

Photometric Test Report

Relevant Standards

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

Prepared For

RAB Lighting Inc.

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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		1130
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Standard	Premium	93.4
		95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		12.1
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	10.75
Power Factor (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.986
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019	7 steps	5029±283	4986
		4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.9
Minimum R9 (Integrating Sphere – Section 4.1)	ANSI/IES LM-79-2019 CIE13.3-1995	≥0		70
Minimum Rf (Integrating Sphere – Section 4.1)	ANSI/IES TM-30-18	≥70		90
Minimum Rg (Integrating Sphere – Section 4.1)	ANSI/IES TM-30-18	≥89		97
IES Rcs,h1 (Integrating Sphere – Section 4.1)	ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-5%
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		0.102
(Goniophotometer – Section 4.2)		Non-Worst Case		N/A
Power (Input Wattage – W)				
(Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		12.1
(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	2025-09-15	COL12SM2 @5000K Black trim	-	250903017-S1
2	Goniophotometer Test	2025-09-15	COL12SM2 @5000K Black trim	-	250903017-S1
3	THD and PF Test	2025-09-15	COL12SM2 @5000K Black trim	-	250903017-S1

Remark (If any):

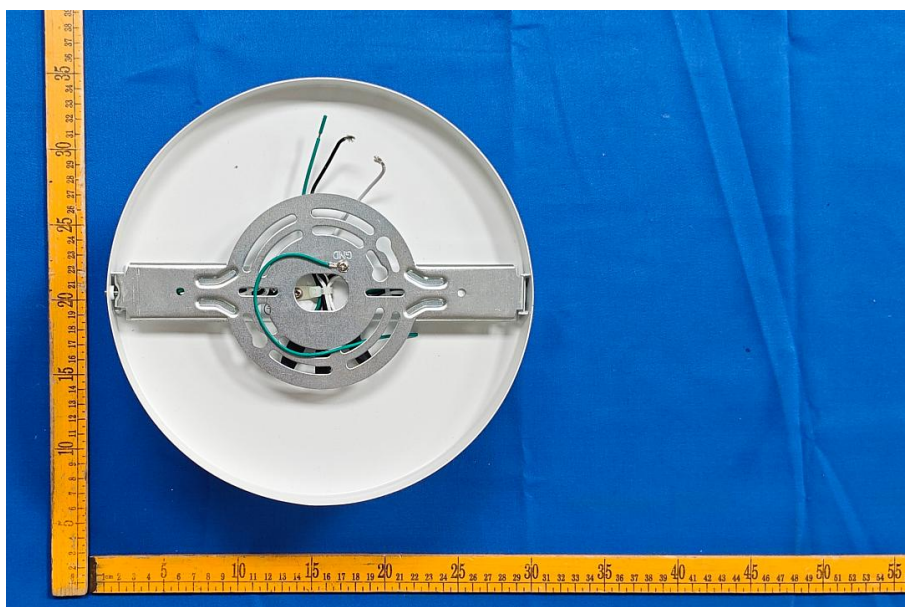
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3.0 Product Description

Luminaire Description: Model No. COL12SM2 @5000K 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 @5000K Black trim	Sample ID	250903017-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

Test Method

The Samples were tested according to the ANSI/IES LM-79:2019.

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.

The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere.

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.

