

## 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		785
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	149.4
			115	130	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.5
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	8.60
				277V	21.00
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.984
				277V	0.852
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	5029±283	4845
			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%		62.6%
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		0.045
(Goniophotometer – Section 4.2)			Non-Worst Case		0.083
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		10.5
(Goniophotometer – Section 4.2)			Non-Worst Case		9.8

## 2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-03-28	STRP2H/MVS @10W5000K	-	250324006-S1
2	Goniophotometer Test	2025-03-28	STRP2H/MVS @10W5000K	-	250324006-S1
3	THD and PF Test	2025-03-28	STRP2H/MVS @10W5000K	-	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 @10W5000K, 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 @10W5000K	Sample ID	250324006-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

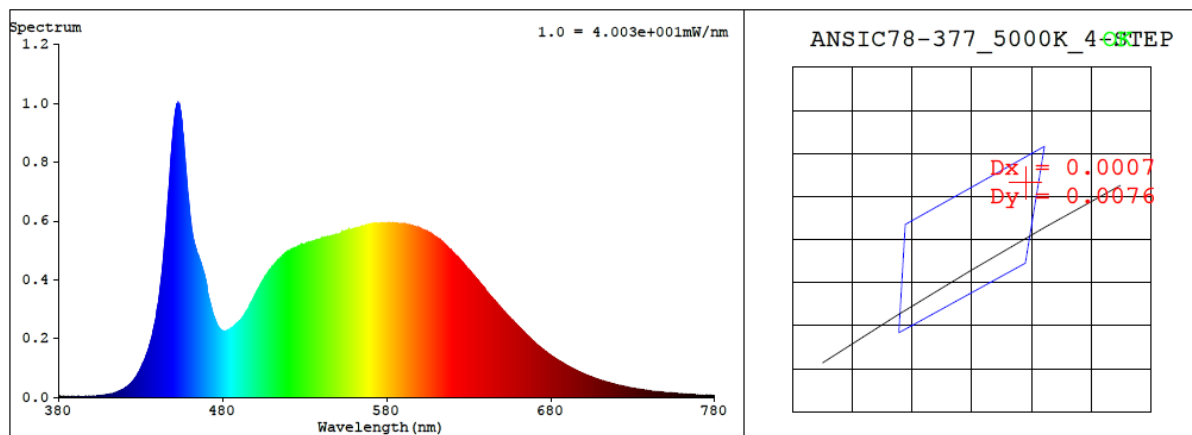
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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 4<math>\pi</math> 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	0.083	9.8	0.984
277.0	60	0.045	10.5	0.852

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4845	83.7	14	0.0035	3.6	84	95	-12%

## 4.1 Integrating Sphere Test



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.3503$   $y = 0.3628$  /  $u' = 0.2106$   $v' = 0.4908$  ( $duv=3.50e-03$ )

