

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: 2025-10-22

Revised Date: N/A

1.0 Test Summary

DLC Technical Requirements V6.0

Track or Mono-Point Directional Luminaires					
Requirement Category		Test Method	Requirements		Test Value
Luminaire Output (lm) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	250		8185
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	140.9
			95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		58.1
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	9.50
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.993
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3985±275	3960
			4 steps	3985±154	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.7
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		81
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		90
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		104
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%		99.4%
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		0.488
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		58.1
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A

2.0 Test List

Test Item	Test	Test Date	Model Number	Build Level	Sample No.
1	Integrating Sphere Test	2025-10-21	TKBEAM4B @60W4000K	-	251017004-S1
2	Goniophotometer Test	2025-10-21	TKBEAM4B @60W4000K	-	251017004-S1
3	THD and PF Test	2025-10-21	TKBEAM4B @60W4000K	-	251017004-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. TKBEAM4B @60W4000K, color tunable from 2700K, 3000K, 3500K, 4000K and 5000K.

Electrical Specification: 120Vac, 60Hz

Photos of Luminaire Characteristics



4.0 LM-79 Measurement and Test Results

4.1 Integrating Sphere Test

Model No.	TKBEAM4B @60W4000K	Sample ID	251017004-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

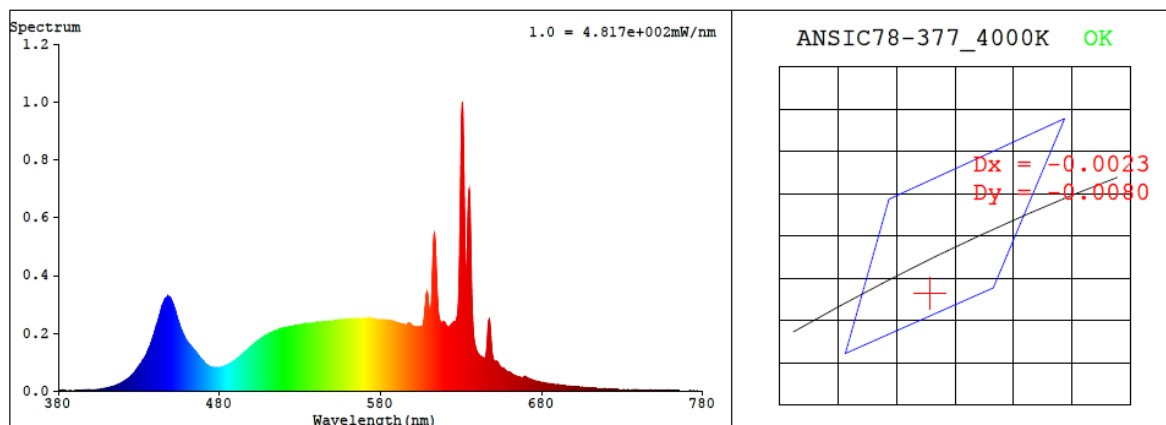
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.488	58.1	0.993

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3960	93.7	81	-0.0031	4.3	90	104	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3799$ $y = 0.3699$ / $u' = 0.2275$ $v' = 0.4984$ ($duv = -3.10e-03$)

CCT= 3960K Prcp WL: $L_d = 581.1\text{nm}$ Purity=25.0%

Peak WL: $L_p = 631\text{nm}$ FWHM: $\approx 3.6\text{nm}$ Ratio: R=20.9% G=75.5% B=3.6%

