

## Photometric Test Report

### Relevant Standards

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

Prepared For

**RAB Lighting Inc.**

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Prepared By

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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		1744
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	111.8
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.6
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.89
				277V	15.28
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.994
				277V	0.953
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3360
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.3
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		76
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		26.6%
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		0.131
(Goniophotometer – Section 4.2)			Non-Worst Case		0.059
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.6
(Goniophotometer – Section 4.2)			Non-Worst Case		15.5

## 2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-28	V1-18B @16W3500K	-	250728006-S1
2	Goniophotometer Test	2025-07-28	V1-18B @16W3500K	-	250728006-S1
3	THD and PF Test	2025-07-28	V1-18B @16W3500K	-	250728006-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. V1-18B @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

<b>Model No.</b>	V1-18B @16W3500K	<b>Sample ID</b>	250728006-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

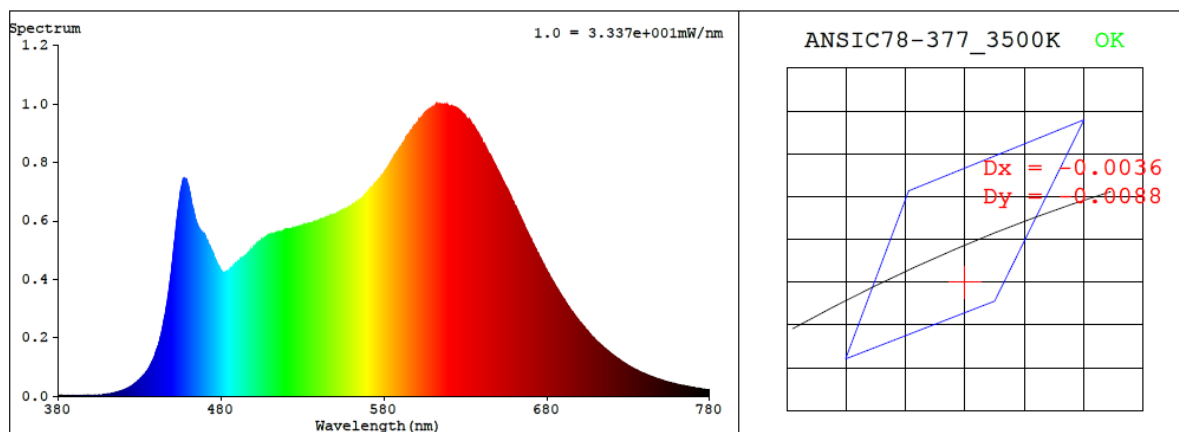
<b>Test Method</b>
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at <math>25\pm1^{\circ}\text{C}</math>.</p> <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 <math>\pm 0.2</math> percent under load.</p> <p>The sample was measured using <math>4\pi</math> 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	0.131	15.6	0.994
277.0	60	0.059	15.5	0.953

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3360	92.3	76	-0.0031	4.5	89	96	-3%

## 4.1 Integrating Sphere Test



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.4099$   $y = 0.3858$  /  $u' = 0.2408$   $v' = 0.5099$  ( $duv = -3.12e-03$ )

CCT= 3360K Prcp WL:  $L_d = 582.8\text{nm}$  Purity=38.8%

Peak WL:  $L_p = 612\text{nm}$  FWHM:  $=174.8\text{nm}$  Ratio: R=23.5% G=72.0% B=4.5%

