

## 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		430
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	143.3
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		6.0
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	9.08
				277V	19.38
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.979
				277V	0.833
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	4046
			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%		55.8%
Discomfort Glare (UGR) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	28.5
			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		0.026
(Goniophotometer – Section 4.2)			Non-Worst Case		0.046
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		6.0
(Goniophotometer – Section 4.2)			Non-Worst Case		5.4

## 2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-03-29	STRP2/MVS @6W4000K	-	250324005-S1
2	Goniophotometer Test	2025-03-29	STRP2/MVS @6W4000K	-	250324005-S1
3	THD and PF Test	2025-03-29	STRP2/MVS @6W4000K	-	250324005-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. STRP2/MVS @6W4000K, 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

<b>Model No.</b>	STRP2/MVS @6W4000K	<b>Sample ID</b>	250324005-S1
<b>Operate time (Min.)</b>	10	<b>Stabilization time (Min.)</b>	60
<b>Temperature (°C)</b>	25.4	<b>Humidity (%RH)</b>	41.0

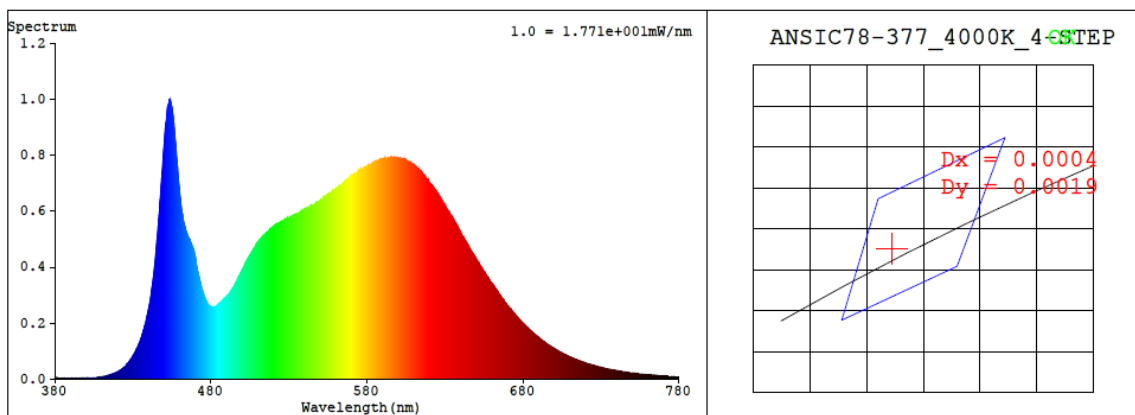
<b>Test Method</b>
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were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

<b>Voltage (Vac)</b>	<b>Frequency (Hz)</b>	<b>Current (A)</b>	<b>Power (W)</b>	<b>Power Factor</b>
120.0	60	0.046	5.4	0.979
277.0	60	0.026	6.0	0.833

<b>CCT (K)</b>	<b>CRI</b>	<b>R9</b>	<b>Duv</b>	<b>SDCM</b>	<b>Rf</b>	<b>Rg</b>	<b>IES Rcs,h1</b>
4046	85.1	18	0.0007	1.4	85	95	-11%

## 4.1 Integrating Sphere Test



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.3789$   $y = 0.3774$  /  $u' = 0.2238$   $v' = 0.5016$  ( $duv=7.44e-04$ )

CCT= 4046K Prcp WL:  $L_d=578.5nm$  Purity=27.0%

Peak WL:  $L_p=454nm$  FWHM:  $=21.0nm$  Ratio:R=18.5% G=77.6% B=3.9%

Render Index:  $R_a = 85.1$  AvgR = 79.0 TM30:Rf=85 Rg=95

EEL: 0.09292 A++ Highest

R1 =84	R2 =92	R3 =96	R4 =83	R5 =83	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