Render Index: $R_a = 93.7$ AvgR = 91.4 TM30: $R_f = 90$ $R_g = 104$

EEL: 0.09680 A++ Highest

R1 =98 R2 =95 R3 =89 R4 =93 R5 =96 R6 =92 R7 =94

R8 =93 R9 =81 R10=85 R11=92 R12=78 R13=96 R14=93 R15=97

4.1 Integrating Sphere Test

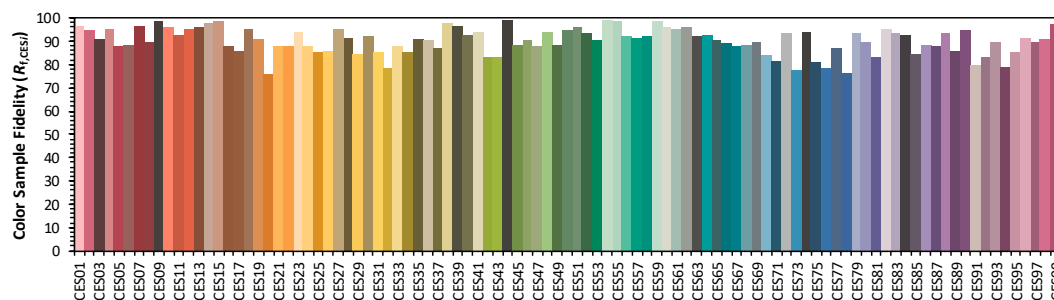
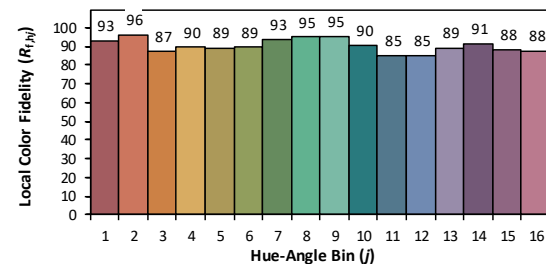
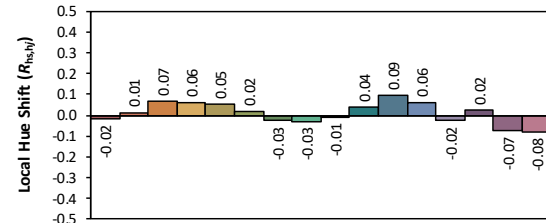
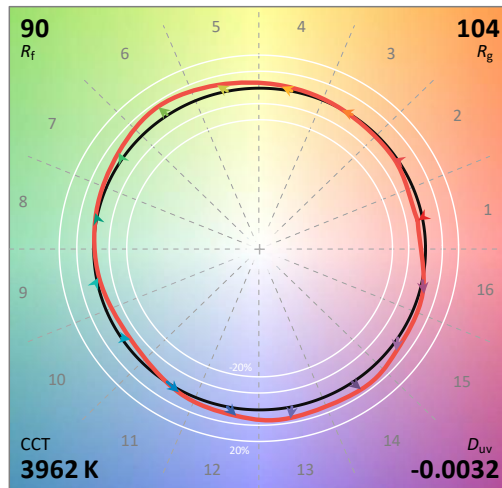
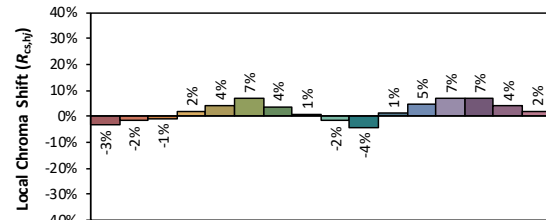
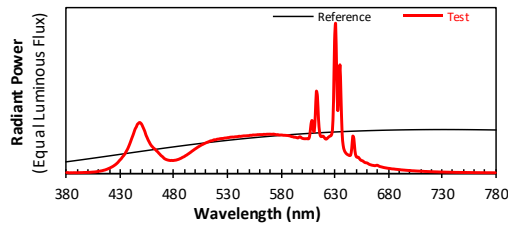
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/10/22

Model: TKBEAM4B @60W4000K



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

x 0.3799
 y 0.3697
 u' 0.2276
 v' 0.4984

CIE 13.3-1995
(CRI)

