

## Photometric Test Report

### Relevant Standards

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

Prepared For

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Issue Date: 2025-09-17

Revised Date: N/A

## 1.0 Test Summary

DLC Technical Requirements V6.0

Surface Mount Luminaires				
Requirement Category	Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	250		1659
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Standard	Premium	97.0
		95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		17.1
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	11.42
Power Factor (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.982
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019	7 steps	3985±275	3832
		4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.4
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		0.145
(Goniophotometer – Section 4.2)		Non-Worst Case		N/A
Power (Input Wattage – W)				
(Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		17.1
(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	2025-09-04	COL18SM3 @4000K Black trim	-	250903021-S1
2	Goniophotometer Test	2025-09-04	COL18SM3 @4000K Black trim	-	250903021-S1
3	THD and PF Test	2025-09-04	COL18SM3 @4000K Black trim	-	250903021-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. COL18SM3 @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>	COL18SM3 @4000K Black trim	<b>Sample ID</b>	250903021-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

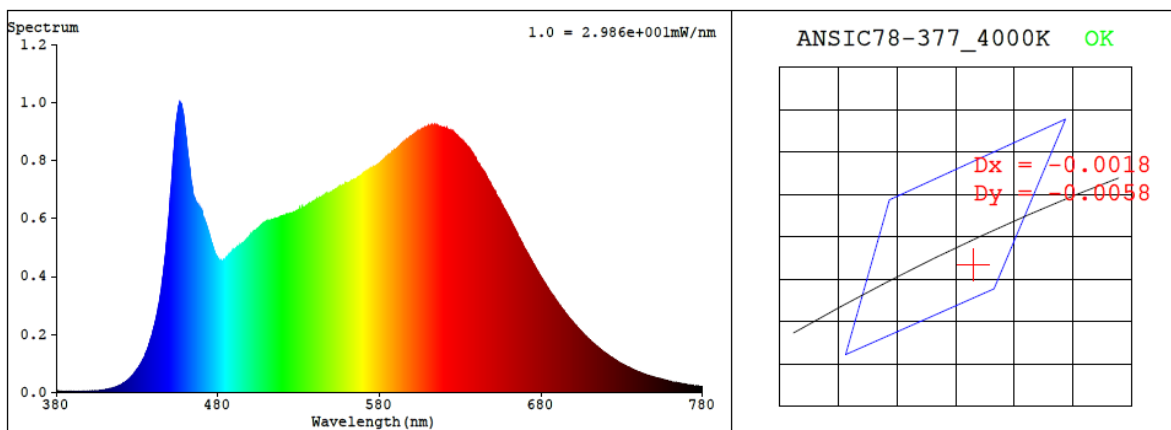
<b>Test Method</b>
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were 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	0.145	17.1	0.982

<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>
3832	93.4	73	-0.0022	4.6	89	96	-4%

## 4.1 Integrating Sphere Test



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.3864$   $y = 0.3756$  /  $u' = 0.2295$   $v' = 0.5020$  ( $duv = -2.22e-03$ )

