

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		1677
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	104.8
			N/A	N/A	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		16.0
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	6.37
				277V	14.37
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	N/A	120V	0.995
				277V	0.957
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	2725±145	2776
			4 steps	2725±83	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.5
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		61
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		96
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-4%
Zonal Lumen Requirement (0°-60°) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	N/A		26.9%
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		0.134
(Goniophotometer – Section 4.2)			Non-Worst Case		0.060
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		16.0
(Goniophotometer – Section 4.2)			Non-Worst Case		15.9

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-07-28	V1-18 @16W2700K	-	250728005-S1
2	Goniophotometer Test	2025-07-28	V1-18 @16W2700K	-	250728005-S1
3	THD and PF Test	2025-07-28	V1-18 @16W2700K	-	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 @16W2700K, 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 @16W2700K	Sample ID	250728005-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

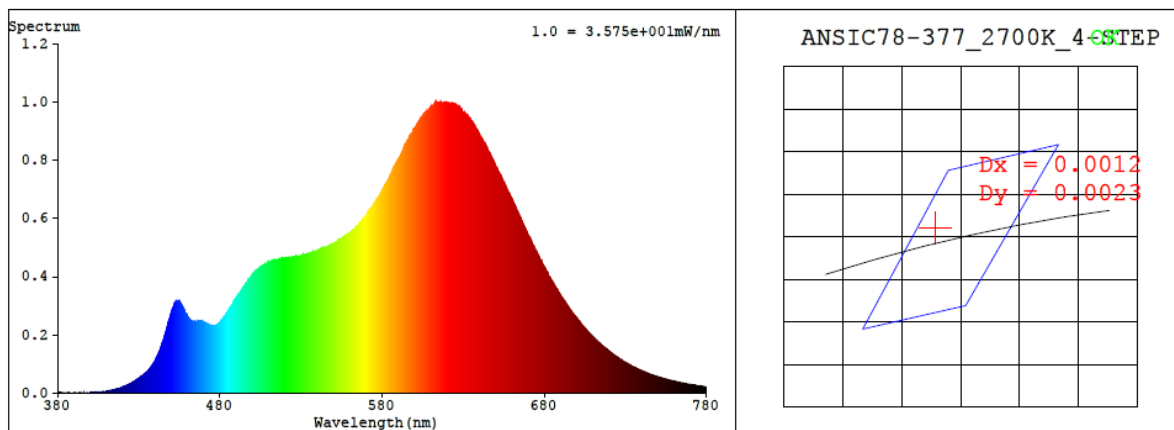
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.134	16.0	0.995
277.0	60	0.060	15.9	0.957

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
2776	93.5	61	0.0007	2.4	91	96	-4%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4550$ $y = 0.4114$ / $u' = 0.2590$ $v' = 0.5269$ ($duv = 7.39e-04$)

CCT= 2776K Prcp WL: $L_d = 583.6\text{nm}$ Purity=60.1%

Peak WL: $L_p = 613\text{nm}$ FWHM: $= 128.6\text{nm}$ Ratio: R=26.6% G=70.3% B=3.1%

