Photometric Test Report

Relevant Standards

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

Prepared For

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Issue Date: 2025-09-25
Revised Date: N/A

1.0 Test Summary

DLC Technical Requirements V5.1

Ceiling Mount Luminaires				
Requirement Category	**Test Method**	**Requirements**		**Test Value**
Luminaire Output (lm) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	250		776
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Standard 80	Premium 95	83.4
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		9.3
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	13.76
Power Factor (THD & PF – Section 4.3)	ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.962
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019	7 steps 4 steps	3045±175 3045±100	3023
Minimum CRI (Integrating Sphere – Section 4.1)	ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.7
Minimum R9 (Integrating Sphere – Section 4.1)	ANSI/IES LM-79-2019 CIE13.3-1995	≥0		71
Minimum Rf (Integrating Sphere – Section 4.1)	ANSI/IES TM-30-18	≥70		91
Minimum Rg (Integrating Sphere – Section 4.1)	ANSI/IES TM-30-18	≥89		102
IES Rcs,h1 (Integrating Sphere – Section 4.1)	ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-3%
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		0.081
(Goniophotometer – Section 4.2)		Non-Worst Case		N/A
Power (Input Wattage – W)				
(Goniophotometer – Section 4.2)	ANSI/IES LM-79:2019	Worst Case		9.3
(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	2025-09-23	ARCSMB	-	250903008-S1
2	Goniophotometer Test	2025-09-23	ARCSMB	-	250903008-S1
3	THD and PF Test	2025-09-23	ARCSMB	-	250903008-S1

Remark (If any):

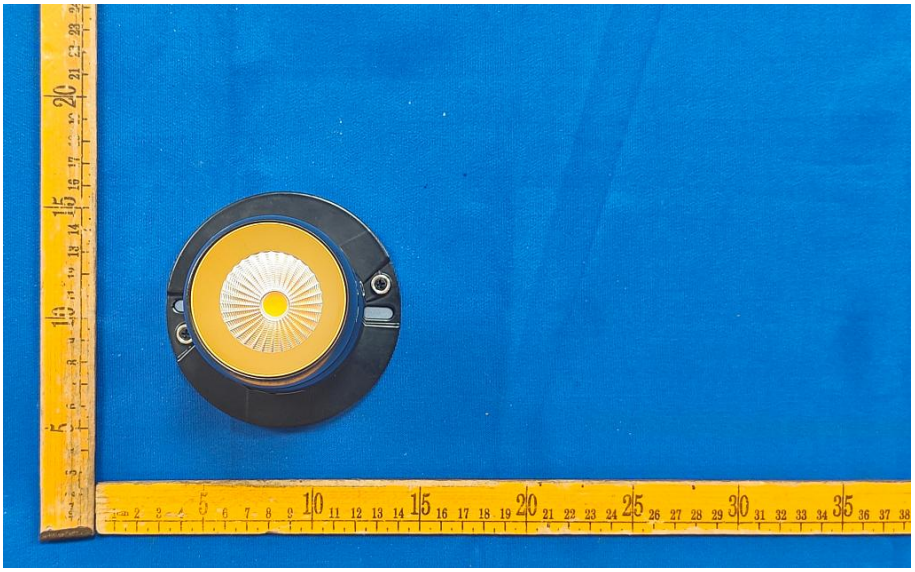
1. **The results contained in this report pertain only to the tested samples.**
2. **This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.**
3. **This report must not be used by the client to claim product certification, approval, or endorsement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