CCT= 3832K Prp WL: Ld=580.9nm Purity=28.7%

Peak WL: Lp=456nm FWHM: =29.1nm Ratio:R=21.0% G=74.1% B=4.9%

Render Index: Ra = 93.4 AvgR = 92.0 TM30:Rf=91 Rg=98

EEI: 0.14867 A+

R1 =97 R2 =98 R3 =95 R4 =92 R5 =95 R6 =94 R7 =90

R8 =86 R9 =73 R10=96 R11=95 R12=76 R13=99 R14=98 R15=94

## 4.1 Integrating Sphere Test

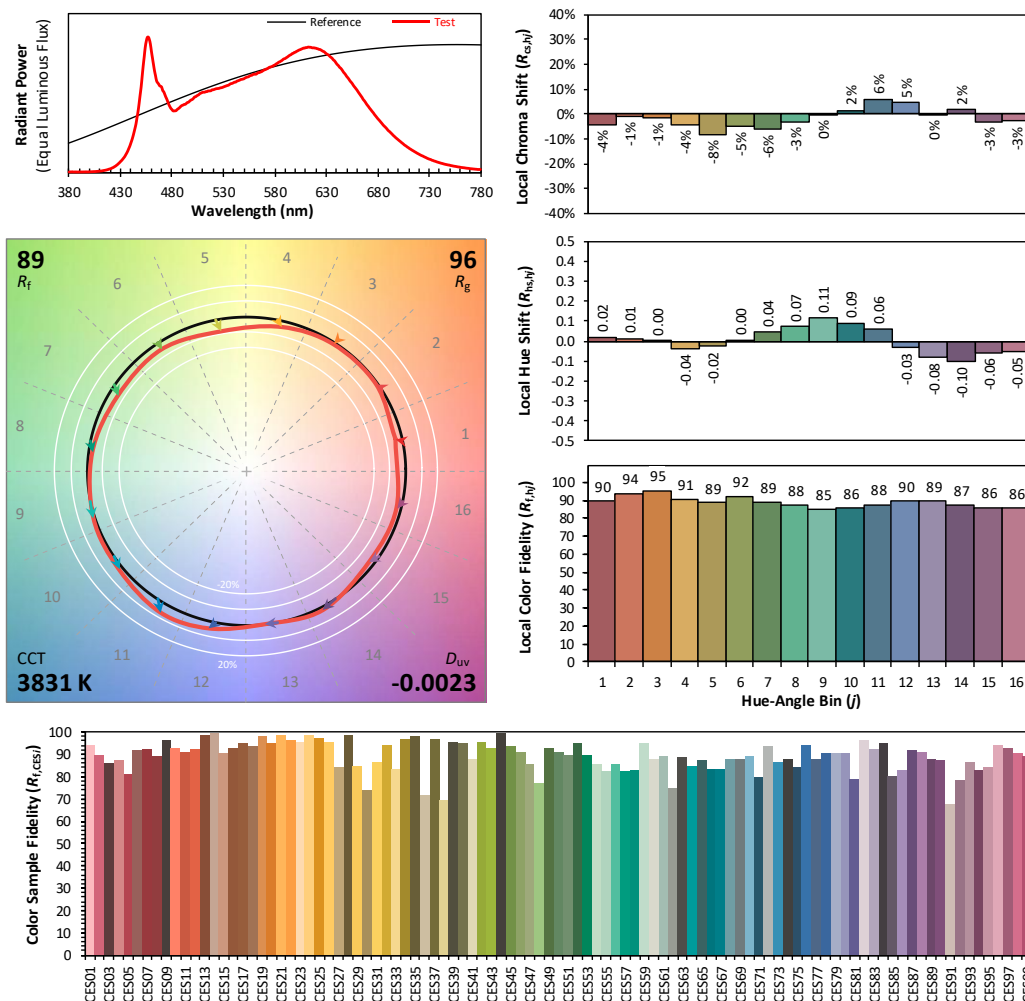
### ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/9/17

Model: COL18SM3 @4000K Black trim



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

$x$  0.3864  
 $y$  0.3755  
 $u'$  0.2295  
 $v'$  0.5019

CIE 13.3-1995  
(CRI)