Render Index: $R_a = 93.5$ AvgR = 91.7 TM30: $R_f = 91$ $R_g = 96$

EEL: 0.13576 A+

R1 =98 R2 =98 R3 =94 R4 =97 R5 =99 R6 =92 R7 =89

R8 =81 R9 =61 R10=95 R11=95 R12=89 R13=99 R14=97 R15=91

4.1 Integrating Sphere Test

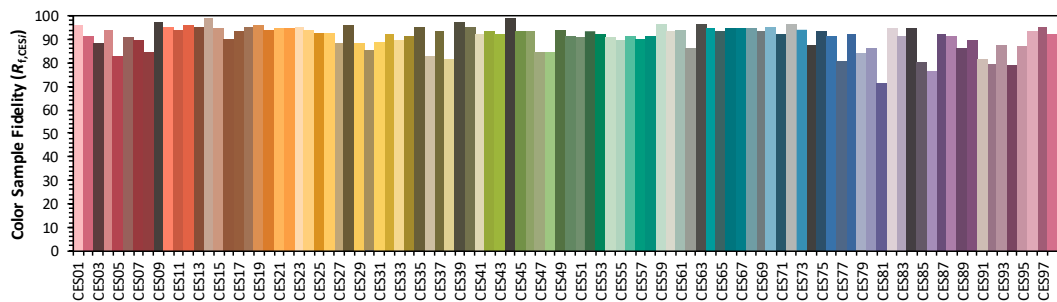
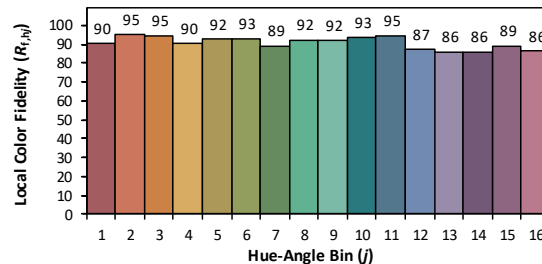
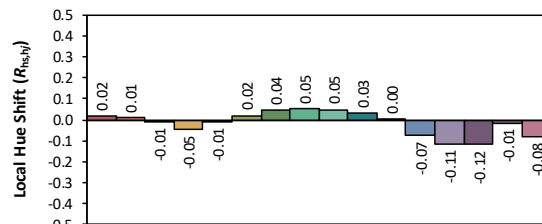
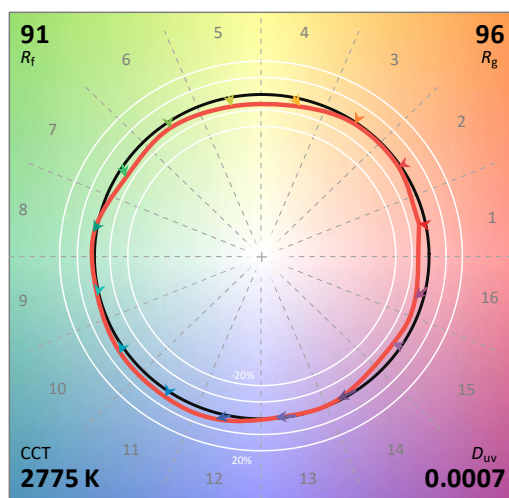
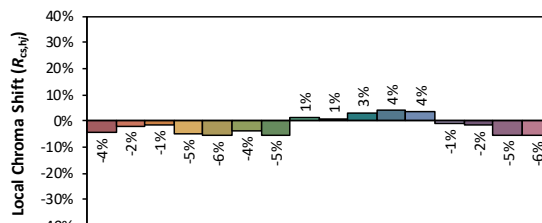
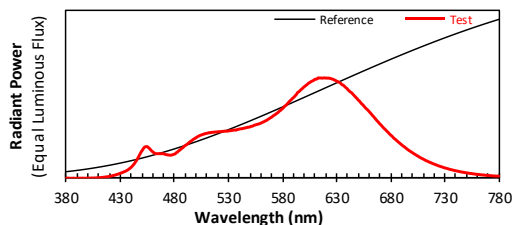
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc

Date: 2025/8/21

Model: V1-18 @16W2700K



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

x 0.4550
 y 0.4114
 u' 0.2591
 v' 0.5269

CIE 13.3-1995
(CRI)
 R_a 93
 R_g 61

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	1.20E-06	447	2.18E-04	514	4.58E-04	581	7.05E-04	648	8.03E-04	715	1.66E-04
381	3.10E-06	448	2.38E-04	515	4.57E-04	582	7.16E-04	649	7.93E-04	716	1.62E-04
382	1.60E-06	449	2.58E-04	516	4.59E-04	583	7.25E-04	650	7.79E-04	717	1.57E-04
383	9.00E-07	450	2.75E-04	517	4.59E-04	584	7.34E-04	651	7.70E-04	718	1.53E-04
384	8.00E-07	451	2.91E-04	518	4.61E-04	585	7.48E-04	652	7.57E-04	719	1.47E-04
385	6.00E-07	452	3.07E-04	519	4.59E-04	586	7.58E-04	653	7.44E-04	720	1.43E-04
386	1.40E-06	453	3.14E-04	520	4.64E-04	587	7.72E-04	654	7.35E-04	721	1.39E-04
387	1.70E-06	454	3.15E-04	521	4.63E-04	588	7.80E-04	655	7.23E-04	722	1.35E-04
388	0.00E+00	455	3.15E-04	522	4.65E-04	589	7.92E-04	656	7.10E-04	723	1.31E-04
389	0.00E+00	456	3.06E-04	523	4.65E-04	590	8.01E-04	657	6.98E-04	724	1.27E-04
390	1.00E-06	457	2.96E-04	524	4.66E-04	591	8.11E-04	658	6.88E-04	725	1.23E-04
391	1.60E-06	458	2.84E-04	525	4.68E-04	592	8.24E-04	659	6.78E-04	726	1.19E-04
392	1.60E-06	459	2.73E-04	526	4.68E-04	593	8.35E-04	660	6.66E-04	727	1.16E-04
393	1.70E-06	460	2.64E-04	527	4.70E-04	594	8.53E-04	661	6.54E-04	728	1.12E-04
394	1.70E-06	461	2.56E-04	528	4.69E-04	595	8.59E-04	662	6.42E-04	729	1.08E-04
395	2.00E-06	462	2.49E-04	529	4.69E-04	596	8.69E-04	663	6.28E-04	730	1.05E-04
396	1.90E-06	463	2.46E-04	530	4.71E-04	597	8.80E-04	664	6.17E-04	731	1.02E-04
397	0.00E+00	464	2.46E-04	531	4.73E-04	598	8.89E-04	665	6.04E-04	732	9.92E-05
398	1.70E-06	465	2.46E-04	532	4.73E-04	599	9.00E-04	666	5.92E-04	733	9.60E-05
399	1.80E-06	466	2.46E-04	533	4.77E-04	600	9.09E-04	667	5.79E-04	734	9.24E-05
400	2.90E-06	467	2.46E-04	534	4.78E-04	601	9.17E-04	668	5.67E-04	735	8.97E-05
401	2.30E-06	468	2.45E-04	535	4.79E-04	602	9.26E-04	669	5.56E-04	736	8.68E-05
402	2.70E-06	469	2.46E-04	536	4.81E-04	603	9.35E-04	670	5.42E-04	737	8.44E-05
403	3.30E-06	470	2.44E-04	537	4.79E-04	604	9.45E-04	671	5.33E-04	738	8.15E-05
404	3.80E-06	471	2.41E-04	538	4.85E-04	605	9.51E-04	672	5.20E-04	739	7.90E-05
405	3.60E-06	472	2.37E-04	539	4.86E-04	606	9.58E-04	673	5.08E-04	740	7.66E-05
406	3.90E-06	473	2.36E-04	540	4.90E-04	607	9.64E-04	674	4.97E-04	741	7.41E-05
407	4.30E-06	474	2.33E-04	541	4.92E-04	608	9.70E-04	675	4.86E-04	742	7.23E-05
408	5.30E-06	475	2.32E-04	542	4.93E-04	609	9.75E-04	676	4.76E-04	743	6.97E-05
409	5.90E-06	476	2.31E-04	543	4.95E-04	610	9.85E-04	677	4.65E-04	744	6.75E-05
410	6.70E-06	477	2.31E-04	544	4.97E-04	611	9.85E-04	678	4.54E-04	745	6.48E-05
411	7.40E-06	478	2.34E-04	545	5.01E-04	612	9.89E-04	679	4.42E-04	746	6.33E-05
412	8.70E-06	479	2.38E-04	546	5.02E-04	613	9.99E-04	680	4.32E-04	747	6.14E-05
413	9.70E-06	480	2.41E-04	547	5.06E-04	614	9.97E-04	681	4.22E-04	748	5.94E-05
414	1.13E-05	481	2.47E-04	548	5.09E-04	615	9.97E-04	682	4.12E-04	749	5.76E-05
415	1.18E-05	482	2.57E-04	549	5.08E-04	616	9.97E-04	683	3.99E-04	750	5.55E-05
416	1.38E-05	483	2.63E-04	550	5.12E-04	617	9.95E-04	684	3.92E-04	751	5.42E-05
417	1.53E-05	484	2.75E-04	551	5.17E-04	618	9.98E-04	685	3.83E-04	752	5.26E-05
418	1.63E-05	485	2.81E-04	552	5.19E-04	619	9.99E-04	686	3.73E-04	753	5.03E-05
419	1.83E-05	486	2.91E-04	553	5.23E-04	620	9.96E-04	687	3.63E-04	754	4.90E-05
420	2.03E-05	487	2.99E-04	554	5.29E-04	621	9.97E-04	688	3.54E-04	755	4.79E-05
421	2.25E-05	488	3.07E-04	555	5.31E-04	622	9.95E-04	689	3.45E-04	756	4.61E-05
422	2.48E-05	489	3.19E-04	556	5.35E-04	623	9.97E-04	690	3.36E-04	757	4.49E-05
423	2.76E-05	490	3.26E-04	557	5.38E-04	624	9.93E-04	691	3.27E-04	758	4.28E-05
424	3.00E-05	491	3.33E-04	558	5.40E-04	625	9.90E-04	692	3.19E-04	759	4.18E-05
425	3.31E-05	492	3.41E-04	559	5.45E-04	626	9.87E-04	693	3.12E-04	760	4.04E-05
426	3.67E-05	493	3.50E-04	560	5.49E-04	627	9.83E-04	694	3.03E-04	761	3.91E-05
427	3.95E-05	494	3.60E-04	561	5.54E-04	628	9.77E-04	695	2.94E-04	762	3.81E-05
428	4.30E-05	495	3.67E-04	562	5.60E-04	629	9.74E-04	696	2.86E-04	763	3.69E-05
429	4.70E-05	496	3.75E-04	563	5.64E-04	630	9.65E-04	697	2.78E-04	764	3.55E-05
430	5.08E-05	497	3.83E-04	564	5.70E-04	631	9.63E-04	698	2.71E-04	765	3.48E-05
431	5.55E-05	498	3.92E-04	565	5.74E-04	632	9.56E-04	699	2.64E-04	766	3.34E-05
432	5.89E-05	499	3.97E-04	566	5.82E-04	633	9.51E-04	700	2.57E-04	767	3.28E-05
433	6.39E-05	500	4.05E-04	567	5.89E-04	634	9.43E-04	701	2.50E-04	768	3.13E-05
434	6.79E-05	501	4.11E-04	568	5.96E-04	635	9.31E-04	702	2.43E-04	769	3.03E-05
435	7.24E-05	502	4.18E-04	569	6.03E-04	636	9.27E-04	703	2.36E-04	770	2.96E-05
436	7.89E-05	503	4.23E-04	570	6.09E-04	637	9.19E-04	704	2.30E-04	771	2.87E-05
437	8.49E-05	504	4.28E-04	571	6.18E-04	638	9.07E-04	705	2.23E-04	772	2.75E-05
438	9.30E-05	505	4.32E-04	572	6.26E-04	639	8.99E-04	706	2.16E-04	773	2.69E-05
439	1.01E-04	506	4.36E-04	573	6.32E-04	640	8.89E-04	707	2.10E-04	774	2.55E-05
440	1.11E-04	507	4.38E-04	574	6.40E-04	641	8.76E-04	708	2.04E-04	775	2.46E-05
441	1.22E-04	508	4.44E-04	575	6.48E-04	642	8.66E-04	709	1.98E-04	776	2.42E-05
442	1.34E-04	509	4.44E-04	576	6.55E-04	643	8.58E-04	710	1.93E-04	777	2.38E-05
443	1.47E-04	510	4.49E-04	577	6.68E-04	644	8.50E-04	711	1.87E-04	778	2.27E-05
444	1.64E-04	511	4.50E-04	578	6.74E-04	645	8.38E-04	712	1.82E-04	779	2.26E-05
445	1.78E-04	512	4.54E-04	579	6.86E-04	646	8.26E-04	713	1.75E-04	780	2.27E-05
446	1.98E-04	513	4.52E-04	580	6.92E-04	647	8.15E-04	714	1.72E-04	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	V1-18 @16W2700K	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	0.134	16.0	0.995
NON-WORST CASE	277.0	60	0.060	15.9	0.957