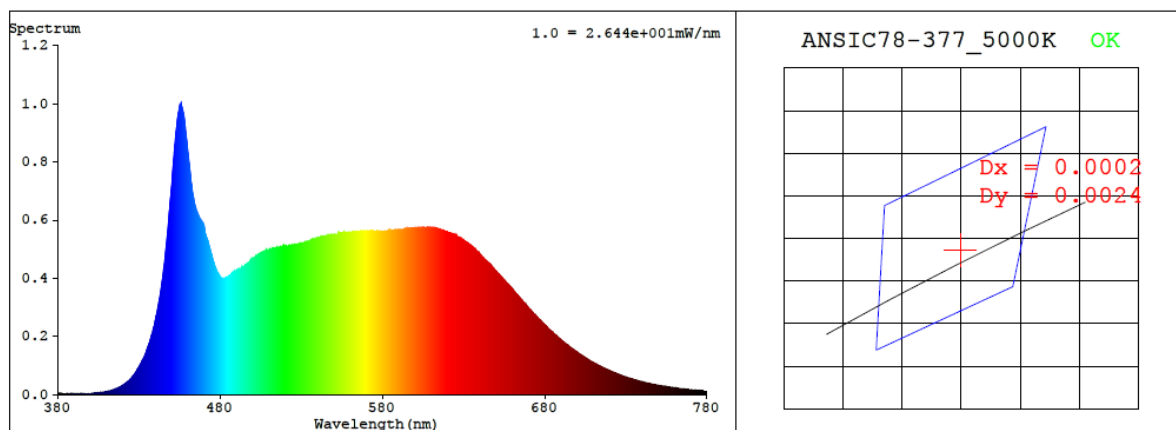
The sample was measured using 4 π geometry and operated at rated voltage and was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780nm.

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
120.0	60	0.102	12.1	0.986

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
4986	92.9	70	0.0011	1.2	90	97	-5%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3457$ $y = 0.3543$ / $u' = 0.2108$ $v' = 0.4861$ ($duv=1.09e-03$)

CCT= 4986K Prcp WL: $L_d=571.8nm$ Purity=10.1%

Peak WL: $L_p=456nm$ FWHM: $=27.3nm$ Ratio:R=17.5% G=76.5% B=6.0%

Render Index: $R_a = 92.9$ AvgR = 90.6 TM30:Rf=91 Rg=98

EEL: 0.15219 A+

R1 =95 R2 =99 R3 =97 R4 =89 R5 =92 R6 =95 R7 =91

R8 =86 R9 =70 R10=98 R11=91 R12=69 R13=97 R14=99 R15=92

4.1 Integrating Sphere Test

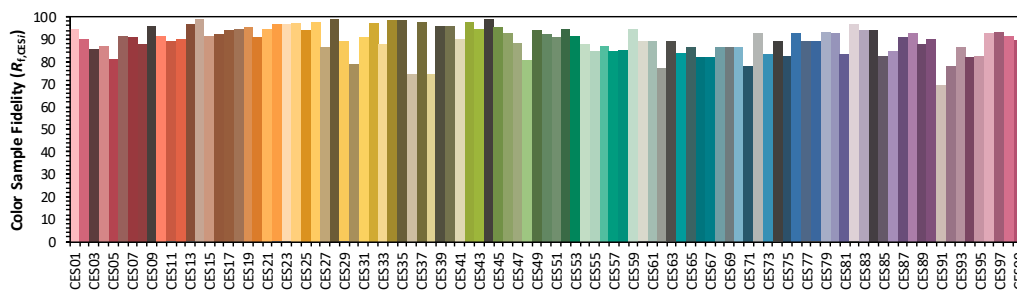
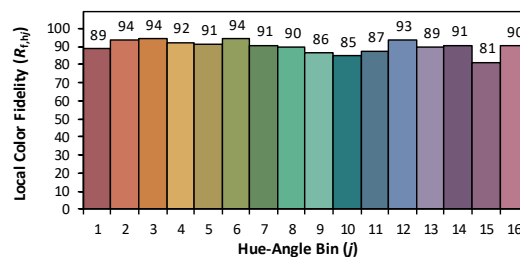
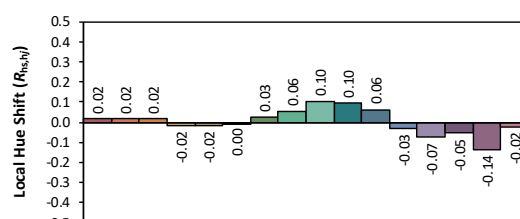
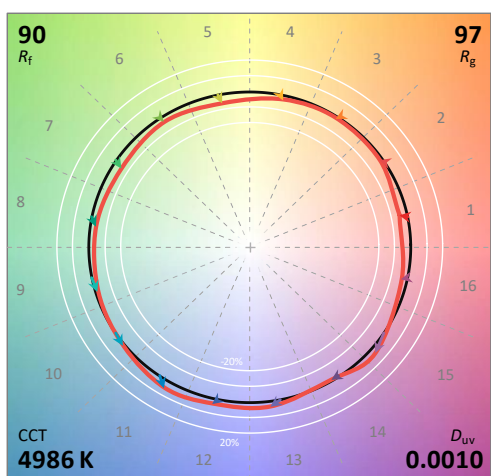
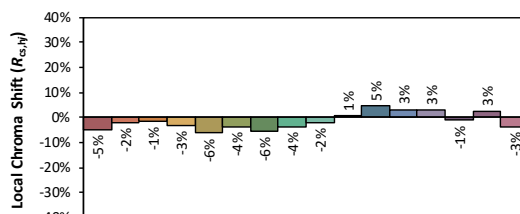
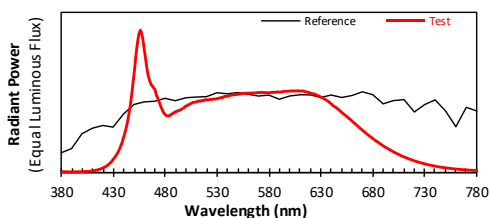
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/9/17