R_a 94
 R_g 82

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	2.50E-06	447	3.22E-04	514	2.08E-04	581	2.46E-04	648	2.22E-04	715	9.80E-06
381	2.60E-06	448	3.28E-04	515	2.09E-04	582	2.45E-04	649	1.44E-04	716	9.80E-06
382	1.80E-06	449	3.24E-04	516	2.10E-04	583	2.45E-04	650	1.10E-04	717	9.20E-06
383	7.00E-07	450	3.16E-04	517	2.14E-04	584	2.44E-04	651	1.02E-04	718	9.20E-06
384	1.90E-06	451	3.01E-04	518	2.16E-04	585	2.44E-04	652	1.03E-04	719	8.70E-06
385	1.20E-06	452	2.85E-04	519	2.15E-04	586	2.44E-04	653	9.52E-05	720	8.40E-06
386	1.70E-06	453	2.69E-04	520	2.18E-04	587	2.42E-04	654	8.64E-05	721	8.20E-06
387	1.90E-06	454	2.46E-04	521	2.20E-04	588	2.41E-04	655	8.14E-05	722	8.10E-06
388	1.80E-06	455	2.31E-04	522	2.20E-04	589	2.39E-04	656	7.94E-05	723	7.70E-06
389	1.80E-06	456	2.15E-04	523	2.22E-04	590	2.36E-04	657	7.44E-05	724	7.50E-06
390	1.50E-06	457	2.02E-04	524	2.23E-04	591	2.36E-04	658	6.91E-05	725	7.30E-06
391	2.50E-06	458	1.89E-04	525	2.24E-04	592	2.32E-04	659	6.66E-05	726	7.10E-06
392	2.20E-06	459	1.78E-04	526	2.24E-04	593	2.32E-04	660	6.57E-05	727	6.80E-06
393	2.30E-06	460	1.70E-04	527	2.26E-04	594	2.31E-04	661	6.25E-05	728	6.50E-06
394	2.40E-06	461	1.63E-04	528	2.27E-04	595	2.29E-04	662	5.77E-05	729	6.50E-06
395	2.70E-06	462	1.57E-04	529	2.27E-04	596	2.28E-04	663	5.45E-05	730	6.20E-06
396	3.20E-06	463	1.51E-04	530	2.29E-04	597	2.33E-04	664	5.25E-05	731	6.10E-06
397	3.30E-06	464	1.43E-04	531	2.29E-04	598	2.34E-04	665	5.03E-05	732	5.80E-06
398	3.50E-06	465	1.37E-04	532	2.31E-04	599	2.29E-04	666	4.93E-05	733	5.70E-06
399	3.80E-06	466	1.29E-04	533	2.33E-04	600	2.25E-04	667	4.79E-05	734	5.40E-06
400	3.60E-06	467	1.22E-04	534	2.33E-04	601	2.23E-04	668	4.76E-05	735	5.30E-06
401	4.20E-06	468	1.14E-04	535	2.33E-04	602	2.22E-04	669	4.96E-05	736	5.30E-06
402	4.50E-06	469	1.08E-04	536	2.33E-04	603	2.22E-04	670	5.00E-05	737	4.90E-06
403	5.10E-06	470	1.02E-04	537	2.35E-04	604	2.23E-04	671	4.63E-05	738	4.90E-06
404	5.70E-06	471	9.47E-05	538	2.35E-04	605	2.22E-04	672	4.27E-05	739	4.60E-06
405	6.10E-06	472	9.05E-05	539	2.36E-04	606	2.23E-04	673	4.07E-05	740	4.50E-06
406	6.60E-06	473	8.72E-05	540	2.37E-04	607	2.52E-04	674	3.90E-05	741	4.30E-06
407	7.30E-06	474	8.49E-05	541	2.38E-04	608	3.16E-04	675	3.71E-05	742	4.20E-06
408	8.60E-06	475	8.30E-05	542	2.37E-04	609	3.40E-04	676	3.54E-05	743	4.00E-06
409	9.30E-06	476	8.19E-05	543	2.39E-04	610	2.86E-04	677	3.41E-05	744	3.80E-06
410	1.09E-05	477	8.09E-05	544	2.39E-04	611	2.69E-04	678	3.28E-05	745	4.00E-06
411	1.21E-05	478	8.18E-05	545	2.41E-04	612	3.73E-04	679	3.16E-05	746	3.80E-06
412	1.34E-05	479	8.08E-05	546	2.41E-04	613	5.29E-04	680	3.03E-05	747	3.60E-06
413	1.47E-05	480	8.16E-05	547	2.41E-04	614	4.97E-04	681	2.97E-05	748	3.50E-06