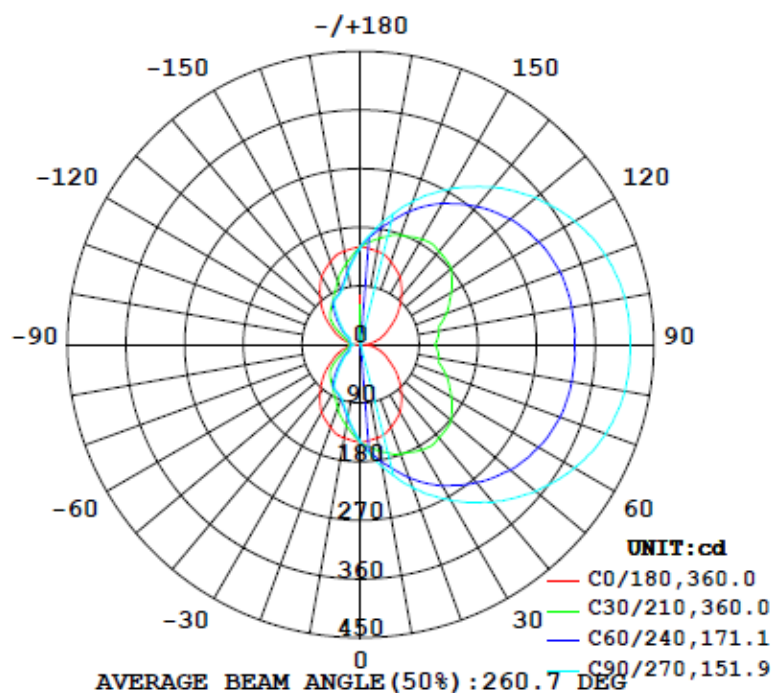
Test Result

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°)	
1677	92.7	156.0	180.0	94.9	104.8	26.9%	B0-U4-G2

