

## Photometric Test Report

### Relevant Standards

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

Prepared For

**RAB Lighting Inc.**

Address: 408 W 14th St New York, NY 10014

Prepared By

**Dongguan New Testing Centre Co., Ltd.**

Address: 3F No. 1 the 1st North Industry Road, Songshan Lake Science & Technology Park, Dongguan, Guangdong, China

Prepare by:

*Alan Wang*

Engineer: Alan Wang

Date: 2025-09-17

Review by:

*Vincent Yuan*

Technical Lead: Vincent Yuan

Issue Date: 2025-09-17

Revised Date: N/A

## 1.0 Test Summary

DLC Technical Requirements V6.0

Linear Ceiling Mount Luminaires					
Requirement Category		Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	250		1135
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	98.7
			95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		11.5
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	11.02
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.984
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	3827
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.6
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		73
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		89
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		96
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-4%
Zonal Lumen Requirement (0°-90°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	≥85%		100.0%
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		120.0
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.097
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		11.5
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A

## 2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-09-15	COL12LM2 @4000K Black trim	-	250903016-S1
2	Goniophotometer Test	2025-09-15	COL12LM2 @4000K Black trim	-	250903016-S1
3	THD and PF Test	2025-09-15	COL12LM2 @4000K Black trim	-	250903016-S1

### Remark (If any):

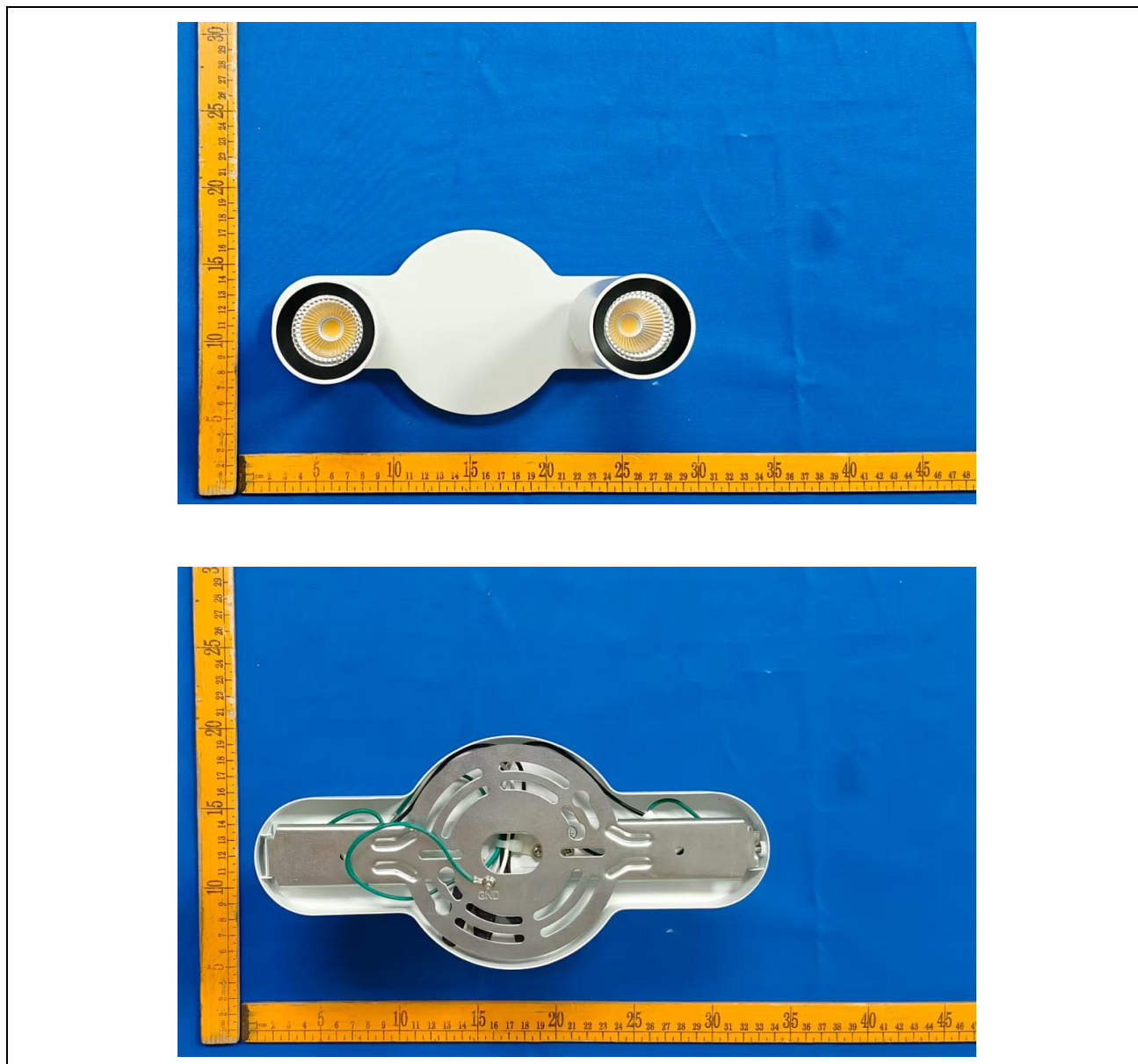
1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

