

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

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Date: 2025-09-17

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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		1126
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Standard	Premium	97.1
		95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		11.6
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	11.33
Power Factor (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.985
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019	7 steps	3985±275	3841
		4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.5
Minimum R9 (Integrating Sphere – Section 4.1)	ANSI/IES LM-79-2019 CIE13.3-1995	≥0		72
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		0.098
(Goniophotometer – Section 4.2)		Non-Worst Case		N/A
Power (Input Wattage – W)				
(Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		11.6
(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	COL12SM2 @4000K Black trim	-	250903017-S1
2	Goniophotometer Test	2025-09-15	COL12SM2 @4000K Black trim	-	250903017-S1
3	THD and PF Test	2025-09-15	COL12SM2 @4000K Black trim	-	250903017-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. COL12SM2 @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

Model No.	COL12SM2 @4000K Black trim	Sample ID	250903017-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

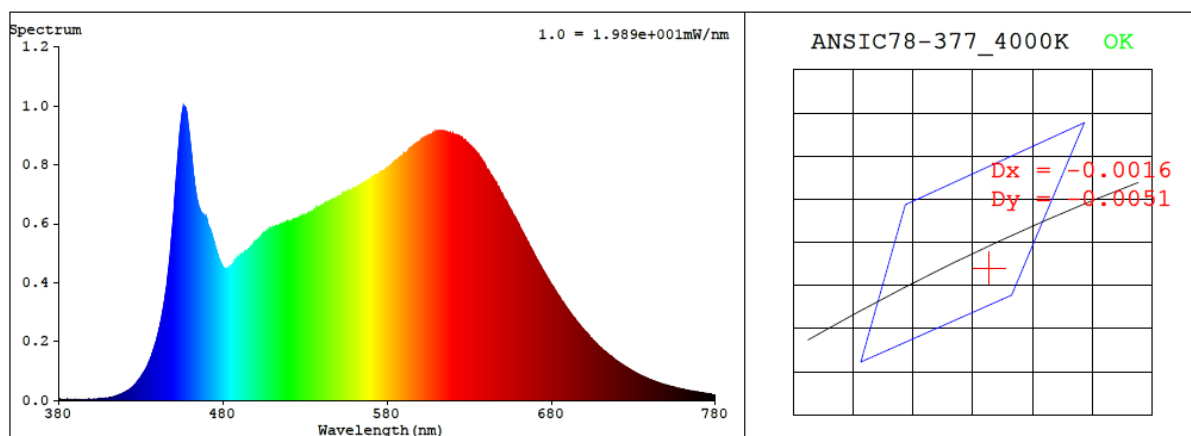
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load.</p> <p>The sample was measured using 4π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780nm.</p>

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
120.0	60	0.098	11.6	0.985

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3841	93.5	72	-0.0020	4.2	89	96	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3862$ $y = 0.3760$ / $u' = 0.2292$ $v' = 0.5021$ ($duv = -1.96e-03$)

CCT= 3841K Prcp WL: $L_d = 580.7\text{nm}$ Purity=28.7%

Peak WL: $L_p = 456\text{nm}$ FWHM: $\approx 28.8\text{nm}$ Ratio: R=21.0% G=74.2% B=4.9%