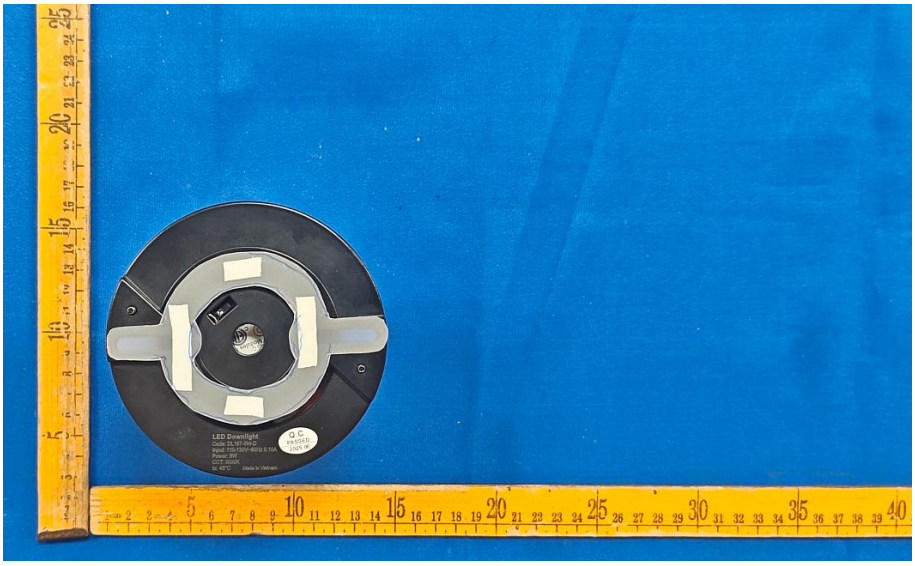
3.0 Product Description

Luminaire Description: Model No. ARCSMB, 3000K.

Electrical Specification: 120Vac, 60Hz

Photos of Luminaire Characteristics





4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	ARCSMB	Sample ID	250903008-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

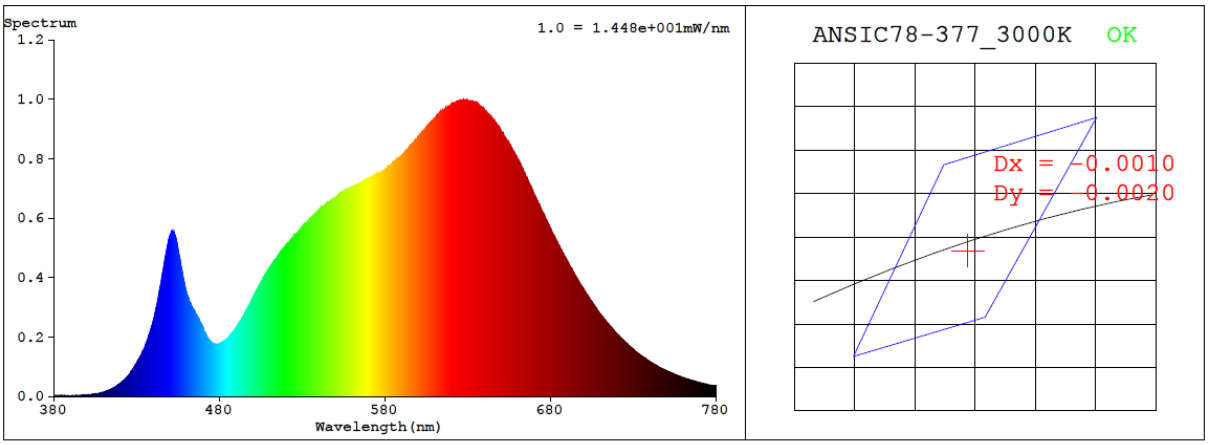
Test Method
The Samples were tested according to the ANSI/IES LM-79:2019. Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C. The sample measurements were made using a spectroradiometer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

Test Result

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
120.0	60	0.081	9.3	0.962

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3023	92.7	71	-0.0007	1.1	91	102	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: x = 0.4344 y = 0.4015 / u' = 0.2500 v' = 0.5200 (duv=-6.60e-04)