414	1.66E-05	481	8.28E-05	548	2.42E-04	615	3.50E-04	682	2.86E-05	749	3.40E-06
415	1.84E-05	482	8.35E-05	549	2.42E-04	616	2.65E-04	683	2.72E-05	750	3.50E-06
416	2.01E-05	483	8.57E-05	550	2.42E-04	617	2.38E-04	684	2.63E-05	751	3.20E-06
417	2.28E-05	484	8.77E-05	551	2.45E-04	618	2.37E-04	685	2.61E-05	752	3.20E-06
418	2.53E-05	485	9.03E-05	552	2.44E-04	619	2.40E-04	686	2.52E-05	753	3.30E-06
419	2.86E-05	486	9.36E-05	553	2.45E-04	620	2.34E-04	687	2.42E-05	754	3.00E-06
420	3.14E-05	487	9.66E-05	554	2.47E-04	621	2.25E-04	688	2.36E-05	755	3.10E-06
421	3.48E-05	488	1.01E-04	555	2.46E-04	622	2.20E-04	689	2.29E-05	756	2.90E-06
422	3.86E-05	489	1.04E-04	556	2.47E-04	623	2.23E-04	690	2.21E-05	757	2.90E-06
423	4.22E-05	490	1.08E-04	557	2.47E-04	624	2.31E-04	691	2.15E-05	758	2.70E-06
424	4.67E-05	491	1.13E-04	558	2.49E-04	625	2.36E-04	692	2.03E-05	759	2.70E-06
425	5.16E-05	492	1.16E-04	559	2.49E-04	626	2.40E-04	693	1.99E-05	760	2.40E-06
426	5.69E-05	493	1.22E-04	560	2.49E-04	627	2.45E-04	694	1.92E-05	761	2.30E-06
427	6.31E-05	494	1.26E-04	561	2.49E-04	628	2.79E-04	695	1.87E-05	762	2.40E-06
428	6.99E-05	495	1.31E-04	562	2.49E-04	629	4.62E-04	696	1.80E-05	763	2.30E-06
429	7.85E-05	496	1.36E-04	563	2.49E-04	630	8.58E-04	697	1.75E-05	764	2.20E-06
430	8.60E-05	497	1.42E-04	564	2.51E-04	631	9.68E-04	698	1.69E-05	765	2.30E-06
431	9.32E-05	498	1.46E-04	565	2.50E-04	632	6.36E-04	699	1.66E-05	766	2.00E-06
432	1.03E-04	499	1.52E-04	566	2.51E-04	633	4.04E-04	700	1.61E-05	767	2.10E-06
433	1.11E-04	500	1.56E-04	567	2.52E-04	634	5.49E-04	701	1.58E-05	768	1.90E-06
434	1.20E-04	501	1.61E-04	568	2.52E-04	635	7.02E-04	702	1.48E-05	769	2.00E-06
435	1.32E-04	502	1.66E-04	569	2.52E-04	636	4.90E-04	703	1.44E-05	770	1.90E-06
436	1.45E-04	503	1.70E-04	570	2.52E-04	637	2.64E-04	704	1.41E-05	771	2.00E-06
437	1.57E-04	504	1.74E-04	571	2.51E-04	638	1.80E-04	705	1.36E-05	772	1.60E-06
438	1.74E-04	505	1.79E-04	572	2.51E-04	639	1.49E-04	706	1.31E-05	773	1.80E-06
439	1.91E-04	506	1.83E-04	573	2.52E-04	640	1.35E-04	707	1.28E-05	774	1.70E-06
440	2.10E-04	507	1.86E-04	574	2.51E-04	641	1.26E-04	708	1.23E-05	775	1.70E-06
441	2.29E-04	508	1.89E-04	575	2.50E-04	642	1.20E-04	709	1.21E-05	776	1.70E-06
442	2.47E-04	509	1.93E-04	576	2.48E-04	643	1.16E-04	710	1.16E-05	777	1.60E-06
443	2.67E-04	510	1.96E-04	577	2.49E-04	644	1.13E-04	711	1.10E-05	778	1.50E-06
444	2.87E-04	511	1.99E-04	578	2.47E-04	645	1.17E-04	712	1.12E-05	779	1.40E-06
445	2.99E-04	512	2.02E-04	579	2.46E-04	646	1.58E-04	713	1.06E-05	780	1.40E-06
446	3.15E-04	513	2.04E-04	580	2.47E-04	647	2.38E-04	714	1.01E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	TKBEAM4B @60W4000K	Sample ID	251017004-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	25.0	Humidity (%RH)	41.3