Render Index: $R_a = 93.5$ AvgR = 92.0 TM30: Rf=91 Rg=98

EEL: 0.14604 A+

R1 =97	R2 =98	R3 =95	R4 =92	R5 =95	R6 =94	R7 =90
R8 =86	R9 =72	R10=97	R11=95	R12=76	R13=99	R14=98 R15=94

4.1 Integrating Sphere Test

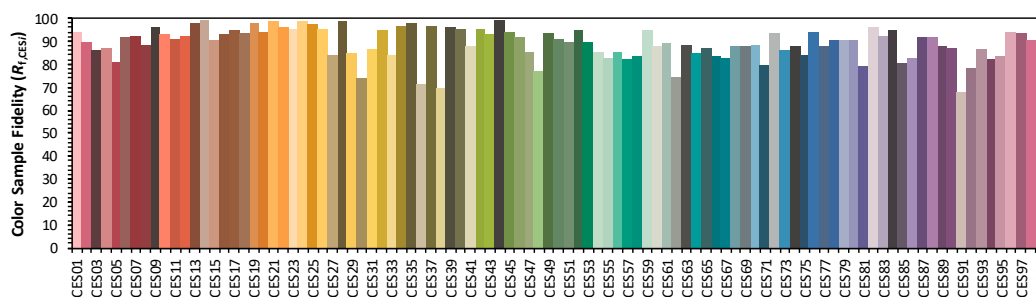
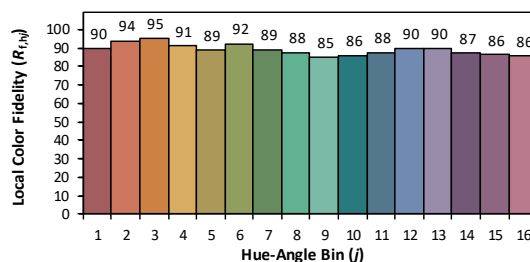
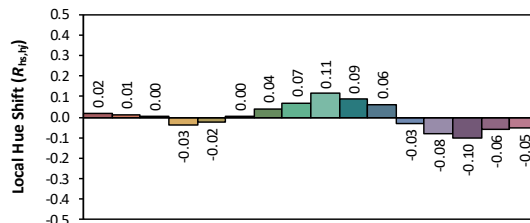
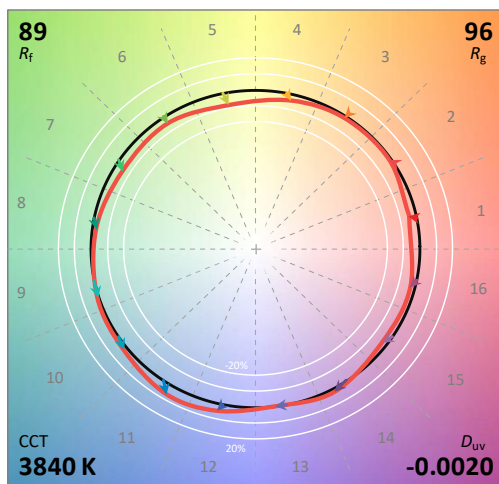
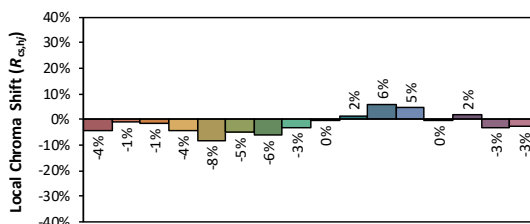
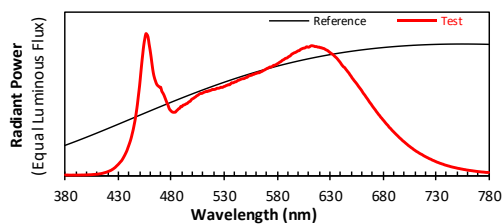
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/9/17