$R_a$  93  
 $R_g$  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	2.60E-06	447	4.47E-04	514	5.94E-04	581	7.96E-04	648	7.27E-04	715	1.57E-04
381	3.30E-06	448	5.04E-04	515	5.98E-04	582	8.00E-04	649	7.17E-04	716	1.52E-04
382	2.90E-06	449	5.67E-04	516	5.99E-04	583	8.05E-04	650	7.05E-04	717	1.48E-04
383	4.10E-06	450	6.27E-04	517	6.00E-04	584	8.11E-04	651	6.97E-04	718	1.43E-04
384	2.60E-06	451	7.04E-04	518	6.01E-04	585	8.14E-04	652	6.86E-04	719	1.39E-04
385	2.80E-06	452	7.82E-04	519	6.07E-04	586	8.19E-04	653	6.75E-04	720	1.35E-04
386	2.90E-06	453	8.49E-04	520	6.07E-04	587	8.23E-04	654	6.65E-04	721	1.30E-04
387	3.00E-06	454	9.20E-04	521	6.10E-04	588	8.30E-04	655	6.57E-04	722	1.26E-04
388	2.20E-06	455	9.63E-04	522	6.13E-04	589	8.35E-04	656	6.46E-04	723	1.23E-04
389	3.20E-06	456	9.92E-04	523	6.15E-04	590	8.37E-04	657	6.34E-04	724	1.20E-04
390	2.80E-06	457	9.95E-04	524	6.16E-04	591	8.42E-04	658	6.25E-04	725	1.16E-04
391	2.80E-06	458	9.77E-04	525	6.17E-04	592	8.47E-04	659	6.15E-04	726	1.12E-04
392	2.80E-06	459	9.44E-04	526	6.18E-04	593	8.53E-04	660	6.05E-04	727	1.09E-04
393	2.90E-06	460	8.91E-04	527	6.21E-04	594	8.59E-04	661	5.93E-04	728	1.05E-04
394	3.10E-06	461	8.42E-04	528	6.23E-04	595	8.63E-04	662	5.82E-04	729	1.01E-04
395	3.10E-06	462	7.94E-04	529	6.25E-04	596	8.67E-04	663	5.72E-04	730	9.80E-05
396	3.50E-06	463	7.48E-04	530	6.28E-04	597	8.74E-04	664	5.61E-04	731	9.56E-05
397	3.50E-06	464	7.11E-04	531	6.31E-04	598	8.76E-04	665	5.50E-04	732	9.30E-05
398	3.00E-06	465	6.74E-04	532	6.34E-04	599	8.82E-04	666	5.37E-04	733	8.88E-05
399	3.90E-06	466	6.60E-04	533	6.37E-04	600	8.84E-04	667	5.28E-04	734	8.70E-05
400	3.90E-06	467	6.50E-04	534	6.39E-04	601	8.89E-04	668	5.17E-04	735	8.35E-05
401	4.30E-06	468	6.37E-04	535	6.41E-04	602	8.93E-04	669	5.05E-04	736	8.16E-05
402	4.50E-06	469	6.33E-04	536	6.47E-04	603	8.97E-04	670	4.95E-04	737	7.88E-05
403	5.00E-06	470	6.27E-04	537	6.52E-04	604	9.01E-04	671	4.86E-04	738	7.59E-05
404	5.50E-06	471	6.02E-04	538	6.53E-04	605	9.03E-04	672	4.74E-04	739	7.38E-05
405	5.60E-06	472	5.93E-04	539	6.56E-04	606	9.07E-04	673	4.65E-04	740	7.13E-05
406	6.20E-06	473	5.74E-04	540	6.60E-04	607	9.10E-04	674	4.55E-04	741	6.92E-05
407	6.90E-06	474	5.55E-04	541	6.64E-04	608	9.14E-04	675	4.46E-04	742	6.67E-05
408	7.40E-06	475	5.38E-04	542	6.64E-04	609	9.14E-04	676	4.37E-04	743	6.51E-05
409	8.00E-06	476	5.18E-04	543	6.70E-04	610	9.18E-04	677	4.25E-04	744	6.26E-05
410	8.80E-06	477	4.99E-04	544	6.73E-04	611	9.18E-04	678	4.16E-04	745	6.06E-05
411	1.02E-05	478	4.83E-04	545	6.76E-04	612	9.20E-04	679	4.07E-04	746	5.87E-05
412	1.05E-05	479	4.70E-04	546	6.79E-04	613	9.22E-04	680	3.97E-04	747	5.71E-05
