

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: 2025-08-21

Revised Date: N/A

1.0 Test Summary

Wall mount Luminaire					
Requirement Category		Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		1829
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	116.5
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	6.70
		ANSI C82-77-10:2020		277V	15.13
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002	N/A	120V	0.994
		ANSI C82-77-10:2020		277V	0.950
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3448
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.5
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		77
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%		-3%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		27.0%
Backlight, Uplight and Glare (BUG) Ratings (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019 IES TM-15-11	N/A		B0-U4-G2
Input Voltage (V)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Cast		120.0
(Goniophotometer – Section 4.2)			Non-Worst Case		277.0
Input Current (A)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		0.132
(Goniophotometer – Section 4.2)			Non-Worst Case		0.059
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.7
(Goniophotometer – Section 4.2)			Non-Worst Case		15.6

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-28	V1-18 @16W3500K	-	250728005-S1
2	Goniophotometer Test	2025-07-28	V1-18 @16W3500K	-	250728005-S1
3	THD and PF Test	2025-07-28	V1-18 @16W3500K	-	250728005-S1

Remark (If any):

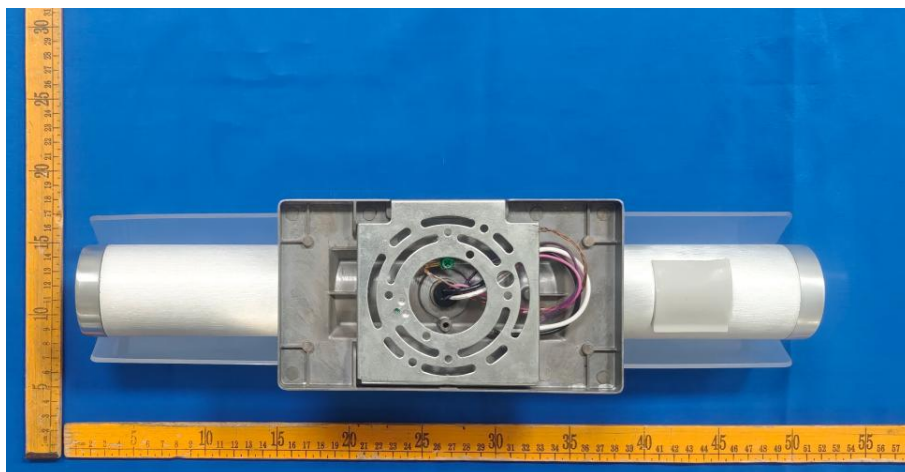
1. The results contained in this report pertain only to the tested samples.
2. This report shall not be reproduced, no limited part or full, without approval of Dongguan New Testing Centre Co., Ltd.
3. This report must not be used by the client to claim product certification, approval, or endorsement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

3.0 Product Description

Luminaire Description: Model No. V1-18 @16W3500K, color tunable from 2700K, 3000K, 3500K, 4000K and 5000K.

Electrical Specification: 120-277Vac, 50/60Hz

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	V1-18 @16W3500K	Sample ID	250728005-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

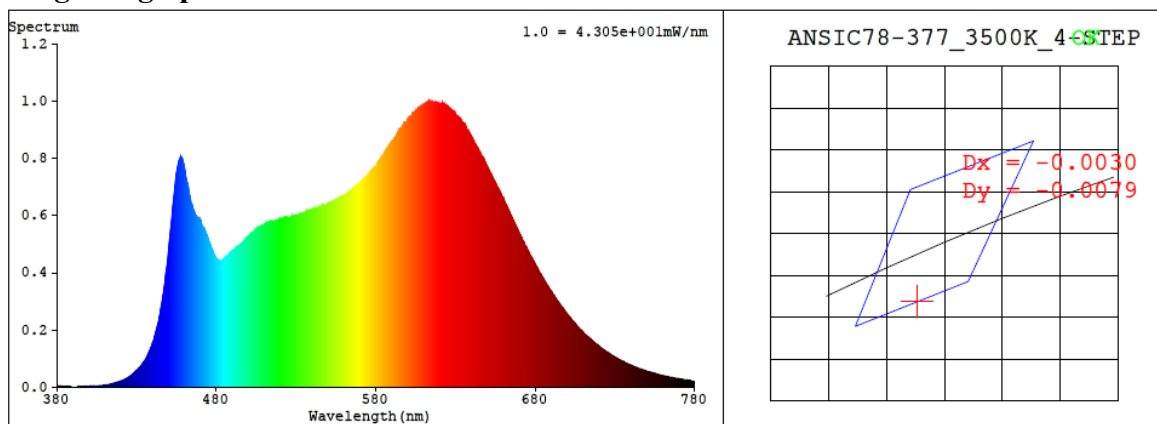
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.132	15.7	0.994
277.0	60	0.059	15.6	0.950

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3448	92.5	77	-0.0028	3.5	89	96	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4052$ $y = 0.3843$ / $u' = 0.2383$ $v' = 0.5085$ ($duv = -2.82e-03$)