Model: COL12SM2 @5000K Black trim



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

x 0.3457
 y 0.3542
 u' 0.2108
 v' 0.4860

CIE 13.3-1995
(CRI)
 R_a 93
 R_g 70

4.1 Integrating Sphere Test

Spectral Distribution over Visible Wavelength											
WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)	WL (nm)	Radiant (W/nm)
380	3.60E-06	447	5.21E-04	514	5.02E-04	581	5.61E-04	648	4.37E-04	715	9.52E-05
381	4.40E-06	448	5.81E-04	515	5.05E-04	582	5.62E-04	649	4.31E-04	716	9.24E-05
382	4.20E-06	449	6.48E-04	516	5.03E-04	583	5.63E-04	650	4.24E-04	717	9.02E-05
383	3.60E-06	450	7.11E-04	517	5.08E-04	584	5.62E-04	651	4.17E-04	718	8.73E-05
384	3.00E-06	451	7.85E-04	518	5.07E-04	585	5.65E-04	652	4.12E-04	719	8.49E-05
385	3.00E-06	452	8.53E-04	519	5.13E-04	586	5.64E-04	653	4.06E-04	720	8.22E-05
386	3.40E-06	453	9.10E-04	520	5.10E-04	587	5.64E-04	654	4.00E-04	721	7.95E-05
387	2.70E-06	454	9.58E-04	521	5.09E-04	588	5.67E-04	655	3.94E-04	722	7.71E-05
388	3.10E-06	455	9.88E-04	522	5.11E-04	589	5.65E-04	656	3.88E-04	723	7.48E-05
389	2.80E-06	456	1.00E-03	523	5.13E-04	590	5.65E-04	657	3.81E-04	724	7.27E-05
390	3.10E-06	457	9.77E-04	524	5.13E-04	591	5.66E-04	658	3.75E-04	725	7.09E-05
391	2.80E-06	458	9.48E-04	525	5.13E-04	592	5.66E-04	659	3.70E-04	726	6.84E-05
392	3.40E-06	459	8.92E-04	526	5.16E-04	593	5.67E-04	660	3.63E-04	727	6.63E-05
393	2.70E-06	460	8.43E-04	527	5.16E-04	594	5.70E-04	661	3.56E-04	728	6.43E-05
394	3.70E-06	461	7.93E-04	528	5.16E-04	595	5.71E-04	662	3.49E-04	729	6.20E-05
395	3.90E-06	462	7.40E-04	529	5.17E-04	596	5.70E-04	663	3.44E-04	730	6.04E-05
396	3.60E-06	463	6.95E-04	530	5.19E-04	597	5.71E-04	664	3.37E-04	731	5.79E-05
397	3.90E-06	464	6.65E-04	531	5.20E-04	598	5.71E-04	665	3.30E-04	732	5.66E-05
398	3.90E-06	465	6.43E-04	532	5.23E-04	599	5.71E-04	666	3.25E-04	733	5.48E-05
399	4.30E-06	466	6.22E-04	533	5.24E-04	600	5.73E-04	667	3.17E-04	734	5.32E-05
400	4.40E-06	467	6.11E-04	534	5.27E-04	601	5.71E-04	668	3.11E-04	735	5.15E-05
401	4.80E-06	468	6.01E-04	535	5.26E-04	602	5.73E-04	669	3.05E-04	736	4.99E-05
402	4.90E-06	469	5.91E-04	536	5.29E-04	603	5.74E-04	670	2.98E-04	737	4.83E-05
403	5.80E-06	470	5.83E-04	537	5.35E-04	604	5.73E-04	671	2.92E-04	738	4.65E-05
404	5.90E-06	471	5.51E-04	538	5.34E-04	605	5.73E-04	672	2.86E-04	739	4.55E-05
405	6.70E-06	472	5.33E-04	539	5.35E-04	606	5.73E-04	673	2.80E-04	740	4.39E-05
406	7.00E-06	473	5.16E-04	540	5.38E-04	607	5.73E-04	674	2.74E-04	741	4.28E-05
407	7.50E-06	474	4.96E-04	541	5.38E-04	608	5.75E-04	675	2.68E-04	742	4.10E-05
408	8.40E-06	475	4.76E-04	542	5.40E-04	609	5.72E-04	676	2.62E-04	743	3.97E-05
409	9.30E-06	476	4.56E-04	543	5.43E-04	610	5.71E-04	677	2.57E-04	744	3.87E-05
410	1.06E-05	477	4.41E-04	544	5.44E-04	611	5.73E-04	678	2.51E-04	745	3.74E-05
411	1.17E-05	478	4.23E-04	545	5.45E-04	612	5.73E-04	679	2.45E-04	746	3.61E-05