Model: COL12SM2 @4000K Black trim



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

x 0.3862
 y 0.3759
 u' 0.2292
 v' 0.5021

CIE 13.3-1995
(CRI)
 R_a 93
 R_g 72

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	4.20E-06	447	4.49E-04	514	5.92E-04	581	7.91E-04	648	7.22E-04	715	1.55E-04
381	2.20E-06	448	5.03E-04	515	5.97E-04	582	7.97E-04	649	7.10E-04	716	1.51E-04
382	3.30E-06	449	5.68E-04	516	5.97E-04	583	8.01E-04	650	7.01E-04	717	1.48E-04
383	2.40E-06	450	6.31E-04	517	6.01E-04	584	8.05E-04	651	6.88E-04	718	1.43E-04
384	2.40E-06	451	7.08E-04	518	6.02E-04	585	8.13E-04	652	6.79E-04	719	1.38E-04
385	2.30E-06	452	7.85E-04	519	6.08E-04	586	8.16E-04	653	6.69E-04	720	1.34E-04
386	2.30E-06	453	8.55E-04	520	6.06E-04	587	8.21E-04	654	6.60E-04	721	1.30E-04
387	2.80E-06	454	9.20E-04	521	6.08E-04	588	8.26E-04	655	6.50E-04	722	1.26E-04
388	2.70E-06	455	9.65E-04	522	6.09E-04	589	8.28E-04	656	6.40E-04	723	1.23E-04
389	2.40E-06	456	1.00E-03	523	6.15E-04	590	8.32E-04	657	6.29E-04	724	1.18E-04
390	2.20E-06	457	9.94E-04	524	6.15E-04	591	8.38E-04	658	6.19E-04	725	1.16E-04
391	3.00E-06	458	9.78E-04	525	6.16E-04	592	8.42E-04	659	6.10E-04	726	1.12E-04
392	2.50E-06	459	9.29E-04	526	6.19E-04	593	8.48E-04	660	5.99E-04	727	1.08E-04
393	2.80E-06	460	8.84E-04	527	6.23E-04	594	8.56E-04	661	5.87E-04	728	1.05E-04
394	2.80E-06	461	8.32E-04	528	6.21E-04	595	8.60E-04	662	5.76E-04	729	1.02E-04
395	3.10E-06	462	7.74E-04	529	6.24E-04	596	8.65E-04	663	5.67E-04	730	9.84E-05
396	3.40E-06	463	7.25E-04	530	6.28E-04	597	8.67E-04	664	5.55E-04	731	9.47E-05
397	3.10E-06	464	6.91E-04	531	6.30E-04	598	8.71E-04	665	5.45E-04	732	9.21E-05
398	3.70E-06	465	6.68E-04	532	6.35E-04	599	8.75E-04	666	5.35E-04	733	8.93E-05
399	3.60E-06	466	6.47E-04	533	6.37E-04	600	8.80E-04	667	5.23E-04	734	8.62E-05
400	3.90E-06	467	6.36E-04	534	6.41E-04	601	8.81E-04	668	5.12E-04	735	8.40E-05
401	4.30E-06	468	6.29E-04	535	6.40E-04	602	8.88E-04	669	5.03E-04	736	8.12E-05
402	4.70E-06	469	6.23E-04	536	6.46E-04	603	8.92E-04	670	4.91E-04	737	7.92E-05
403	5.00E-06	470	6.22E-04	537	6.54E-04	604	8.95E-04	671	4.81E-04	738	7.59E-05
404	5.00E-06	471	5.96E-04	538	6.53E-04	605	8.98E-04	672	4.71E-04	739	7.33E-05
405	5.70E-06	472	5.83E-04	539	6.55E-04	606	8.99E-04	673	4.62E-04	740	7.13E-05
406	6.50E-06	473	5.68E-04	540	6.60E-04	607	9.03E-04	674	4.50E-04	741	6.91E-05
407	7.00E-06	474	5.50E-04	541	6.61E-04	608	9.08E-04	675	4.41E-04	742	6.69E-05
408	7.40E-06	475	5.30E-04	542	6.65E-04	609	9.06E-04	676	4.31E-04	743	6.51E-05
409	8.50E-06	476	5.11E-04	543	6.71E-04	610	9.05E-04	677	4.23E-04	744	6.26E-05
410	8.80E-06	477	4.95E-04	544	6.73E-04	611	9.09E-04	678	4.12E-04	745	6.06E-05
411	9.70E-06	478	4.72E-04	545	6.76E-04	612	9.14E-04	679	4.04E-04	746	5.88E-05
412	1.12E-05	479	4.62E-04	546	6.79E-04	613	9.16E-04	680	3.94E-04	747	5.71E-05
413	1.21E-05	480	4.54E-04	547	6.82E-04	614	9.14E-04	681	3.86E-04	748	5.55E-05
414	1.35E-05	481	4.48E-04	548	6.83E-04	615	9.12E-04	682	3.77E-04	749	5.38E-05