CCT= 3448K Prcp WL: $L_d = 582.3nm$ Purity=36.9%

Peak WL: $L_p = 613nm$ FWHM: $= 177.8nm$ Ratio: R=23.1% G=72.3% B=4.6%

Render Index: $R_a = 92.5$ AvgR = 91.4 TM30: $R_f = 91$ $R_g = 98$

EEL: 0.11945 A+

R1 =97 R2 =95 R3 =92 R4 =94 R5 =96 R6 =90 R7 =89

R8 =87 R9 =77 R10=89 R11=97 R12=79 R13=96 R14=96 R15=96

4.1 Integrating Sphere Test

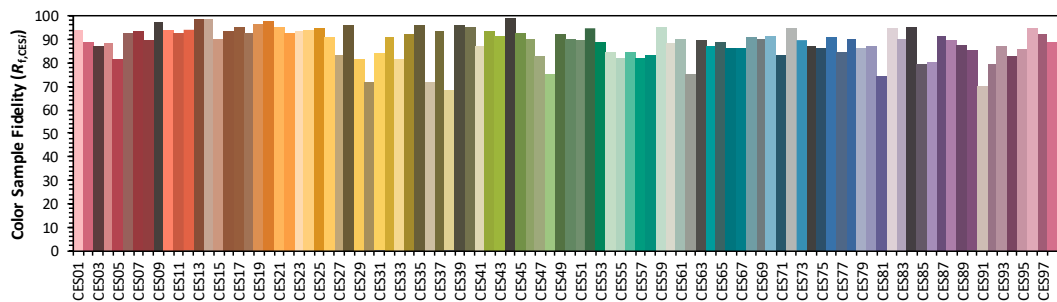
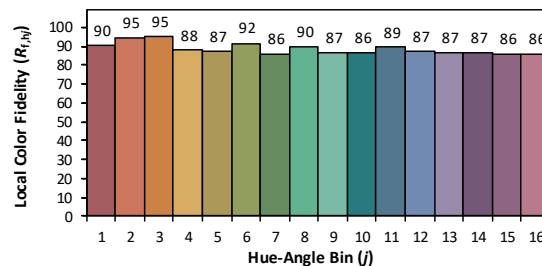
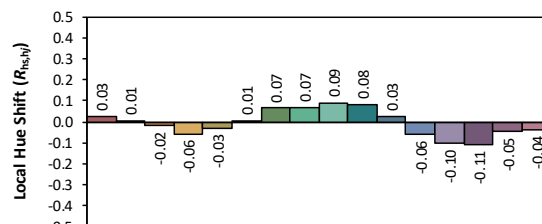
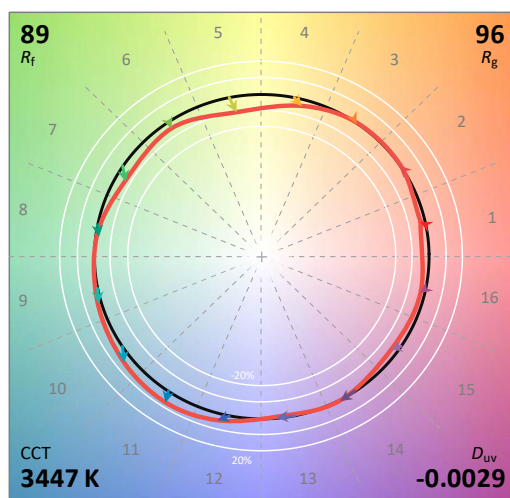
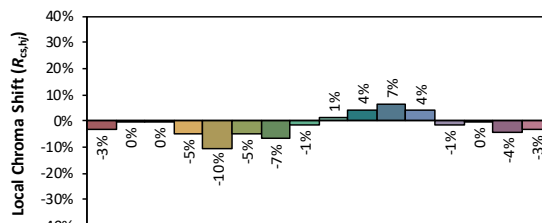
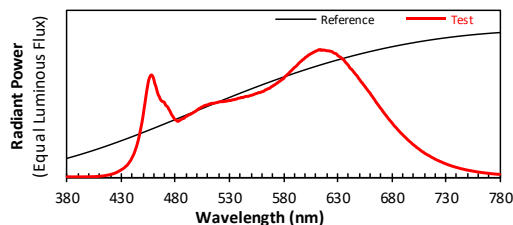
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/21