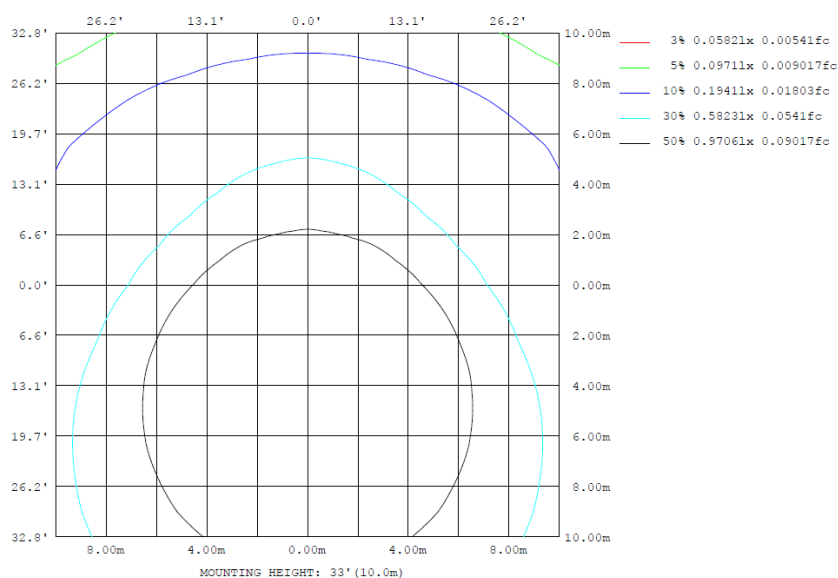
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

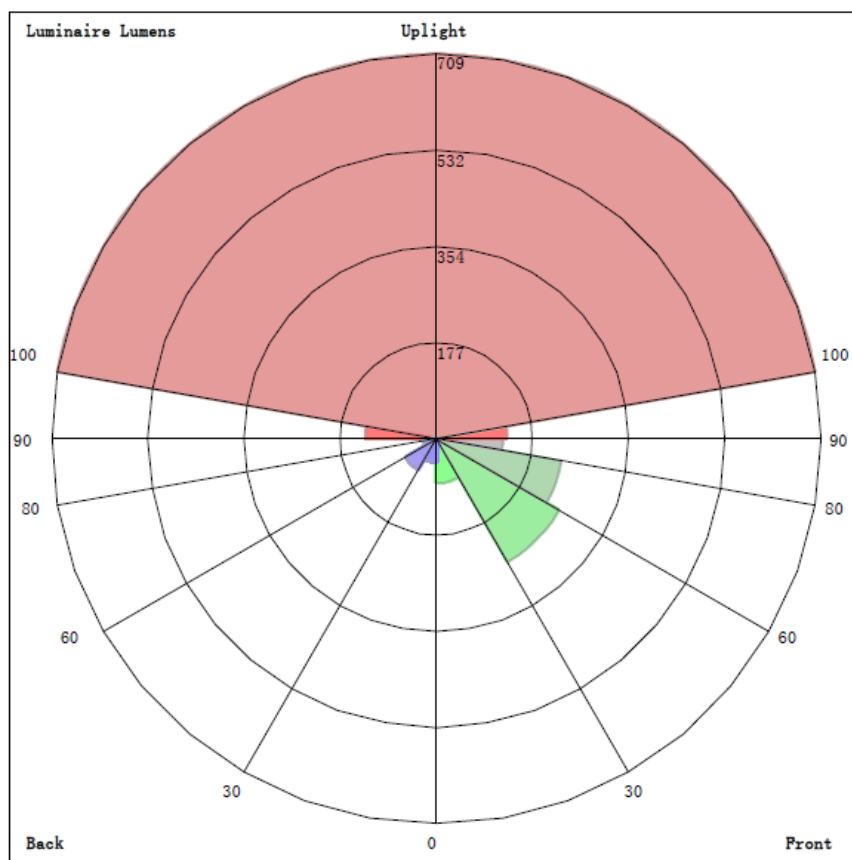
Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	145.5	174.0	190.2	174.0	145.5	120.0	112.4	120.0	0- 10	14.17	14.17	0.84, 0.84
20	135.5	200.5	233.8	200.5	135.5	94.48	87.14	94.48	10- 20	41.78	55.95	3.34, 3.34
30	120.5	220.7	276.0	220.7	120.5	79.58	80.36	79.58	20- 30	68.66	124.6	7.43, 7.43
40	97.26	236.8	316.0	236.8	97.26	72.05	54.48	72.05	30- 40	93.36	218.0	13, 13
50	74.01	244.8	350.5	244.8	74.01	47.24	35.19	47.24	40- 50	111.3	329.2	19.6, 19.6
60	50.79	245.6	378.5	245.6	50.79	29.11	19.45	29.11	50- 60	122.3	451.5	26.9, 26.9
70	34.77	241.3	400.0	241.3	34.77	19.02	17.67	19.02	60- 70	127.6	579.1	34.5, 34.5
80	19.12	232.1	411.8	232.1	19.12	17.67	15.33	17.67	70- 80	129.7	708.8	42.3, 42.3
90	3.823	225.1	413.8	225.1	3.823	16.31	15.06	16.31	80- 90	129.8	838.7	50, 50
100	19.12	232.1	411.8	232.1	19.12	17.67	15.33	17.67	90-100	129.8	968.5	57.7, 57.7
110	34.77	241.3	400.0	241.3	34.77	19.02	17.67	19.02	100-110	129.7	1098	65.5, 65.5
120	50.79	245.6	378.5	245.6	50.79	29.11	19.45	29.11	110-120	127.6	1226	73.1, 73.1
130	74.01	244.8	350.5	244.8	74.01	47.24	35.19	47.24	120-130	122.3	1348	80.4, 80.4
140	97.26	236.8	316.0	236.8	97.26	72.05	54.48	72.05	130-140	111.3	1459	87, 87
150	120.5	220.7	276.0	220.7	120.5	79.58	80.36	79.58	140-150	93.36	1553	92.6, 92.6
160	135.5	200.5	233.8	200.5	135.5	94.48	87.14	94.48	150-160	68.66	1621	96.7, 96.7
170	145.5	174.0	190.2	174.0	145.5	120.0	112.4	120.0	160-170	41.78	1663	99.2, 99.2
180	150.6	150.6	150.6	150.6	150.6	150.6	150.6	150.6	170-180	14.17	1677	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	14.17	0-10	14.17	0.85%
10-20	41.78	0-20	55.95	3.36%
20-30	68.66	0-30	124.61	7.49%
30-40	93.36	0-40	217.97	13.11%
40-50	111.26	0-50	329.23	19.80%
50-60	122.25	0-60	451.48	27.15%
60-70	127.61	0-70	579.09	34.82%
70-80	129.74	0-80	708.83	42.62%
80-90	129.83	0-90	838.66	50.43%
90-100	129.83	0-100	968.49	58.23%
100-110	129.74	0-110	1098.23	66.03%
110-120	127.61	0-120	1225.84	73.71%
120-130	122.25	0-130	1348.09	81.06%
130-140	111.26	0-140	1459.35	87.75%
140-150	93.36	0-150	1552.71	93.36%
150-160	68.66	0-160	1621.37	97.49%
160-170	41.78	0-170	1663.15	100.00%
170-180	14.17	0-180	1677.32	100.85%