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	0.488	58.1	0.993
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

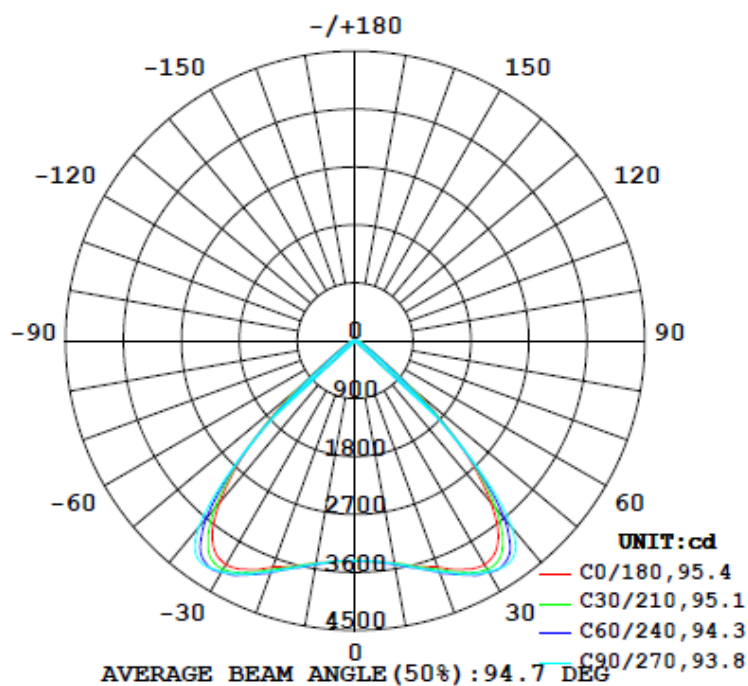
Test Result

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°)
8185	93.7	107.9	67.8	90.1	140.9	99.4%