415	1.53E-05	482	4.46E-04	549	6.84E-04	616	9.09E-04	683	3.67E-04	750	5.21E-05
416	1.74E-05	483	4.46E-04	550	6.89E-04	617	9.10E-04	684	3.59E-04	751	5.01E-05
417	1.95E-05	484	4.47E-04	551	6.92E-04	618	9.07E-04	685	3.51E-04	752	4.92E-05
418	2.16E-05	485	4.56E-04	552	6.93E-04	619	9.05E-04	686	3.40E-04	753	4.76E-05
419	2.38E-05	486	4.63E-04	553	7.03E-04	620	9.06E-04	687	3.34E-04	754	4.60E-05
420	2.68E-05	487	4.71E-04	554	7.03E-04	621	9.01E-04	688	3.25E-04	755	4.47E-05
421	2.98E-05	488	4.75E-04	555	7.07E-04	622	9.02E-04	689	3.17E-04	756	4.31E-05
422	3.31E-05	489	4.87E-04	556	7.07E-04	623	8.97E-04	690	3.10E-04	757	4.17E-05
423	3.62E-05	490	4.85E-04	557	7.12E-04	624	8.97E-04	691	3.02E-04	758	4.07E-05
424	4.10E-05	491	4.95E-04	558	7.13E-04	625	8.93E-04	692	2.94E-04	759	3.89E-05
425	4.56E-05	492	4.97E-04	559	7.17E-04	626	8.88E-04	693	2.87E-04	760	3.78E-05
426	5.13E-05	493	5.00E-04	560	7.19E-04	627	8.84E-04	694	2.80E-04	761	3.68E-05
427	5.69E-05	494	5.06E-04	561	7.22E-04	628	8.80E-04	695	2.72E-04	762	3.55E-05
428	6.45E-05	495	5.08E-04	562	7.25E-04	629	8.74E-04	696	2.65E-04	763	3.48E-05
429	7.17E-05	496	5.15E-04	563	7.24E-04	630	8.68E-04	697	2.59E-04	764	3.36E-05
430	7.90E-05	497	5.21E-04	564	7.29E-04	631	8.62E-04	698	2.51E-04	765	3.27E-05
431	8.75E-05	498	5.24E-04	565	7.32E-04	632	8.57E-04	699	2.44E-04	766	3.14E-05
432	9.61E-05	499	5.35E-04	566	7.35E-04	633	8.52E-04	700	2.39E-04	767	3.05E-05
433	1.04E-04	500	5.41E-04	567	7.41E-04	634	8.45E-04	701	2.32E-04	768	2.92E-05
434	1.16E-04	501	5.44E-04	568	7.44E-04	635	8.38E-04	702	2.25E-04	769	2.85E-05
435	1.29E-04	502	5.50E-04	569	7.48E-04	636	8.31E-04	703	2.19E-04	770	2.74E-05
436	1.43E-04	503	5.55E-04	570	7.53E-04	637	8.23E-04	704	2.13E-04	771	2.67E-05
437	1.58E-04	504	5.62E-04	571	7.57E-04	638	8.14E-04	705	2.07E-04	772	2.58E-05
438	1.74E-04	505	5.66E-04	572	7.59E-04	639	8.05E-04	706	2.01E-04	773	2.50E-05
439	1.95E-04	506	5.71E-04	573	7.65E-04	640	7.95E-04	707	1.95E-04	774	2.42E-05
440	2.16E-04	507	5.77E-04	574	7.66E-04	641	7.83E-04	708	1.91E-04	775	2.38E-05
441	2.37E-04	508	5.79E-04	575	7.67E-04	642	7.74E-04	709	1.84E-04	776	2.29E-05
442	2.62E-04	509	5.79E-04	576	7.73E-04	643	7.66E-04	710	1.79E-04	777	2.21E-05
443	2.92E-04	510	5.83E-04	577	7.78E-04	644	7.61E-04	711	1.74E-04	778	2.13E-05
444	3.23E-04	511	5.87E-04	578	7.78E-04	645	7.50E-04	712	1.69E-04	779	2.14E-05
445	3.61E-04	512	5.90E-04	579	7.82E-04	646	7.41E-04	713	1.65E-04	780	2.14E-05
446	4.00E-04	513	5.93E-04	580	7.87E-04	647	7.31E-04	714	1.60E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	COL12SM2 @4000K Black trim	Sample ID	250903017-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 $25 \pm 1^\circ\text{C}$, measured at a point not more than 1 m from the sample and at the same height as the sample.</p> <p>The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.</p> <p>The samples were operated at rated voltage and was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1.0° vertical intervals and 15° horizontal intervals.</p>