### 3.0 Product Description

Luminaire Description: Model No. COL12LM2 @4000K Black trim, color tunable from 3000K, 4000K and 5000K.

Electrical Specification: 120Vac, 60Hz

Photos of Luminaire Characteristics



## 4.0 LM-79 Measurement and Test Results

### 4.1 Integrating Sphere Test

<b>Model No.</b>	COL12LM2 @4000K Black trim	<b>Sample ID</b>	250903016-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

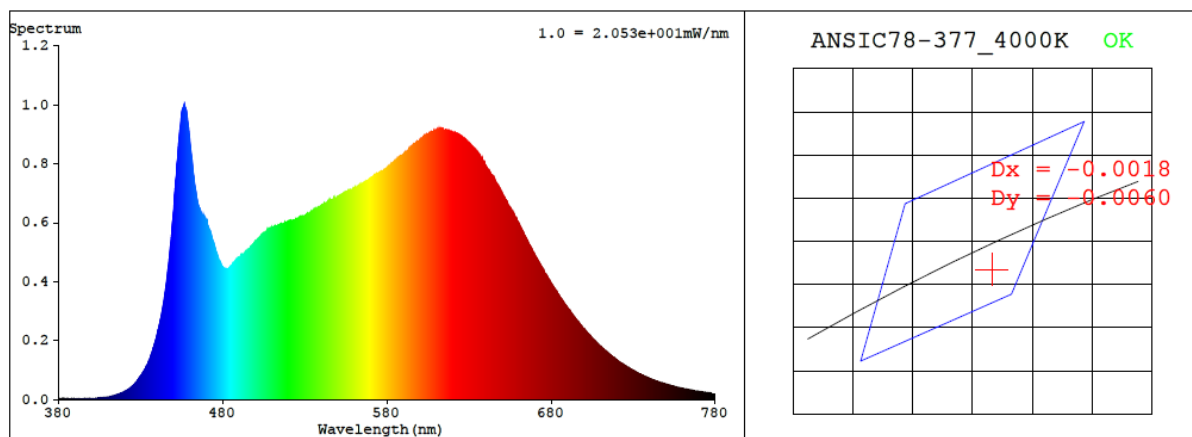
<b>Test Method</b>
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were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

<b>Voltage (Vac)</b>	<b>Frequency (Hz)</b>	<b>Current (A)</b>	<b>Power (W)</b>	<b>Power Factor</b>
120.0	60	0.097	11.5	0.984

<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>
3827	93.6	73	-0.0023	4.7	89	96	-4%

## 4.1 Integrating Sphere Test



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.3866$   $y = 0.3756$  /  $u' = 0.2296$   $v' = 0.5020$  ( $duv = -2.29e-03$ )

CCT= 3827K Prcp WL:  $L_d = 580.9\text{nm}$  Purity=28.7%

Peak WL:  $L_p = 457\text{nm}$  FWHM:  $\approx 28.7\text{nm}$  Ratio: R=21.1% G=74.1% B=4.8%