CCT= 3023K Prcp WL: Ld=583.0nm Purity=50.9%

Peak WL: Lp=628nm FWHM: =166.9nm Ratio:R=24.2% G=73.3% B=2.5%

Render Index: Ra = 92.7 AvgR = 89.9 TM30:Rf=91 Rg=102

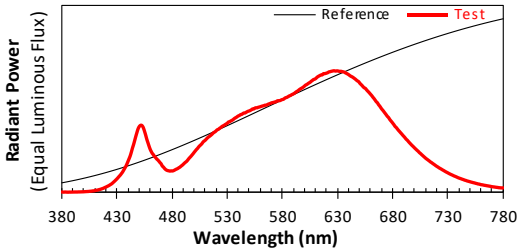
EEI: 0.15850 A+

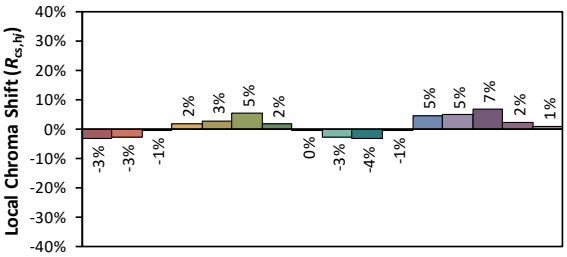
R1 =94	R2 =94	R3 =92	R4 =93	R5 =92	R6 =92	R7 =95	
R8 =88	R9 =71	R10=85	R11=93	R12=77	R13=94	R14=95	R15=92

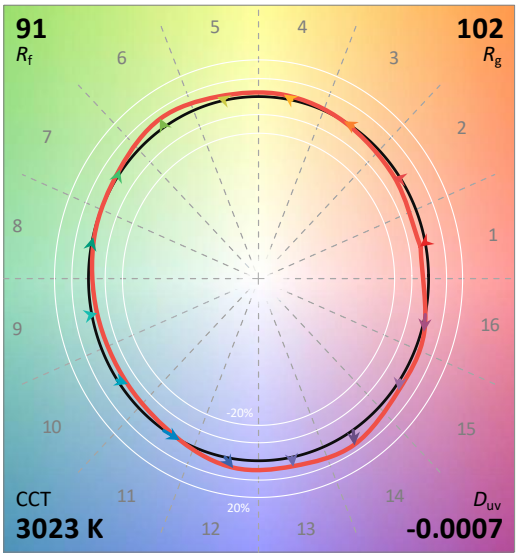
4.1 Integrating Sphere Test

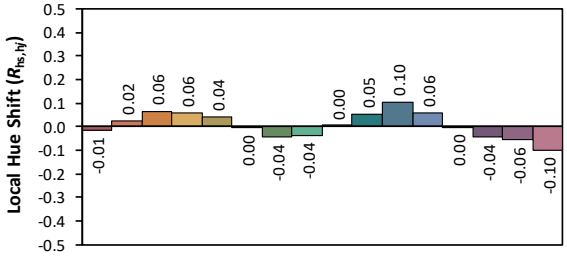
ANSI/IES TM-30-18 Color Rendition Report

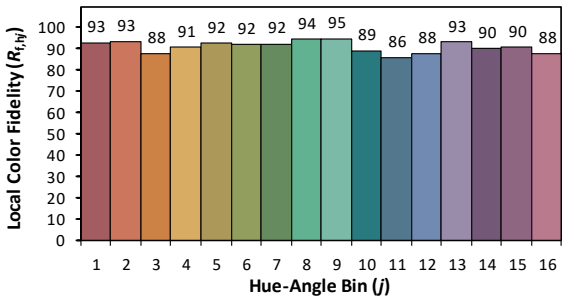
Source:	1 CIE F1	**Manufacturer:**	RAB Lighting Inc.
Date:	2025/9/25	**Model:**	ARCSMB

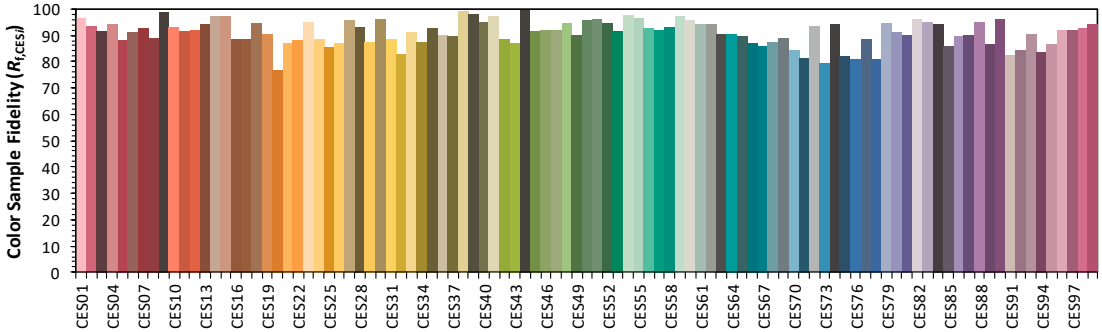












Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x	0.4343
y	0.4015
u'	0.2500
v'	0.5200