Model: V1-18 @16W3500K



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

x 0.4052
 y 0.3842
 u' 0.2384
 v' 0.5085

CIE 13.3-1995
(CRI)
 R_a 92
 R_g 77

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	2.70E-06	447	3.40E-04	514	5.80E-04	581	7.84E-04	648	7.94E-04	715	1.67E-04
381	3.70E-06	448	3.83E-04	515	5.78E-04	582	7.92E-04	649	7.81E-04	716	1.61E-04
382	1.80E-06	449	4.26E-04	516	5.80E-04	583	7.99E-04	650	7.69E-04	717	1.56E-04
383	2.70E-06	450	4.76E-04	517	5.82E-04	584	8.07E-04	651	7.58E-04	718	1.52E-04
384	2.20E-06	451	5.34E-04	518	5.84E-04	585	8.14E-04	652	7.45E-04	719	1.48E-04
385	2.30E-06	452	5.88E-04	519	5.84E-04	586	8.24E-04	653	7.37E-04	720	1.43E-04
386	2.10E-06	453	6.48E-04	520	5.89E-04	587	8.32E-04	654	7.24E-04	721	1.38E-04
387	2.50E-06	454	7.01E-04	521	5.90E-04	588	8.40E-04	655	7.15E-04	722	1.34E-04
388	2.30E-06	455	7.49E-04	522	5.90E-04	589	8.50E-04	656	7.02E-04	723	1.31E-04
389	2.10E-06	456	7.78E-04	523	5.93E-04	590	8.58E-04	657	6.92E-04	724	1.27E-04
390	2.10E-06	457	7.95E-04	524	5.91E-04	591	8.64E-04	658	6.80E-04	725	1.23E-04
391	2.10E-06	458	8.01E-04	525	5.93E-04	592	8.71E-04	659	6.69E-04	726	1.20E-04
392	1.90E-06	459	7.89E-04	526	5.94E-04	593	8.81E-04	660	6.60E-04	727	1.15E-04
393	2.60E-06	460	7.67E-04	527	5.95E-04	594	8.90E-04	661	6.45E-04	728	1.12E-04
394	2.80E-06	461	7.32E-04	528	5.99E-04	595	8.99E-04	662	6.34E-04	729	1.08E-04
395	2.60E-06	462	7.09E-04	529	5.98E-04	596	9.05E-04	663	6.21E-04	730	1.05E-04
396	2.40E-06	463	6.77E-04	530	6.01E-04	597	9.13E-04	664	6.10E-04	731	1.01E-04
397	2.90E-06	464	6.48E-04	531	6.00E-04	598	9.21E-04	665	5.97E-04	732	9.81E-05
398	2.90E-06	465	6.32E-04	532	6.04E-04	599	9.26E-04	666	5.84E-04	733	9.52E-05
399	2.80E-06	466	6.11E-04	533	6.07E-04	600	9.35E-04	667	5.73E-04	734	9.23E-05
400	3.00E-06	467	6.00E-04	534	6.06E-04	601	9.42E-04	668	5.61E-04	735	8.94E-05
401	3.50E-06	468	5.93E-04	535	6.10E-04	602	9.46E-04	669	5.49E-04	736	8.63E-05
402	3.10E-06	469	5.90E-04	536	6.10E-04	603	9.56E-04	670	5.38E-04	737	8.39E-05
403	4.00E-06	470	5.83E-04	537	6.13E-04	604	9.59E-04	671	5.28E-04	738	8.10E-05
404	3.80E-06	471	5.63E-04	538	6.18E-04	605	9.66E-04	672	5.14E-04	739	7.89E-05
405	4.10E-06	472	5.57E-04	539	6.18E-04	606	9.69E-04	673	5.04E-04	740	7.65E-05
406	4.50E-06	473	5.47E-04	540	6.21E-04	607	9.74E-04	674	4.92E-04	741	7.40E-05
407	5.20E-06	474	5.31E-04	541	6.25E-04	608	9.80E-04	675	4.82E-04	742	7.20E-05
408	5.70E-06	475	5.17E-04	542	6.23E-04	609	9.82E-04	676	4.71E-04	743	6.95E-05
409	6.80E-06	476	4.98E-04	543	6.26E-04	610	9.88E-04	677	4.59E-04	744	6.72E-05
410	7.30E-06	477	4.83E-04	544	6.29E-04	611	9.90E-04	678	4.49E-04	745	6.50E-05
411	8.00E-06	478	4.71E-04	545	6.31E-04	612	9.95E-04	679	4.39E-04	746	6.35E-05
412	8.80E-06	479	4.58E-04	546	6.33E-04	613	9.99E-04	680	4.29E-04	747	6.13E-05
