

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		6838
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	143.4
			95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		47.7
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	9.65
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.991
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	2725±145	2786
			4 steps	2725±83	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		91.3
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		54
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		101
IES Rcs,h1 (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	-12%≤IES Rcs,h1≤+23%		-6%
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		0.401
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		47.7
(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 @50W2700K	-	251017004-S1
2	Goniophotometer Test	2025-10-21	TKBEAM4B @50W2700K	-	251017004-S1
3	THD and PF Test	2025-10-21	TKBEAM4B @50W2700K	-	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 @50W2700K, 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 @50W2700K	Sample ID	251017004-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

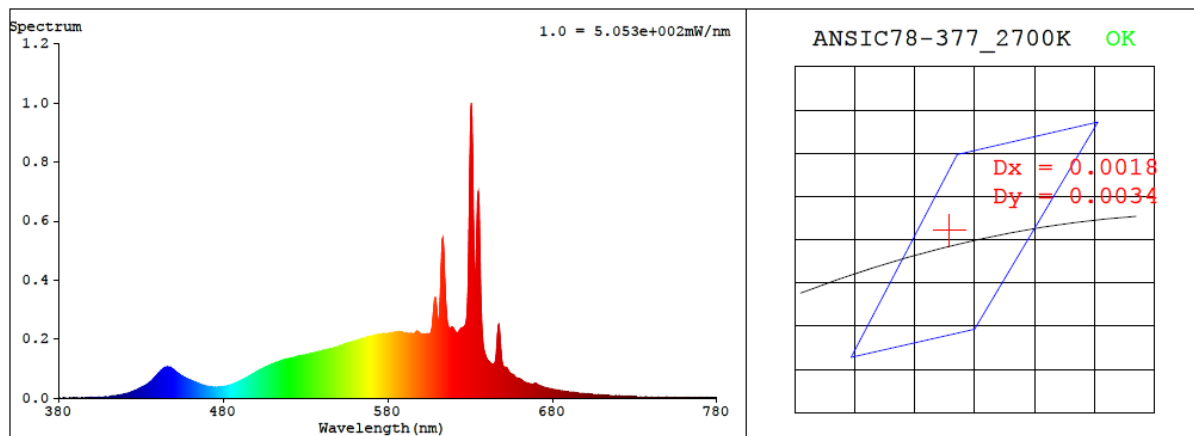
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.401	47.7	0.991

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
2786	91.3	54	0.0011	2.8	89	101	-6%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4548$ $y = 0.4123$ / $u' = 0.2585$ $v' = 0.5272$ ($duv=1.10e-03$)