412	1.29E-05	479	4.13E-04	546	5.47E-04	613	5.73E-04	680	2.40E-04	747	3.52E-05
413	1.45E-05	480	4.05E-04	547	5.47E-04	614	5.70E-04	681	2.35E-04	748	3.41E-05
414	1.59E-05	481	4.00E-04	548	5.47E-04	615	5.69E-04	682	2.28E-04	749	3.28E-05
415	1.81E-05	482	3.98E-04	549	5.48E-04	616	5.66E-04	683	2.23E-04	750	3.19E-05
416	2.06E-05	483	3.99E-04	550	5.51E-04	617	5.66E-04	684	2.18E-04	751	3.09E-05
417	2.27E-05	484	3.99E-04	551	5.50E-04	618	5.63E-04	685	2.14E-04	752	3.01E-05
418	2.53E-05	485	4.05E-04	552	5.50E-04	619	5.61E-04	686	2.08E-04	753	2.92E-05
419	2.84E-05	486	4.09E-04	553	5.57E-04	620	5.59E-04	687	2.04E-04	754	2.84E-05
420	3.19E-05	487	4.14E-04	554	5.55E-04	621	5.55E-04	688	1.98E-04	755	2.75E-05
421	3.55E-05	488	4.17E-04	555	5.56E-04	622	5.55E-04	689	1.93E-04	756	2.65E-05
422	3.93E-05	489	4.25E-04	556	5.56E-04	623	5.52E-04	690	1.88E-04	757	2.56E-05
423	4.35E-05	490	4.24E-04	557	5.57E-04	624	5.52E-04	691	1.84E-04	758	2.52E-05
424	4.83E-05	491	4.30E-04	558	5.57E-04	625	5.48E-04	692	1.79E-04	759	2.39E-05
425	5.44E-05	492	4.33E-04	559	5.57E-04	626	5.44E-04	693	1.75E-04	760	2.30E-05
426	6.13E-05	493	4.35E-04	560	5.58E-04	627	5.41E-04	694	1.71E-04	761	2.27E-05
427	6.82E-05	494	4.39E-04	561	5.58E-04	628	5.39E-04	695	1.66E-04	762	2.21E-05
428	7.61E-05	495	4.41E-04	562	5.59E-04	629	5.35E-04	696	1.62E-04	763	2.12E-05
429	8.53E-05	496	4.46E-04	563	5.58E-04	630	5.31E-04	697	1.58E-04	764	2.06E-05
430	9.47E-05	497	4.51E-04	564	5.59E-04	631	5.26E-04	698	1.54E-04	765	2.02E-05
431	1.04E-04	498	4.54E-04	565	5.58E-04	632	5.23E-04	699	1.49E-04	766	1.93E-05
432	1.16E-04	499	4.63E-04	566	5.59E-04	633	5.19E-04	700	1.46E-04	767	1.88E-05
433	1.26E-04	500	4.67E-04	567	5.59E-04	634	5.15E-04	701	1.41E-04	768	1.81E-05
434	1.38E-04	501	4.69E-04	568	5.60E-04	635	5.10E-04	702	1.38E-04	769	1.75E-05
435	1.53E-04	502	4.76E-04	569	5.61E-04	636	5.06E-04	703	1.34E-04	770	1.73E-05
436	1.70E-04	503	4.77E-04	570	5.62E-04	637	5.01E-04	704	1.30E-04	771	1.63E-05
437	1.89E-04	504	4.83E-04	571	5.62E-04	638	4.94E-04	705	1.27E-04	772	1.60E-05
438	2.06E-04	505	4.85E-04	572	5.62E-04	639	4.90E-04	706	1.23E-04	773	1.56E-05
439	2.30E-04	506	4.89E-04	573	5.63E-04	640	4.83E-04	707	1.20E-04	774	1.50E-05
440	2.55E-04	507	4.93E-04	574	5.63E-04	641	4.77E-04	708	1.15E-04	775	1.45E-05
441	2.80E-04	508	4.94E-04	575	5.60E-04	642	4.69E-04	709	1.13E-04	776	1.39E-05
442	3.10E-04	509	4.94E-04	576	5.61E-04	643	4.65E-04	710	1.10E-04	777	1.33E-05
443	3.42E-04	510	4.96E-04	577	5.62E-04	644	4.60E-04	711	1.07E-04	778	1.30E-05
444	3.79E-04	511	4.99E-04	578	5.60E-04	645	4.54E-04	712	1.04E-04	779	1.29E-05
445	4.22E-04	512	5.02E-04	579	5.60E-04	646	4.50E-04	713	1.01E-04	780	1.30E-05
446	4.67E-04	513	5.02E-04	580	5.60E-04	647	4.44E-04	714	9.82E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	COL12SM2 @5000K 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	0.102	12.1	0.986
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