413	1.27E-05	480	4.62E-04	547	6.83E-04	614	9.20E-04	681	3.88E-04	748	5.55E-05
414	1.37E-05	481	4.53E-04	548	6.84E-04	615	9.20E-04	682	3.80E-04	749	5.39E-05
415	1.54E-05	482	4.52E-04	549	6.86E-04	616	9.17E-04	683	3.71E-04	750	5.28E-05
416	1.68E-05	483	4.53E-04	550	6.88E-04	617	9.16E-04	684	3.62E-04	751	5.04E-05
417	1.90E-05	484	4.54E-04	551	6.94E-04	618	9.16E-04	685	3.52E-04	752	4.91E-05
418	2.13E-05	485	4.62E-04	552	6.97E-04	619	9.14E-04	686	3.44E-04	753	4.74E-05
419	2.40E-05	486	4.67E-04	553	7.01E-04	620	9.13E-04	687	3.37E-04	754	4.58E-05
420	2.59E-05	487	4.73E-04	554	7.02E-04	621	9.10E-04	688	3.29E-04	755	4.45E-05
421	2.91E-05	488	4.81E-04	555	7.06E-04	622	9.09E-04	689	3.20E-04	756	4.35E-05
422	3.29E-05	489	4.88E-04	556	7.11E-04	623	9.05E-04	690	3.11E-04	757	4.19E-05
423	3.62E-05	490	4.93E-04	557	7.13E-04	624	9.04E-04	691	3.03E-04	758	4.04E-05
424	4.12E-05	491	4.96E-04	558	7.15E-04	625	9.00E-04	692	2.98E-04	759	3.92E-05
425	4.55E-05	492	5.00E-04	559	7.21E-04	626	8.95E-04	693	2.89E-04	760	3.83E-05
426	5.14E-05	493	5.01E-04	560	7.22E-04	627	8.90E-04	694	2.83E-04	761	3.62E-05
427	5.73E-05	494	5.07E-04	561	7.22E-04	628	8.87E-04	695	2.74E-04	762	3.57E-05
428	6.44E-05	495	5.14E-04	562	7.23E-04	629	8.80E-04	696	2.67E-04	763	3.45E-05
429	7.15E-05	496	5.16E-04	563	7.29E-04	630	8.74E-04	697	2.60E-04	764	3.38E-05
430	7.96E-05	497	5.22E-04	564	7.34E-04	631	8.68E-04	698	2.53E-04	765	3.25E-05
431	8.69E-05	498	5.29E-04	565	7.34E-04	632	8.65E-04	699	2.47E-04	766	3.13E-05
432	9.59E-05	499	5.34E-04	566	7.38E-04	633	8.58E-04	700	2.40E-04	767	3.02E-05
433	1.06E-04	500	5.37E-04	567	7.40E-04	634	8.50E-04	701	2.34E-04	768	2.96E-05
434	1.15E-04	501	5.45E-04	568	7.45E-04	635	8.44E-04	702	2.28E-04	769	2.85E-05
435	1.29E-04	502	5.55E-04	569	7.50E-04	636	8.38E-04	703	2.21E-04	770	2.72E-05
436	1.42E-04	503	5.56E-04	570	7.54E-04	637	8.27E-04	704	2.15E-04	771	2.64E-05
437	1.57E-04	504	5.62E-04	571	7.56E-04	638	8.22E-04	705	2.09E-04	772	2.58E-05
438	1.75E-04	505	5.67E-04	572	7.62E-04	639	8.12E-04	706	2.02E-04	773	2.48E-05
439	1.93E-04	506	5.71E-04	573	7.63E-04	640	8.00E-04	707	1.97E-04	774	2.41E-05
440	2.15E-04	507	5.78E-04	574	7.69E-04	641	7.91E-04	708	1.92E-04	775	2.32E-05
441	2.37E-04	508	5.82E-04	575	7.74E-04	642	7.84E-04	709	1.86E-04	776	2.28E-05
442	2.62E-04	509	5.86E-04	576	7.75E-04	643	7.73E-04	710	1.81E-04	777	2.16E-05
443	2.92E-04	510	5.89E-04	577	7.78E-04	644	7.67E-04	711	1.75E-04	778	2.12E-05
444	3.23E-04	511	5.89E-04	578	7.81E-04	645	7.58E-04	712	1.71E-04	779	2.12E-05
445	3.56E-04	512	5.90E-04	579	7.87E-04	646	7.47E-04	713	1.66E-04	780	2.13E-05
446	4.02E-04	513	5.94E-04	580	7.89E-04	647	7.36E-04	714	1.61E-04	N/A	N/A