Render Index:  $R_a = 93.6$  AvgR = 92.1 TM30:  $R_f = 91$   $R_g = 98$

EEL: 0.14057 A+

R1 =97 R2 =98 R3 =95 R4 =93 R5 =95 R6 =94 R7 =90

R8 =86 R9 =73 R10=97 R11=95 R12=77 R13=99 R14=98 R15=94

## 4.1 Integrating Sphere Test

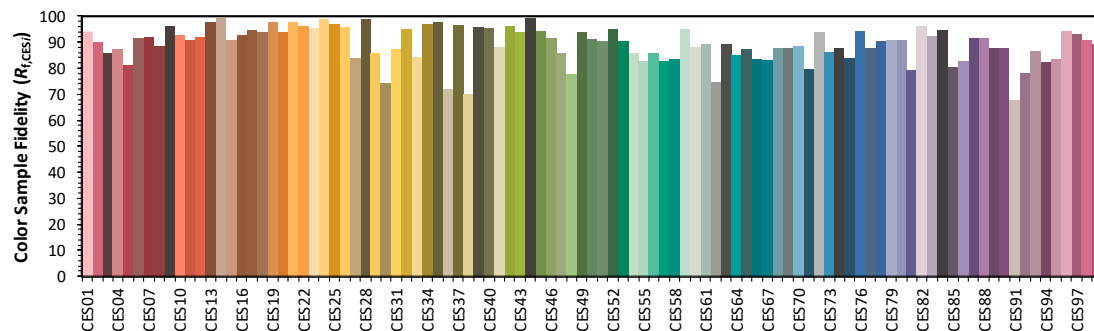
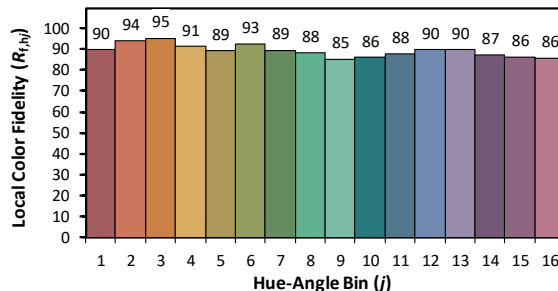
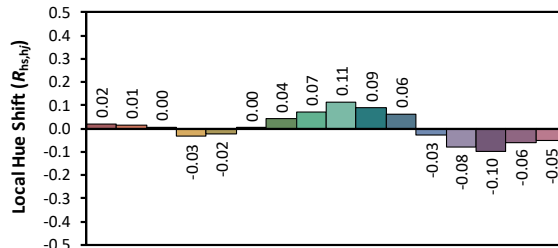
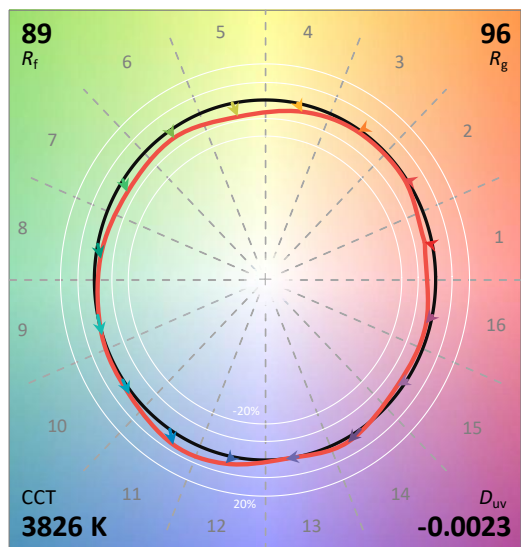
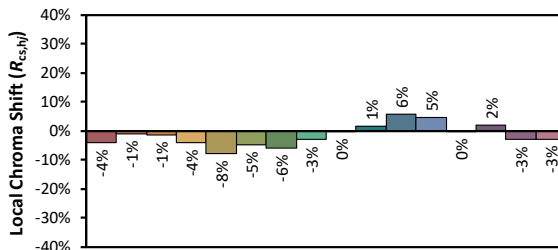
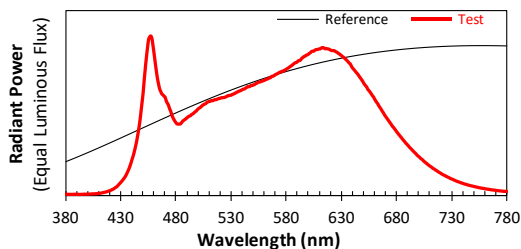
### ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/9/17