4.2 Goniophotometer Test

LCS/BUG

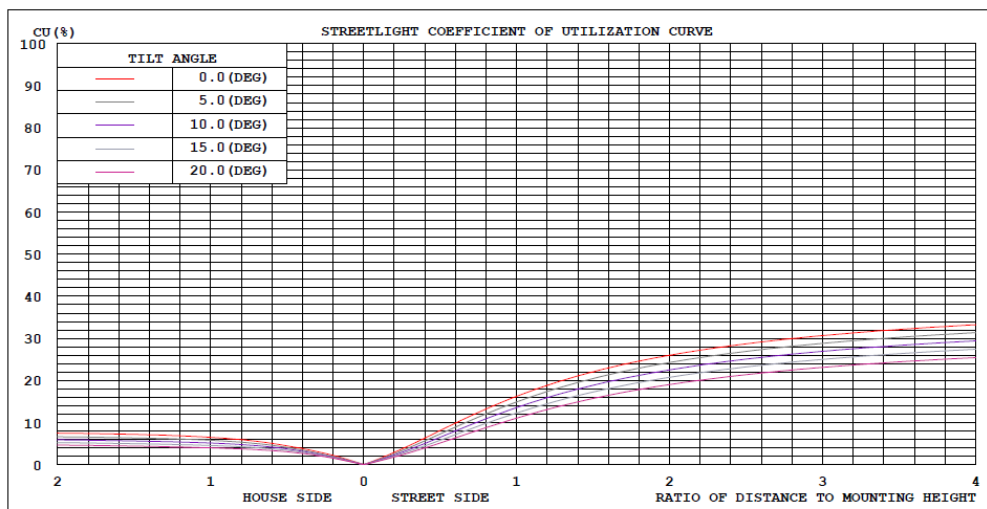


LUMINAIRE CLASSIFICATION SYSTEM (LCS)