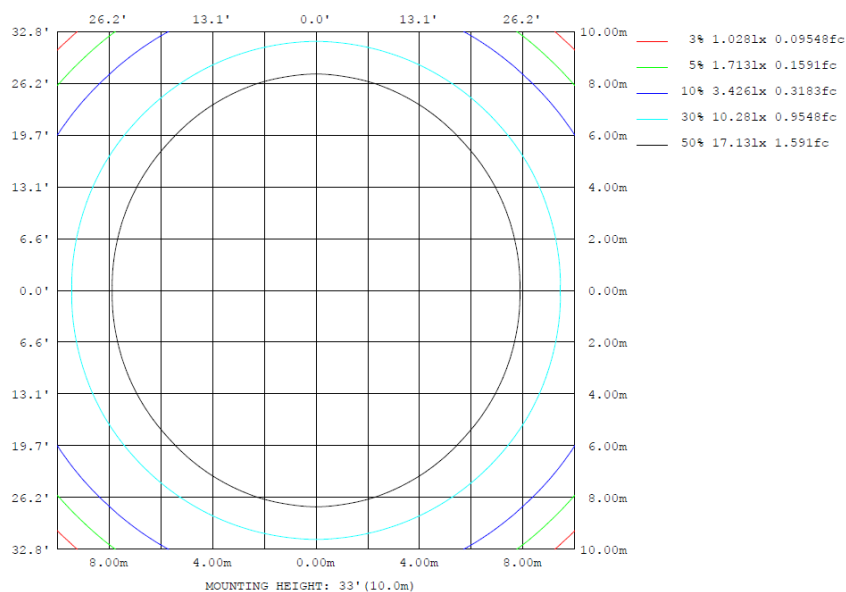
4.2 Goniophotometer Test

Lighting Distribution Curve

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Isolux Plot



4.2 Goniophotometer Test

Zonal Lumen Summary

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	± zone	± total	%lum, lamp
10	3500	3520	3521	3520	3500	3520	3521	3520	0- 10	331.3	331.3	4.05,4.05
20	3744	3800	3813	3800	3744	3800	3813	3800	10- 20	1038	1369	16.7,16.7
30	4018	4134	4148	4134	4018	4134	4148	4134	20- 30	1844	3213	39.3,39.3
40	3278	3470	3786	3470	3278	3470	3786	3470	30- 40	2485	5698	69.6,69.6
50	1172	1031	836.4	1031	1172	1031	836.4	1031	40- 50	1772	7470	91.3,91.3
60	242.6	210.3	142.7	210.3	242.6	210.3	142.7	210.3	50- 60	410.2	7880	96.3,96.3
70	121.9	103.2	82.13	103.2	121.9	103.2	82.13	103.2	60- 70	141.3	8022	98,98
80	42.17	59.87	51.79	59.87	42.17	59.87	51.79	59.87	70- 80	78.33	8100	99,99
90	3.834	27.37	34.47	27.37	3.834	27.37	34.47	27.37	80- 90	39.15	8139	99.4,99.4
100	3.432	10.48	25.03	10.48	3.432	10.48	25.03	10.48	90-100	15.53	8155	99.6,99.6
110	5.829	2.054	9.419	2.054	5.829	2.054	9.419	2.054	100-110	6.493	8161	99.7,99.7
120	12.60	1.774	1.236	1.774	12.60	1.774	1.236	1.774	110-120	3.140	8164	99.8,99.8
130	13.54	2.519	1.800	2.519	13.54	2.519	1.800	2.519	120-130	3.148	8168	99.8,99.8
140	13.73	4.943	3.982	4.943	13.73	4.943	3.982	4.943	130-140	4.160	8172	99.8,99.8
150	15.86	6.910	5.122	6.910	15.86	6.910	5.122	6.910	140-150	4.822	8177	99.9,99.9
160	13.64	6.910	5.594	6.910	13.64	6.910	5.594	6.910	150-160	3.842	8180	99.9,99.9
170	27.24	9.894	7.966	9.894	27.24	9.894	7.966	9.894	160-170	2.917	8183	100,100
180	28.11	10.55	9.290	10.55	28.11	10.55	9.290	10.55	170-180	1.282	8185	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

	Zonal (lm)		Total (lm)	Percent
0-10	331.34	0-10	331.34	4.05%
10-20	1037.61	0-20	1368.95	16.73%
20-30	1844.19	0-30	3213.14	39.26%
30-40	2485.27	0-40	5698.41	69.63%
40-50	1771.84	0-50	7470.25	91.29%
50-60	410.21	0-60	7880.46	96.30%
60-70	141.31	0-70	8021.77	98.03%
70-80	78.33	0-80	8100.10	98.98%
80-90	39.15	0-90	8139.25	99.46%
90-100	15.53	0-100	8154.78	99.65%
100-110	6.49	0-110	8161.27	99.73%
110-120	3.14	0-120	8164.41	99.77%
120-130	3.15	0-130	8167.56	99.81%
130-140	4.16	0-140	8171.72	99.86%
140-150	4.82	0-150	8176.54	99.92%
150-160	3.84	0-160	8180.38	99.96%
160-170	2.92	0-170	8183.30	100.00%
170-180	1.29	0-180	8184.59	100.02%