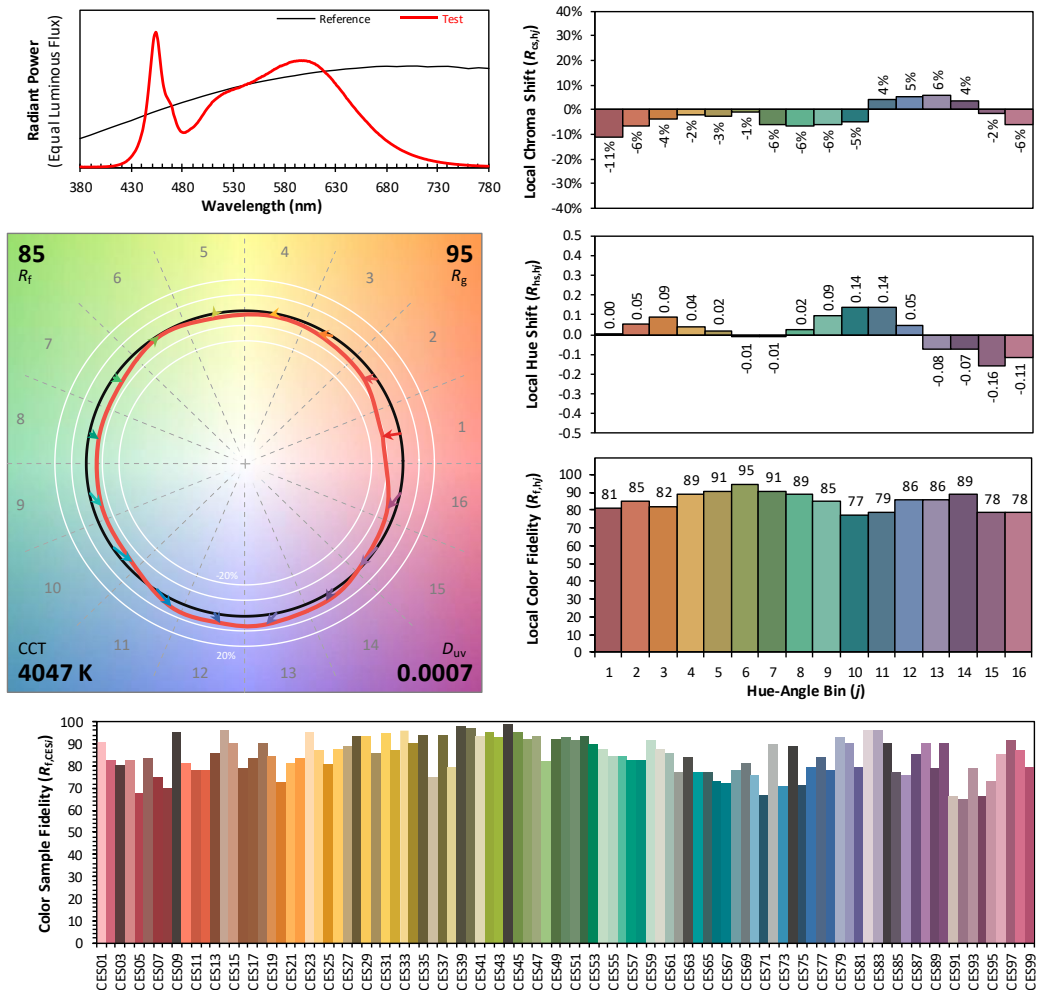
### ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/1