## 4.0 LM-79 Measurement and Test Results

### 4.2 Goniophotometer Test

<b>Model No.</b>	COL18SM3 @4000K Black trim	<b>Sample ID</b>	250903021-S1
<b>Operate time (Min.)</b>	30	<b>Stabilization time (Min.)</b>	60
<b>Temperature (°C)</b>	25.0	<b>Humidity (%RH)</b>	40.8

<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>	120.0	60	0.145	17.1	0.982
<b>NON-WORST CASE</b>	N/A	N/A	N/A	N/A	N/A

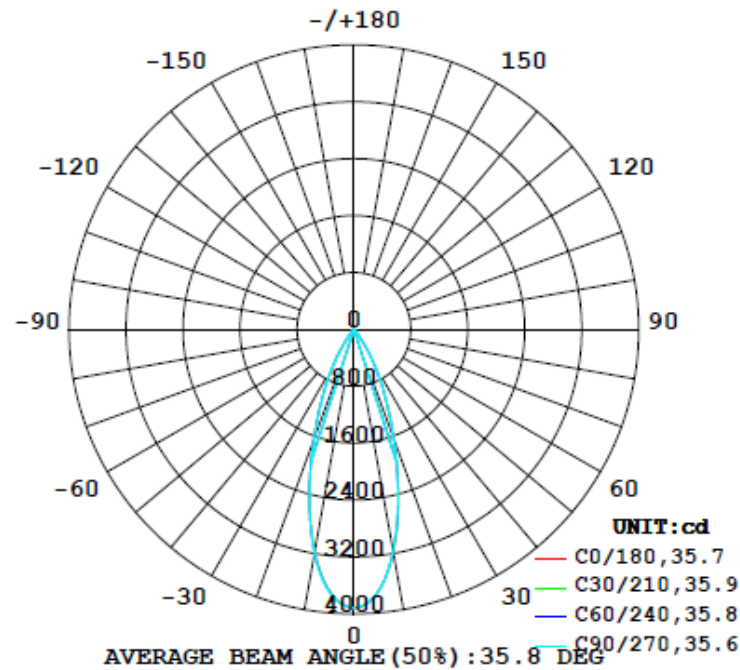
#### Test Result

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°)
1659	65.1	65.0	35.8	35.6	97.0	100.0%