CCT= 4845K Prcp WL:  $L_d=571.5nm$  Purity=14.0%

Peak WL:  $L_p=453nm$  FWHM:  $=19.6nm$  Ratio:R=16.1% G=79.6% B=4.4%

Render Index:  $R_a = 83.7$  AvgR = 76.7 TM30:Rf=84 Rg=95

EEL: 0.09626 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

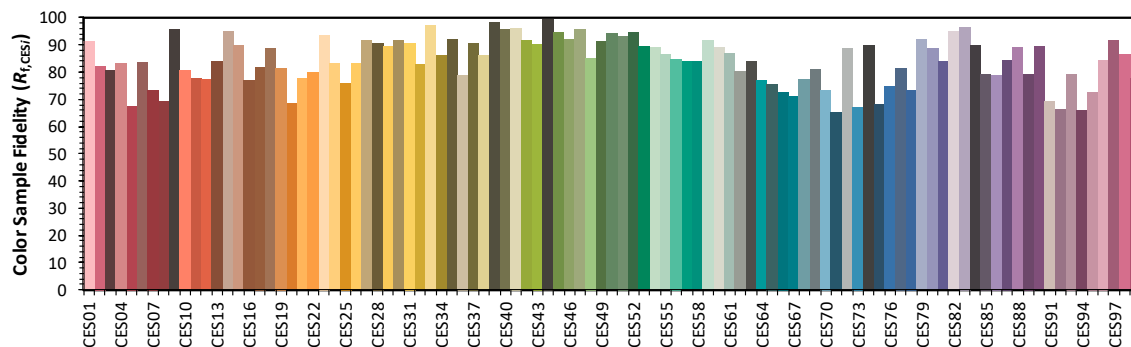
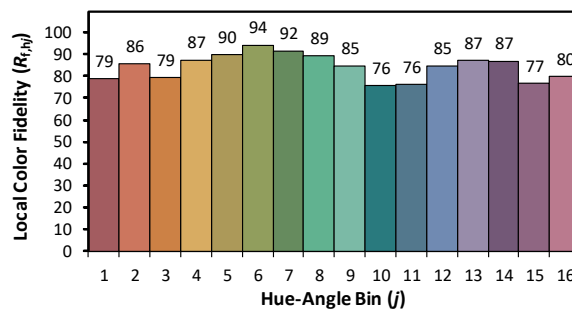
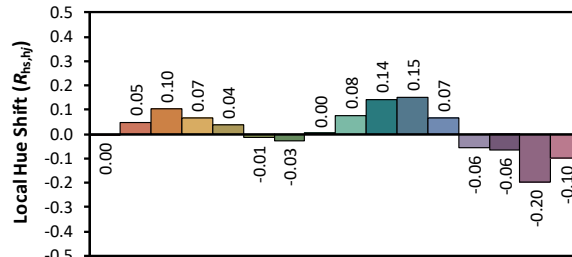
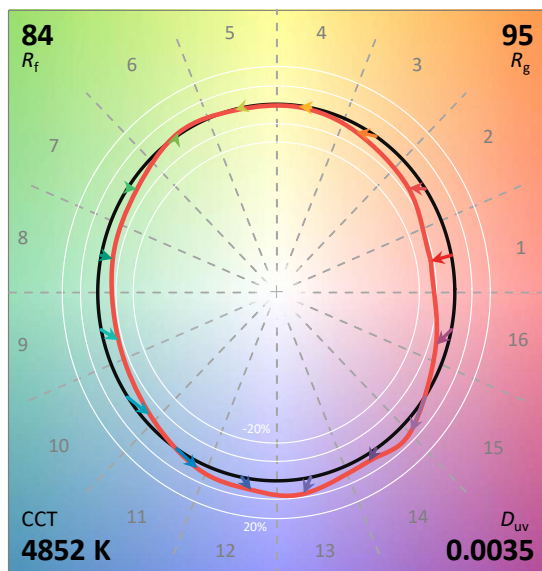
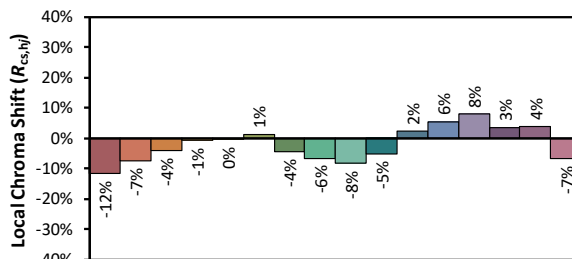
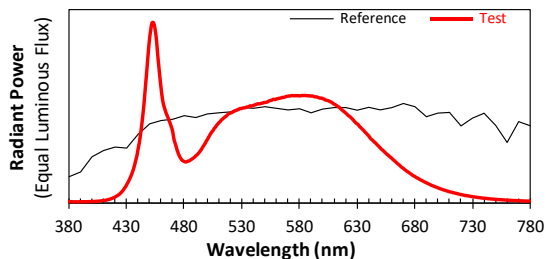
### ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/4/1

Model: STRP2H/MVS @10W5000K



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

$x$  0.3503  
 $y$  0.3627  
 $u'$  0.2106  
 $v'$  0.4907

CIE 13.3-1995  
(CRI)