Model: COL12LM2 @4000K Black trim



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

$x$  0.3866  
 $y$  0.3754  
 $u'$  0.2297  
 $v'$  0.5019

CIE 13.3-1995  
(CRI)

$R_a$  94  
 $R_g$  73



## 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	4.50E-06	447	4.55E-04	514	5.91E-04	581	7.90E-04	648	7.23E-04	715	1.57E-04
381	2.90E-06	448	5.13E-04	515	5.95E-04	582	7.94E-04	649	7.13E-04	716	1.52E-04
382	2.50E-06	449	5.74E-04	516	5.95E-04	583	8.00E-04	650	7.01E-04	717	1.48E-04
383	2.70E-06	450	6.36E-04	517	5.97E-04	584	8.04E-04	651	6.90E-04	718	1.43E-04
384	2.70E-06	451	7.16E-04	518	6.01E-04	585	8.10E-04	652	6.81E-04	719	1.39E-04
385	2.70E-06	452	7.90E-04	519	6.02E-04	586	8.15E-04	653	6.73E-04	720	1.35E-04
386	2.80E-06	453	8.59E-04	520	6.03E-04	587	8.21E-04	654	6.58E-04	721	1.30E-04
387	2.50E-06	454	9.18E-04	521	6.07E-04	588	8.25E-04	655	6.52E-04	722	1.26E-04
388	3.50E-06	455	9.71E-04	522	6.07E-04	589	8.27E-04	656	6.42E-04	723	1.23E-04
389	3.00E-06	456	9.87E-04	523	6.08E-04	590	8.32E-04	657	6.32E-04	724	1.19E-04
390	2.60E-06	457	9.93E-04	524	6.09E-04	591	8.39E-04	658	6.21E-04	725	1.16E-04
391	2.90E-06	458	9.78E-04	525	6.13E-04	592	8.40E-04	659	6.13E-04	726	1.12E-04
392	2.20E-06	459	9.33E-04	526	6.15E-04	593	8.44E-04	660	6.00E-04	727	1.09E-04
393	2.50E-06	460	8.82E-04	527	6.20E-04	594	8.54E-04	661	5.88E-04	728	1.06E-04
394	2.70E-06	461	8.27E-04	528	6.20E-04	595	8.58E-04	662	5.78E-04	729	1.02E-04
395	3.00E-06	462	7.76E-04	529	6.22E-04	596	8.65E-04	663	5.68E-04	730	9.91E-05
396	3.60E-06	463	7.29E-04	530	6.23E-04	597	8.67E-04	664	5.56E-04	731	9.60E-05
397	3.80E-06	464	6.94E-04	531	6.28E-04	598	8.73E-04	665	5.45E-04	732	9.30E-05
398	3.70E-06	465	6.63E-04	532	6.30E-04	599	8.75E-04	666	5.35E-04	733	8.96E-05
399	3.70E-06	466	6.47E-04	533	6.34E-04	600	8.80E-04	667	5.23E-04	734	8.67E-05
400	3.80E-06	467	6.31E-04	534	6.37E-04	601	8.85E-04	668	5.13E-04	735	8.38E-05
401	4.40E-06	468	6.25E-04	535	6.42E-04	602	8.90E-04	669	5.01E-04	736	8.15E-05
402	4.40E-06	469	6.17E-04	536	6.44E-04	603	8.97E-04	670	4.91E-04	737	7.90E-05
403	5.20E-06	470	6.10E-04	537	6.48E-04	604	8.98E-04	671	4.81E-04	738	7.66E-05
404	5.70E-06	471	5.88E-04	538	6.50E-04	605	8.99E-04	672	4.71E-04	739	7.38E-05
405	5.70E-06	472	5.73E-04	539	6.53E-04	606	9.05E-04	673	4.62E-04	740	7.16E-05
406	6.20E-06	473	5.61E-04	540	6.58E-04	607	9.08E-04	674	4.51E-04	741	6.91E-05
407	6.60E-06	474	5.39E-04	541	6.61E-04	608	9.08E-04	675	4.42E-04	742	6.68E-05
408	6.90E-06	475	5.24E-04	542	6.62E-04	609	9.10E-04	676	4.31E-04	743	6.54E-05
409	8.20E-06	476	5.02E-04	543	6.67E-04	610	9.13E-04	677	4.24E-04	744	6.29E-05
410	8.90E-06	477	4.84E-04	544	6.72E-04	611	9.13E-04	678	4.14E-04	745	6.10E-05
411	9.80E-06	478	4.71E-04	545	6.77E-04	612	9.19E-04	679	4.05E-04	746	5.90E-05