Test Conditions

Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	120.0	60	0.098	11.6	0.985
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

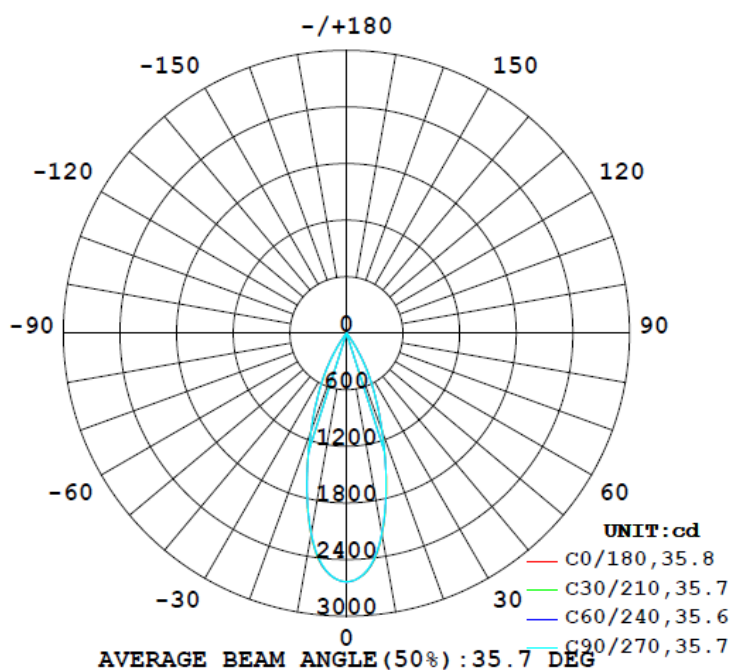
Test Result

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°)
1126	64.9	64.6	35.8	35.7	97.1	100.0%