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	3422	3419	3419	3419	3426	3420	3423	3420	3426	3419	3419	3419	3422	3419	3419	3419	3426	3420	3423
5	3451	3446	3452	3446	3444	3455	3439	3455	3444	3446	3452	3446	3451	3446	3452	3446	3444	3455	3439
10	3500	3507	3513	3520	3533	3529	3521	3529	3533	3520	3513	3507	3500	3507	3513	3520	3533	3529	3521
15	3626	3606	3633	3639	3657	3659	3655	3659	3657	3639	3633	3606	3626	3606	3633	3639	3657	3659	3655
20	3744	3757	3788	3800	3827	3836	3813	3836	3827	3800	3788	3757	3744	3757	3788	3800	3827	3836	3813
25	3925	3937	3969	3982	4011	4023	3998	4023	4011	3982	3969	3937	3925	3937	3969	3982	4011	4023	3998
30	4018	4050	4103	4134	4153	4172	4148	4172	4153	4134	4103	4050	4018	4050	4103	4134	4153	4172	4148
35	3860	3912	3981	4034	4133	4202	4196	4202	4133	4034	3981	3912	3860	3912	3981	4034	4133	4202	4196
40	3278	3322	3400	3470	3611	3729	3786	3729	3611	3470	3400	3322	3278	3322	3400	3470	3611	3729	3786
45	2344	2361	2382	2359	2361	2359	2378	2359	2361	2359	2382	2361	2344	2361	2382	2359	2361	2359	2378
50	1172	1157	1108	1031	999	890	836	890	999	1031	1108	1157	1172	1157	1108	1031	999	890	836
55	456	459	427	396	368	314	281	314	368	396	427	459	456	459	427	396	368	314	281
60	243	247	227	210	188	162	143	162	188	210	227	247	243	247	227	210	188	162	143
65	168	166	154	142	125	107	98.3	107	125	142	154	166	168	166	154	142	125	107	98.3
70	122	119	114	103	92.1	79.7	82.1	79.7	92.1	103	114	119	122	119	114	103	92.1	79.7	82.1
75	94.5	76.1	77.1	74.3	68.4	58.9	61.3	58.9	68.4	74.3	77.1	76.1	94.5	76.1	77.1	74.3	68.4	58.9	61.3
80	42.2	43.8	55.8	59.9	64.0	57.2	51.8	57.2	64.0	59.9	55.8	43.8	42.2	43.8	55.8	59.9	64.0	57.2	51.8
85	20.7	25.8	35.7	36.1	36.7	33.7	34.3	33.7	36.7	36.1	35.7	25.8	20.7	25.8	35.7	36.1	36.7	33.7	34.3
90	3.83	12.1	29.1	27.4	22.4	21.9	34.5	21.9	22.4	27.4	29.1	12.1	3.83	12.1	29.1	27.4	22.4	21.9	34.5
95	3.53	4.68	11.7	13.8	15.1	16.9	27.4	16.9	15.1	13.8	11.7	4.68	3.53	4.68	11.7	13.8	15.1	16.9	27.4
100	3.43	2.52	4.69	10.5	15.2	19.4	25.0	19.4	15.2	10.5	4.69	2.52	3.43	2.52	4.69	10.5	15.2	19.4	25.0
105	3.61	2.52	2.34	3.20	5.59	9.59	14.0	9.59	5.59	3.20	2.34	2.52	3.61	2.52	2.34	3.20	5.59	9.59	14.0
110	5.83	2.52	2.24	2.05	2.75	6.17	9.42	6.17	2.75	2.05	2.24	2.52	5.83	2.52	2.24	2.05	2.75	6.17	9.42
115	9.63	2.97	2.24	1.77	1.51	2.67	4.39	2.67	1.51	1.77	2.24	2.97	9.63	2.97	2.24	1.77	1.51	2.67	4.39
120	12.6	4.29	2.24	1.77	1.41	1.23	1.24	1.23	1.41	1.77	2.24	4.29	12.6	4.29	2.24	1.77	1.41	1.23	1.24
125	14.2	6.06	2.61	1.77	1.41	1.23	1.23	1.23	1.41	1.77	2.61	6.06	14.2	6.06	2.61	1.77	1.41	1.23	1.23
130	13.5	7.64	3.36	2.52	2.26	2.08	1.80	2.08	2.26	2.52	3.36	7.64	13.5	7.64	3.36	2.52	2.26	2.08	1.80
135	13.5	9.23	4.58	3.82	3.30	3.22	2.84	3.22	3.30	3.82	4.58	9.23	13.5	9.23	4.58	3.82	3.30	3.22	2.84
140	13.7	10.6	5.88	4.94	4.71	4.55	3.98	4.55	4.71	4.94	5.88	10.6	13.7	10.6	5.88	4.94	4.71	4.55	3.98
145	14.8	12.2	7.10	6.07	5.84	5.87	4.74	5.87	5.84	6.07	7.10	12.2	14.8	12.2	7.10	6.07	5.84	5.87	4.74
150	15.9	12.9	7.38	6.91	6.31	6.25	5.12	6.25	6.31	6.91	7.38	12.9	15.9	12.9	7.38	6.91	6.31	6.25	5.12
155	14.6	12.5	7.47	7.10	6.41	6.35	5.50	6.35	6.41	7.10	7.47	12.5	14.6	12.5	7.47	7.10	6.41	6.35	5.50
160	13.6	12.0	7.38	6.91	6.41	6.35	5.59	6.35	6.41	6.91	7.38	12.0	13.6	12.0	7.38	6.91	6.41	6.35	5.59
165	20.7	17.1	9.79	8.40	7.82	7.76	6.92	7.76	7.82	8.40	9.79	17.1	20.7	17.1	9.79	8.40	7.82	7.76	6.92
170	27.2	20.1	11.7	9.89	9.24	8.99	7.97	8.99	9.24	9.89	11.7	20.1	27.2	20.1	11.7	9.89	9.24	8.99	7.97
175	28.1	20.8	12.4	10.5	9.90	9.75	8.72	9.75	9.90	10.5	12.4	20.8	28.1	20.8	12.4	10.5	9.90	9.75	8.72
180	28.1	20.9	12.3	10.6	9.99	9.85	9.29	9.85	9.99	10.6	12.3	20.9	28.1	20.9	12.3	10.6	9.99	9.85	9.29