Render Index:  $R_a = 92.3$  AvgR = 91.2 TM30:  $R_f = 91$   $R_g = 98$

EEL: 0.13055 A+

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

R8 =86 R9 =76 R10=89 R11=97 R12=79 R13=96 R14=96 R15=96

## 4.1 Integrating Sphere Test

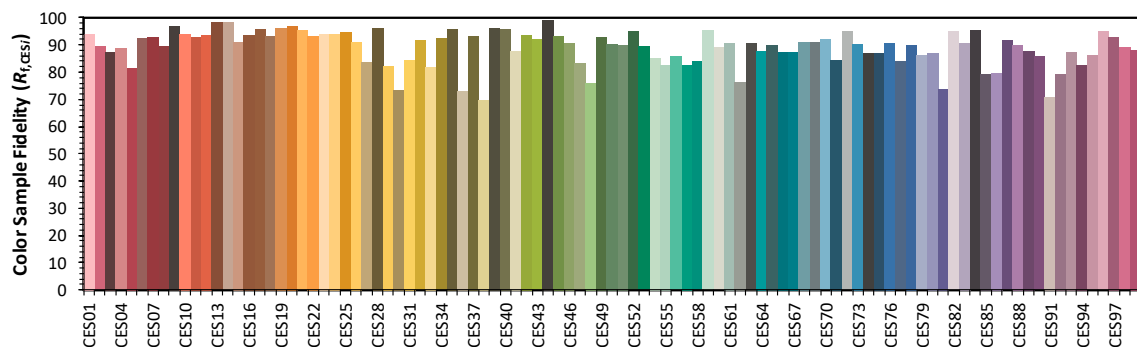
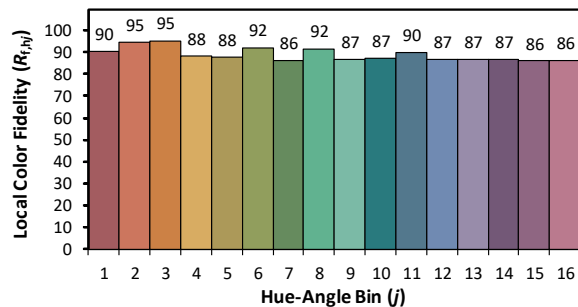
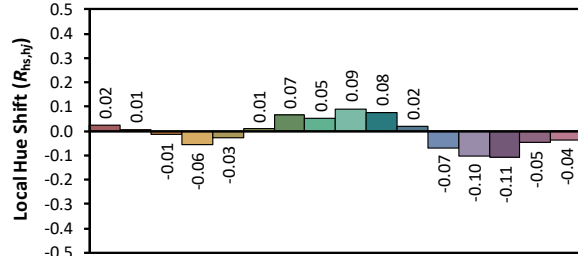
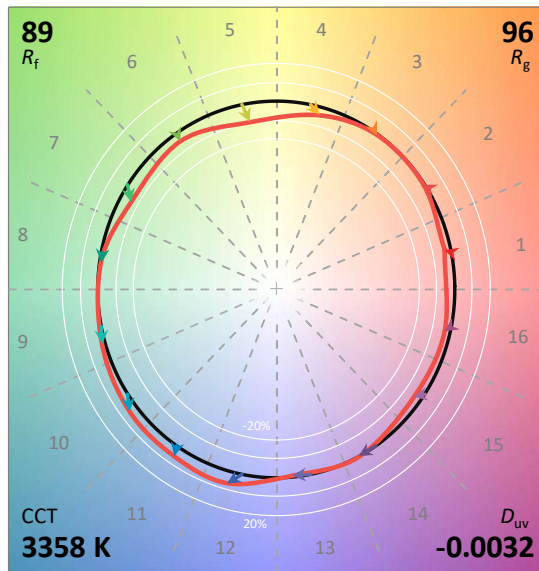
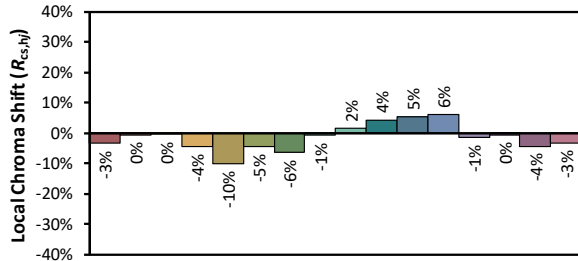
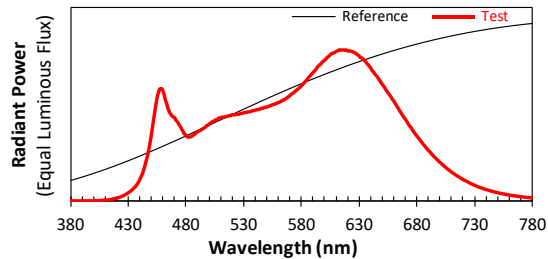
### ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/8/21

Model: V1-18B @16W3500K



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

$x$  0.4099  
 $y$  0.3857  
 $u'$  0.2408  
 $v'$  0.5099

CIE 13.3-1995  
(CRI)