CCT= 2786K Prcp WL: $L_d=583.4nm$ Purity=60.3%

Peak WL: $L_p=631nm$ FWHM: $=3.6nm$ Ratio:R=26.1% G=71.9% B=2.1%

Render Index: $R_a = 91.3$ AvgR = 87.9 TM30:Rf=89 Rg=101

EEL: 0.09503 A++ Highest

R1 =92 R2 =94 R3 =93 R4 =93 R5 =91 R6 =94 R7 =92

R8 =81 R9 =54 R10=83 R11=94 R12=82 R13=92 R14=95 R15=88

4.1 Integrating Sphere Test

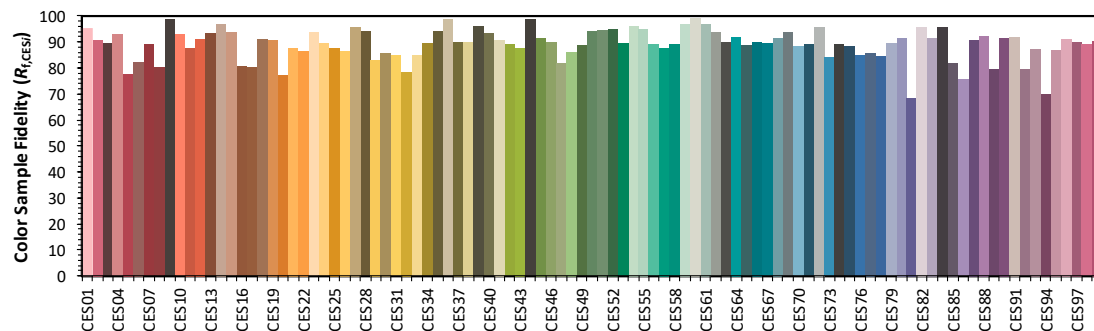
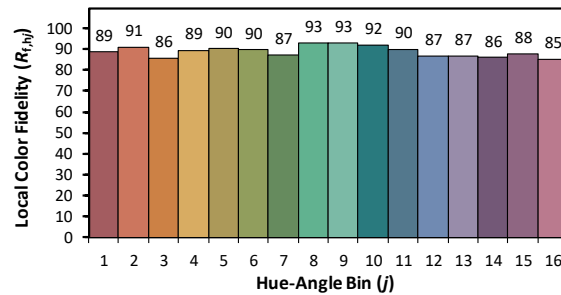
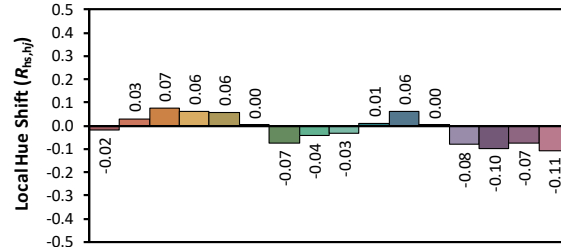
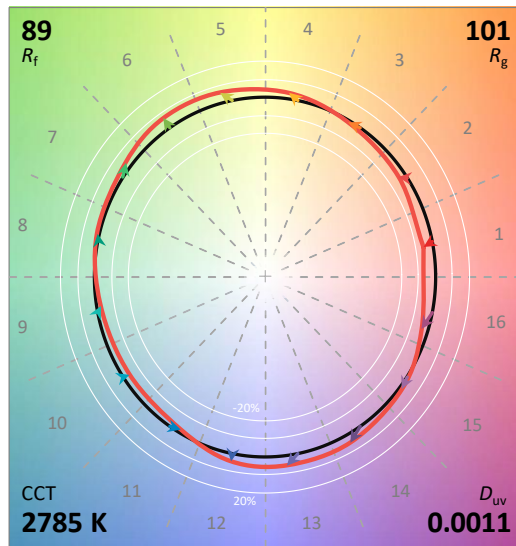
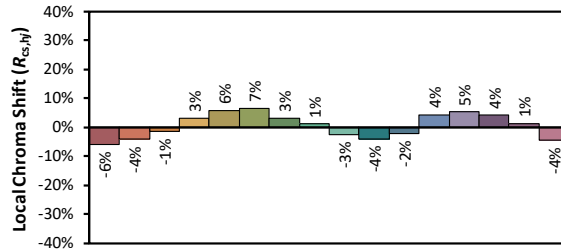
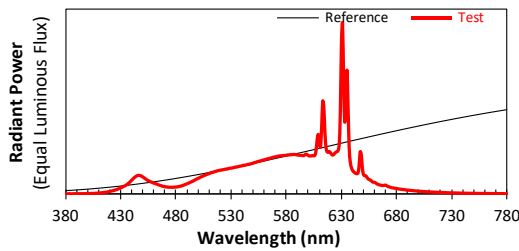
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/10/22

Model: TKBEAM4B @50W2700K



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

x 0.4548

y 0.4122

u' 0.2585

v' 0.5272

CIE 13.3-1995
(CRI)