412	1.09E-05	479	4.59E-04	546	6.76E-04	613	9.20E-04	680	3.95E-04	747	5.73E-05
413	1.24E-05	480	4.49E-04	547	6.79E-04	614	9.19E-04	681	3.87E-04	748	5.56E-05
414	1.41E-05	481	4.43E-04	548	6.85E-04	615	9.13E-04	682	3.78E-04	749	5.43E-05
415	1.54E-05	482	4.42E-04	549	6.83E-04	616	9.15E-04	683	3.69E-04	750	5.25E-05
416	1.75E-05	483	4.42E-04	550	6.87E-04	617	9.13E-04	684	3.61E-04	751	5.10E-05
417	1.88E-05	484	4.44E-04	551	6.89E-04	618	9.12E-04	685	3.52E-04	752	4.93E-05
418	2.17E-05	485	4.52E-04	552	6.95E-04	619	9.10E-04	686	3.43E-04	753	4.77E-05
419	2.34E-05	486	4.61E-04	553	6.97E-04	620	9.05E-04	687	3.36E-04	754	4.60E-05
420	2.66E-05	487	4.66E-04	554	7.02E-04	621	9.03E-04	688	3.27E-04	755	4.45E-05
421	2.91E-05	488	4.71E-04	555	7.04E-04	622	9.02E-04	689	3.19E-04	756	4.31E-05
422	3.29E-05	489	4.77E-04	556	7.05E-04	623	9.02E-04	690	3.12E-04	757	4.18E-05
423	3.59E-05	490	4.82E-04	557	7.09E-04	624	8.99E-04	691	3.04E-04	758	4.03E-05
424	4.06E-05	491	4.89E-04	558	7.11E-04	625	8.94E-04	692	2.95E-04	759	3.97E-05
425	4.57E-05	492	4.92E-04	559	7.13E-04	626	8.91E-04	693	2.89E-04	760	3.79E-05
426	5.00E-05	493	4.95E-04	560	7.16E-04	627	8.85E-04	694	2.82E-04	761	3.66E-05
427	5.67E-05	494	5.02E-04	561	7.19E-04	628	8.82E-04	695	2.74E-04	762	3.58E-05
428	6.46E-05	495	5.06E-04	562	7.22E-04	629	8.75E-04	696	2.67E-04	763	3.47E-05
429	7.19E-05	496	5.11E-04	563	7.25E-04	630	8.71E-04	697	2.61E-04	764	3.37E-05
430	7.98E-05	497	5.18E-04	564	7.30E-04	631	8.64E-04	698	2.53E-04	765	3.26E-05
431	8.74E-05	498	5.23E-04	565	7.31E-04	632	8.60E-04	699	2.46E-04	766	3.12E-05
432	9.64E-05	499	5.30E-04	566	7.35E-04	633	8.53E-04	700	2.40E-04	767	3.03E-05
433	1.05E-04	500	5.38E-04	567	7.41E-04	634	8.47E-04	701	2.34E-04	768	2.97E-05
434	1.16E-04	501	5.42E-04	568	7.42E-04	635	8.40E-04	702	2.27E-04	769	2.88E-05
435	1.29E-04	502	5.47E-04	569	7.46E-04	636	8.33E-04	703	2.22E-04	770	2.77E-05
436	1.45E-04	503	5.53E-04	570	7.51E-04	637	8.24E-04	704	2.16E-04	771	2.68E-05
437	1.60E-04	504	5.60E-04	571	7.54E-04	638	8.19E-04	705	2.08E-04	772	2.56E-05
438	1.78E-04	505	5.64E-04	572	7.58E-04	639	8.05E-04	706	2.03E-04	773	2.51E-05
439	1.99E-04	506	5.68E-04	573	7.62E-04	640	7.94E-04	707	1.97E-04	774	2.43E-05
440	2.22E-04	507	5.71E-04	574	7.67E-04	641	7.86E-04	708	1.92E-04	775	2.36E-05
441	2.43E-04	508	5.78E-04	575	7.67E-04	642	7.77E-04	709	1.86E-04	776	2.30E-05
442	2.69E-04	509	5.81E-04	576	7.72E-04	643	7.69E-04	710	1.81E-04	777	2.20E-05
443	2.98E-04	510	5.84E-04	577	7.73E-04	644	7.61E-04	711	1.76E-04	778	2.14E-05
444	3.30E-04	511	5.85E-04	578	7.78E-04	645	7.53E-04	712	1.71E-04	779	2.14E-05
445	3.67E-04	512	5.89E-04	579	7.81E-04	646	7.42E-04	713	1.65E-04	780	2.15E-05
446	4.09E-04	513	5.89E-04	580	7.86E-04	647	7.32E-04	714	1.62E-04	N/A	N/A