$R_a$  92  
 $R_g$  76



## 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	2.10E-06	447	3.22E-04	514	5.58E-04	581	7.71E-04	648	7.94E-04	715	1.66E-04
381	2.60E-06	448	3.62E-04	515	5.60E-04	582	7.79E-04	649	7.82E-04	716	1.62E-04
382	2.10E-06	449	4.05E-04	516	5.62E-04	583	7.89E-04	650	7.71E-04	717	1.57E-04
383	2.20E-06	450	4.53E-04	517	5.64E-04	584	7.97E-04	651	7.61E-04	718	1.53E-04
384	2.20E-06	451	5.05E-04	518	5.65E-04	585	8.05E-04	652	7.50E-04	719	1.48E-04
385	1.60E-06	452	5.56E-04	519	5.68E-04	586	8.16E-04	653	7.37E-04	720	1.43E-04
386	2.20E-06	453	6.06E-04	520	5.71E-04	587	8.24E-04	654	7.26E-04	721	1.39E-04
387	1.60E-06	454	6.52E-04	521	5.70E-04	588	8.33E-04	655	7.15E-04	722	1.36E-04
388	1.80E-06	455	6.94E-04	522	5.71E-04	589	8.42E-04	656	7.06E-04	723	1.31E-04
389	2.40E-06	456	7.22E-04	523	5.72E-04	590	8.50E-04	657	6.94E-04	724	1.28E-04
390	1.90E-06	457	7.41E-04	524	5.75E-04	591	8.58E-04	658	6.83E-04	725	1.24E-04
391	2.20E-06	458	7.42E-04	525	5.74E-04	592	8.66E-04	659	6.70E-04	726	1.19E-04
392	1.90E-06	459	7.42E-04	526	5.75E-04	593	8.76E-04	660	6.61E-04	727	1.16E-04
393	2.50E-06	460	7.22E-04	527	5.79E-04	594	8.90E-04	661	6.48E-04	728	1.12E-04
394	1.90E-06	461	6.96E-04	528	5.80E-04	595	8.94E-04	662	6.35E-04	729	1.09E-04
395	2.30E-06	462	6.65E-04	529	5.81E-04	596	9.03E-04	663	6.23E-04	730	1.05E-04
396	2.40E-06	463	6.43E-04	530	5.84E-04	597	9.09E-04	664	6.12E-04	731	1.02E-04
397	2.80E-06	464	6.16E-04	531	5.86E-04	598	9.20E-04	665	5.98E-04	732	9.86E-05
398	2.20E-06	465	5.96E-04	532	5.86E-04	599	9.24E-04	666	5.86E-04	733	9.58E-05
399	2.20E-06	466	5.80E-04	533	5.88E-04	600	9.33E-04	667	5.73E-04	734	9.25E-05
400	2.90E-06	467	5.70E-04	534	5.90E-04	601	9.37E-04	668	5.63E-04	735	8.99E-05
401	3.40E-06	468	5.59E-04	535	5.90E-04	602	9.49E-04	669	5.51E-04	736	8.73E-05
402	3.90E-06	469	5.55E-04	536	5.92E-04	603	9.53E-04	670	5.40E-04	737	8.41E-05
403	3.80E-06	470	5.51E-04	537	5.97E-04	604	9.60E-04	671	5.29E-04	738	8.15E-05
404	3.90E-06	471	5.34E-04	538	5.97E-04	605	9.68E-04	672	5.17E-04	739	7.90E-05
405	4.00E-06	472	5.27E-04	539	6.00E-04	606	9.74E-04	673	5.04E-04	740	7.71E-05
406	4.80E-06	473	5.15E-04	540	6.01E-04	607	9.77E-04	674	4.94E-04	741	7.50E-05
407	5.30E-06	474	5.02E-04	541	6.04E-04	608	9.80E-04	675	4.85E-04	742	7.23E-05
408	5.40E-06	475	4.91E-04	542	6.05E-04	609	9.84E-04	676	4.72E-04	743	7.02E-05
409	6.70E-06	476	4.75E-04	543	6.06E-04	610	9.88E-04	677	4.61E-04	744	6.74E-05
410	6.90E-06	477	4.64E-04	544	6.10E-04	611	9.91E-04	678	4.50E-04	745	6.60E-05
411	7.50E-06	478	4.47E-04	545	6.14E-04	612	9.96E-04	679	4.40E-04	746	6.39E-05
412	8.70E-06	479	4.41E-04	546	6.11E-04	613	9.99E-04	680	4.30E-04	747	6.15E-05
413	1.00E-05	480	4.30E-04	547	6.18E-04	614	9.98E-04	681	4.20E-04	748	5.98E-05
414	1.08E-05	481	4.25E-04	548	6.19E-04	615	9.98E-04	682	4.10E-04	749	5.81E-05
415	1.24E-05	482	4.23E-04	549	6.20E-04	616	9.99E-04	683	4.00E-04	750	5.62E-05
416	1.37E-05	483	4.24E-04	550	6.23E-04	617	9.98E-04	684	3.90E-04	751	5.47E-05
417	1.55E-05	484	4.26E-04	551	6.24E-04	618	9.96E-04	685	3.81E-04	752	5.24E-05
418	1.73E-05	485	4.31E-04	552	6.28E-04	619	9.98E-04	686	3.71E-04	753	5.06E-05
419	1.95E-05	486	4.37E-04	553	6.31E-04	620	9.92E-04	687	3.62E-04	754	4.92E-05
420	2.09E-05	487	4.40E-04	554	6.33E-04	621	9.92E-04	688	3.53E-04	755	4.79E-05
421	2.27E-05	488	4.48E-04	555	6.38E-04	622	9.92E-04	689	3.44E-04	756	4.67E-05
422	2.56E-05	489	4.54E-04	556	6.39E-04	623	9.90E-04	690	3.35E-04	757	4.48E-05
423	2.84E-05	490	4.58E-04	557	6.42E-04	624	9.88E-04	691	3.28E-04	758	4.37E-05
424	3.18E-05	491	4.63E-04	558	6.44E-04	625	9.84E-04	692	3.19E-04	759	4.20E-05
425	3.45E-05	492	4.67E-04	559	6.49E-04	626	9.81E-04	693	3.09E-04	760	4.05E-05
426	3.85E-05	493	4.72E-04	560	6.51E-04	627	9.76E-04	694	3.02E-04	761	3.97E-05
427	4.27E-05	494	4.76E-04	561	6.55E-04	628	9.70E-04	695	2.93E-04	762	3.84E-05
428	4.71E-05	495	4.81E-04	562	6.58E-04	629	9.64E-04	696	2.87E-04	763	3.72E-05
429	5.22E-05	496	4.86E-04	563	6.64E-04	630	9.58E-04	697	2.78E-04	764	3.67E-05
430	5.77E-05	497	4.92E-04	564	6.66E-04	631	9.49E-04	698	2.71E-04	765	3.50E-05
431	6.25E-05	498	5.01E-04	565	6.71E-04	632	9.46E-04	699	2.63E-04	766	3.40E-05
432	6.82E-05	499	5.02E-04	566	6.75E-04	633	9.43E-04	700	2.56E-04	767	3.22E-05
433	7.46E-05	500	5.10E-04	567	6.81E-04	634	9.31E-04	701	2.50E-04	768	3.16E-05
434	8.20E-05	501	5.15E-04	568	6.86E-04	635	9.26E-04	702	2.43E-04	769	3.08E-05
435	9.00E-05	502	5.21E-04	569	6.92E-04	636	9.16E-04	703	2.37E-04	770	2.99E-05
436	9.76E-05	503	5.26E-04	570	6.98E-04	637	9.07E-04	704	2.29E-04	771	2.89E-05
437	1.09E-04	504	5.27E-04	571	7.05E-04	638	8.99E-04	705	2.23E-04	772	2.76E-05
438	1.19E-04	505	5.37E-04	572	7.13E-04	639	8.88E-04	706	2.16E-04	773	2.71E-05
439	1.33E-04	506	5.37E-04	573	7.14E-04	640	8.80E-04	707	2.10E-04	774	2.63E-05
440	1.50E-04	507	5.42E-04	574	7.23E-04	641	8.64E-04	708	2.04E-04	775	2.49E-05
441	1.65E-04	508	5.47E-04	575	7.30E-04	642	8.56E-04	709	1.98E-04	776	2.48E-05
442	1.83E-04	509	5.50E-04	576	7.35E-04	643	8.46E-04	710	1.92E-04	777	2.37E-05
443	2.06E-04	510	5.52E-04	577	7.43E-04	644	8.36E-04	711	1.87E-04	778	2.29E-05
444	2.32E-04	511	5.55E-04	578	7.48E-04	645	8.26E-04	712	1.82E-04	779	2.29E-05
445	2.61E-04	512	5.56E-04	579	7.55E-04	646	8.18E-04	713	1.76E-04	780	2.30E-05
446	2.89E-04	513	5.56E-04	580	7.63E-04	647	8.04E-04	714	1.72E-04	N/A	N/A