413	9.70E-06	480	4.48E-04	547	6.33E-04	614	9.95E-04	681	4.18E-04	748	5.96E-05
414	1.07E-05	481	4.45E-04	548	6.35E-04	615	9.99E-04	682	4.07E-04	749	5.72E-05
415	1.25E-05	482	4.37E-04	549	6.39E-04	616	9.93E-04	683	3.97E-04	750	5.54E-05
416	1.39E-05	483	4.40E-04	550	6.40E-04	617	9.95E-04	684	3.89E-04	751	5.40E-05
417	1.54E-05	484	4.45E-04	551	6.43E-04	618	9.95E-04	685	3.80E-04	752	5.26E-05
418	1.67E-05	485	4.50E-04	552	6.45E-04	619	9.92E-04	686	3.70E-04	753	5.10E-05
419	1.86E-05	486	4.55E-04	553	6.50E-04	620	9.91E-04	687	3.61E-04	754	4.92E-05
420	2.12E-05	487	4.60E-04	554	6.53E-04	621	9.90E-04	688	3.52E-04	755	4.79E-05
421	2.35E-05	488	4.61E-04	555	6.56E-04	622	9.89E-04	689	3.42E-04	756	4.59E-05
422	2.58E-05	489	4.71E-04	556	6.58E-04	623	9.88E-04	690	3.35E-04	757	4.47E-05
423	2.82E-05	490	4.76E-04	557	6.62E-04	624	9.85E-04	691	3.25E-04	758	4.33E-05
424	3.12E-05	491	4.80E-04	558	6.62E-04	625	9.83E-04	692	3.18E-04	759	4.18E-05
425	3.46E-05	492	4.86E-04	559	6.65E-04	626	9.76E-04	693	3.10E-04	760	4.03E-05
426	3.89E-05	493	4.89E-04	560	6.69E-04	627	9.71E-04	694	3.02E-04	761	3.91E-05
427	4.29E-05	494	4.93E-04	561	6.71E-04	628	9.68E-04	695	2.93E-04	762	3.79E-05
428	4.78E-05	495	4.98E-04	562	6.75E-04	629	9.66E-04	696	2.85E-04	763	3.71E-05
429	5.29E-05	496	5.02E-04	563	6.82E-04	630	9.54E-04	697	2.78E-04	764	3.54E-05
430	5.80E-05	497	5.09E-04	564	6.86E-04	631	9.48E-04	698	2.71E-04	765	3.47E-05
431	6.36E-05	498	5.12E-04	565	6.89E-04	632	9.43E-04	699	2.62E-04	766	3.36E-05
432	6.90E-05	499	5.18E-04	566	6.94E-04	633	9.38E-04	700	2.55E-04	767	3.22E-05
433	7.59E-05	500	5.25E-04	567	6.95E-04	634	9.29E-04	701	2.48E-04	768	3.14E-05
434	8.38E-05	501	5.31E-04	568	7.03E-04	635	9.23E-04	702	2.42E-04	769	3.06E-05
435	9.02E-05	502	5.38E-04	569	7.09E-04	636	9.17E-04	703	2.34E-04	770	2.99E-05
436	1.00E-04	503	5.41E-04	570	7.13E-04	637	9.04E-04	704	2.29E-04	771	2.88E-05
437	1.12E-04	504	5.48E-04	571	7.20E-04	638	8.95E-04	705	2.22E-04	772	2.71E-05
438	1.24E-04	505	5.51E-04	572	7.24E-04	639	8.85E-04	706	2.16E-04	773	2.71E-05
439	1.37E-04	506	5.56E-04	573	7.30E-04	640	8.76E-04	707	2.09E-04	774	2.56E-05
440	1.54E-04	507	5.60E-04	574	7.36E-04	641	8.62E-04	708	2.02E-04	775	2.54E-05
441	1.72E-04	508	5.63E-04	575	7.42E-04	642	8.51E-04	709	1.98E-04	776	2.41E-05
442	1.90E-04	509	5.64E-04	576	7.50E-04	643	8.44E-04	710	1.92E-04	777	2.36E-05
443	2.15E-04	510	5.68E-04	577	7.53E-04	644	8.36E-04	711	1.85E-04	778	2.25E-05
444	2.39E-04	511	5.70E-04	578	7.61E-04	645	8.24E-04	712	1.81E-04	779	2.25E-05
445	2.70E-04	512	5.75E-04	579	7.67E-04	646	8.13E-04	713	1.76E-04	780	2.25E-05
446	3.02E-04	513	5.74E-04	580	7.71E-04	647	8.03E-04	714	1.71E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18 @16W3500K	Sample ID	250728005-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.9	Humidity (%RH)	42.1