CIE 13.3-1995 (CRI)

R_a	93
R_9	71

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	3.50E-06	447	4.58E-04	514	4.61E-04	581	7.65E-04	648	9.14E-04	715	2.45E-04
381	2.40E-06	448	4.89E-04	515	4.69E-04	582	7.73E-04	649	9.08E-04	716	2.38E-04
382	2.10E-06	449	5.19E-04	516	4.76E-04	583	7.77E-04	650	8.96E-04	717	2.31E-04
383	3.00E-06	450	5.38E-04	517	4.86E-04	584	7.80E-04	651	8.87E-04	718	2.25E-04
384	2.30E-06	451	5.48E-04	518	4.93E-04	585	7.86E-04	652	8.78E-04	719	2.18E-04
385	1.80E-06	452	5.51E-04	519	4.98E-04	586	7.91E-04	653	8.67E-04	720	2.12E-04
386	1.80E-06	453	5.45E-04	520	5.07E-04	587	7.95E-04	654	8.58E-04	721	2.07E-04
387	2.50E-06	454	5.27E-04	521	5.15E-04	588	8.00E-04	655	8.54E-04	722	2.00E-04
388	2.10E-06	455	5.00E-04	522	5.18E-04	589	8.05E-04	656	8.43E-04	723	1.95E-04
389	2.60E-06	456	4.70E-04	523	5.27E-04	590	8.09E-04	657	8.33E-04	724	1.90E-04
390	2.60E-06	457	4.36E-04	524	5.32E-04	591	8.15E-04	658	8.23E-04	725	1.84E-04
391	3.00E-06	458	4.09E-04	525	5.40E-04	592	8.23E-04	659	8.13E-04	726	1.79E-04
392	3.10E-06	459	3.81E-04	526	5.45E-04	593	8.28E-04	660	8.03E-04	727	1.74E-04
393	3.20E-06	460	3.55E-04	527	5.50E-04	594	8.34E-04	661	7.92E-04	728	1.69E-04
394	3.00E-06	461	3.36E-04	528	5.56E-04	595	8.42E-04	662	7.80E-04	729	1.64E-04
395	3.80E-06	462	3.20E-04	529	5.62E-04	596	8.48E-04	663	7.69E-04	730	1.59E-04
396	3.80E-06	463	3.09E-04	530	5.68E-04	597	8.54E-04	664	7.56E-04	731	1.54E-04
397	4.10E-06	464	2.95E-04	531	5.78E-04	598	8.59E-04	665	7.43E-04	732	1.50E-04
398	4.40E-06	465	2.85E-04	532	5.80E-04	599	8.66E-04	666	7.35E-04	733	1.45E-04
399	4.70E-06	466	2.74E-04	533	5.86E-04	600	8.74E-04	667	7.20E-04	734	1.41E-04
400	5.10E-06	467	2.66E-04	534	5.90E-04	601	8.81E-04	668	7.09E-04	735	1.37E-04
401	5.90E-06	468	2.56E-04	535	5.96E-04	602	8.86E-04	669	6.96E-04	736	1.33E-04
402	6.40E-06	469	2.44E-04	536	6.04E-04	603	8.92E-04	670	6.83E-04	737	1.29E-04
403	7.10E-06	470	2.34E-04	537	6.10E-04	604	8.99E-04	671	6.72E-04	738	1.25E-04
404	7.40E-06	471	2.17E-04	538	6.15E-04	605	9.04E-04	672	6.60E-04	739	1.21E-04
405	8.60E-06	472	2.08E-04	539	6.22E-04	606	9.12E-04	673	6.48E-04	740	1.17E-04
406	9.40E-06	473	1.97E-04	540	6.28E-04	607	9.18E-04	674	6.36E-04	741	1.14E-04
407	1.03E-05	474	1.88E-04	541	6.32E-04	608	9.26E-04	675	6.24E-04	742	1.11E-04
408	1.19E-05	475	1.82E-04	542	6.38E-04	609	9.29E-04	676	6.15E-04	743	1.07E-04
409	1.26E-05	476	1.79E-04	543	6.40E-04	610	9.34E-04	677	6.01E-04	744	1.04E-04
410	1.45E-05	477	1.77E-04	544	6.46E-04	611	9.43E-04	678	5.89E-04	745	1.01E-04
411	1.70E-05	478	1.75E-04	545	6.52E-04	612	9.50E-04	679	5.78E-04	746	9.82E-05
412	1.82E-05	479	1.77E-04	546	6.52E-04	613	9.55E-04	680	5.66E-04	747	9.47E-05
413	2.04E-05	480	1.76E-04	547	6.57E-04	614	9.60E-04	681	5.55E-04	748	9.20E-05