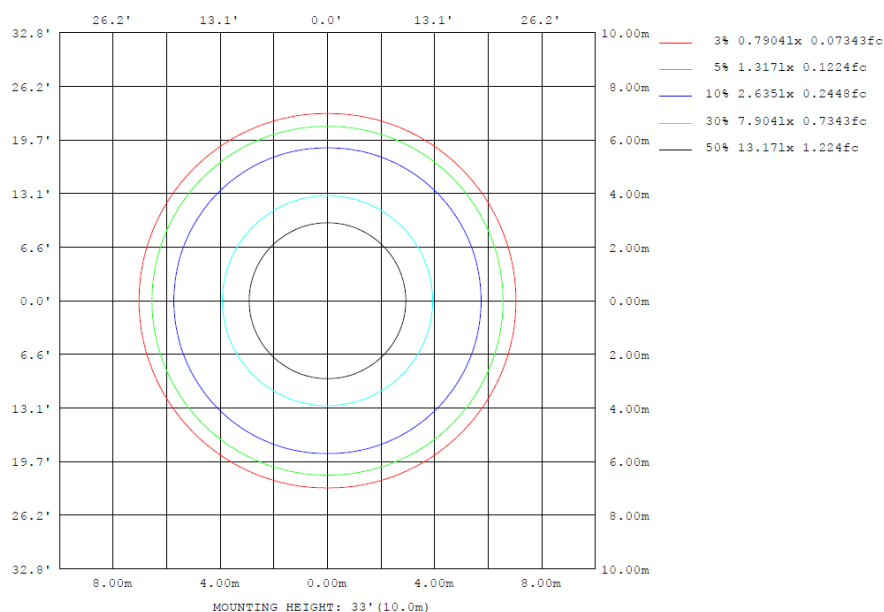
4.2 Goniophotometer Test

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	2170	2161	2157	2161	2170	2161	2157	2161	0- 10	229.6	229.6	20.4,20.4
20	1107	1103	1103	1103	1107	1103	1103	1103	10- 20	445.4	675.0	59.9,59.9
30	391.8	394.5	381.9	394.5	391.8	394.5	381.9	394.5	20- 30	322.8	997.8	88.6,88.6
40	26.27	22.37	29.56	22.37	26.27	22.37	29.56	22.37	30- 40	100.2	1098	97.5,97.5
50	11.20	10.53	10.34	10.53	11.20	10.53	10.34	10.53	40- 50	10.67	1109	98.4,98.4
60	8.419	7.875	7.686	7.875	8.419	7.875	7.686	7.875	50- 60	8.281	1117	99.2,99.2
70	5.160	4.657	4.362	4.657	5.160	4.657	4.362	4.657	60- 70	6.525	1123	99.8,99.8
80	0.1662	0.2625	0.2928	0.2625	0.1662	0.2625	0.2928	0.2625	70- 80	2.632	1126	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.0795	1126	100,100
100	0	0	0	0	0	0	0	0	90-100	0	1126	100,100
110	0	0	0	0	0	0	0	0	100-110	0	1126	100,100
120	0	0	0	0	0	0	0	0	110-120	0	1126	100,100
130	0	0	0	0	0	0	0	0	120-130	0	1126	100,100
140	0	0	0	0	0	0	0	0	130-140	0	1126	100,100
150	0	0	0	0	0	0	0	0	140-150	0	1126	100,100
160	0	0	0	0	0	0	0	0	150-160	0	1126	100,100
170	0	0	0	0	0	0	0	0	160-170	0	1126	100,100
180	0	0	0	0	0	0	0	0	170-180	0	1126	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	229.62	0-10	229.62	20.39%
10-20	445.38	0-20	675.00	59.94%
20-30	322.80	0-30	997.80	88.60%
30-40	100.22	0-40	1098.02	97.50%
40-50	10.67	0-50	1108.69	98.44%
50-60	8.28	0-60	1116.97	99.18%
60-70	6.53	0-70	1123.50	99.76%
70-80	2.63	0-80	1126.13	99.99%
80-90	0.08	0-90	1126.21	100.00%
90-100	0.00	0-100	1126.21	100.00%
100-110	0.00	0-110	1126.21	100.00%
110-120	0.00	0-120	1126.21	100.00%
120-130	0.00	0-130	1126.21	100.00%
130-140	0.00	0-140	1126.21	100.00%
140-150	0.00	0-150	1126.21	100.00%
150-160	0.00	0-160	1126.21	100.00%
160-170	0.00	0-170	1126.21	100.00%
170-180	0.00	0-180	1126.21	100.00%