## 4.0 LM-79 Measurement and Test Results

### 4.2 Goniophotometer Test

<b>Model No.</b>	V1-18B @16W3500K	<b>Sample ID</b>	250728006-S1
<b>Operate time (Min.)</b>	30	<b>Stabilization time (Min.)</b>	60
<b>Temperature (°C)</b>	25.2	<b>Humidity (%RH)</b>	43.3

<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	0.131	15.6	0.994
<b>NON-WORST CASE</b>	277.0	60	0.059	15.5	0.953

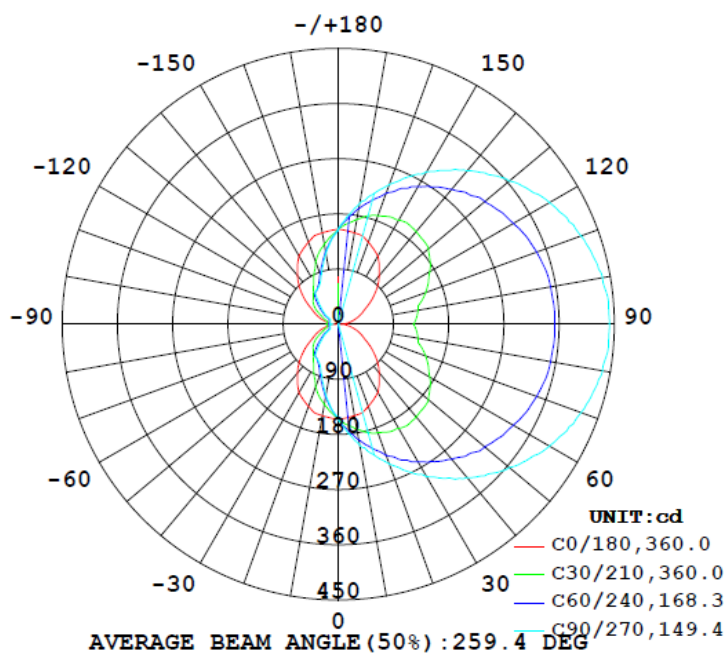
### Test Result

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°)	
1744	87.7	154.4	180.0	96.5	111.8	26.6%	B0-U4-G2