414	2.32E-05	481	1.78E-04	548	6.62E-04	615	9.64E-04	682	5.41E-04	749	8.95E-05
415	2.52E-05	482	1.82E-04	549	6.67E-04	616	9.64E-04	683	5.33E-04	750	8.69E-05
416	2.86E-05	483	1.87E-04	550	6.69E-04	617	9.74E-04	684	5.21E-04	751	8.41E-05
417	3.17E-05	484	1.92E-04	551	6.74E-04	618	9.74E-04	685	5.10E-04	752	8.19E-05
418	3.53E-05	485	1.96E-04	552	6.79E-04	619	9.76E-04	686	5.00E-04	753	7.93E-05
419	4.00E-05	486	2.02E-04	553	6.86E-04	620	9.80E-04	687	4.89E-04	754	7.75E-05
420	4.37E-05	487	2.07E-04	554	6.85E-04	621	9.83E-04	688	4.79E-04	755	7.43E-05
421	4.85E-05	488	2.15E-04	555	6.92E-04	622	9.89E-04	689	4.68E-04	756	7.25E-05
422	5.29E-05	489	2.22E-04	556	6.95E-04	623	9.90E-04	690	4.59E-04	757	6.94E-05
423	5.77E-05	490	2.30E-04	557	6.94E-04	624	9.93E-04	691	4.48E-04	758	6.81E-05
424	6.38E-05	491	2.39E-04	558	6.99E-04	625	9.95E-04	692	4.37E-04	759	6.57E-05
425	6.91E-05	492	2.47E-04	559	7.01E-04	626	9.97E-04	693	4.29E-04	760	6.30E-05
426	7.67E-05	493	2.54E-04	560	7.04E-04	627	9.98E-04	694	4.18E-04	761	6.20E-05
427	8.52E-05	494	2.64E-04	561	7.07E-04	628	9.96E-04	695	4.07E-04	762	6.00E-05
428	9.33E-05	495	2.76E-04	562	7.09E-04	629	9.97E-04	696	3.98E-04	763	5.82E-05
429	1.03E-04	496	2.86E-04	563	7.11E-04	630	9.97E-04	697	3.88E-04	764	5.67E-05
430	1.11E-04	497	2.96E-04	564	7.16E-04	631	9.94E-04	698	3.80E-04	765	5.48E-05
431	1.22E-04	498	3.07E-04	565	7.16E-04	632	9.94E-04	699	3.71E-04	766	5.34E-05
432	1.32E-04	499	3.18E-04	566	7.19E-04	633	9.94E-04	700	3.61E-04	767	5.18E-05
433	1.42E-04	500	3.30E-04	567	7.24E-04	634	9.91E-04	701	3.53E-04	768	5.02E-05
434	1.54E-04	501	3.41E-04	568	7.27E-04	635	9.89E-04	702	3.44E-04	769	4.81E-05
435	1.66E-04	502	3.52E-04	569	7.31E-04	636	9.87E-04	703	3.36E-04	770	4.65E-05
436	1.82E-04	503	3.61E-04	570	7.35E-04	637	9.81E-04	704	3.26E-04	771	4.52E-05
437	1.97E-04	504	3.73E-04	571	7.37E-04	638	9.76E-04	705	3.19E-04	772	4.40E-05
438	2.14E-04	505	3.83E-04	572	7.39E-04	639	9.71E-04	706	3.10E-04	773	4.26E-05
439	2.33E-04	506	3.91E-04	573	7.42E-04	640	9.66E-04	707	3.02E-04	774	4.13E-05
440	2.55E-04	507	4.01E-04	574	7.43E-04	641	9.58E-04	708	2.94E-04	775	4.02E-05
441	2.77E-04	508	4.14E-04	575	7.50E-04	642	9.53E-04	709	2.86E-04	776	3.85E-05
442	3.01E-04	509	4.21E-04	576	7.52E-04	643	9.49E-04	710	2.78E-04	777	3.79E-05
443	3.30E-04	510	4.28E-04	577	7.52E-04	644	9.43E-04	711	2.71E-04	778	3.67E-05
444	3.63E-04	511	4.38E-04	578	7.55E-04	645	9.36E-04	712	2.64E-04	779	3.69E-05
445	3.92E-04	512	4.48E-04	579	7.60E-04	646	9.29E-04	713	2.58E-04	780	3.70E-05
446	4.25E-04	513	4.55E-04	580	7.62E-04	647	9.21E-04	714	2.50E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	ARCSMB	Sample ID	250903008-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	25.0	Humidity (%RH)	41.1