Model: STRP2/MVS @6W4000K



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

$x$  0.3789  
 $y$  0.3772  
 $u'$  0.2239  
 $v'$  0.5016

CIE 13.3-1995  
(CRI)  
 $R_a$  85  
 $R_g$  18

## 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	3.40E-06	447	6.09E-04	514	5.13E-04	581	7.63E-04	648	4.47E-04	715	6.79E-05
381	4.20E-06	448	6.86E-04	515	5.19E-04	582	7.64E-04	649	4.39E-04	716	6.56E-05
382	2.10E-06	449	7.63E-04	516	5.25E-04	583	7.68E-04	650	4.29E-04	717	6.33E-05
383	2.40E-06	450	8.40E-04	517	5.29E-04	584	7.72E-04	651	4.19E-04	718	6.13E-05
384	3.00E-06	451	9.12E-04	518	5.36E-04	585	7.77E-04	652	4.11E-04	719	6.01E-05
385	2.40E-06	452	9.66E-04	519	5.40E-04	586	7.78E-04	653	4.01E-04	720	5.79E-05
386	2.70E-06	453	9.90E-04	520	5.45E-04	587	7.81E-04	654	3.93E-04	721	5.54E-05
387	2.60E-06	454	1.00E-03	521	5.50E-04	588	7.82E-04	655	3.84E-04	722	5.39E-05
388	2.60E-06	455	9.70E-04	522	5.51E-04	589	7.84E-04	656	3.76E-04	723	5.27E-05
389	2.30E-06	456	9.28E-04	523	5.57E-04	590	7.86E-04	657	3.68E-04	724	5.06E-05
390	2.40E-06	457	8.60E-04	524	5.59E-04	591	7.85E-04	658	3.60E-04	725	4.94E-05
391	3.10E-06	458	7.94E-04	525	5.62E-04	592	7.88E-04	659	3.50E-04	726	4.73E-05
392	2.80E-06	459	7.24E-04	526	5.64E-04	593	7.87E-04	660	3.43E-04	727	4.60E-05
393	3.10E-06	460	6.66E-04	527	5.69E-04	594	7.89E-04	661	3.36E-04	728	4.46E-05
394	3.10E-06	461	6.14E-04	528	5.73E-04	595	7.90E-04	662	3.27E-04	729	4.31E-05
395	2.90E-06	462	5.79E-04	529	5.74E-04	596	7.90E-04	663	3.19E-04	730	4.15E-05
396	2.90E-06	463	5.48E-04	530	5.76E-04	597	7.90E-04	664	3.11E-04	731	4.04E-05
397	4.00E-06	464	5.29E-04	531	5.79E-04	598	7.89E-04	665	3.01E-04	732	3.94E-05
398	3.30E-06	465	5.15E-04	532	5.83E-04	599	7.90E-04	666	2.94E-04	733	3.74E-05
399	3.60E-06	466	5.01E-04	533	5.85E-04	600	7.89E-04	667	2.86E-04	734	3.64E-05
400	3.60E-06	467	4.88E-04	534	5.87E-04	601	7.89E-04	668	2.78E-04	735	3.54E-05
401	4.00E-06	468	4.74E-04	535	5.88E-04	602	7.87E-04	669	2.71E-04	736	3.42E-05
402	4.60E-06	469	4.59E-04	536	5.91E-04	603	7.84E-04	670	2.63E-04	737	3.31E-05
403	4.90E-06	470	4.36E-04	537	5.95E-04	604	7.85E-04	671	2.57E-04	738	3.24E-05
404	5.00E-06	471	3.99E-04	538	5.99E-04	605	7.83E-04	672	2.51E-04	739	3.11E-05
405	5.40E-06	472	3.75E-04	539	6.02E-04	606	7.77E-04	673	2.42E-04	740	3.00E-05
406	5.90E-06	473	3.52E-04	540	6.05E-04	607	7.75E-04	674	2.37E-04	741	2.95E-05
407	6.50E-06	474	3.27E-04	541	6.10E-04	608	7.72E-04	675	2.31E-04	742	2.81E-05
408	7.10E-06	475	3.07E-04	542	6.12E-04	609	7.69E-04	676	2.24E-04	743	2.75E-05
409	7.80E-06	476	2.91E-04	543	6.13E-04	610	7.67E-04	677	2.17E-04	744	2.64E-05
410	8.10E-06	477	2.79E-04	544	6.20E-04	611	7.59E-04	678	2.11E-04	745	2.56E-05
411	9.10E-06	478	2.68E-04	545	6.20E-04	612	7.57E-04	679	2.05E-04	746	2.47E-05