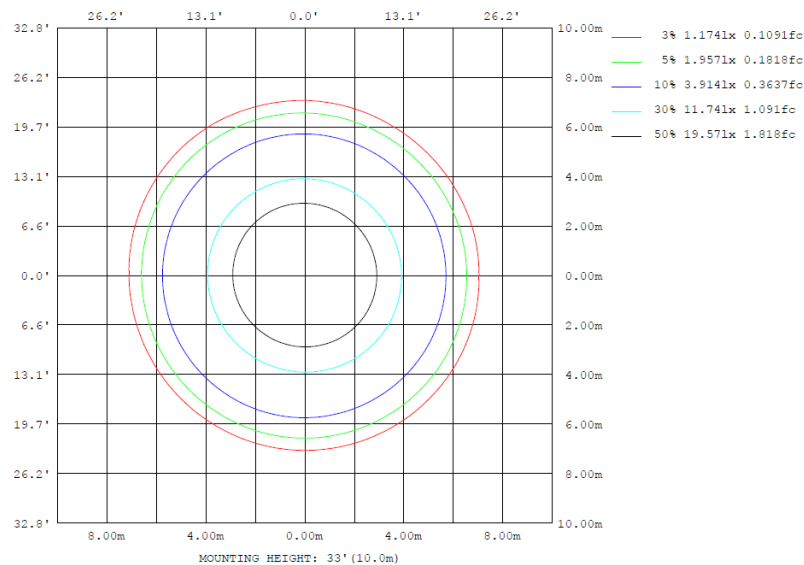
## 4.2 Goniophotometer Test

### 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	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	3184	3175	3161	3161	3173	3193	3201	3189	0- 10	338.4	338.4	20.4,20.4
20	1629	1644	1627	1626	1657	1669	1640	1613	10- 20	658.2	996.7	60.1,60.1
30	569.2	580.9	591.2	595.2	594.2	590.3	576.4	559.2	20- 30	476.3	1473	88.8,88.8
40	43.31	54.40	39.85	34.48	49.19	60.19	41.51	34.18	30- 40	154.9	1628	98.1,98.1
50	11.77	11.76	11.61	11.38	11.51	11.67	11.65	11.69	40- 50	14.52	1642	99,99
60	8.106	7.986	8.017	7.987	8.157	8.416	8.468	8.353	50- 60	8.824	1651	99.5,99.5
70	3.633	3.763	3.928	3.840	3.760	3.693	3.612	3.574	60- 70	6.187	1657	99.9,99.9
80	0.0521	0.0459	0.0345	0.0354	0.0501	0.0589	0.0386	0.0353	70- 80	1.568	1659	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.0233	1659	100,100
100	0	0	0	0	0	0	0	0	90-100	0	1659	100,100
110	0	0	0	0	0	0	0	0	100-110	0	1659	100,100
120	0	0	0	0	0	0	0	0	110-120	0	1659	100,100
130	0	0	0	0	0	0	0	0	120-130	0	1659	100,100
140	0	0	0	0	0	0	0	0	130-140	0	1659	100,100
150	0	0	0	0	0	0	0	0	140-150	0	1659	100,100
160	0	0	0	0	0	0	0	0	150-160	0	1659	100,100
170	0	0	0	0	0	0	0	0	160-170	0	1659	100,100
180	0	0	0	0	0	0	0	0	170-180	0	1659	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	338.41	0-10	338.41	20.40%
10-20	658.25	0-20	996.66	60.08%
20-30	476.28	0-30	1472.94	88.79%
30-40	154.89	0-40	1627.83	98.12%
40-50	14.52	0-50	1642.35	99.00%
50-60	8.82	0-60	1651.17	99.53%
60-70	6.19	0-70	1657.36	99.90%
70-80	1.57	0-80	1658.93	100.00%
80-90	0.02	0-90	1658.95	100.00%
90-100	0.00	0-100	1658.95	100.00%
100-110	0.00	0-110	1658.95	100.00%
110-120	0.00	0-120	1658.95	100.00%
120-130	0.00	0-130	1658.95	100.00%
130-140	0.00	0-140	1658.95	100.00%
140-150	0.00	0-150	1658.95	100.00%
150-160	0.00	0-160	1658.95	100.00%
160-170	0.00	0-170	1658.95	100.00%
170-180	0.00	0-180	1658.95	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	3914	3911	3912	3913	3915	3914	3914	3915	3913	3914	3916	3915	3914	3911	3912	3913	3915	3914	3914
5	3731	3731	3722	3722	3724	3727	3729	3732	3732	3729	3730	3729	3719	3722	3721	3727	3732	3734	3740
10	3184	3181	3179	3175	3170	3166	3161	3158	3157	3161	3166	3176	3173	3181	3188	3193	3200	3201	3201
15	2411	2410	2408	2405	2395	2387	2380	2377	2377	2383	2393	2404	2404	2418	2427	2433	2432	2426	2416
20	1629	1639	1644	1644	1638	1632	1627	1623	1620	1626	1632	1641	1657	1665	1671	1669	1662	1652	1640
25	1024	1027	1032	1035	1033	1033	1037	1037	1037	1040	1042	1044	1050	1053	1055	1053	1045	1036	1027
30	569	575	581	581	582	585	591	592	592	595	595	593	594	593	593	590	587	584	576
35	222	227	230	230	229	228	228	227	228	230	234	241	248	253	253	250	237	231	
40	43.3	53.7	55.0	54.4	52.7	42.2	39.9	38.5	36.3	34.5	36.7	42.5	49.2	55.2	60.1	60.2	55.9	49.4	41.5
45	15.8	15.8	15.9	16.0	15.9	15.6	15.4	15.2	15.1	15.0	15.2	15.4	15.6	16.2	16.6	16.4	15.9	15.4	15.3
50	11.8	11.7	11.7	11.9	11.7	11.6	11.6	11.5	11.5	11.4	11.5	11.5	11.5	11.6	11.7	11.7	11.6	11.6	11.6
55	9.96	9.88	9.85	9.81	9.78	9.75	9.72	9.68	9.62	9.66	9.75	9.82	9.83	9.87	9.94	9.98	10.1	10.1	10.2
60	8.11	8.05	7.98	7.99	7.97	8.04	8.02	8.02	7.99	7.99	8.05	8.10	8.16	8.24	8.35	8.42	8.41	8.44	8.47
65	6.40	6.36	6.35	6.34	6.38	6.58	6.64	6.71	6.70	6.60	6.57	6.54	6.51	6.49	6.43	6.43	6.46	6.53	6.65
70	3.63	3.67	3.73	3.76	3.79	3.91	3.93	3.96	3.92	3.84	3.85	3.80	3.76	3.80	3.75	3.69	3.67	3.64	3.61
75	1.35	1.38	1.43	1.43	1.41	1.36	1.30	1.25	1.22	1.23	1.24	1.23	1.23	1.22	1.23	1.21	1.22	1.23	1.27
80	0.05	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.05	0.05	0.04
85	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
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	3915	3913	3914	3916	3915														
5	3738	3738	3735	3735	3730														
10	3198	3197	3189	3185	3178														
15	2406	2402	2394	2394	2401														
20	1628	1619	1613	1618	1626														
25	1020	1013	1014	1016	1022														
30	569	562	559	561	565														
35	220	212	211	216	223														
40	35.3	33.0	34.2	37.3	40.3														
45	15.3	15.1	15.2	15.3	15.6														
50	11.7	11.7	11.7	11.7	11.8														
55	10.2	10.2	10.2	10.2	10.1														
60	8.43	8.37	8.35	8.29	8.22														
65	6.67	6.63	6.63	6.53	6.52														
70	3.57	3.55	3.57	3.53	3.62														
75	1.28	1.24	1.21	1.19	1.27														
80	0.03	0.03	0.04	0.04	0.05														
85	0.02	0.02	0.02	0.02	0.02														
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>	COL18SM3 @4000K Black trim	<b>Sample ID</b>	250903021-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	0.145	17.1	0.982	11.42

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