Test Method
The Samples were tested according to the ANSI/IES LM-79:2019. Photometric parameters were measured using a type C goniophotometer and software. The ambient temperature shall be maintained at 25±1°C, measured at a point not more than 1 m from the sample and at the same height as the sample. 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 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.

Test Conditions

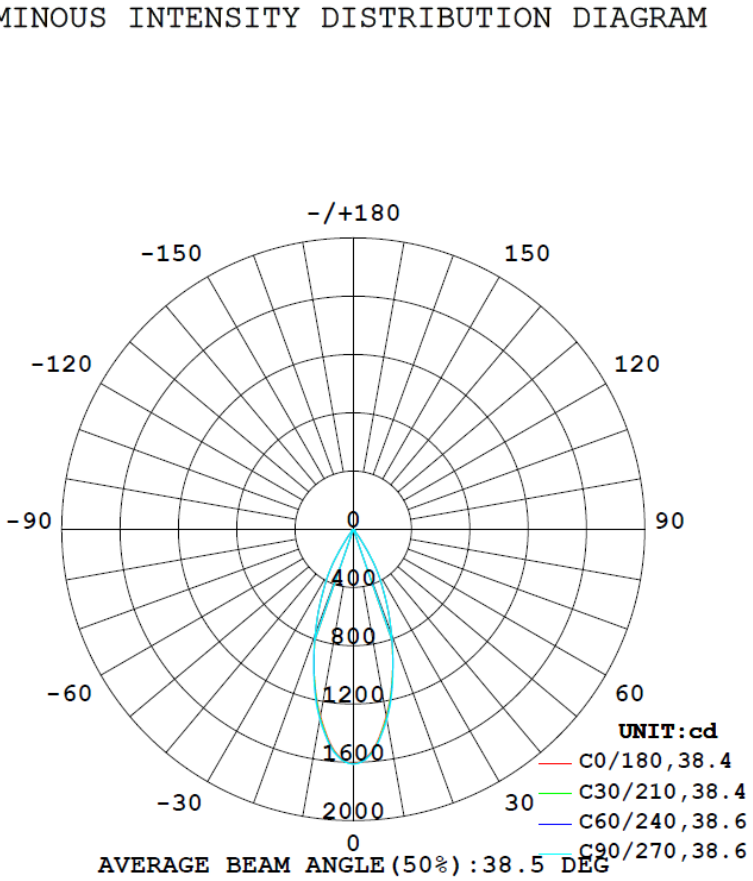
Condition	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor
WORST CASE	120.0	60	0.081	9.3	0.962
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