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	0.132	15.7	0.994
NON-WORST CASE	277.0	60	0.059	15.6	0.950

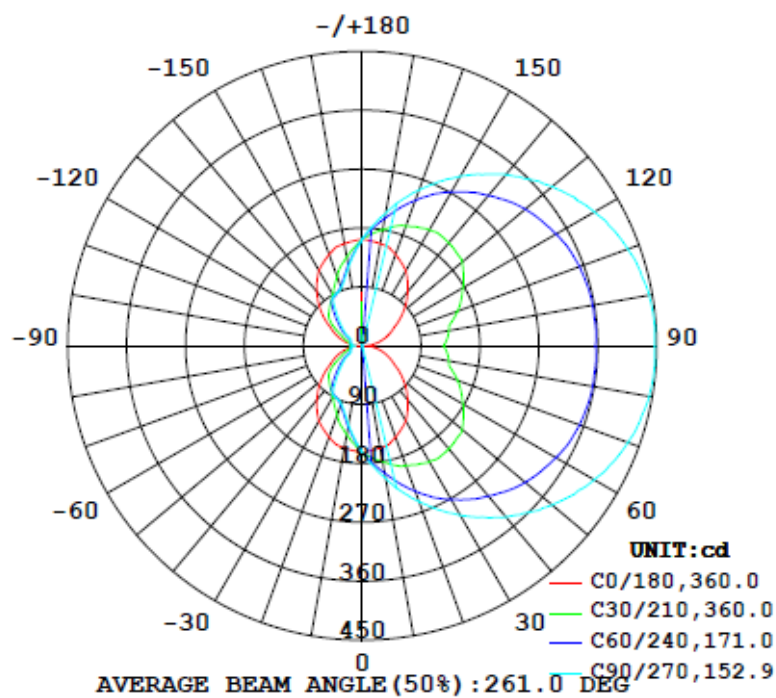
Test Result

Flux (lm)	Field Angle (10%)		Beam Angle (50%)		Luminous Efficacy (lm/W)	Zonal Lumen Requirement	BUG
	C0-180	C90-270	C0-180	C90-270		(0°-60°)	
1829	92.6	156.2	180.0	96.4	116.5	27.0%	B0-U4-G2

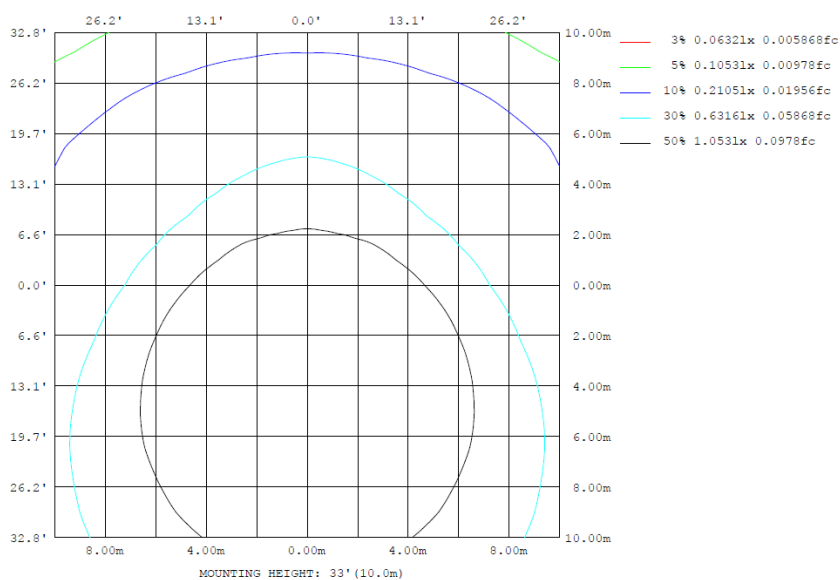
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