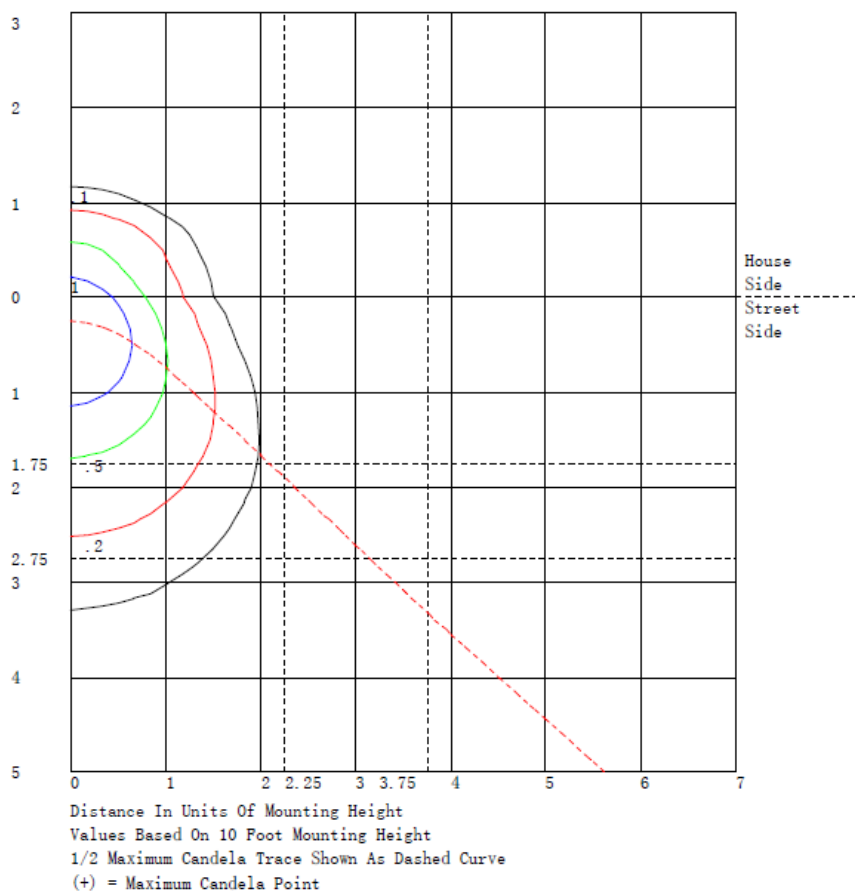
	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	81.3	N.A.	4.8
FM - Front-Medium (30-60)	261.4	N.A.	15.6
FH - Front-High (60-80)	233.5	N.A.	13.9
FVH - Front-Very High (80-90)	121.3	N.A.	7.2
BL - Back-Low (0-30)	43.3	N.A.	2.6
BM - Back-Medium (30-60)	65.4	N.A.	3.9
BH - Back-High (60-80)	23.8	N.A.	1.4
BVH - Back-Very High (80-90)	8.6	N.A.	0.5
UL - Uplight-Low (90-100)	129.8	N.A.	7.7
UH - Uplight-High (100-180)	708.8	N.A.	42.3
Total	1677.2	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	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151
5	148	153	158	163	166	169	170	169	166	163	158	153	148	143	138	134	132	131	131
10	145	156	166	174	182	188	190	188	182	174	166	156	145	135	127	120	115	113	112
15	143	158	173	187	199	207	211	207	199	187	173	158	143	128	116	106	99.8	97.5	97.9
20	135	157	179	200	217	228	234	228	217	200	179	157	135	117	103	94.5	89.2	87.0	87.1
25	128	154	182	212	234	249	255	249	234	212	182	154	128	107	92.1	85.4	83.3	82.0	82.4
30	121	152	187	221	250	267	276	267	250	221	187	152	121	96.3	83.3	79.6	79.7	79.8	80.4
35	109	145	190	230	264	286	296	286	264	230	190	145	109	85.7	76.8	75.7	74.5	69.2	68.3
40	97.3	136	187	237	276	304	316	304	276	237	187	136	97.3	76.2	71.2	72.1	61.3	55.6	54.5
45	85.6	128	185	241	289	322	333	322	289	241	185	128	85.6	68.1	66.2	59.1	49.3	44.6	43.6
50	74.0	117	181	245	300	336	351	336	300	245	181	117	74.0	61.1	60.3	47.2	39.6	35.6	35.2
55	62.4	103	171	247	308	349	365	349	308	247	171	103	62.4	54.6	50.0	37.4	31.2	28.1	27.7
60	50.8	87.5	161	246	315	362	379	362	315	246	161	87.5	50.8	48.8	38.7	29.1	23.1	20.1	19.5
65	42.8	77.1	150	244	321	372	391	372	321	244	150	77.1	42.8	40.4	29.9	22.3	19.3	18.5	18.6
70	34.8	66.9	140	241	326	380	400	380	326	241	140	66.9	34.8	31.1	24.5	19.0	18.5	17.9	17.7
75	26.8	56.0	128	237	328	386	407	386	328	237	128	56.0	26.8	21.6	19.6	18.3	17.7	17.1	17.2
80	19.1	53.9	122	232	329	390	412	390	329	232	122	53.9	19.1	19.2	18.0	17.7	15.8	15.4	15.3
85	11.5	52.5	119	230	329	392	413	392	329	230	119	52.5	11.5	17.6	17.9	17.0	15.2	13.3	13.0
90	3.82	50.8	114	225	328	392	414	392	328	225	114	50.8	3.82	16.1	17.8	16.3	16.0	13.8	15.1
95	11.5	52.5	119	230	329	392	413	392	329	230	119	52.5	11.5	17.6	17.9	17.0	15.2	13.3	13.0
100	19.1	53.9	122	232	329	390	412	390	329	232	122	53.9	19.1	19.2	18.0	17.7	15.8	15.4	15.3
105	26.8	56.0	128	237	328	386	407	386	328	237	128	56.0	26.8	21.6	19.6	18.3	17.7	17.1	17.2
110	34.8	66.9	140	241	326	380	400	380	326	241	140	66.9	34.8	31.1	24.5	19.0	18.5	17.9	17.7
115	42.8	77.1	150	244	321	372	391	372	321	244	150	77.1	42.8	40.4	29.9	22.3	19.3	18.5	18.6
120	50.8	87.5	161	246	315	362	379	362	315	246	161	87.5	50.8	48.8	38.7	29.1	23.1	20.1	19.5
125	62.4	103	171	247	308	349	365	349	308	247	171	103	62.4	54.6	50.0	37.4	31.2	28.1	27.7
130	74.0	117	181	245	300	336	351	336	300	245	181	117	74.0	61.1	60.3	47.2	39.6	35.6	35.2
135	85.6	128	185	241	289	322	333	322	289	241	185	128	85.6	68.1	66.2	59.1	49.3	44.6	43.6
140	97.3	136	187	237	276	304	316	304	276	237	187	136	97.3	76.2	71.2	72.1	61.3	55.6	54.5
145	109	145	190	230	264	286	296	286	264	230	190	145	109	85.7	76.8	75.7	74.5	69.2	68.3
150	121	152	187	221	250	267	276	267	250	221	187	152	121	96.3	83.3	79.6	79.7	79.8	80.4
155	128	154	182	212	234	249	255	249	234	212	182	154	128	107	92.1	85.4	83.3	82.0	82.4
160	135	157	179	200	217	228	234	228	217	200	179	157	135	117	103	94.5	89.2	87.0	87.1
165	143	158	173	187	199	207	211	207	199	187	173	158	143	128	116	106	99.8	97.5	97.9
170	145	156	166	174	182	188	190	188	182	174	166	156	145	135	127	120	115	113	112
175	148	153	158	163	166	169	170	169	166	163	158	153	148	143	138	134	132	131	131
180	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151	151