$R_a$  84  
 $R_g$  15



## 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	4.00E-06	447	6.94E-04	514	4.67E-04	581	5.92E-04	648	3.15E-04	715	5.07E-05
381	3.70E-06	448	7.71E-04	515	4.72E-04	582	5.93E-04	649	3.08E-04	716	4.92E-05
382	3.70E-06	449	8.50E-04	516	4.77E-04	583	5.92E-04	650	3.02E-04	717	4.77E-05
383	3.70E-06	450	9.14E-04	517	4.82E-04	584	5.93E-04	651	2.94E-04	718	4.62E-05
384	2.30E-06	451	9.62E-04	518	4.89E-04	585	5.92E-04	652	2.90E-04	719	4.46E-05
385	3.30E-06	452	9.96E-04	519	4.93E-04	586	5.92E-04	653	2.84E-04	720	4.30E-05
386	3.10E-06	453	9.98E-04	520	4.95E-04	587	5.91E-04	654	2.78E-04	721	4.19E-05
387	2.40E-06	454	9.83E-04	521	4.98E-04	588	5.91E-04	655	2.71E-04	722	4.05E-05
388	3.20E-06	455	9.46E-04	522	5.01E-04	589	5.91E-04	656	2.65E-04	723	3.91E-05
389	3.10E-06	456	8.92E-04	523	5.05E-04	590	5.89E-04	657	2.61E-04	724	3.81E-05
390	3.00E-06	457	8.14E-04	524	5.09E-04	591	5.90E-04	658	2.54E-04	725	3.70E-05
391	3.10E-06	458	7.49E-04	525	5.10E-04	592	5.88E-04	659	2.49E-04	726	3.59E-05
392	3.60E-06	459	6.84E-04	526	5.14E-04	593	5.86E-04	660	2.44E-04	727	3.49E-05
393	3.50E-06	460	6.27E-04	527	5.15E-04	594	5.86E-04	661	2.37E-04	728	3.36E-05
394	3.50E-06	461	5.75E-04	528	5.20E-04	595	5.84E-04	662	2.32E-04	729	3.23E-05
395	3.30E-06	462	5.43E-04	529	5.20E-04	596	5.82E-04	663	2.26E-04	730	3.16E-05
396	3.50E-06	463	5.20E-04	530	5.21E-04	597	5.80E-04	664	2.21E-04	731	3.04E-05
397	3.80E-06	464	5.00E-04	531	5.24E-04	598	5.78E-04	665	2.14E-04	732	2.95E-05
398	4.00E-06	465	4.83E-04	532	5.24E-04	599	5.79E-04	666	2.09E-04	733	2.88E-05
399	4.10E-06	466	4.68E-04	533	5.25E-04	600	5.75E-04	667	2.04E-04	734	2.77E-05
400	4.40E-06	467	4.51E-04	534	5.29E-04	601	5.74E-04	668	1.98E-04	735	2.68E-05
401	4.70E-06	468	4.34E-04	535	5.29E-04	602	5.70E-04	669	1.92E-04	736	2.60E-05
402	5.20E-06	469	4.14E-04	536	5.31E-04	603	5.67E-04	670	1.89E-04	737	2.53E-05
403	5.60E-06	470	3.91E-04	537	5.35E-04	604	5.65E-04	671	1.83E-04	738	2.46E-05
404	5.90E-06	471	3.52E-04	538	5.35E-04	605	5.64E-04	672	1.78E-04	739	2.34E-05
405	6.30E-06	472	3.29E-04	539	5.35E-04	606	5.60E-04	673	1.73E-04	740	2.29E-05
406	6.80E-06	473	3.08E-04	540	5.37E-04	607	5.57E-04	674	1.69E-04	741	2.24E-05
407	7.10E-06	474	2.86E-04	541	5.41E-04	608	5.54E-04	675	1.64E-04	742	2.14E-05
408	8.30E-06	475	2.68E-04	542	5.42E-04	609	5.49E-04	676	1.60E-04	743	2.08E-05
409	9.00E-06	476	2.54E-04	543	5.45E-04	610	5.45E-04	677	1.55E-04	744	2.00E-05
410	9.60E-06	477	2.43E-04	544	5.47E-04	611	5.41E-04	678	1.50E-04	745	1.96E-05
411	1.08E-05	478	2.34E-04	545	5.46E-04	612	5.38E-04	679	1.47E-04	746	1.88E-05
412	1.20E-05	479	2.30E-04	546	5.48E-04	613	5.33E-04	680	1.44E-04	747	1.83E-05