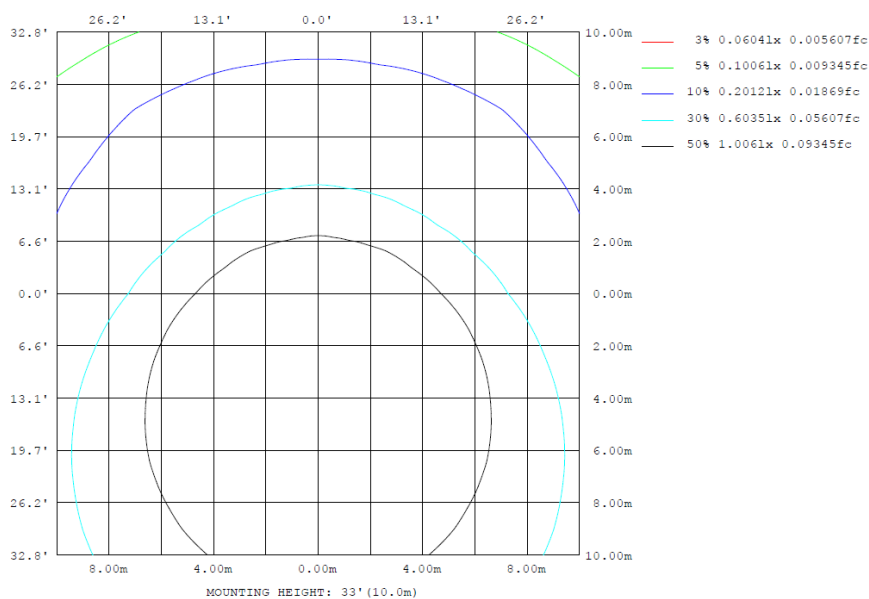
## 4.2 Goniophotometer Test

### Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



### Isolux Plot



## 4.2 Goniophotometer Test

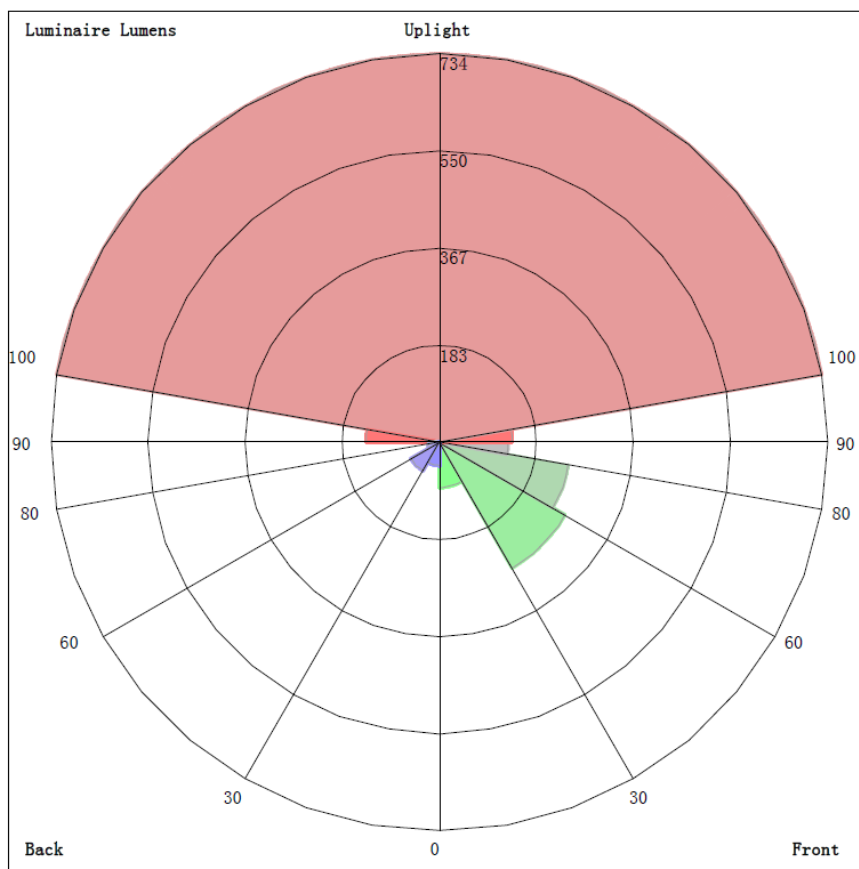
### Zonal Lumen Summary

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	151.6	183.7	200.4	183.7	151.6	125.7	117.1	125.7	0- 10	14.79	14.79	0.85,0.85
20	142.8	210.2	242.5	210.2	142.8	96.16	82.92	96.16	10- 20	43.57	58.36	3.35,3.35
30	128.8	230.3	286.9	230.3	128.8	71.63	67.92	71.63	20- 30	70.22	128.6	7.37,7.37
40	103.9	247.3	326.5	247.3	103.9	61.74	53.42	61.74	30- 40	95.21	223.8	12.8,12.8
50	77.67	256.1	363.5	256.1	77.67	46.22	31.96	46.22	40- 50	114.6	338.4	19.4,19.4
60	50.22	258.8	397.3	258.8	50.22	27.07	15.26	27.07	50- 60	126.2	464.6	26.6,26.6
70	33.79	257.9	421.0	257.9	33.79	16.63	14.48	16.63	60- 70	132.7	597.2	34.2,34.2
80	18.31	250.9	437.2	250.9	18.31	16.31	13.58	16.31	70- 80	136.5	733.7	42.1,42.1
90	3.778	248.1	442.1	248.1	3.778	17.28	14.35	17.28	80- 90	138.4	872.1	50,50
100	18.31	250.9	437.2	250.9	18.31	16.31	13.58	16.31	90-100	138.4	1011	57.9,57.9
110	33.79	257.9	421.0	257.9	33.79	16.63	14.48	16.63	100-110	136.5	1147	65.8,65.8
120	50.22	258.8	397.3	258.8	50.22	27.07	15.26	27.07	110-120	132.7	1280	73.4,73.4
130	77.67	256.1	363.5	256.1	77.67	46.22	31.96	46.22	120-130	126.2	1406	80.6,80.6
140	103.9	247.3	326.5	247.3	103.9	61.74	53.42	61.74	130-140	114.6	1520	87.2,87.2
150	128.8	230.3	286.9	230.3	128.8	71.63	67.92	71.63	140-150	95.21	1616	92.6,92.6
160	142.8	210.2	242.5	210.2	142.8	96.16	82.92	96.16	150-160	70.22	1686	96.7,96.7
170	151.6	183.7	200.4	183.7	151.6	125.7	117.1	125.7	160-170	43.57	1729	99.2,99.2
180	155.3	155.3	155.3	155.3	155.3	155.3	155.3	155.3	170-180	14.79	1744	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	14.79	0-10	14.79	0.86%
10-20	43.57	0-20	58.36	3.37%
20-30	70.22	0-30	128.58	7.43%
30-40	95.21	0-40	223.79	12.94%
40-50	114.58	0-50	338.37	19.57%
50-60	126.18	0-60	464.55	26.86%
60-70	132.66	0-70	597.21	34.53%
70-80	136.49	0-80	733.70	42.42%
80-90	138.41	0-90	872.11	50.43%
90-100	138.41	0-100	1010.52	58.43%
100-110	136.49	0-110	1147.01	66.32%
110-120	132.66	0-120	1279.67	73.99%
120-130	126.18	0-130	1405.85	81.29%
130-140	114.58	0-140	1520.43	87.92%
140-150	95.21	0-150	1615.64	93.42%
150-160	70.22	0-160	1685.86	97.48%
160-170	43.57	0-170	1729.43	100.00%
170-180	14.79	0-180	1744.22	100.86%