## 4.0 LM-79 Measurement and Test Results

### 4.2 Goniophotometer Test

Model No.	COL12LM2 @4000K Black trim	Sample ID	250903016-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	25.0	Humidity (%RH)	41.1

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	120.0	60	0.097	11.5	0.984
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

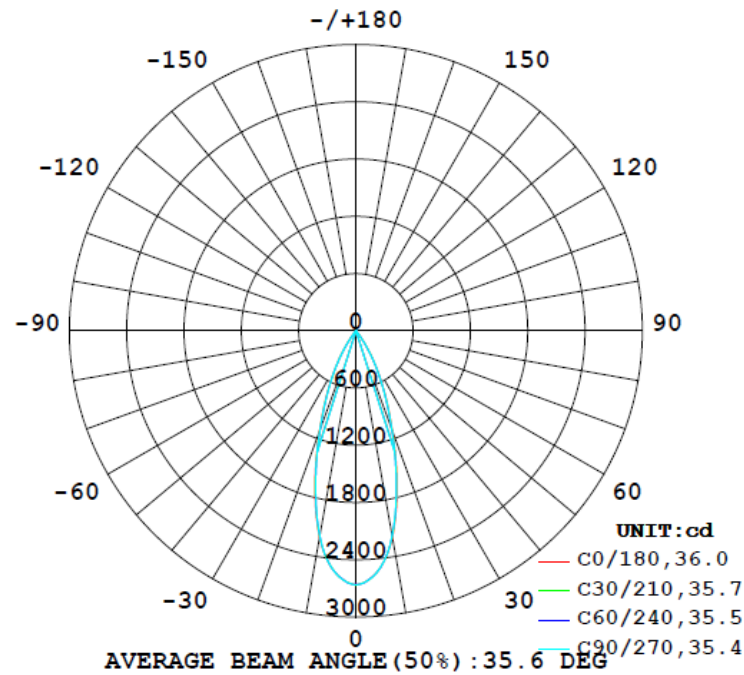
#### Test Result

Flux (lm)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)	Zonal Lumen Requirement
	C0-180	C90-270	C0-180	C90-270		(0°-90°)
1135	65.1	64.4	36.0	35.5	98.7	100.0%