412	9.60E-06	479	2.62E-04	546	6.22E-04	613	7.51E-04	680	1.99E-04	747	2.38E-05
413	1.13E-05	480	2.59E-04	547	6.27E-04	614	7.45E-04	681	1.94E-04	748	2.31E-05
414	1.27E-05	481	2.57E-04	548	6.31E-04	615	7.38E-04	682	1.88E-04	749	2.23E-05
415	1.47E-05	482	2.58E-04	549	6.33E-04	616	7.32E-04	683	1.83E-04	750	2.19E-05
416	1.62E-05	483	2.59E-04	550	6.38E-04	617	7.26E-04	684	1.78E-04	751	2.12E-05
417	1.84E-05	484	2.65E-04	551	6.41E-04	618	7.17E-04	685	1.72E-04	752	2.02E-05
418	2.03E-05	485	2.67E-04	552	6.46E-04	619	7.10E-04	686	1.68E-04	753	1.97E-05
419	2.27E-05	486	2.73E-04	553	6.52E-04	620	7.02E-04	687	1.63E-04	754	1.92E-05
420	2.56E-05	487	2.78E-04	554	6.55E-04	621	6.95E-04	688	1.58E-04	755	1.85E-05
421	2.94E-05	488	2.85E-04	555	6.60E-04	622	6.90E-04	689	1.53E-04	756	1.81E-05
422	3.19E-05	489	2.89E-04	556	6.64E-04	623	6.81E-04	690	1.49E-04	757	1.73E-05
423	3.59E-05	490	2.94E-04	557	6.67E-04	624	6.73E-04	691	1.44E-04	758	1.69E-05
424	4.02E-05	491	3.00E-04	558	6.73E-04	625	6.66E-04	692	1.40E-04	759	1.62E-05
425	4.51E-05	492	3.08E-04	559	6.74E-04	626	6.57E-04	693	1.35E-04	760	1.58E-05
426	5.23E-05	493	3.16E-04	560	6.78E-04	627	6.49E-04	694	1.31E-04	761	1.53E-05
427	5.76E-05	494	3.25E-04	561	6.82E-04	628	6.39E-04	695	1.27E-04	762	1.49E-05
428	6.58E-05	495	3.33E-04	562	6.89E-04	629	6.28E-04	696	1.23E-04	763	1.43E-05
429	7.30E-05	496	3.45E-04	563	6.91E-04	630	6.21E-04	697	1.20E-04	764	1.36E-05
430	8.21E-05	497	3.55E-04	564	6.96E-04	631	6.09E-04	698	1.16E-04	765	1.34E-05
431	9.14E-05	498	3.66E-04	565	7.01E-04	632	6.01E-04	699	1.13E-04	766	1.33E-05
432	1.03E-04	499	3.78E-04	566	7.05E-04	633	5.93E-04	700	1.09E-04	767	1.27E-05
433	1.14E-04	500	3.89E-04	567	7.09E-04	634	5.84E-04	701	1.06E-04	768	1.22E-05
434	1.26E-04	501	4.00E-04	568	7.15E-04	635	5.74E-04	702	1.02E-04	769	1.22E-05
435	1.42E-04	502	4.12E-04	569	7.19E-04	636	5.64E-04	703	9.90E-05	770	1.15E-05
436	1.58E-04	503	4.23E-04	570	7.26E-04	637	5.55E-04	704	9.60E-05	771	1.15E-05
437	1.79E-04	504	4.33E-04	571	7.28E-04	638	5.46E-04	705	9.28E-05	772	1.07E-05
438	1.99E-04	505	4.43E-04	572	7.32E-04	639	5.34E-04	706	9.01E-05	773	1.05E-05
439	2.25E-04	506	4.52E-04	573	7.36E-04	640	5.25E-04	707	8.72E-05	774	1.02E-05
440	2.52E-04	507	4.60E-04	574	7.41E-04	641	5.12E-04	708	8.48E-05	775	1.00E-05
441	2.81E-04	508	4.69E-04	575	7.45E-04	642	5.05E-04	709	8.19E-05	776	9.70E-06
442	3.22E-04	509	4.82E-04	576	7.51E-04	643	4.95E-04	710	7.98E-05	777	9.30E-06
443	3.61E-04	510	4.88E-04	577	7.50E-04	644	4.85E-04	711	7.68E-05	778	9.00E-06
444	4.12E-04	511	4.95E-04	578	7.54E-04	645	4.76E-04	712	7.47E-05	779	9.00E-06
445	4.72E-04	512	5.01E-04	579	7.56E-04	646	4.65E-04	713	7.19E-05	780	9.00E-06
446	5.37E-04	513	5.08E-04	580	7.60E-04	647	4.56E-04	714	7.02E-05	N/A	N/A