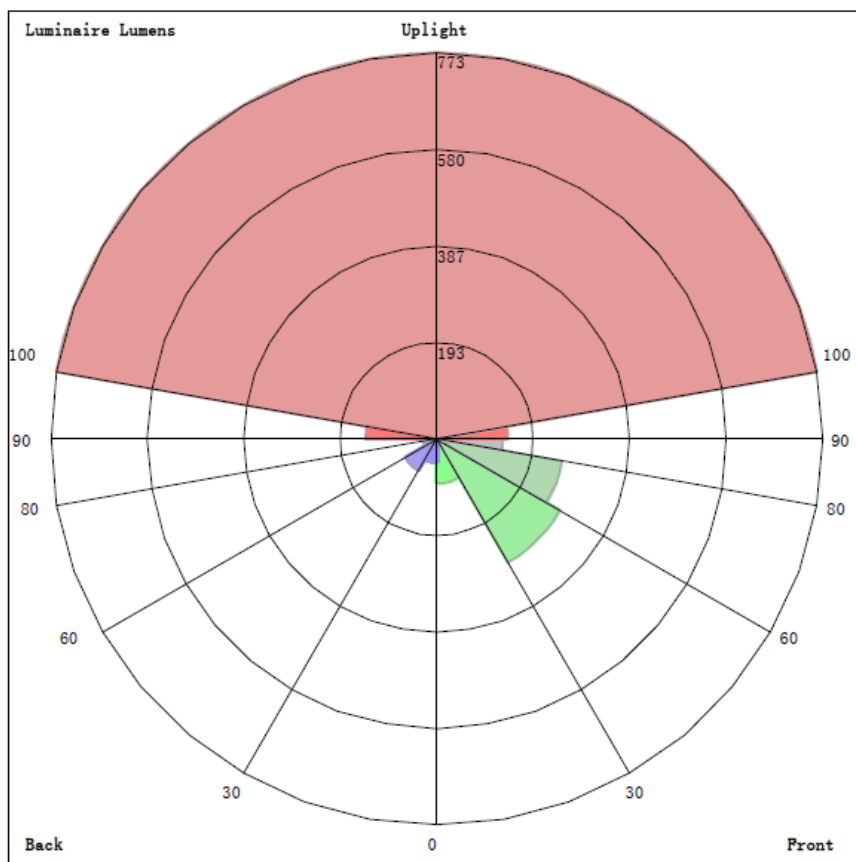
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	158.6	189.9	206.0	189.9	158.6	130.2	122.8	130.2	0- 10	15.40	15.40	0.84,0.84
20	148.6	219.7	253.4	219.7	148.6	103.1	95.18	103.1	10- 20	45.55	60.95	3.33,3.33
30	133.2	240.5	299.7	240.5	133.2	86.25	88.00	86.25	20- 30	74.86	135.8	7.43,7.43
40	108.2	258.9	341.6	258.9	108.2	79.04	59.45	79.04	30- 40	101.9	237.7	13,13
50	82.59	266.5	379.1	266.5	82.59	52.56	37.82	52.56	40- 50	121.6	359.3	19.6,19.6
60	56.32	269.1	409.3	269.1	56.32	32.61	20.62	32.61	50- 60	133.6	492.8	27,27
70	38.82	264.1	432.0	264.1	38.82	20.44	19.04	20.44	60- 70	139.2	632.0	34.6,34.6
80	21.46	253.9	445.2	253.9	21.46	19.20	16.25	19.20	70- 80	141.3	773.3	42.3,42.3
90	4.256	246.9	447.2	246.9	4.256	17.49	16.00	17.49	80- 90	141.0	914.3	50,50
100	21.46	253.9	445.2	253.9	21.46	19.20	16.25	19.20	90-100	141.0	1055	57.7,57.7
110	38.82	264.1	432.0	264.1	38.82	20.44	19.04	20.44	100-110	141.3	1197	65.4,65.4
120	56.32	269.1	409.3	269.1	56.32	32.61	20.62	32.61	110-120	139.2	1336	73,73
130	82.59	266.5	379.1	266.5	82.59	52.56	37.82	52.56	120-130	133.6	1469	80.4,80.4
140	108.2	258.9	341.6	258.9	108.2	79.04	59.45	79.04	130-140	121.6	1591	87,87
150	133.2	240.5	299.7	240.5	133.2	86.25	88.00	86.25	140-150	101.9	1693	92.6,92.6
160	148.6	219.7	253.4	219.7	148.6	103.1	95.18	103.1	150-160	74.86	1768	96.7,96.7
170	158.6	189.9	206.0	189.9	158.6	130.2	122.8	130.2	160-170	45.55	1813	99.2,99.2
180	163.3	163.3	163.3	163.3	163.3	163.3	163.3	163.3	170-180	15.40	1829	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	15.40	0-10	15.40	0.85%
10-20	45.55	0-20	60.95	3.36%
20-30	74.86	0-30	135.81	7.49%
30-40	101.90	0-40	237.71	13.11%
40-50	121.56	0-50	359.27	19.81%
50-60	133.57	0-60	492.84	27.18%
60-70	139.20	0-70	632.04	34.86%
70-80	141.28	0-80	773.32	42.65%
80-90	141.01	0-90	914.33	50.42%
90-100	141.01	0-100	1055.34	58.20%
100-110	141.28	0-110	1196.62	65.99%
110-120	139.20	0-120	1335.82	73.67%
120-130	133.57	0-130	1469.39	81.04%
130-140	121.56	0-140	1590.95	87.74%
140-150	101.90	0-150	1692.85	93.36%
150-160	74.86	0-160	1767.71	97.49%
160-170	45.55	0-170	1813.26	100.00%
170-180	15.40	0-180	1828.66	100.85%