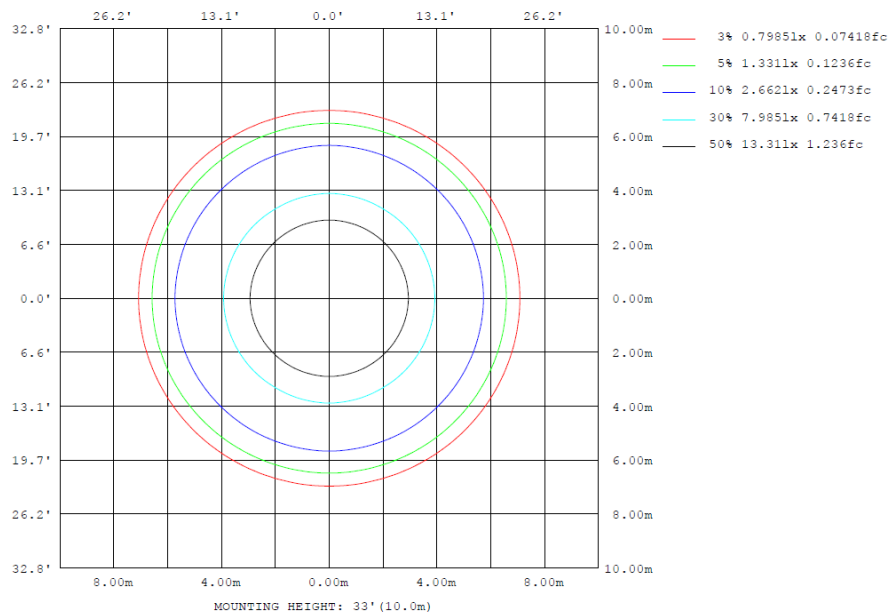
## 4.2 Goniophotometer Test

### 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	$\gamma$	zone	total	%lum, lamp
10	2200	2188	2183	2188	2200	2188	2183	2188	0- 10	231.4	231.4	20.4, 20.4
20	1123	1099	1099	1099	1123	1099	1099	1099	10- 20	449.5	681.0	60, 60
30	395.5	384.7	377.9	384.7	395.5	384.7	377.9	384.7	20- 30	318.4	999.3	88.1, 88.1
40	30.56	24.98	23.39	24.98	30.56	24.98	23.39	24.98	30- 40	101.0	1100	97, 97
50	12.42	12.45	12.12	12.45	12.42	12.45	12.12	12.45	40- 50	11.88	1112	98, 98
60	10.10	10.02	9.661	10.02	10.10	10.02	9.661	10.02	50- 60	10.09	1122	98.9, 98.9
70	6.458	6.405	6.067	6.405	6.458	6.405	6.067	6.405	60- 70	8.333	1131	99.6, 99.6
80	0.5738	0.5456	0.5601	0.5456	0.5738	0.5456	0.5601	0.5456	70- 80	3.970	1135	100, 100
90	0	0	0	0	0	0	0	0	80- 90	0.2410	1135	100, 100
100	0	0	0	0	0	0	0	0	90-100	0	1135	100, 100
110	0	0	0	0	0	0	0	0	100-110	0	1135	100, 100
120	0	0	0	0	0	0	0	0	110-120	0	1135	100, 100
130	0	0	0	0	0	0	0	0	120-130	0	1135	100, 100
140	0	0	0	0	0	0	0	0	130-140	0	1135	100, 100
150	0	0	0	0	0	0	0	0	140-150	0	1135	100, 100
160	0	0	0	0	0	0	0	0	150-160	0	1135	100, 100
170	0	0	0	0	0	0	0	0	160-170	0	1135	100, 100
180	0	0	0	0	0	0	0	0	170-180	0	1135	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	231.43	0-10	231.43	20.39%
10-20	449.52	0-20	680.95	60.00%
20-30	318.38	0-30	999.33	88.06%
30-40	101.00	0-40	1100.33	96.96%
40-50	11.88	0-50	1112.21	98.01%
50-60	10.09	0-60	1122.30	98.89%
60-70	8.33	0-70	1130.63	99.63%
70-80	3.97	0-80	1134.60	99.98%
80-90	0.24	0-90	1134.84	100.00%
90-100	0.00	0-100	1134.84	100.00%
100-110	0.00	0-110	1134.84	100.00%
110-120	0.00	0-120	1134.84	100.00%
120-130	0.00	0-130	1134.84	100.00%
130-140	0.00	0-140	1134.84	100.00%
140-150	0.00	0-150	1134.84	100.00%
150-160	0.00	0-160	1134.84	100.00%
160-170	0.00	0-170	1134.84	100.00%
170-180	0.00	0-180	1134.84	100.00%