413	1.31E-05	480	2.26E-04	547	5.50E-04	614	5.29E-04	681	1.39E-04	748	1.78E-05
414	1.53E-05	481	2.24E-04	548	5.51E-04	615	5.23E-04	682	1.35E-04	749	1.72E-05
415	1.66E-05	482	2.25E-04	549	5.54E-04	616	5.17E-04	683	1.32E-04	750	1.66E-05
416	1.87E-05	483	2.28E-04	550	5.54E-04	617	5.12E-04	684	1.28E-04	751	1.62E-05
417	2.12E-05	484	2.29E-04	551	5.55E-04	618	5.06E-04	685	1.24E-04	752	1.55E-05
418	2.41E-05	485	2.33E-04	552	5.57E-04	619	5.01E-04	686	1.21E-04	753	1.53E-05
419	2.64E-05	486	2.38E-04	553	5.61E-04	620	4.95E-04	687	1.18E-04	754	1.47E-05
420	2.97E-05	487	2.42E-04	554	5.64E-04	621	4.90E-04	688	1.14E-04	755	1.44E-05
421	3.39E-05	488	2.46E-04	555	5.66E-04	622	4.83E-04	689	1.11E-04	756	1.38E-05
422	3.73E-05	489	2.52E-04	556	5.67E-04	623	4.79E-04	690	1.08E-04	757	1.36E-05
423	4.20E-05	490	2.58E-04	557	5.72E-04	624	4.73E-04	691	1.05E-04	758	1.29E-05
424	4.66E-05	491	2.64E-04	558	5.71E-04	625	4.67E-04	692	1.02E-04	759	1.24E-05
425	5.31E-05	492	2.70E-04	559	5.70E-04	626	4.61E-04	693	9.90E-05	760	1.23E-05
426	5.98E-05	493	2.78E-04	560	5.74E-04	627	4.53E-04	694	9.56E-05	761	1.17E-05
427	6.78E-05	494	2.87E-04	561	5.75E-04	628	4.46E-04	695	9.31E-05	762	1.16E-05
428	7.69E-05	495	2.95E-04	562	5.77E-04	629	4.40E-04	696	9.07E-05	763	1.10E-05
429	8.60E-05	496	3.06E-04	563	5.78E-04	630	4.35E-04	697	8.76E-05	764	1.07E-05
430	9.75E-05	497	3.17E-04	564	5.80E-04	631	4.29E-04	698	8.56E-05	765	1.04E-05
431	1.09E-04	498	3.26E-04	565	5.82E-04	632	4.21E-04	699	8.29E-05	766	1.03E-05
432	1.21E-04	499	3.39E-04	566	5.82E-04	633	4.15E-04	700	8.05E-05	767	9.90E-06
433	1.35E-04	500	3.49E-04	567	5.83E-04	634	4.09E-04	701	7.78E-05	768	9.50E-06
434	1.50E-04	501	3.60E-04	568	5.87E-04	635	4.02E-04	702	7.54E-05	769	9.10E-06
435	1.67E-04	502	3.71E-04	569	5.88E-04	636	3.95E-04	703	7.33E-05	770	8.90E-06
436	1.86E-04	503	3.82E-04	570	5.89E-04	637	3.88E-04	704	7.12E-05	771	8.70E-06
437	2.09E-04	504	3.92E-04	571	5.90E-04	638	3.82E-04	705	6.86E-05	772	8.40E-06
438	2.35E-04	505	3.99E-04	572	5.90E-04	639	3.75E-04	706	6.70E-05	773	8.00E-06
439	2.62E-04	506	4.10E-04	573	5.92E-04	640	3.68E-04	707	6.48E-05	774	7.90E-06
440	2.99E-04	507	4.17E-04	574	5.92E-04	641	3.59E-04	708	6.29E-05	775	7.40E-06
441	3.30E-04	508	4.27E-04	575	5.91E-04	642	3.51E-04	709	6.09E-05	776	7.50E-06
442	3.77E-04	509	4.34E-04	576	5.92E-04	643	3.46E-04	710	5.88E-05	777	7.00E-06
443	4.23E-04	510	4.42E-04	577	5.92E-04	644	3.40E-04	711	5.71E-05	778	7.10E-06
444	4.81E-04	511	4.47E-04	578	5.92E-04	645	3.34E-04	712	5.61E-05	779	7.10E-06
445	5.44E-04	512	4.56E-04	579	5.92E-04	646	3.28E-04	713	5.38E-05	780	7.10E-06
446	6.19E-04	513	4.61E-04	580	5.90E-04	647	3.22E-04	714	5.25E-05	N/A	N/A