## 4.0 LM-79 Measurement and Test Results

### 4.2 Goniophotometer Test

<b>Model No.</b>	STRP2/MVS @6W4000K	<b>Sample ID</b>	250324005-S1
<b>Operate time (Min.)</b>	30	<b>Stabilization time (Min.)</b>	60
<b>Temperature (°C)</b>	24.7	<b>Humidity (%RH)</b>	41.3

<b>Test Method</b>
<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 <math>25 \pm 1^\circ\text{C}</math>, 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 <math>\pm 0.2</math> 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 <math>1.0^\circ</math> vertical intervals and <math>15^\circ</math> horizontal intervals.</p>

#### Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
<b>WORST CASE</b>	277.0	60	0.026	6.0	0.833
<b>NON-WORST CASE</b>	120.0	60	0.046	5.4	0.979

#### Test Result

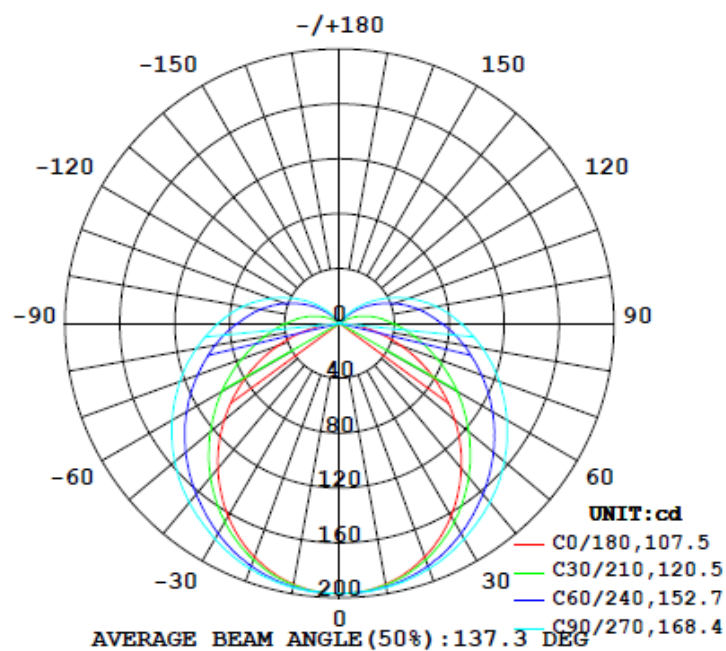
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
860	430	160.7	160.7	107.4	168.4	143.3