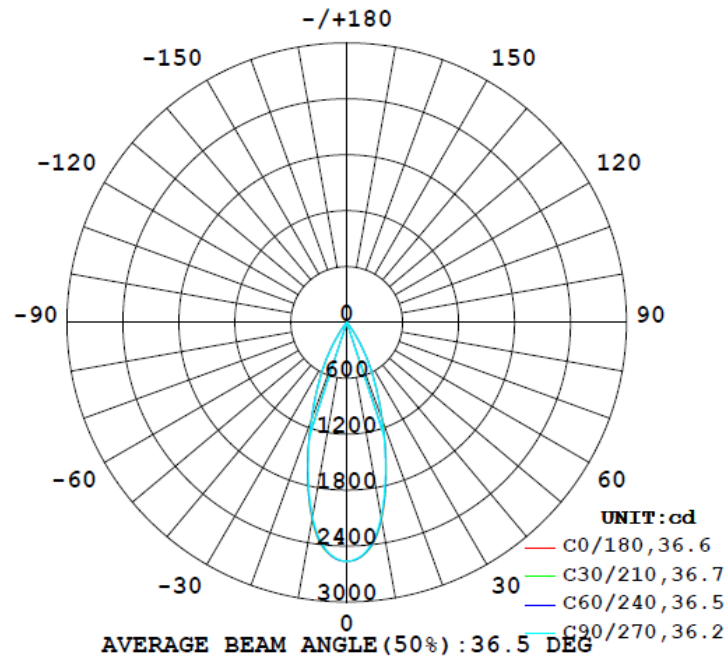
Test Result

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°)
1130	65.6	64.9	36.7	36.2	93.4	100.0%