## 4.0 LM-79 Measurement and Test Results

### 4.2 Goniophotometer Test

Model No.	STRP2H/MVS @10W5000K	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 <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
WORST CASE	277.0	60	0.045	10.5	0.852
NON-WORST CASE	120.0	60	0.083	9.8	0.984

#### Test Result

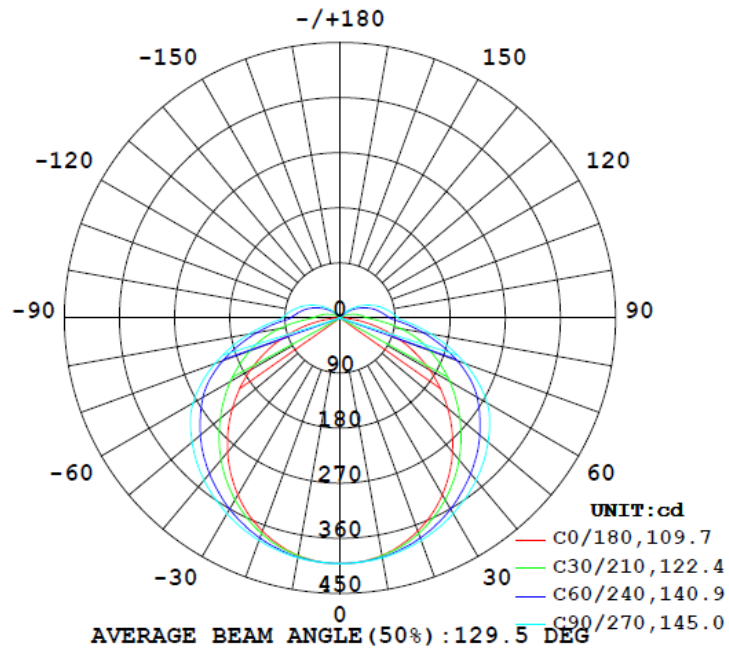
Flux (lm)	Flux per feet (lm/ft)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)
		C0-180	C90-270	C0-180	C90-270	
1569	785	162.1	162.1	109.9	144.8	149.4