Zonal Lumen Requirement (0°-60°)	UGR	
	Crosswise	Endwise
55.8%	20.5	28.5

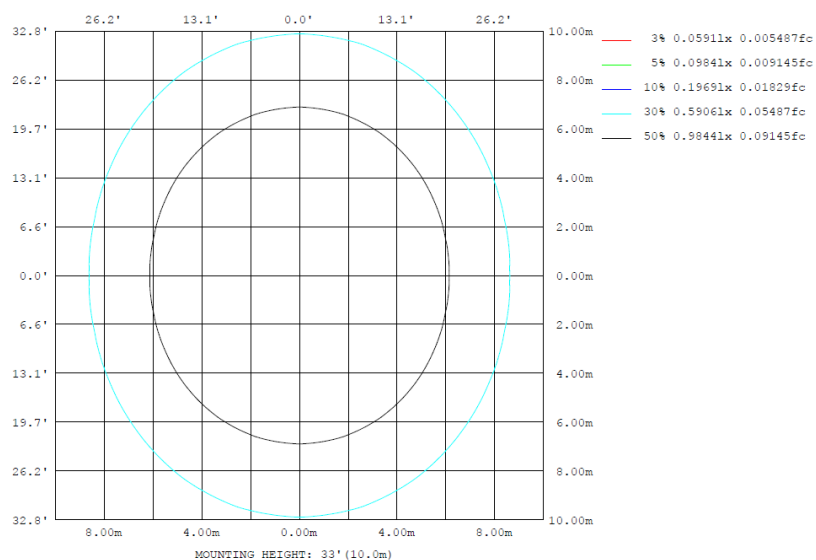
## 4.2 Goniophotometer Test

### 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	zone	total	lum, lamp
10	193.1	194.1	195.5	194.1	193.1	194.1	195.5	194.1	0- 10	18.68	18.68	2.17,2.17
20	181.2	185.8	190.4	185.8	181.2	185.8	190.4	185.8	10- 20	53.88	72.56	8.44,8.44
30	162.3	172.1	181.4	172.1	162.3	172.1	181.4	172.1	20- 30	82.80	155.4	18.1,18.1
40	137.9	154.4	170.5	154.4	137.9	154.4	170.5	154.4	30- 40	102.4	257.8	30,30
50	109.7	135.1	156.8	135.1	109.7	135.1	156.8	135.1	40- 50	111.7	369.4	43,43
60	79.11	114.7	140.9	114.7	79.11	114.7	140.9	114.7	50- 60	110.6	480.0	55.8,55.8
70	48.00	94.42	123.8	94.42	48.00	94.42	123.8	94.42	60- 70	100.7	580.7	67.6,67.6
80	19.25	75.50	106.1	75.50	19.25	75.50	106.1	75.50	70- 80	84.87	665.6	77.4,77.4
90	2.240	58.70	88.54	58.70	2.240	58.70	88.54	58.70	80- 90	67.03	732.6	85.2,85.2
100	1.491	44.31	71.53	44.31	1.491	44.31	71.53	44.31	90-100	50.94	783.6	91.2,91.2
110	1.491	30.19	53.29	30.19	1.491	30.19	53.29	30.19	100-110	36.12	819.7	95.4,95.4
120	1.491	17.27	35.73	17.27	1.491	17.27	35.73	17.27	110-120	22.43	842.1	98,98
130	1.491	6.053	20.15	6.053	1.491	6.053	20.15	6.053	120-130	11.54	853.7	99.3,99.3
140	1.491	1.369	6.629	1.369	1.491	1.369	6.629	1.369	130-140	4.228	857.9	99.8,99.8
150	1.491	0.9695	0.9071	0.9695	1.491	0.9695	0.9071	0.9695	140-150	0.9297	858.8	99.9,99.9
160	1.291	0.7908	0.8437	0.7908	1.291	0.7908	0.8437	0.7908	150-160	0.4237	859.3	100,100
170	1.244	0.7556	0.7803	0.7556	1.244	0.7556	0.7803	0.7556	160-170	0.2337	859.5	100,100
180	1.212	0.7309	0.7360	0.7309	1.212	0.7309	0.7360	0.7309	170-180	0.0783	859.6	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	18.68	0-10	18.68	2.17%
10-20	53.88	0-20	72.56	8.44%
20-30	82.80	0-30	155.36	18.08%
30-40	102.41	0-40	257.77	29.99%
40-50	111.66	0-50	369.43	42.98%
50-60	110.61	0-60	480.04	55.85%
60-70	100.71	0-70	580.75	67.57%
70-80	84.87	0-80	665.62	77.44%
80-90	67.03	0-90	732.65	85.24%
90-100	50.94	0-100	783.59	91.17%
100-110	36.12	0-110	819.71	95.37%
110-120	22.43	0-120	842.14	97.98%
120-130	11.54	0-130	853.68	99.32%
130-140	4.23	0-140	857.91	99.82%
140-150	0.93	0-150	858.84	99.92%
150-160	0.42	0-160	859.26	99.97%
160-170	0.23	0-170	859.49	100.00%
170-180	0.08	0-180	859.57	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	19.9	19.3	20.6	21.3	25.6	26.8	26.2	27.4	28.1
	6H	19.0	20.1	19.6	20.7	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	29.2	28.7	29.8	30.5
	12H	19.0	20.1	19.7	20.7	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	22.3	24.6	25.7	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	28.7
	6H	20.9	21.8	21.5	22.4	23.2	28.1	29.0	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	30.9	30.8	31.6	32.4
8H	4H	21.7	22.5	22.3	23.2	23.9	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	30.9	31.7
	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	25.0	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	16.4	17.8	17.0	18.4	19.1	20.5	22.0	21.1	22.6	23.2
	3H	17.8	19.1	18.3	19.7	20.4	23.5	24.8	24.1	25.4	26.1
	4H	18.2	19.4	18.8	20.1	20.8	25.1	26.3	25.7	26.9	27.6
	6H	18.5	19.6	19.1	20.2	21.0	26.7	27.8	27.3	28.5	29.2
	8H	18.5	19.6	19.1	20.3	21.0	27.5	28.7	28.2	29.3	30.0
	12H	18.5	19.6	19.2	20.2	21.0	28.5	29.5	29.1	30.2	30.9
4H	2H	17.7	19.0	18.3	19.6	20.3	20.9	22.1	21.5	22.7	23.4
	3H	19.4	20.5	20.0	21.1	21.8	24.1	25.2	24.7	25.8	26.5
	4H	20.0	21.0	20.6	21.6	22.4	25.7	26.7	26.4	27.4	28.2
	6H	20.4	21.3	21.0	21.9	22.7	27.6	28.5	28.2	29.1	29.9
	8H	20.5	21.3	21.1	22.0	22.8	28.5	29.4	29.2	30.0	30.8
	12H	20.5	21.3	21.2	22.0	22.8	29.6	30.4	30.3	31.1	31.9
8H	4H	21.2	22.0	21.8	22.7	23.4	25.9	26.7	26.6	27.4	28.2
	6H	21.8	22.5	22.5	23.3	24.0	27.9	28.6	28.6	29.3	30.1
	8H	22.0	22.7	22.7	23.4	24.2	29.0	29.6	29.7	30.4	31.2
	12H	22.2	22.8	22.9	23.5	24.3	30.2	30.8	30.9	31.5	32.4
12H	4H	21.5	22.3	22.2	23.0	23.8	25.9	26.7	26.6	27.4	28.2
	6H	22.4	23.0	23.1	23.7	24.5	27.9	28.6	28.6	29.3	30.1
	8H	22.7	23.3	23.4	24.0	24.9	29.1	29.7	29.8	30.4	31.2