4.2 Goniophotometer Test

LCS/BUG

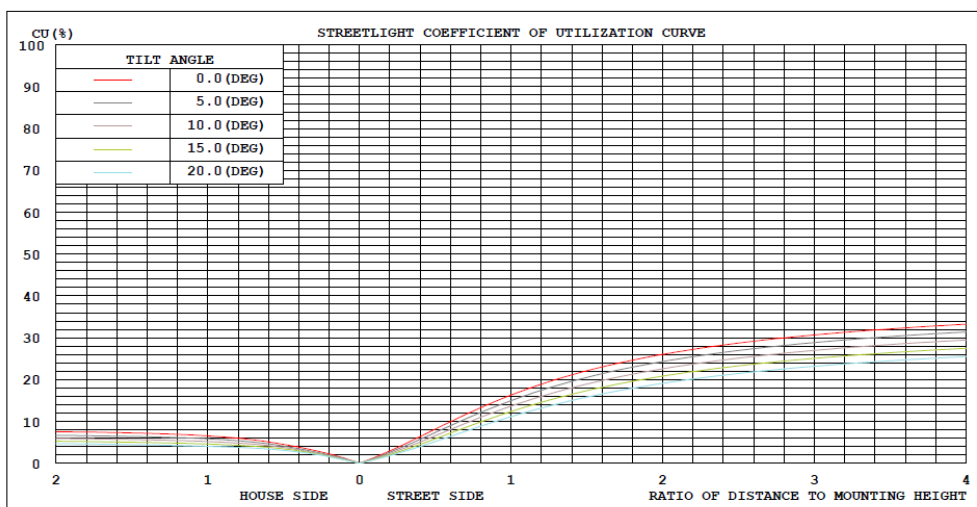


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

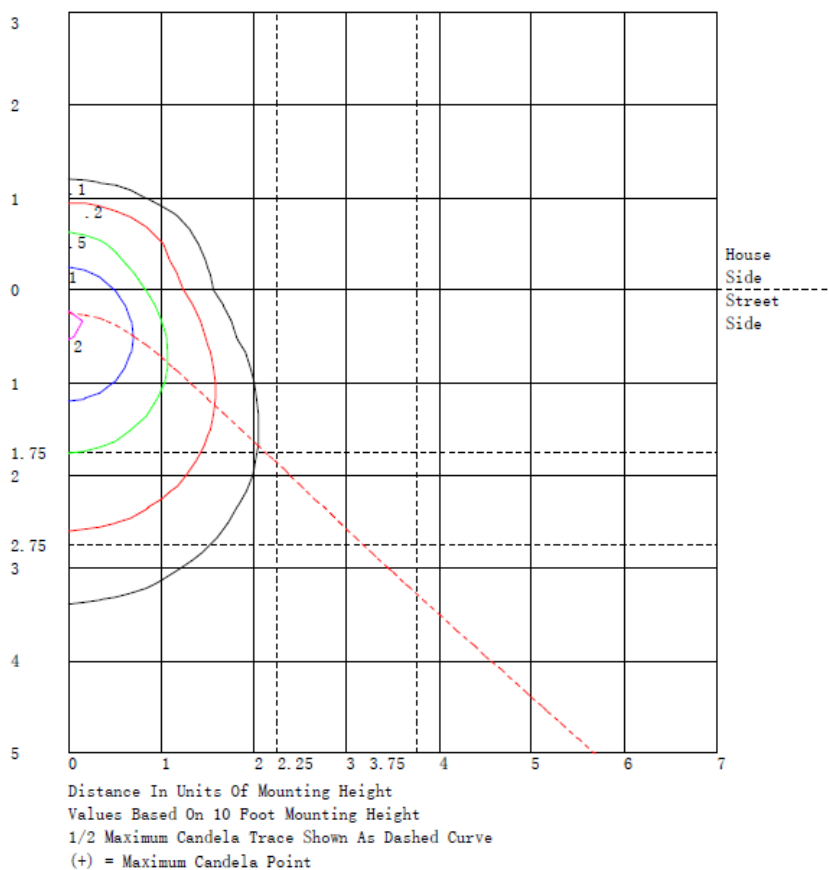
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	88.6	N.A.	4.8
FM - Front-Medium (30-60)	285.1	N.A.	15.6
FH - Front-High (60-80)	254.3	N.A.	13.9
FVH - Front-Very High (80-90)	131.8	N.A.	7.2
BL - Back-Low (0-30)	47.2	N.A.	2.6
BM - Back-Medium (30-60)	72.0	N.A.	3.9
BH - Back-High (60-80)	26.1	N.A.	1.4
BVH - Back-Very High (80-90)	9.3	N.A.	0.5
UL - Uplight-Low (90-100)	141.0	N.A.	7.7
UH - Uplight-High (100-180)	773.3	N.A.	42.3
Total	1828.7	N.A.	100.0
BUG Rating	B0-U4-G2		