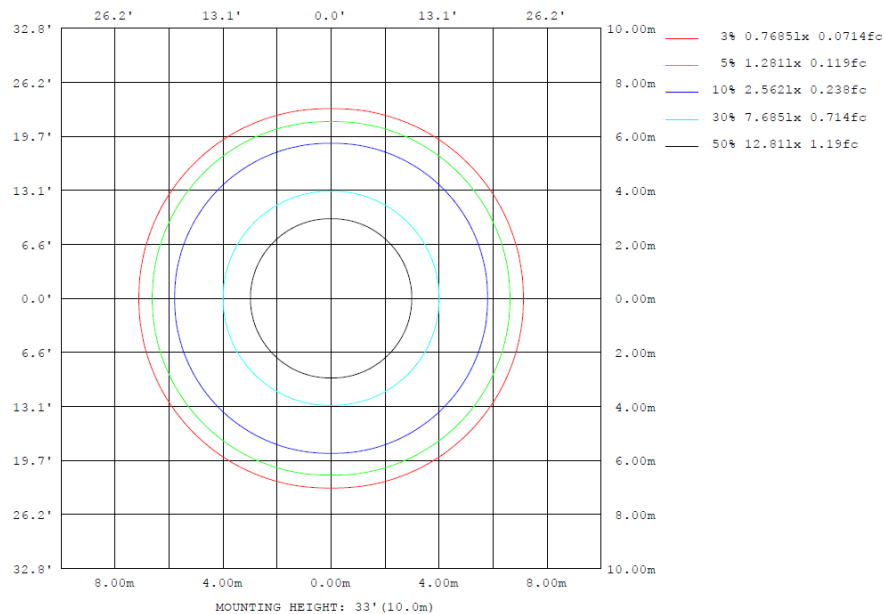
4.2 Goniophotometer Test

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	2148	2138	2115	2138	2148	2138	2115	2138	0- 10	225.2	225.2	19.9,19.9
20	1117	1114	1097	1114	1117	1114	1097	1114	10- 20	444.4	669.5	59.3,59.3
30	400.5	403.7	383.1	403.7	400.5	403.7	383.1	403.7	20- 30	326.9	996.4	88.2,88.2
40	27.55	24.57	26.41	24.57	27.55	24.57	26.41	24.57	30- 40	105.2	1102	97.5,97.5
50	11.10	10.44	10.19	10.44	11.10	10.44	10.19	10.44	40- 50	10.80	1112	98.5,98.5
60	8.295	7.750	7.558	7.750	8.295	7.750	7.558	7.750	50- 60	8.185	1121	99.2,99.2
70	5.162	4.651	4.311	4.651	5.162	4.651	4.311	4.651	60- 70	6.453	1127	99.8,99.8
80	0.2909	0.3782	0.3276	0.3782	0.2909	0.3782	0.3276	0.3782	70- 80	2.700	1130	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.0867	1130	100,100
100	0	0	0	0	0	0	0	0	90-100	0	1130	100,100
110	0	0	0	0	0	0	0	0	100-110	0	1130	100,100
120	0	0	0	0	0	0	0	0	110-120	0	1130	100,100
130	0	0	0	0	0	0	0	0	120-130	0	1130	100,100
140	0	0	0	0	0	0	0	0	130-140	0	1130	100,100
150	0	0	0	0	0	0	0	0	140-150	0	1130	100,100
160	0	0	0	0	0	0	0	0	150-160	0	1130	100,100
170	0	0	0	0	0	0	0	0	160-170	0	1130	100,100
180	0	0	0	0	0	0	0	0	170-180	0	1130	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	225.15	0-10	225.15	19.93%
10-20	444.36	0-20	669.51	59.26%
20-30	326.86	0-30	996.37	88.19%
30-40	105.22	0-40	1101.59	97.50%
40-50	10.80	0-50	1112.39	98.46%
50-60	8.19	0-60	1120.58	99.18%
60-70	6.45	0-70	1127.03	99.75%
70-80	2.70	0-80	1129.73	99.99%
80-90	0.09	0-90	1129.82	100.00%
90-100	0.00	0-100	1129.82	100.00%
100-110	0.00	0-110	1129.82	100.00%
110-120	0.00	0-120	1129.82	100.00%
120-130	0.00	0-130	1129.82	100.00%
130-140	0.00	0-140	1129.82	100.00%
140-150	0.00	0-150	1129.82	100.00%
150-160	0.00	0-160	1129.82	100.00%
160-170	0.00	0-170	1129.82	100.00%
170-180	0.00	0-180	1129.82	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	2562	2562	2561	2562	2563	2563	2563	2563	2563	2562	2561	2562	2562	2562	2561	2562	2563	2563	2563
5	2472	2472	2471	2470	2465	2461	2456	2461	2465	2470	2471	2472	2472	2472	2471	2470	2465	2461	2456
10	2148	2147	2143	2138	2131	2122	2115	2122	2131	2138	2143	2147	2148	2147	2143	2138	2131	2122	2115
15	1632	1634	1631	1626	1620	1611	1602	1611	1620	1626	1631	1634	1632	1634	1631	1626	1620	1611	1602
