.782	47.34	76.72	47.34	1.782	47.34	76.72	47.34	90-100	54.47	828.8	91.2, 91.2
110	1.782	32.04	57.17	32.04	1.782	32.04	57.17	32.04	100-110	38.48	867.2	95.4, 95.4
120	1.782	17.82	38.22	17.82	1.782	17.82	38.22	17.82	110-120	23.82	891.1	98.98
130	1.782	5.517	21.42	5.517	1.782	5.517	21.42	5.517	120-130	12.08	903.1	99.3, 99.3
140	1.782	1.196	6.147	1.196	1.782	1.196	6.147	1.196	130-140	4.231	907.4	99.8, 99.8
150	1.782	1.100	0.4629	1.100	1.782	1.100	0.4629	1.100	140-150	0.9176	908.3	99.9, 99.9
160	1.782	0.8256	0.3704	0.8256	1.782	0.8256	0.3704	0.8256	150-160	0.4854	908.8	100, 100
170	1.782	0.8256	0.3704	0.8256	1.782	0.8256	0.3704	0.8256	160-170	0.2773	909.0	100, 100
180	1.782	0.8256	0.3704	0.8256	1.782	0.8256	0.3704	0.8256	170-180	0.0942	909.1	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	19.59	0-10	19.59	2.16%
10-20	56.53	0-20	76.12	8.37%
20-30	86.95	0-30	163.07	17.94%
30-40	107.72	0-40	270.79	29.79%
40-50	117.73	0-50	388.52	42.74%
50-60	116.98	0-60	505.50	55.61%
60-70	106.89	0-70	612.39	67.37%
70-80	90.34	0-80	702.73	77.30%
80-90	71.54	0-90	774.27	85.17%
90-100	54.47	0-100	828.74	91.17%
100-110	38.48	0-110	867.22	95.40%
110-120	23.82	0-120	891.04	98.02%
120-130	12.08	0-130	903.12	99.35%
130-140	4.23	0-140	907.35	99.81%
140-150	0.92	0-150	908.27	99.92%
150-160	0.49	0-160	908.76	99.97%
160-170	0.28	0-170	909.04	100.00%
170-180	0.09	0-180	909.13	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			
		16.5	17.9	17.1	18.5	19.2	20.6	22.0	21.2	22.6
3H		17.9	19.2	18.5	19.8	20.5	23.6	24.9	24.2	25.5
4H		18.3	19.6	18.9	20.2	20.9	25.1	26.4	25.7	27.0
6H		18.6	19.7	19.2	20.4	21.1	26.8	28.0	27.4	28.6
8H		18.6	19.8	19.3	20.4	21.1	27.7	28.8	28.3	29.4
12H		18.6	19.7	19.3	20.4	21.1	28.6	29.7	29.2	30.3
4H		2H	17.8	19.1	18.4	19.7	20.4	20.9	22.2	21.5
		3H	19.5	20.6	20.1	21.2	21.9	24.1	25.2	24.8
		4H	20.1	21.1	20.7	21.7	22.5	25.8	26.8	26.5
		6H	20.5	21.4	21.2	22.1	22.8	27.7	28.6	28.3
		8H	20.6	21.4	21.3	22.1	22.9	28.7	29.5	29.3
		12H	20.6	21.4	21.3	22.1	22.9	29.7	30.5	30.4
8H		4H	21.3	22.1	21.9	22.8	23.6	26.0	26.8	26.7
		6H	21.9	22.6	22.6	23.4	24.1	28.0	28.7	28.7
		8H	22.2	22.8	22.9	23.5	24.3	29.1	29.8	29.8
		12H	22.3	22.9	23.0	23.6	24.5	30.4	31.0	31.1
12H		4H	21.6	22.4	22.3	23.1	23.9	26.0	26.8	26.7
		6H	22.5	23.1	23.2	23.8	24.7	28.0	28.7	28.8
		8H	22.8	23.4	23.5	24.1	25.0	29.2	29.8	29.9