Maximum UGR = 32.4

## 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	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197
5	196	196	196	196	197	197	197	197	197	196	196	196	196	196	196	196	197	197	197
10	193	193	194	194	195	196	195	196	195	194	194	193	193	193	194	194	195	196	195
15	188	188	189	191	192	193	193	193	192	191	189	188	188	188	189	191	192	193	193
20	181	182	183	186	188	190	190	190	188	186	183	182	181	182	183	186	188	190	190
25	173	174	176	179	183	185	186	185	183	179	176	174	173	174	176	179	183	185	186
30	162	164	167	172	177	180	181	180	177	172	167	164	162	164	167	172	177	180	181
35	151	152	157	164	170	174	176	174	170	164	157	152	151	152	157	164	170	174	176
40	138	140	146	154	162	168	170	168	162	154	146	140	138	140	146	154	162	168	170
45	124	127	135	145	155	162	164	162	155	145	135	127	124	127	135	145	155	162	164
50	110	114	123	135	146	154	157	154	146	135	123	114	110	114	123	135	146	154	157
55	94.6	99.8	111	125	138	146	149	146	138	125	111	99.8	94.6	99.8	111	125	138	146	149
60	79.1	85.4	99.1	115	129	138	141	138	129	115	99.1	85.4	79.1	85.4	99.1	115	129	138	141
65	63.5	71.0	87.2	104	119	129	132	129	119	104	87.2	71.0	63.5	71.0	87.2	104	119	129	132
70	48.0	57.4	75.8	94.4	110	121	124	121	110	94.4	75.8	57.4	48.0	57.4	75.8	94.4	110	121	124
75	32.9	44.7	65.2	84.8	101	112	115	112	101	84.8	65.2	44.7	32.9	44.7	65.2	84.8	101	112	115
80	19.3	33.4	55.4	75.5	92.1	103	106	103	92.1	75.5	55.4	33.4	19.3	33.4	55.4	75.5	92.1	103	106
85	8.16	24.3	46.8	67.2	83.3	93.5	97.1	93.5	83.3	67.2	46.8	24.3	8.16	24.3	46.8	67.2	83.3	93.5	97.1
90	2.24	17.0	38.9	58.7	74.6	84.7	88.5	84.7	74.6	58.7	38.9	17.0	2.24	17.0	38.9	58.7	74.6	84.7	88.5
95	1.68	12.2	32.6	51.5	66.4	76.1	80.2	76.1	66.4	51.5	32.6	12.2	1.68	12.2	32.6	51.5	66.4	76.1	80.2
100	1.49	8.15	26.6	44.3	58.8	67.7	71.5	67.7	58.8	44.3	26.6	8.15	1.49	8.15	26.6	44.3	58.8	67.7	71.5
105	1.49	4.62	20.7	37.2	50.7	59.2	62.5	59.2	50.7	37.2	20.7	4.62	1.49	4.62	20.7	37.2	50.7	59.2	62.5
110	1.49	2.04	15.2	30.2	42.6	50.4	53.3	50.4	42.6	30.2	15.2	2.04	1.49	2.04	15.2	30.2	42.6	50.4	53.3
115	1.49	1.68	10.1	23.6	34.7	41.7	44.4	41.7	34.7	23.6	10.1	1.68	1.49	1.68	10.1	23.6	34.7	41.7	44.4
120	1.49	1.56	5.61	17.3	27.3	33.5	35.7	33.5	27.3	17.3	5.61	1.56	1.49	1.56	5.61	17.3	27.3	33.5	35.7
125	1.49	1.52	2.11	11.3	20.2	25.9	27.8	25.9	20.2	11.3	2.11	1.52	1.49	1.52	2.11	11.3	20.2	25.9	27.8
130	1.49	1.51	1.57	6.05	13.6	18.8	20.2	18.8	13.6	6.05	1.57	1.51	1.49	1.51	1.57	6.05	13.6	18.8	20.2
135	1.49	1.50	1.40	1.84	7.43	11.7	13.1	11.7	7.43	1.84	1.40	1.50	1.49	1.50	1.40	1.84	7.43	11.7	13.1
140	1.49	1.49	1.34	1.37	2.12	5.35	6.63	5.35	2.12	1.37	1.34	1.49	1.49	1.49	1.34	1.37	2.12	5.35	6.63
145	1.49	1.48	1.19	1.13	1.10	1.10	1.30	1.10	1.10	1.13	1.19	1.48	1.49	1.48	1.19	1.13	1.10	1.10	1.30
150	1.49	1.29	0.99	0.97	0.95	0.89	0.91	0.89	0.95	0.97	0.99	1.29	1.49	1.29	0.99	0.97	0.95	0.89	0.91
155	1.42	0.92	0.85	0.84	0.81	0.83	0.88	0.83	0.81	0.84	0.85	0.92	1.42	0.92	0.85	0.84	0.81	0.83	0.88
160	1.29	0.87	0.78	0.79	0.67	0.80	0.84	0.80	0.67	0.79	0.78	0.87	1.29	0.87	0.78	0.79	0.67	0.80	0.84
165	1.27	0.89	0.79	0.77	0.66	0.78	0.81	0.78	0.66	0.77	0.79	0.89	1.27	0.89	0.79	0.77	0.66	0.78	0.81
170	1.24	0.91	0.81	0.76	0.65	0.76	0.78	0.76	0.65	0.76	0.81	0.91	1.24	0.91	0.81	0.76	0.65	0.76	0.78
175	1.22	1.02	0.82	0.74	0.64	0.74	0.75	0.74	0.64	0.74	0.82	1.02	1.22	1.02	0.82	0.74	0.64	0.74	0.75
180	1.21	1.02	0.82	0.73	0.64	0.73	0.74	0.73	0.64	0.73	0.82	1.02	1.21	1.02	0.82	0.73	0.64	0.73	0.74