## 4.2 Goniophotometer Test

LCS/BUG

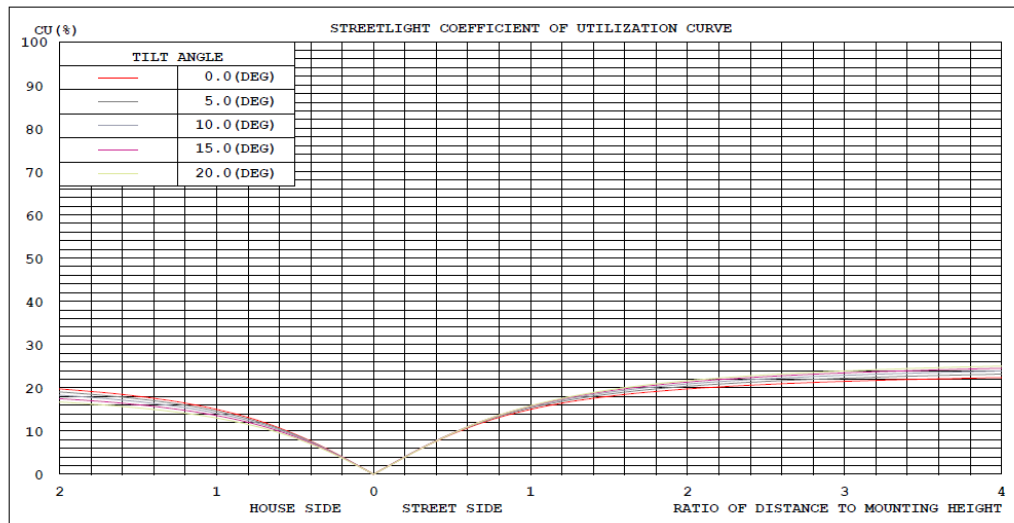


### LUMINAIRE CLASSIFICATION SYSTEM (LCS)

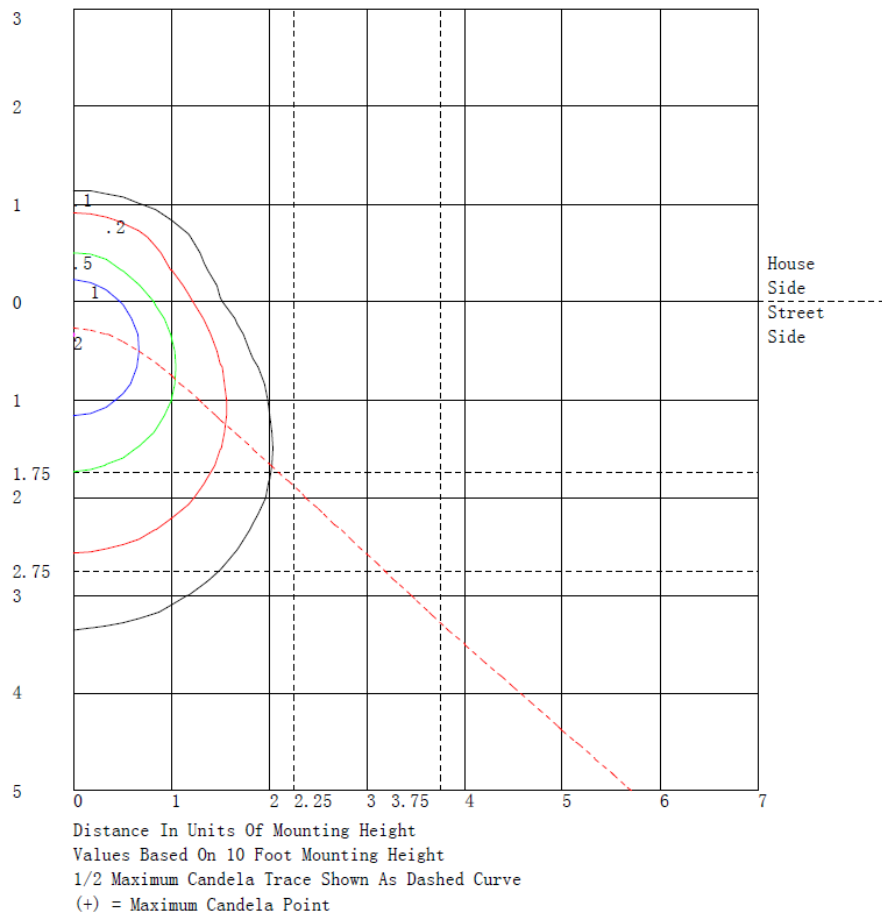
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	85.1	N.A.	4.9
FM - Front-Medium (30-60)	274.3	N.A.	15.7
FH - Front-High (60-80)	247.6	N.A.	14.2
FVH - Front-Very High (80-90)	129.8	N.A.	7.4
BL - Back-Low (0-30)	43.5	N.A.	2.5
BM - Back-Medium (30-60)	61.7	N.A.	3.5
BH - Back-High (60-80)	21.6	N.A.	1.2
BVH - Back-Very High (80-90)	8.6	N.A.	0.5
UL - Uplight-Low (90-100)	138.4	N.A.	7.9
UH - Uplight-High (100-180)	733.7	N.A.	42.1
Total	1744.3	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) y (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155
5	153	159	165	169	173	176	178	176	173	169	165	159	153	148	144	141	138	137	138
10	152	163	174	184	191	197	200	197	191	184	174	163	152	141	133	126	121	118	117
15	150	166	183	197	209	217	220	217	209	197	183	166	150	134	122	110	103	98.5	98.7
20	143	166	188	210	227	237	243	237	227	210	188	166	143	123	108	96.2	87.2	83.1	82.9
25	136	164	194	222	245	258	265	258	245	222	194	164	136	112	93.4	82.0	75.4	72.2	71.9
30	129	162	196	230	259	276	287	276	259	230	196	162	129	100	81.3	71.6	68.5	67.2	67.9
35	116	156	199	240	274	298	307	298	274	240	199	156	116	87.5	71.2	65.0	64.8	65.4	65.4
40	104	148	197	247	288	316	327	316	288	247	197	148	104	75.4	63.8	61.7	60.0	55.1	53.4
45	91.4	140	195	252	300	336	345	336	300	252	195	140	91.4	64.2	58.1	56.4	48.3	42.7	41.2
50	77.7	127	191	256	312	350	363	350	312	256	191	127	77.7	55.9	53.7	46.2	37.6	32.7	32.0
55	63.9	112	182	259	321	365	381	365	321	259	182	112	63.9	49.1	46.7	35.6	28.5	24.4	23.7
60	50.2	95.8	172	259	329	378	397	378	329	259	172	95.8	50.2	42.7	37.4	27.1	19.7	16.1	15.3
65	42.0	84.1	162	259	338	390	411	390	338	259	162	84.1	42.0	36.1	29.1	19.9	15.7	14.8	14.7
70	33.8	72.3	152	258	344	401	421	401	344	258	152	72.3	33.8	28.9	23.6	16.6	15.8	14.8	14.5