Maximum UGR = 32.5

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			
		16.2	17.6	16.8	18.2	18.9	20.3	21.7	20.9	22.3
3H		17.6	18.9	18.2	19.5	20.2	23.3	24.6	23.9	25.2
4H		18.0	19.3	18.6	19.9	20.6	24.8	26.1	25.4	26.7
6H		18.3	19.4	18.9	20.1	20.8	26.5	27.7	27.1	28.3
8H		18.3	19.5	19.0	20.1	20.8	27.4	28.5	28.0	29.1
12H		18.3	19.4	19.0	20.1	20.8	28.3	29.4	28.9	30.0
4H		2H	17.5	18.8	18.1	19.4	20.1	20.6	21.9	21.2
		3H	19.2	20.3	19.8	20.9	21.6	23.8	24.9	24.5
		4H	19.8	20.8	20.4	21.4	22.2	25.5	26.5	26.2
		6H	20.2	21.1	20.9	21.8	22.5	27.4	28.3	28.0
		8H	20.3	21.1	21.0	21.8	22.6	28.4	29.2	29.0
		12H	20.3	21.1	21.0	21.8	22.6	29.4	30.2	30.1
8H		4H	21.0	21.8	21.6	22.5	23.3	25.7	26.5	26.4
		6H	21.6	22.3	22.3	23.1	23.8	27.7	28.4	28.4
		8H	21.9	22.5	22.6	23.2	24.0	28.8	29.5	29.5
		12H	22.0	22.6	22.7	23.3	24.2	30.1	30.7	30.8
12H		4H	21.3	22.1	22.0	22.8	23.6	25.7	26.5	26.4
		6H	22.2	22.8	22.9	23.5	24.4	27.7	28.4	28.5
		8H	22.5	23.1	23.2	23.8	24.7	28.9	29.5	29.6

Maximum UGR = 32.2

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	207	206	207	206	206	207	207	207	206	206	207	206	207	206	207	206	206	207	207
5	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206	206
10	203	203	203	203	204	205	205	205	204	203	203	203	203	203	203	203	204	205	205
15	198	198	199	200	202	203	203	203	202	200	199	198	198	198	199	200	202	203	203
20	191	191	192	195	197	199	200	199	197	195	192	191	191	191	192	195	197	199	200
25	182	183	185	188	192	195	195	195	192	188	185	183	182	183	185	188	192	195	195
30	172	172	176	181	186	189	190	189	186	181	176	172	172	172	176	181	186	189	190
35	160	161	166	172	178	183	185	183	178	172	166	161	160	161	166	172	178	183	185
40	146	148	154	162	171	177	179	177	171	162	154	148	146	148	154	162	171	177	179
45	132	135	142	152	163	170	172	170	163	152	142	135	132	135	142	152	163	170	172
50	117	121	130	142	154	162	165	162	154	142	130	121	117	121	130	142	154	162	165
55	101	106	117	132	145	154	157	154	145	132	117	106	101	106	117	132	145	154	157
60	85.2	91.2	105	122	136	145	149	145	136	122	105	91.2	85.2	91.2	105	122	136	145	149
65	68.5	75.8	92.9	111	126	137	140	137	126	111	92.9	75.8	68.5	75.8	92.9	111	126	137	140
70	51.8	61.4	80.8	100	117	128	131	128	117	100	80.8	61.4	51.8	61.4	80.8	100	117	128	131
75	35.3	47.9	69.6	90.4	107	119	122	119	107	90.4	69.6	47.9	35.3	47.9	69.6	90.4	107	119	122
80	20.7	35.5	59.2	80.6	98.1	109	113	109	98.1	80.6	59.2	35.5	20.7	35.5	59.2	80.6	98.1	109	113
85	8.75	25.6	49.9	71.8	89.1	99.8	104	99.8	89.1	71.8	49.9	25.6	8.75	25.6	49.9	71.8	89.1	99.8	104
90	2.37	18.1	41.5	63.0	79.8	90.7	94.9	90.7	79.8	63.0	41.5	18.1	2.37	18.1	41.5	63.0	79.8	90.7	94.9
95	1.88	12.6	34.7	55.0	71.1	81.7	86.1	81.7	71.1	55.0	34.7	12.6	1.88	12.6	34.7	55.0	71.1	81.7	86.1
100	1.78	8.26	28.1	47.3	62.7	72.4	76.7	72.4	62.7	47.3	28.1	8.26	1.78	8.26	28.1	47.3	62.7	72.4	76.7
105	1.78	4.56	21.7	39.6	54.1	63.4	67.1	63.4	54.1	39.6	21.7	4.56	1.78	4.56	21.7	39.6	54.1	63.4	67.1
110	1.78	2.14	15.7	32.0	45.5	53.9	57.2	53.9	45.5	32.0	15.7	2.14	1.78	2.14	15.7	32.0	45.5	53.9	57.2
115	1.78	1.86	10.2	24.7	36.9	44.6	47.7	44.6	36.9	24.7	10.2	1.86	1.78	1.86	10.2	24.7	36.9	44.6	47.7
120	1.78	1.86	5.36	17.8	28.8	35.8	38.2	35.8	28.8	17.8	5.36	1.86	1.78	1.86	5.36	17.8	28.8	35.8	38.2
125	1.78	1.76	2.03	11.4	21.1	27.5	29.6	27.5	21.1	11.4	2.03	1.76	1.78	1.76	2.03	11.4	21.1	27.5	29.6
130	1.78	1.76	1.66	5.52	13.7	19.3	21.4	19.3	13.7	5.52	1.66	1.76	1.78	1.76	1.66	5.52	13.7	19.3	21.4
135	1.78	1.67	1.65	1.66	7.03	11.6	13.4	11.6	7.03	1.66	1.65	1.67	1.78	1.67	1.65	1.66	7.03	11.6	13.4
140	1.78	1.67	1.56	1.20	1.76	4.72	6.15	4.72	1.76	1.20	1.56	1.67	1.78	1.67	1.56	1.20	1.76	4.72	6.15
145	1.78	1.67	1.38	1.10	1.10	1.02	1.11	1.02	1.10	1.10	1.38	1.67	1.78	1.67	1.38	1.10	1.10	1.02	1.11
150	1.78	1.67	1.29	1.10	0.92	0.74	0.46	0.74	0.92	1.10	1.29	1.67	1.78	1.67	1.29	1.10	0.92	0.74	0.46
155	1.78	1.48	1.20	0.92	0.83	0.74	0.37	0.74	0.83	0.92	1.20	1.48	1.78	1.48	1.20	0.92	0.83	0.74	0.37
160	1.78	1.30	1.10	0.83	0.83	0.74	0.37	0.74	0.83	0.83	1.10	1.30	1.78	1.30	1.10	0.83	0.83	0.74	0.37
165	1.78	1.30	1.10	0.83	0.83	0.74	0.37	0.74	0.83	0.83	1.10	1.30	1.78	1.30	1.10	0.83	0.83	0.74	0.37
170	1.78	1.30	1.10	0.83	0.83	0.74	0.37	0.74	0.83	0.83	1.10	1.30	1.78	1.30	1.10	0.83	0.83	0.74	0.37
175	1.78	1.30	1.20	0.83	0.83	0.74	0.37	0.74	0.83	0.83	1.20	1.30	1.78	1.30	1.20	0.83	0.83	0.74	0.37
180	1.78	1.30	1.20	0.83	0.83	0.74	0.37	0.74	0.83	0.83	1.20	1.30	1.78	1.30	1.20	0.83	0.83	0.74	0.37