## 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	2662	2663	2663	2661	2660	2665	2663	2665	2660	2661	2663	2663	2662	2663	2663	2661	2660	2665	2663
5	2540	2538	2539	2538	2538	2542	2541	2542	2538	2538	2539	2538	2540	2538	2539	2538	2538	2542	2541
10	2200	2196	2192	2188	2184	2183	2183	2183	2184	2188	2192	2196	2200	2196	2192	2188	2184	2183	2183
15	1663	1657	1647	1640	1633	1634	1633	1634	1633	1640	1647	1657	1663	1657	1647	1640	1633	1634	1633
20	1123	1115	1106	1099	1096	1098	1099	1098	1096	1099	1106	1115	1123	1115	1106	1099	1096	1098	1099
25	702	696	691	688	688	687	690	687	688	688	691	696	702	696	691	688	688	687	690
30	395	394	390	385	379	377	378	377	379	385	390	394	395	394	390	385	379	377	378
35	158	156	153	148	143	139	139	139	143	148	153	156	158	156	153	148	143	139	139
40	30.6	29.2	27.3	25.0	23.5	23.1	23.4	23.1	23.5	25.0	27.3	29.2	30.6	29.2	27.3	25.0	23.5	23.1	23.4
45	14.4	14.3	14.3	14.3	14.3	14.3	14.1	14.3	14.3	14.3	14.3	14.3	14.4	14.3	14.3	14.3	14.3	14.3	14.1
50	12.4	12.4	12.4	12.5	12.5	12.3	12.1	12.3	12.5	12.5	12.4	12.4	12.4	12.4	12.4	12.5	12.5	12.3	12.1
55	11.5	11.5	11.5	11.5	11.5	11.3	11.1	11.3	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.3	11.1
60	10.1	10.1	10.1	10.0	9.88	9.79	9.66	9.79	9.88	10.0	10.1	10.1	10.1	10.1	10.1	10.0	9.88	9.79	9.66
65	8.79	8.79	8.82	8.76	8.65	8.50	8.36	8.50	8.65	8.76	8.82	8.79	8.79	8.79	8.82	8.76	8.65	8.50	8.36
70	6.46	6.46	6.48	6.40	6.33	6.20	6.07	6.20	6.33	6.40	6.48	6.46	6.46	6.46	6.48	6.40	6.33	6.20	6.07
75	4.14	4.14	4.09	4.05	3.99	3.84	3.69	3.84	3.99	4.05	4.09	4.14	4.14	4.14	4.09	4.05	3.99	3.84	3.69
80	0.57	0.56	0.54	0.55	0.55	0.56	0.56	0.56	0.55	0.55	0.54	0.56	0.57	0.56	0.54	0.55	0.55	0.56	0.56
85	0.21	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.20
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	2665	2660	2661	2663	2663														
5	2542	2538	2538	2539	2538														
10	2183	2184	2188	2192	2196														
15	1634	1633	1640	1647	1657														
20	1098	1096	1099	1106	1115														
25	687	688	688	691	696														
30	377	379	385	390	394														
35	139	143	148	153	156														
40	23.1	23.5	25.0	27.3	29.2														
45	14.3	14.3	14.3	14.3	14.3														
50	12.3	12.5	12.5	12.4	12.4														
55	11.3	11.5	11.5	11.5	11.5														
60	9.79	9.88	10.0	10.1	10.1														
65	8.50	8.65	8.76	8.82	8.79														
70	6.20	6.33	6.40	6.48	6.46														
75	3.84	3.99	4.05	4.09	4.14														
80	0.56	0.55	0.55	0.54	0.56														
85	0.20	0.20	0.20	0.20	0.21														
90	0.00	0.00	0.00	0.00	0.00														
95	0.00	0.00	0.00	0.00	0.00														
100	0.00	0.00	0.00	0.00	0.00														
105	0.00	0.00	0.00	0.00	0.00														
110	0.00	0.00	0.00	0.00	0.00														
115	0.00	0.00	0.00	0.00	0.00														
120	0.00	0.00	0.00	0.00	0.00														
125	0.00	0.00	0.00	0.00	0.00														
130	0.00	0.00	0.00	0.00	0.00														
135	0.00	0.00	0.00	0.00	0.00														
140	0.00	0.00	0.00	0.00	0.00														
145	0.00	0.00	0.00	0.00	0.00														
150	0.00	0.00	0.00	0.00	0.00														
155	0.00	0.00	0.00	0.00	0.00														
160	0.00	0.00	0.00	0.00	0.00														
165	0.00	0.00	0.00	0.00	0.00														
170	0.00	0.00	0.00	0.00	0.00														
175	0.00	0.00	0.00	0.00	0.00														
180	0.00	0.00	0.00	0.00	0.00														

## 4.0 LM-79 Measurement and Test Results

### 4.3 THD and PF Test

<b>Model No.</b>	COL12LM2 @4000K Black trim	<b>Sample ID</b>	250903016-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 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	0.097	11.5	0.984	11.02

## 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	2025-08-04	2026-08-03
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

\*\*\*\*\*End of Report\*\*\*\*\*