Test Result

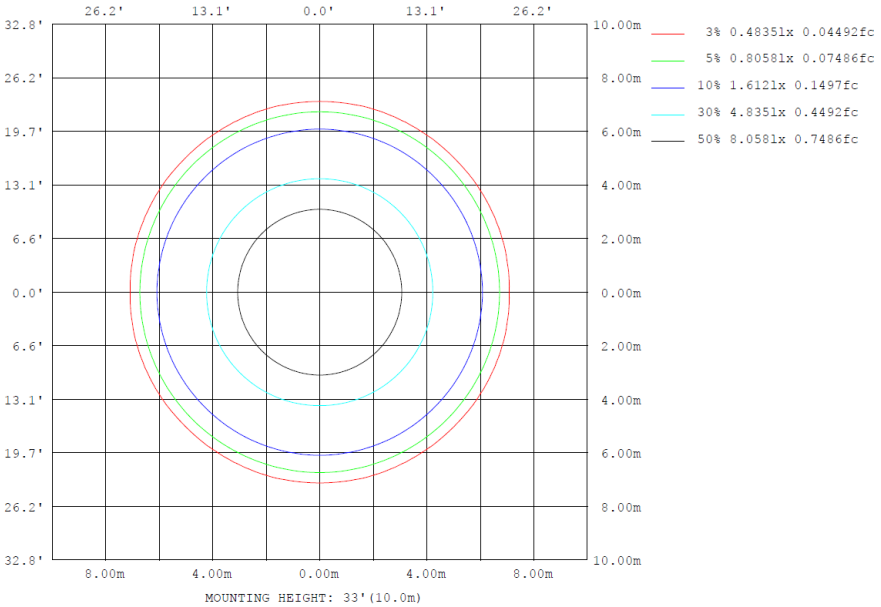
Flux (lm)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)	Zonal Lumen Requirement
	C0-180	C90-270	C0-180	C90-270		(0°-90°)
776	67.2	67.4	38.4	38.7	83.4	100.0%

4.2 Goniophotometer Test

Lighting Distribution Curve



Isolux Plot



4.2 Goniophotometer Test

Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1303	1316	1327	1316	1303	1316	1327	1316	0- 10	139.0	139.0	17.9,17.9
20	763.4	766.8	769.1	766.8	763.4	766.8	769.1	766.8	10- 20	287.1	426.0	54.9,54.9
30	319.5	316.4	318.6	316.4	319.5	316.4	318.6	316.4	20- 30	238.8	664.8	85.7,85.7
40	25.84	25.50	25.62	25.50	25.84	25.50	25.62	25.50	30- 40	76.07	740.9	95.5,95.5
50	17.47	17.50	17.49	17.50	17.47	17.50	17.49	17.50	40- 50	16.62	757.5	97.7,97.7
60	7.590	8.044	8.264	8.044	7.590	8.044	8.264	8.044	50- 60	11.30	768.8	99.1,99.1
70	2.940	3.133	3.216	3.133	2.940	3.133	3.216	3.133	60- 70	5.456	774.2	99.8,99.8
80	0.3922	0.4325	0.4391	0.4325	0.3922	0.4325	0.4391	0.4325	70- 80	1.079	775.3	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.2032	775.5	100,100
100	0	0	0	0	0	0	0	0	90-100	0	775.5	100,100
110	0	0	0	0	0	0	0	0	100-110	0	775.5	100,100
120	0	0	0	0	0	0	0	0	110-120	0	775.5	100,100
130	0	0	0	0	0	0	0	0	120-130	0	775.5	100,100
140	0	0	0	0	0	0	0	0	130-140	0	775.5	100,100
150	0	0	0	0	0	0	0	0	140-150	0	775.5	100,100
160	0	0	0	0	0	0	0	0	150-160	0	775.5	100,100
170	0	0	0	0	0	0	0	0	160-170	0	775.5	100,100
180	0	0	0	0	0	0	0	0	170-180	0	775.5	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	138.97	0-10	138.97	17.92%
10-20	287.06	0-20	426.03	54.93%
20-30	238.77	0-30	664.80	85.72%
30-40	76.07	0-40	740.87	95.53%
40-50	16.62	0-50	757.49	97.67%
50-60	11.30	0-60	768.79	99.13%
60-70	5.46	0-70	774.25	99.83%
70-80	1.08	0-80	775.33	99.97%
80-90	0.20	0-90	775.53	100.00%
90-100	0.00	0-100	775.53	100.00%
100-110	0.00	0-110	775.53	100.00%
110-120	0.00	0-120	775.53	100.00%
120-130	0.00	0-130	775.53	100.00%
130-140	0.00	0-140	775.53	100.00%
140-150	0.00	0-150	775.53	100.00%
150-160	0.00	0-160	775.53	100.00%
160-170	0.00	0-170	775.53	100.00%
170-180	0.00	0-180	775.53	100.00%