75	25.6	59.4	139	255	349	407	430	407	349	255	139	59.4	25.6	21.5	18.7	16.4	15.7	14.0	14.1
80	18.3	56.3	132	251	351	413	437	413	351	251	132	56.3	18.3	20.2	17.7	16.3	14.9	13.5	13.6
85	11.0	53.9	128	251	353	417	442	417	353	251	128	53.9	11.0	19.8	18.7	16.7	15.0	12.5	12.6
90	3.78	51.1	123	248	352	418	442	418	352	248	123	51.1	3.78	19.4	19.8	17.3	16.0	13.2	14.3
95	11.0	53.9	128	251	353	417	442	417	353	251	128	53.9	11.0	19.8	18.7	16.7	15.0	12.5	12.6
100	18.3	56.3	132	251	351	413	437	413	351	251	132	56.3	18.3	20.2	17.7	16.3	14.9	13.5	13.6
105	25.6	59.4	139	255	349	407	430	407	349	255	139	59.4	25.6	21.5	18.7	16.4	15.7	14.0	14.1
110	33.8	72.3	152	258	344	401	421	401	344	258	152	72.3	33.8	28.9	23.6	16.6	15.8	14.8	14.5
115	42.0	84.1	162	259	338	390	411	390	338	259	162	84.1	42.0	36.1	29.1	19.9	15.7	14.8	14.7
120	50.2	95.8	172	259	329	378	397	378	329	259	172	95.8	50.2	42.7	37.4	27.1	19.7	16.1	15.3
125	63.9	112	182	259	321	365	381	365	321	259	182	112	63.9	49.1	46.7	35.6	28.5	24.4	23.7
130	77.7	127	191	256	312	350	363	350	312	256	191	127	77.7	55.9	53.7	46.2	37.6	32.7	32.0
135	91.4	140	195	252	300	336	345	336	300	252	195	140	91.4	64.2	58.1	56.4	48.3	42.7	41.2
140	104	148	197	247	288	316	327	316	288	247	197	148	104	75.4	63.8	61.7	60.0	55.1	53.4
145	116	156	199	240	274	298	307	298	274	240	199	156	116	87.5	71.2	65.0	64.8	65.4	65.4
150	129	162	196	230	259	276	287	276	259	230	196	162	129	100	81.3	71.6	68.5	67.2	67.9
155	136	164	194	222	245	258	265	258	245	222	194	164	136	112	93.4	82.0	75.4	72.2	71.9
160	143	166	188	210	227	237	243	237	227	210	188	166	143	123	108	96.2	87.2	83.1	82.9
165	150	166	183	197	209	217	220	217	209	197	183	166	150	134	122	110	103	98.5	98.7
170	152	163	174	184	191	197	200	197	191	184	174	163	152	141	133	126	121	118	117
175	153	159	165	169	173	176	178	176	173	169	165	159	153	148	144	141	138	137	138
180	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155	155