Zonal Lumen Requirement	UGR	
( $0^\circ$ - $60^\circ$ )	Crosswise	Endwise
62.6%	21.8	27.0

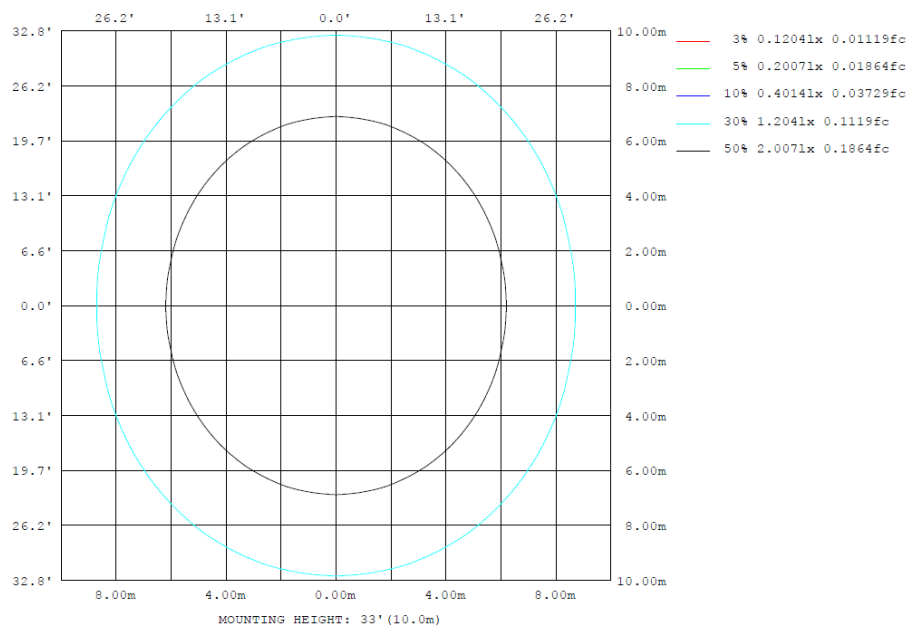
## 4.2 Goniophotometer Test

### Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



### Isolux Plot



## 4.2 Goniophotometer Test

### Zonal Lumen Summary

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\phi$ zone	$\phi$ total	$\phi$ lum, lamp
10	393.7	395.6	397.7	395.6	393.7	395.6	397.7	395.6	0- 10	38.04	38.04	2.42, 2.42
20	370.5	378.6	386.8	378.6	370.5	378.6	386.8	378.6	10- 20	109.7	147.8	9.42, 9.42
30	333.6	351.9	369.1	351.9	333.6	351.9	369.1	351.9	20- 30	169.0	316.7	20.2, 20.2
40	285.7	317.0	345.7	317.0	285.7	317.0	345.7	317.0	30- 40	209.8	526.5	33.5, 33.5
50	229.5	277.8	315.6	277.8	229.5	277.8	315.6	277.8	40- 50	229.0	755.5	48.1, 48.1
60	168.3	234.3	277.1	234.3	168.3	234.3	277.1	234.3	50- 60	226.2	981.8	62.6, 62.6
70	103.8	185.4	217.4	185.4	103.8	185.4	217.4	185.4	60- 70	200.5	1182	75.3, 75.3
80	41.48	121.9	150.8	121.9	41.48	121.9	150.8	121.9	70- 80	151.2	1333	85, 85
90	3.500	64.96	94.74	64.96	3.500	64.96	94.74	64.96	80- 90	90.71	1424	90.7, 90.7
100	2.738	49.86	78.04	49.86	2.738	49.86	78.04	49.86	90-100	56.53	1481	94.3, 94.3
110	2.738	34.67	59.59	34.67	2.738	34.67	59.59	34.67	100-110	40.87	1522	96.9, 96.9
120	2.738	20.19	40.52	20.19	2.738	20.19	40.52	20.19	110-120	25.95	1547	98.6, 98.6
130	2.738	7.441	22.87	7.441	2.738	7.441	22.87	7.441	120-130	13.71	1561	99.5, 99.5
140	2.738	2.212	7.570	2.212	2.738	2.212	7.570	2.212	130-140	5.314	1567	99.8, 99.8
150	2.738	1.920	1.226	1.920	2.738	1.920	1.226	1.920	140-150	1.511	1568	99.9, 99.9
160	2.738	1.572	1.109	1.572	2.738	1.572	1.109	1.572	150-160	0.8342	1569	100, 100
170	2.738	1.522	1.060	1.522	2.738	1.522	1.060	1.522	160-170	0.4613	1569	100, 100
180	2.832	1.487	1.027	1.487	2.832	1.487	1.027	1.487	170-180	0.1540	1569	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	38.04	0-10	38.04	2.42%
10-20	109.73	0-20	147.77	9.42%
20-30	168.96	0-30	316.73	20.18%
30-40	209.75	0-40	526.48	33.55%
40-50	229.04	0-50	755.52	48.14%
50-60	226.24	0-60	981.76	62.56%
60-70	200.45	0-70	1182.21	75.33%
70-80	151.22	0-80	1333.43	84.97%
80-90	90.71	0-90	1424.14	90.75%
90-100	56.53	0-100	1480.67	94.35%
100-110	40.87	0-110	1521.54	96.96%
110-120	25.95	0-120	1547.49	98.61%
120-130	13.71	0-130	1561.20	99.48%
130-140	5.31	0-140	1566.51	99.82%
140-150	1.51	0-150	1568.02	99.92%
150-160	0.83	0-160	1568.85	99.97%
160-170	0.46	0-170	1569.31	100.00%
170-180	0.15	0-180	1569.46	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			
		15.7	17.3	16.2	17.7	18.3	18.8	20.3	19.3	20.8
	3H	17.3	18.7	17.8	19.2	19.8	21.4	22.8	21.9	23.3
	4H	17.8	19.2	18.4	19.7	20.3	22.5	23.9	23.0	24.4
	6H	18.2	19.4	18.7	20.0	20.6	23.7	24.9	24.2	25.5
	8H	18.3	19.5	18.8	20.0	20.6	24.3	25.4	24.8	26.0
	12H	18.3	19.5	18.9	20.0	20.6	24.8	26.0	25.4	26.5
4H	2H	17.0	18.3	17.5	18.8	19.4	19.2	20.6	19.7	21.1
	3H	18.9	20.0	19.4	20.6	21.2	22.1	23.2	22.6	23.8
	4H	19.6	20.6	20.2	21.2	21.8	23.4	24.5	24.0	25.0
	6H	20.1	21.0	20.7	21.6	22.3	24.8	25.7	25.3	26.3
	8H	20.2	21.1	20.8	21.7	22.3	25.4	26.3	26.0	26.9
	12H	20.3	21.1	20.9	21.7	22.4	26.1	26.9	26.7	27.5
8H	4H	20.5	21.4	21.1	22.0	22.6	23.7	24.5	24.2	25.1
	6H	21.2	22.0	21.8	22.6	23.3	25.2	25.9	25.8	26.6
	8H	21.5	22.2	22.1	22.8	23.5	26.0	26.7	26.6	27.3
	12H	21.6	22.3	22.3	22.9	23.6	26.8	27.5	27.5	28.1
12H	4H	20.7	21.5	21.3	22.1	22.8	23.7	24.5	24.3	25.1
	6H	21.6	22.2	22.2	22.9	23.6	25.2	25.9	25.9	26.5
	8H	21.9	22.5	22.5	23.2	23.9	26.1	26.7	26.7	27.3

Maximum UGR = 28.8

UGR – Corrected Table:

**UGR TABLE - CORRECTED**

Reflectances										
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20
Room Size										
X=2H	Y=2H	UGR Viewed Crosswise					UGR Viewed Endwise			
		17.3	18.9	17.8	19.3	19.9	20.4	21.9	20.9	22.4
	3H	18.9	20.3	19.4	20.8	21.4	23.0	24.4	23.5	24.9
	4H	19.4	20.8	20.0	21.3	21.9	24.1	25.5	24.6	26.0
	6H	19.8	21.0	20.3	21.6	22.2	25.3	26.5	25.8	27.1
	8H	19.9	21.1	20.4	21.6	22.2	25.9	27.0	26.4	27.6
	12H	19.9	21.1	20.5	21.6	22.2	26.4	27.6	27.0	28.1
4H	2H	18.6	19.9	19.1	20.4	21.0	20.8	22.2	21.3	22.7
	3H	20.5	21.6	21.0	22.2	22.8	23.7	24.8	24.2	25.4
	4H	21.2	22.2	21.8	22.8	23.4	25.0	26.1	25.6	26.6
	6H	21.7	22.6	22.3	23.2	23.9	26.4	27.3	26.9	27.9
	8H	21.8	22.7	22.4	23.3	23.9	27.0	27.9	27.6	28.5
	12H	21.9	22.7	22.5	23.3	24.0	27.7	28.5	28.3	29.1
8H	4H	22.1	23.0	22.7	23.6	24.2	25.3	26.1	25.8	26.7
	6H	22.8	23.6	23.4	24.2	24.9	26.8	27.5	27.4	28.2
	8H	23.1	23.8	23.7	24.4	25.1	27.6	28.3	28.2	28.9
	12H	23.2	23.9	23.9	24.5	25.2	28.4	29.1	29.1	29.7
12H	4H	22.3	23.1	22.9	23.7	24.4	25.3	26.1	25.9	26.7
	6H	23.2	23.8	23.8	24.5	25.2	26.8	27.5	27.5	28.1
	8H	23.5	24.1	24.1	24.8	25.5	27.7	28.3	28.3	28.9

Maximum UGR = 30.4

## 4.2 Goniophotometer Test

### Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) y	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401	401
5	400	400	399	400	400	400	400	400	400	400	399	400	400	400	399	400	400	400	400
10	394	394	394	396	396	397	398	397	396	396	394	394	394	394	394	396	396	397	398
15	384	385	386	388	388	390	392	393	390	388	386	385	384	385	386	388	388	390	393
20	370	372	375	379	383	386	387	386	383	379	375	372	370	372	375	379	383	386	387
25	354	355	360	366	372	377	379	377	372	366	360	355	354	355	360	366	372	377	379
30	334	336	343	352	360	367	369	367	360	352	343	336	334	336	343	352	360	367	369
35	311	314	324	335	347	355	358	355	347	335	324	314	311	314	324	335	347	355	358
40	286	290	302	317	332	342	346	342	332	317	302	290	286	290	302	317	332	342	346
45	258	264	279	298	316	328	331	328	316	298	279	264	258	264	279	298	316	328	331
50	230	237	256	278	298	311	316	311	298	278	256	237	230	237	256	278	298	311	316
55	200	209	231	256	278	293	298	293	278	256	231	209	200	209	231	256	278	293	298
60	168	180	207	234	259	273	277	273	259	234	207	180	168	180	207	234	259	273	277
65	136	151	182	212	234	246	249	246	234	212	182	151	136	151	182	212	234	246	249
70	104	123	157	185	203	214	217	214	203	185	157	123	104	123	157	185	203	214	217
75	71.7	95.1	131	154	171	181	184	181	171	154	131	95.1	71.7	95.1	131	154	171	181	184
80	41.5	69.2	101	122	138	148	151	148	138	122	101	69.2	41.5	69.2	101	122	138	148	151
85	16.6	43.7	70.0	90.7	106	116	119	116	106	90.7	70.0	43.7	16.6	43.7	70.0	90.7	106	116	119
90	3.50	21.4	44.6	65.0	81.1	91.4	94.7	91.4	81.1	65.0	44.6	21.4	3.50	21.4	44.6	65.0	81.1	91.4	94.7
95	2.83	15.4	37.4	57.0	72.6	83.0	86.5	83.0	72.6	57.0	37.4	15.4	2.83	15.4	37.4	57.0	72.6	83.0	86.5
100	2.74	10.4	31.0	49.9	64.8	74.7	78.0	74.7	64.8	49.9	31.0	10.4	2.74	10.4	31.0	49.9	64.8	74.7	78.0
105	2.74	6.22	24.5	42.3	56.8	65.6	69.3	65.6	56.8	42.3	24.5	6.22	2.74	6.22	24.5	42.3	56.8	65.6	69.3
110	2.74	3.29	18.2	34.7	48.3	56.7	59.6	56.7	48.3	34.7	18.2	3.29	2.74	3.29	18.2	34.7	48.3	56.7	59.6
115	2.74	3.02	12.4	27.3	39.5	47.3	50.0	47.3	39.5	27.3	12.4	3.02	2.74	3.02	12.4	27.3	39.5	47.3	50.0
120	2.74	2.95	7.19	20.2	31.6	38.4	40.5	38.4	31.6	20.2	7.19	2.95	2.74	2.95	7.19	20.2	31.6	38.4	40.5
125	2.74	2.93	3.27	13.5	23.6	29.8	31.6	29.8	23.6	13.5	3.27	2.93	2.74	2.93	3.27	13.5	23.6	29.8	31.6
130	2.74	2.89	2.63	7.44	15.8	21.6	22.9	21.6	15.8	7.44	2.63	2.89	2.74	2.89	2.63	7.44	15.8	21.6	22.9
135	2.74	2.83	2.49	2.70	8.85	13.7	15.1	13.7	8.85	2.70	2.49	2.83	2.74	2.83	2.49	2.70	8.85	13.7	15.1
140	2.74	2.78	2.32	2.21	2.89	6.46	7.57	6.46	2.89	2.21	2.32	2.78	2.74	2.78	2.32	2.21	2.89	6.46	7.57
145	2.74	2.72	2.27	2.07	1.81	1.50	1.69	1.50	1.81	2.07	2.27	2.72	2.74	2.72	2.27	2.07	1.81	1.50	1.69
150	2.74	2.63	2.15	1.92	1.62	1.32	1.23	1.32	1.62	1.92	2.15	2.63	2.74	2.63	2.15	1.92	1.62	1.32	1.23
155	2.74	2.44	1.96	1.77	1.51	1.19	1.09	1.19	1.51	1.77	1.96	2.44	2.74	2.44	1.96	1.77	1.51	1.19	1.09
160	2.74	2.21	1.70	1.57	1.30	1.16	1.11	1.16	1.30	1.57	1.70	2.21	2.74	2.21	1.70	1.57	1.30	1.16	1.11
165	2.74	2.23	1.66	1.55	1.28	1.15	1.08	1.15	1.28	1.55	1.66	2.23	2.74	2.23	1.66	1.55	1.28	1.15	1.08
170	2.74	2.24	1.63	1.52	1.25	1.13	1.06	1.13	1.25	1.52	1.63	2.24	2.74	2.24	1.63	1.52	1.25	1.13	1.06
175	2.83	2.35	1.60	1.50	1.22	1.12	1.04	1.12	1.22	1.50	1.60	2.35	2.83	2.35	1.60	1.50	1.22	1.12	1.04
180	2.83	2.35	1.59	1.49	1.21	1.12	1.03	1.12	1.21	1.49	1.59	2.35	2.83	2.35	1.59	1.49	1.21	1.12	1.03