20	1117	1119	1117	1114	1110	1105	1097	1105	1110	1114	1117	1119	1117	1119	1117	1114	1110	1105	1097
25	712	716	716	715	712	707	698	707	712	715	716	716	712	716	716	715	712	707	698
30	400	404	406	404	398	392	383	392	398	404	406	404	400	404	406	404	398	392	383
35	158	160	160	158	156	149	143	149	156	158	160	160	158	160	160	158	156	149	143
40	27.5	26.6	25.0	24.6	26.1	26.5	26.4	26.5	26.1	24.6	25.0	26.6	27.5	26.6	25.0	24.6	26.1	26.5	26.4
45	13.4	13.1	12.8	12.6	12.5	12.4	12.4	12.4	12.5	12.6	12.8	13.1	13.4	13.1	12.8	12.6	12.5	12.4	12.4
50	11.1	10.9	10.6	10.4	10.4	10.3	10.2	10.3	10.4	10.4	10.6	10.9	11.1	10.9	10.6	10.4	10.4	10.3	10.2
55	9.72	9.53	9.30	9.15	9.08	8.96	8.92	8.96	9.08	9.15	9.30	9.53	9.72	9.53	9.30	9.15	9.08	8.96	8.92
60	8.29	8.09	7.92	7.75	7.65	7.58	7.56	7.58	7.65	7.75	7.92	8.09	8.29	8.09	7.92	7.75	7.65	7.58	7.56
65	7.28	7.08	6.91	6.72	6.58	6.48	6.45	6.48	6.58	6.72	6.91	7.08	7.28	7.08	6.91	6.72	6.58	6.48	6.45
70	5.16	5.00	4.84	4.65	4.49	4.40	4.31	4.40	4.49	4.65	4.84	5.00	5.16	5.00	4.84	4.65	4.49	4.40	4.31
75	3.22	2.99	2.78	2.61	2.46	2.33	2.29	2.33	2.46	2.61	2.78	2.99	3.22	2.99	2.78	2.61	2.46	2.33	2.29
80	0.29	0.34	0.36	0.38	0.38	0.36	0.33	0.36	0.38	0.38	0.36	0.34	0.29	0.34	0.36	0.38	0.38	0.36	0.33
85	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
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	2563	2563	2562	2561	2562														
5	2461	2465	2470	2471	2472														
10	2122	2131	2138	2143	2147														
15	1611	1620	1626	1631	1634														
20	1105	1110	1114	1117	1119														
25	707	712	715	716	716														
30	392	398	404	406	404														
35	149	156	158	160	160														
40	26.5	26.1	24.6	25.0	26.6														
45	12.4	12.5	12.6	12.8	13.1														
50	10.3	10.4	10.4	10.6	10.9														
55	8.96	9.08	9.15	9.30	9.53														
60	7.58	7.65	7.75	7.92	8.09														
65	6.48	6.58	6.72	6.91	7.08														
70	4.40	4.49	4.65	4.84	5.00														
75	2.33	2.46	2.61	2.78	2.99														
80	0.36	0.38	0.38	0.36	0.34														
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 @5000K 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 $25 \pm 1^\circ\text{C}$. 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	0.102	12.1	0.986	10.75

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*****