Table--2 UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	207	206	206	207	206														
5	206	206	206	206	206														
10	205	204	203	203	203														
15	203	202	200	199	198														
20	199	197	195	192	191														
25	195	192	188	185	183														
30	189	186	181	176	172														
35	183	178	172	166	161														
40	177	171	162	154	148														
45	170	163	152	142	135														
50	162	154	142	130	121														
55	154	145	132	117	106														
60	145	136	122	105	91.2														
65	137	126	111	92.9	75.8														
70	128	117	100	80.8	61.4														
75	119	107	90.4	69.6	47.9														
80	109	98.1	80.6	59.2	35.5														
85	99.8	89.1	71.8	49.9	25.6														
90	90.7	79.8	63.0	41.5	18.1														
95	81.7	71.1	55.0	34.7	12.6														
100	72.4	62.7	47.3	28.1	8.26														
105	63.4	54.1	39.6	21.7	4.56														
110	53.9	45.5	32.0	15.7	2.14														
115	44.6	36.9	24.7	10.2	1.86														
120	35.8	28.8	17.8	5.36	1.86														
125	27.5	21.1	11.4	2.03	1.76														
130	19.3	13.7	5.52	1.66	1.76														
135	11.6	7.03	1.66	1.65	1.67														
140	4.72	1.76	1.20	1.56	1.67														
145	1.02	1.10	1.10	1.38	1.67														
150	0.74	0.92	1.10	1.29	1.67														
155	0.74	0.83	0.92	1.20	1.48														
160	0.74	0.83	0.83	1.10	1.30														
165	0.74	0.83	0.83	1.10	1.30														
170	0.74	0.83	0.83	1.10	1.30														
175	0.74	0.83	0.83	1.20	1.30														
180	0.74	0.83	0.83	1.20	1.30														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	STRP2 @6W5000K	Sample ID	241225003-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	0.049	5.8	0.981	7.76
277.0	60	0.027	6.4	0.841	18.36

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*****