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	3420	3426	3419	3419	3419														
5	3455	3444	3446	3452	3446														
10	3529	3533	3520	3513	3507														
15	3659	3657	3639	3633	3606														
20	3836	3827	3800	3788	3757														
25	4023	4011	3982	3969	3937														
30	4172	4153	4134	4103	4050														
35	4202	4133	4034	3981	3912														
40	3729	3611	3470	3400	3322														
45	2359	2361	2359	2382	2361														
50	890	999	1031	1108	1157														
55	314	368	396	427	459														
60	162	188	210	227	247														
65	107	125	142	154	166														
70	79.7	92.1	103	114	119														
75	58.9	68.4	74.3	77.1	76.1														
80	57.2	64.0	59.9	55.8	43.8														
85	33.7	36.7	36.1	35.7	25.8														
90	21.9	22.4	27.4	29.1	12.1														
95	16.9	15.1	13.8	11.7	4.68														
100	19.4	15.2	10.5	4.69	2.52														
105	9.59	5.59	3.20	2.34	2.52														
110	6.17	2.75	2.05	2.24	2.52														
115	2.67	1.51	1.77	2.24	2.97														
120	1.23	1.41	1.77	2.24	4.29														
125	1.23	1.41	1.77	2.61	6.06														
130	2.08	2.26	2.52	3.36	7.64														
135	3.22	3.30	3.82	4.58	9.23														
140	4.55	4.71	4.94	5.88	10.6														
145	5.87	5.84	6.07	7.10	12.2														
150	6.25	6.31	6.91	7.38	12.9														
155	6.35	6.41	7.10	7.47	12.5														
160	6.35	6.41	6.91	7.38	12.0														
165	7.76	7.82	8.40	9.79	17.1														
170	8.99	9.24	9.89	11.7	20.1														
175	9.75	9.90	10.5	12.4	20.8														
180	9.85	9.99	10.6	12.3	20.9														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	TKBEAM4B @60W4000K	Sample ID	251017004-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±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.</p>

Test Results

Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	iTHD(%)
120.0	60	0.488	58.1	0.993	9.50

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*****