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	151	151	151	151	151														
5	131	132	134	138	143														
10	113	115	120	127	135														
15	97.5	99.8	106	116	128														
20	87.0	89.2	94.5	103	117														
25	82.0	83.3	85.4	92.1	107														
30	79.8	79.7	79.6	83.3	96.3														
35	69.2	74.5	75.7	76.8	85.7														
40	55.6	61.3	72.1	71.2	76.2														
45	44.6	49.3	59.1	66.2	68.1														
50	35.6	39.6	47.2	60.3	61.1														
55	28.1	31.2	37.4	50.0	54.6														
60	20.1	23.1	29.1	38.7	48.8														
65	18.5	19.3	22.3	29.9	40.4														
70	17.9	18.5	19.0	24.5	31.1														
75	17.1	17.7	18.3	19.6	21.6														
80	15.4	15.8	17.7	18.0	19.2														
85	13.3	15.2	17.0	17.9	17.6														
90	13.8	16.0	16.3	17.8	16.1														
95	13.3	15.2	17.0	17.9	17.6														
100	15.4	15.8	17.7	18.0	19.2														
105	17.1	17.7	18.3	19.6	21.6														
110	17.9	18.5	19.0	24.5	31.1														
115	18.5	19.3	22.3	29.9	40.4														
120	20.1	23.1	29.1	38.7	48.8														
125	28.1	31.2	37.4	50.0	54.6														
130	35.6	39.6	47.2	60.3	61.1														
135	44.6	49.3	59.1	66.2	68.1														
140	55.6	61.3	72.1	71.2	76.2														
145	69.2	74.5	75.7	76.8	85.7														
150	79.8	79.7	79.6	83.3	96.3														
155	82.0	83.3	85.4	92.1	107														
160	87.0	89.2	94.5	103	117														
165	97.5	99.8	106	116	128														
170	113	115	120	127	135														
175	131	132	134	138	143														
180	151	151	151	151	151														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	V1-18 @16W2700K	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	0.134	16.0	0.995	6.37
277.0	60	0.060	15.9	0.957	14.37

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*****