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	155	155	155	155	155														
5	137	138	141	144	148														
10	118	121	126	133	141														
15	98.5	103	110	122	134														
20	83.1	87.2	96.2	108	123														
25	72.2	75.4	82.0	93.4	112														
30	67.2	68.5	71.6	81.3	100														
35	65.4	64.8	65.0	71.2	87.5														
40	55.1	60.0	61.7	63.8	75.4														
45	42.7	48.3	56.4	58.1	64.2														
50	32.7	37.6	46.2	53.7	55.9														
55	24.4	28.5	35.6	46.7	49.1														
60	16.1	19.7	27.1	37.4	42.7														
65	14.8	15.7	19.9	29.1	36.1														
70	14.8	15.8	16.6	23.6	28.9														
75	14.0	15.7	16.4	18.7	21.5														
80	13.5	14.9	16.3	17.7	20.2														
85	12.5	15.0	16.7	18.7	19.8														
90	13.2	16.0	17.3	19.8	19.4														
95	12.5	15.0	16.7	18.7	19.8														
100	13.5	14.9	16.3	17.7	20.2														
105	14.0	15.7	16.4	18.7	21.5														
110	14.8	15.8	16.6	23.6	28.9														
115	14.8	15.7	19.9	29.1	36.1														
120	16.1	19.7	27.1	37.4	42.7														
125	24.4	28.5	35.6	46.7	49.1														
130	32.7	37.6	46.2	53.7	55.9														
135	42.7	48.3	56.4	58.1	64.2														
140	55.1	60.0	61.7	63.8	75.4														
145	65.4	64.8	65.0	71.2	87.5														
150	67.2	68.5	71.6	81.3	100														
155	72.2	75.4	82.0	93.4	112														
160	83.1	87.2	96.2	108	123														
165	98.5	103	110	122	134														
170	118	121	126	133	141														
175	137	138	141	144	148														
180	155	155	155	155	155														



## 4.0 LM-79 Measurement and Test Results

### 4.3 THD and PF Test

<b>Model No.</b>	V1-18B @16W3500K	<b>Sample ID</b>	250728006-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	0.131	15.6	0.994	6.89
277.0	60	0.059	15.5	0.953	15.28

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