4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1 UNIT: cd

γ (DEG) \ C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1612	1612	1612	1611	1612	1612	1611	1612	1612	1611	1612	1612	1612	1612	1612	1611	1612	1612	1611
5	1523	1527	1530	1532	1534	1535	1536	1535	1534	1532	1530	1527	1523	1527	1530	1532	1534	1535	1536
10	1303	1307	1312	1316	1322	1325	1327	1325	1322	1316	1312	1307	1303	1307	1312	1316	1322	1325	1327
15	1036	1036	1038	1040	1045	1049	1051	1049	1045	1040	1038	1036	1036	1036	1038	1040	1045	1049	1051
20	763	764	765	767	769	769	769	769	769	767	765	764	763	764	765	767	769	769	769
25	518	520	520	522	523	524	524	524	523	522	520	520	518	520	520	522	523	524	524
30	319	317	315	316	317	318	319	318	317	316	315	317	319	317	315	316	317	318	319
35	95.0	97.2	97.4	96.3	97.1	99.5	99.4	99.5	97.1	96.3	97.4	97.2	95.0	97.2	97.4	96.3	97.1	99.5	99.4
40	25.8	26.0	25.9	25.5	25.5	25.7	25.6	25.7	25.5	25.5	25.9	26.0	25.8	26.0	25.9	25.5	25.5	25.7	25.6
45	21.6	21.7	21.7	21.4	21.5	21.6	21.5	21.6	21.5	21.4	21.7	21.7	21.6	21.7	21.7	21.4	21.5	21.6	21.5
50	17.5	17.6	17.6	17.5	17.5	17.6	17.5	17.6	17.5	17.5	17.6	17.6	17.5	17.6	17.6	17.5	17.5	17.6	17.5
55	12.2	12.5	12.7	12.6	12.7	12.8	12.9	12.8	12.7	12.6	12.7	12.5	12.2	12.5	12.7	12.6	12.7	12.8	12.9
60	7.59	7.90	8.06	8.04	8.15	8.28	8.26	8.28	8.15	8.04	8.06	7.90	7.59	7.90	8.06	8.04	8.15	8.28	8.26
65	5.23	5.42	5.56	5.50	5.51	5.56	5.53	5.56	5.51	5.50	5.56	5.42	5.23	5.42	5.56	5.50	5.51	5.56	5.53
70	2.94	3.17	3.23	3.13	3.13	3.24	3.22	3.24	3.13	3.13	3.23	3.17	2.94	3.17	3.23	3.13	3.13	3.24	3.22
75	0.73	0.76	0.78	0.79	0.80	0.81	0.80	0.81	0.80	0.79	0.78	0.76	0.73	0.76	0.78	0.79	0.80	0.81	0.80
80	0.39	0.41	0.42	0.43	0.44	0.44	0.44	0.44	0.44	0.43	0.42	0.41	0.39	0.41	0.42	0.43	0.44	0.44	0.44
85	0.16	0.16	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.18
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

γ (DEG) \ C (DEG)	285	300	315	330	345
0	1612	1612	1611	1612	1612
5	1535	1534	1532	1530	1527
10	1325	1322	1316	1312	1307
15	1049	1045	1040	1038	1036
20	769	769	767	765	764
25	524	523	522	520	520
30	318	317	316	315	317
35	99.5	97.1	96.3	97.4	97.2
40	25.7	25.5	25.5	25.9	26.0
45	21.6	21.5	21.4	21.7	21.7
50	17.6	17.5	17.5	17.6	17.6
55	12.8	12.7	12.6	12.7	12.5
60	8.28	8.15	8.04	8.06	7.90
65	5.56	5.51	5.50	5.56	5.42
70	3.24	3.13	3.13	3.23	3.17
75	0.81	0.80	0.79	0.78	0.76
80	0.44	0.44	0.43	0.42	0.41
85	0.18	0.18	0.17	0.17	0.16
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.	ARCSMB	Sample ID	250903008-S1
Temperature (°C)	25.4	Humidity (%RH)	41.0

Test Method
The samples were tested according to the and ANSI C82.77: 2002 and ANSI C82.77-10:2020 The total harmonic distortion shall be measured to the 40th order. 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.

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	iTHD(%)
120.0	60	0.081	9.3	0.962	13.76

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************