4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
γ (DEG)	0	2635	2635	2635	2635	2636	2635	2636	2638	2635	2635	2635	2635	2635	2635	2635	2638	2636	2635
5	2529	2528	2527	2526	2525	2521	2521	2521	2525	2526	2527	2528	2529	2528	2527	2526	2525	2521	2521
10	2170	2168	2167	2161	2159	2157	2157	2157	2159	2161	2167	2168	2170	2168	2167	2161	2159	2157	2157
15	1633	1631	1628	1627	1621	1621	1622	1621	1621	1627	1628	1631	1633	1631	1628	1627	1621	1621	1622
20	1107	1107	1106	1103	1102	1103	1103	1103	1102	1103	1106	1107	1107	1107	1106	1103	1102	1103	1103
25	702	705	702	703	703	701	699	701	703	703	702	705	702	705	702	703	703	701	699
30	392	394	393	394	391	389	382	389	391	394	393	394	392	394	393	394	391	389	382
35	149	148	147	145	144	142	140	142	144	145	147	148	149	148	147	145	144	142	140
40	26.3	24.9	23.0	22.4	22.7	23.9	29.6	23.9	22.7	22.4	23.0	24.9	26.3	24.9	23.0	22.4	22.7	23.9	29.6
45	13.4	13.1	12.8	12.6	12.5	12.5	12.5	12.5	12.6	12.8	13.1	13.4	13.1	12.8	12.6	12.5	12.5	12.5	12.5
50	11.2	10.9	10.7	10.5	10.4	10.3	10.3	10.3	10.4	10.5	10.7	10.9	11.2	10.9	10.7	10.5	10.4	10.3	10.3
55	9.84	9.64	9.43	9.26	9.19	9.08	9.07	9.08	9.19	9.26	9.43	9.64	9.84	9.64	9.43	9.26	9.19	9.08	9.07
60	8.42	8.22	8.04	7.87	7.77	7.71	7.69	7.71	7.77	7.87	8.04	8.22	8.42	8.22	8.04	7.87	7.77	7.71	7.69
65	7.31	7.12	6.99	6.80	6.66	6.57	6.54	6.57	6.66	6.80	6.99	7.12	7.31	7.12	6.99	6.80	6.66	6.57	6.54
70	5.16	4.99	4.84	4.66	4.51	4.43	4.36	4.43	4.51	4.66	4.84	4.99	5.16	4.99	4.84	4.66	4.51	4.43	4.36
75	2.99	2.77	2.60	2.47	2.36	2.27	2.28	2.27	2.36	2.47	2.60	2.77	2.99	2.77	2.60	2.47	2.36	2.27	2.28
80	0.17	0.19	0.23	0.26	0.28	0.29	0.29	0.29	0.28	0.26	0.23	0.19	0.17	0.19	0.23	0.26	0.28	0.29	0.29
85	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07
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)	285	300	315	330	345														
γ (DEG)	0	2636	2638	2635	2635	2635													
5	2521	2525	2526	2527	2528														
10	2157	2159	2161	2167	2168														
15	1621	1621	1627	1628	1631														
20	1103	1102	1103	1106	1107														
25	701	703	703	702	705														
30	389	391	394	393	394														
35	142	144	145	147	148														
40	23.9	22.7	22.4	23.0	24.9														
45	12.5	12.5	12.6	12.8	13.1														
50	10.3	10.4	10.5	10.7	10.9														
55	9.08	9.19	9.26	9.43	9.64														
60	7.71	7.77	7.87	8.04	8.22														
65	6.57	6.66	6.80	6.99	7.12														
70	4.43	4.51	4.66	4.84	4.99														
75	2.27	2.36	2.47	2.60	2.77														
80	0.29	0.28	0.26	0.23	0.19														
85	0.06	0.06	0.06	0.06	0.06														
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

Model No.	COL12SM2 @4000K Black trim	Sample ID	250903017-S1
Temperature (°C)	25.4	Humidity (%RH)	41.0

Test Method
<p>The samples were tested according to the and ANSI C82.77: 2002 and ANSI C82.77-10:2020</p> <p>The total harmonic distortion shall be measured to the 40th order.</p> <p>The ambient temperature shall be maintained at 25±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	0.098	11.6	0.985	11.33

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*****