4.2 Goniophotometer Test

Coefficients of Utilization



Isolines



4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163
5	161	166	172	177	180	183	184	183	180	177	172	166	161	155	150	147	144	142	142
10	159	170	180	190	198	203	206	203	198	190	180	170	159	148	138	130	126	123	123
15	156	173	189	204	217	226	230	226	217	204	189	173	156	140	126	116	109	105	105
20	149	171	195	220	236	248	253	248	236	220	195	171	149	128	113	103	96.6	94.7	95.2
25	141	169	200	231	256	269	277	269	256	231	200	169	141	117	101	92.6	89.7	89.3	90.0
30	133	167	205	240	271	290	300	290	271	240	205	167	133	106	90.8	86.2	86.5	86.8	88.0
35	121	159	207	250	286	310	320	310	286	250	207	159	121	94.6	83.4	82.5	81.5	76.0	74.7
40	108	151	206	259	300	329	342	329	300	259	206	151	108	83.6	77.5	79.0	67.9	61.1	59.4
45	95.7	142	203	262	313	348	360	348	313	262	203	142	95.7	74.3	72.3	65.8	54.5	48.8	47.1
50	82.6	130	199	266	325	364	379	364	325	266	199	130	82.6	66.8	66.7	52.6	43.6	39.0	37.8
55	69.5	115	189	270	334	378	396	378	334	270	189	115	69.5	59.9	56.0	41.6	34.6	30.7	30.0
60	56.3	98.9	178	269	342	391	409	391	342	269	178	98.9	56.3	53.4	43.4	32.6	25.4	21.8	20.6
65	47.6	86.7	167	267	349	402	422	402	349	267	167	86.7	47.6	44.8	33.5	24.3	20.6	19.9	19.8
70	38.8	74.5	155	264	353	411	432	411	353	264	155	74.5	38.8	35.0	27.0	20.4	19.8	19.2	19.0
75	30.1	61.9	142	259	356	417	440	417	356	259	142	61.9	30.1	24.8	21.4	19.7	19.0	18.5	18.7
80	21.5	59.1	134	254	357	422	445	422	357	254	134	59.1	21.5	21.8	19.3	19.2	17.1	16.7	16.3
85	12.9	57.0	130	252	358	424	447	424	358	252	130	57.0	12.9	19.7	19.2	18.4	16.4	14.2	13.7
90	4.26	54.4	124	247	356	425	447	425	356	247	124	54.4	4.26	17.7	19.0	17.5	16.7	14.4	16.0
95	12.9	57.0	130	252	358	424	447	424	358	252	130	57.0	12.9	19.7	19.2	18.4	16.4	14.2	13.7
100	21.5	59.1	134	254	357	422	445	422	357	254	134	59.1	21.5	21.8	19.3	19.2	17.1	16.7	16.3
105	30.1	61.9	142	259	356	417	440	417	356	259	142	61.9	30.1	24.8	21.4	19.7	19.0	18.5	18.7
110	38.8	74.5	155	264	353	411	432	411	353	264	155	74.5	38.8	35.0	27.0	20.4	19.8	19.2	19.0
115	47.6	86.7	167	267	349	402	422	402	349	267	167	86.7	47.6	44.8	33.5	24.3	20.6	19.9	19.8
120	56.3	98.9	178	269	342	391	409	391	342	269	178	98.9	56.3	53.4	43.4	32.6	25.4	21.8	20.6
125	69.5	115	189	270	334	378	396	378	334	270	189	115	69.5	59.9	56.0	41.6	34.6	30.7	30.0
130	82.6	130	199	266	325	364	379	364	325	266	199	130	82.6	66.8	66.7	52.6	43.6	39.0	37.8
135	95.7	142	203	262	313	348	360	348	313	262	203	142	95.7	74.3	72.3	65.8	54.5	48.8	47.1
140	108	151	206	259	300	329	342	329	300	259	206	151	108	83.6	77.5	79.0	67.9	61.1	59.4
145	121	159	207	250	286	310	320	310	286	250	207	159	121	94.6	83.4	82.5	81.5	76.0	74.7
150	133	167	205	240	271	290	300	290	271	240	205	167	133	106	90.8	86.2	86.5	86.8	88.0
155	141	169	200	231	256	269	277	269	256	231	200	169	141	117	101	92.6	89.7	89.3	90.0
160	149	171	195	220	236	248	253	248	236	220	195	171	149	128	113	103	96.6	94.7	95.2
165	156	173	189	204	217	226	230	226	217	204	189	173	156	140	126	116	109	105	105
170	159	170	180	190	198	203	206	203	198	190	180	170	159	148	138	130	126	123	123
175	161	166	172	177	180	183	184	183	180	177	172	166	161	155	150	147	144	142	142
180	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163	163

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	163	163	163	163	163														
5	142	144	147	150	155														
10	123	126	130	138	148														
15	105	109	116	126	140														
20	94.7	96.6	103	113	128														
25	89.3	89.7	92.6	101	117														
30	86.8	86.5	86.2	90.8	106														
35	76.0	81.5	82.5	83.4	94.6														
40	61.1	67.9	79.0	77.5	83.6														
45	48.8	54.5	65.8	72.3	74.3														
50	39.0	43.6	52.6	66.7	66.8														
55	30.7	34.6	41.6	56.0	59.9														
60	21.8	25.4	32.6	43.4	53.4														
65	19.9	20.6	24.3	33.5	44.8														
70	19.2	19.8	20.4	27.0	35.0														
75	18.5	19.0	19.7	21.4	24.8														
80	16.7	17.1	19.2	19.3	21.8														
85	14.2	16.4	18.4	19.2	19.7														
90	14.4	16.7	17.5	19.0	17.7														
95	14.2	16.4	18.4	19.2	19.7														
100	16.7	17.1	19.2	19.3	21.8														
105	18.5	19.0	19.7	21.4	24.8														
110	19.2	19.8	20.4	27.0	35.0														
115	19.9	20.6	24.3	33.5	44.8														
120	21.8	25.4	32.6	43.4	53.4														
125	30.7	34.6	41.6	56.0	59.9														
130	39.0	43.6	52.6	66.7	66.8														
135	48.8	54.5	65.8	72.3	74.3														
140	61.1	67.9	79.0	77.5	83.6														
145	76.0	81.5	82.5	83.4	94.6														
150	86.8	86.5	86.2	90.8	106														
155	89.3	89.7	92.6	101	117														
160	94.7	96.6	103	113	128														
165	105	109	116	126	140														
170	123	126	130	138	148														
175	142	144	147	150	155														
180	163	163	163	163	163														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18 @16W3500K	Sample ID	250728005-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	0.132	15.7	0.994	6.70
277.0	60	0.059	15.6	0.950	15.13

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	2024-08-06	2025-08-05
NTC-F01-019	Temperature & Humidity Meter	2024-10-29	2025-10-28

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