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	197	197	197	197	197														
5	197	197	196	196	196														
10	196	195	194	194	193														
15	193	192	191	189	188														
20	190	188	186	183	182														
25	185	183	179	176	174														
30	180	177	172	167	164														
35	174	170	164	157	152														
40	168	162	154	146	140														
45	162	155	145	135	127														
50	154	146	135	123	114														
55	146	138	125	111	99.8														
60	138	129	115	99.1	85.4														
65	129	119	104	87.2	71.0														
70	121	110	94.4	75.8	57.4														
75	112	101	84.8	65.2	44.7														
80	103	92.1	75.5	55.4	33.4														
85	93.5	83.3	67.2	46.8	24.3														
90	84.7	74.6	58.7	38.9	17.0														
95	76.1	66.4	51.5	32.6	12.2														
100	67.7	58.8	44.3	26.6	8.15														
105	59.2	50.7	37.2	20.7	4.62														
110	50.4	42.6	30.2	15.2	2.04														
115	41.7	34.7	23.6	10.1	1.68														
120	33.5	27.3	17.3	5.61	1.56														
125	25.9	20.2	11.3	2.11	1.52														
130	18.8	13.6	6.05	1.57	1.51														
135	11.7	7.43	1.84	1.40	1.50														
140	5.35	2.12	1.37	1.34	1.49														
145	1.10	1.10	1.13	1.19	1.48														
150	0.89	0.95	0.97	0.99	1.29														
155	0.83	0.81	0.84	0.85	0.92														
160	0.80	0.67	0.79	0.78	0.87														
165	0.78	0.66	0.77	0.79	0.89														
170	0.76	0.65	0.76	0.81	0.91														
175	0.74	0.64	0.74	0.82	1.02														
180	0.73	0.64	0.73	0.82	1.02														

## 4.0 LM-79 Measurement and Test Results

### 4.3 THD and PF Test

<b>Model No.</b>	STRP2/MVS @6W4000K	<b>Sample ID</b>	250324005-S1
<b>Temperature (°C)</b>	25.4	<b>Humidity (%RH)</b>	41.0

<b>Test Method</b>
<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 <math>25 \pm 1^\circ\text{C}</math>. 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	0.046	5.4	0.979	9.08
277.0	60	0.026	6.0	0.833	19.38

## 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**\*\*\*\*\*