Table--2

UNIT: cd

C (DEG) y	285	300	315	330	345														
0	401	401	401	401	401														
5	400	400	400	399	400														
10	397	396	396	394	394														
15	392	390	388	386	385														
20	386	383	379	375	372														
25	377	372	366	360	355														
30	367	360	352	343	336														
35	355	347	335	324	314														
40	342	332	317	302	290														
45	328	316	298	279	264														
50	311	298	278	256	237														
55	293	278	256	231	209														
60	273	259	234	207	180														
65	246	234	212	182	151														
70	214	203	185	157	123														
75	181	171	154	131	95.1														
80	148	138	122	101	69.2														
85	116	106	90.7	70.0	43.7														
90	91.4	81.1	65.0	44.6	21.4														
95	83.0	72.6	57.0	37.4	15.4														
100	74.7	64.8	49.9	31.0	10.4														
105	65.6	56.8	42.3	24.5	6.22														
110	56.7	48.3	34.7	18.2	3.29														
115	47.3	39.5	27.3	12.4	3.02														
120	38.4	31.6	20.2	7.19	2.95														
125	29.8	23.6	13.5	3.27	2.93														
130	21.6	15.8	7.44	2.63	2.89														
135	13.7	8.85	2.70	2.49	2.83														
140	6.46	2.89	2.21	2.32	2.78														
145	1.50	1.81	2.07	2.27	2.72														
150	1.32	1.62	1.92	2.15	2.63														
155	1.19	1.51	1.77	1.96	2.44														
160	1.16	1.30	1.57	1.70	2.21														
165	1.15	1.28	1.55	1.66	2.23														
170	1.13	1.25	1.52	1.63	2.24														
175	1.12	1.22	1.50	1.60	2.35														
180	1.12	1.21	1.49	1.59	2.35														

## 4.0 LM-79 Measurement and Test Results

### 4.3 THD and PF Test

<b>Model No.</b>	STRP2H/MVS @10W5000K	<b>Sample ID</b>	250324006-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	0.083	9.8	0.984	8.60
277.0	60	0.045	10.5	0.852	21.00



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