R_a 91

R_g 55

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	1.80E-06	447	1.04E-04	514	1.24E-04	581	2.21E-04	648	2.23E-04	715	9.40E-06
381	3.00E-07	448	1.03E-04	515	1.27E-04	582	2.21E-04	649	1.46E-04	716	9.10E-06
382	3.00E-07	449	9.86E-05	516	1.27E-04	583	2.21E-04	650	1.10E-04	717	8.90E-06
383	1.10E-06	450	9.55E-05	517	1.30E-04	584	2.24E-04	651	1.04E-04	718	8.60E-06
384	7.00E-07	451	9.05E-05	518	1.32E-04	585	2.23E-04	652	1.03E-04	719	8.60E-06
385	2.00E-07	452	8.60E-05	519	1.33E-04	586	2.24E-04	653	9.55E-05	720	8.10E-06
386	7.00E-07	453	8.19E-05	520	1.35E-04	587	2.24E-04	654	8.66E-05	721	8.00E-06
387	1.00E-06	454	7.75E-05	521	1.36E-04	588	2.24E-04	655	8.18E-05	722	7.70E-06
388	6.00E-07	455	7.43E-05	522	1.37E-04	589	2.22E-04	656	7.91E-05	723	7.50E-06
389	1.40E-06	456	7.13E-05	523	1.38E-04	590	2.21E-04	657	7.47E-05	724	7.00E-06
390	7.00E-07	457	6.81E-05	524	1.39E-04	591	2.21E-04	658	6.89E-05	725	7.00E-06
391	8.00E-07	458	6.59E-05	525	1.41E-04	592	2.20E-04	659	6.63E-05	726	6.60E-06
392	1.00E-06	459	6.26E-05	526	1.41E-04	593	2.19E-04	660	6.58E-05	727	6.50E-06
393	7.00E-07	460	6.13E-05	527	1.43E-04	594	2.19E-04	661	6.26E-05	728	6.10E-06
394	1.30E-06	461	5.85E-05	528	1.45E-04	595	2.17E-04	662	5.78E-05	729	6.00E-06
395	1.20E-06	462	5.63E-05	529	1.46E-04	596	2.18E-04	663	5.43E-05	730	6.00E-06
396	1.50E-06	463	5.45E-05	530	1.47E-04	597	2.23E-04	664	5.20E-05	731	5.60E-06
397	1.10E-06	464	5.14E-05	531	1.47E-04	598	2.26E-04	665	5.05E-05	732	5.40E-06
398	1.60E-06	465	4.93E-05	532	1.49E-04	599	2.22E-04	666	4.90E-05	733	5.30E-06
399	1.70E-06	466	4.74E-05	533	1.51E-04	600	2.18E-04	667	4.79E-05	734	5.00E-06
400	2.20E-06	467	4.52E-05	534	1.52E-04	601	2.15E-04	668	4.75E-05	735	5.00E-06
401	1.90E-06	468	4.32E-05	535	1.53E-04	602	2.16E-04	669	4.91E-05	736	4.90E-06
402	2.00E-06	469	4.19E-05	536	1.54E-04	603	2.16E-04	670	4.95E-05	737	4.70E-06
403	2.40E-06	470	4.06E-05	537	1.56E-04	604	2.18E-04	671	4.63E-05	738	4.50E-06
404	2.80E-06	471	3.95E-05	538	1.57E-04	605	2.16E-04	672	4.27E-05	739	4.30E-06
405	2.50E-06	472	3.91E-05	539	1.58E-04	606	2.20E-04	673	4.06E-05	740	4.20E-06
406	3.30E-06	473	3.84E-05	540	1.60E-04	607	2.48E-04	674	3.85E-05	741	4.00E-06
407	3.60E-06	474	3.75E-05	541	1.62E-04	608	3.11E-04	675	3.63E-05	742	3.90E-06
408	3.80E-06	475	3.79E-05	542	1.62E-04	609	3.37E-04	676	3.48E-05	743	3.90E-06
409	4.50E-06	476	3.74E-05	543	1.64E-04	610	2.84E-04	677	3.39E-05	744	3.70E-06
410	4.80E-06	477	3.79E-05	544	1.65E-04	611	2.66E-04	678	3.25E-05	745	3.60E-06
411	5.30E-06	478	3.82E-05	545	1.67E-04	612	3.72E-04	679	3.16E-05	746	3.50E-06
412	6.50E-06	479	3.85E-05	546	1.68E-04	613	5.26E-04	680	3.05E-05	747	3.40E-06
413	6.60E-06	480	3.91E-05	547	1.70E-04	614	4.94E-04	681	2.90E-05	748	3.40E-06
414	7.80E-06	481	4.00E-05	548	1.72E-04	615	3.50E-04	682	2.82E-05	749	3.20E-06
415	8.70E-06	482	4.12E-05	549	1.73E-04	616	2.64E-04	683	2.72E-05	750	3.10E-06
416	9.70E-06	483	4.25E-05	550	1.75E-04	617	2.39E-04	684	2.63E-05	751	3.00E-06
417	1.03E-05	484	4.38E-05	551	1.78E-04	618	2.37E-04	685	2.55E-05	752	3.00E-06
418	1.17E-05	485	4.57E-05	552	1.79E-04	619	2.40E-04	686	2.49E-05	753	2.90E-06
419	1.24E-05	486	4.80E-05	553	1.81E-04	620	2.34E-04	687	2.39E-05	754	2.80E-06
420	1.43E-05	487	5.02E-05	554	1.84E-04	621	2.25E-04	688	2.30E-05	755	2.60E-06
421	1.61E-05	488	5.25E-05	555	1.85E-04	622	2.20E-04	689	2.21E-05	756	2.50E-06
422	1.70E-05	489	5.51E-05	556	1.87E-04	623	2.24E-04	690	2.15E-05	757	2.50E-06
423	1.84E-05	490	5.77E-05	557	1.88E-04	624	2.31E-04	691	2.10E-05	758	2.50E-06
424	2.05E-05	491	6.09E-05	558	1.90E-04	625	2.37E-04	692	2.02E-05	759	2.40E-06
425	2.27E-05	492	6.28E-05	559	1.92E-04	626	2.41E-04	693	1.97E-05	760	2.40E-06
426	2.50E-05	493	6.62E-05	560	1.93E-04	627	2.46E-04	694	1.89E-05	761	2.20E-06
427	2.69E-05	494	6.92E-05	561	1.95E-04	628	2.80E-04	695	1.83E-05	762	2.30E-06
428	2.98E-05	495	7.20E-05	562	1.97E-04	629	4.63E-04	696	1.76E-05	763	2.10E-06
429	3.29E-05	496	7.53E-05	563	1.99E-04	630	8.55E-04	697	1.71E-05	764	2.10E-06
430	3.51E-05	497	7.85E-05	564	2.00E-04	631	9.69E-04	698	1.66E-05	765	1.80E-06
431	3.81E-05	498	8.26E-05	565	2.02E-04	632	6.40E-04	699	1.61E-05	766	2.00E-06
432	4.13E-05	499	8.50E-05	566	2.03E-04	633	4.07E-04	700	1.53E-05	767	1.90E-06
433	4.44E-05	500	8.87E-05	567	2.06E-04	634	5.51E-04	701	1.50E-05	768	1.70E-06
434	4.77E-05	501	9.08E-05	568	2.08E-04	635	7.03E-04	702	1.45E-05	769	1.70E-06
435	5.19E-05	502	9.56E-05	569	2.09E-04	636	4.92E-04	703	1.39E-05	770	1.60E-06
436	5.64E-05	503	9.76E-05	570	2.10E-04	637	2.65E-04	704	1.36E-05	771	1.80E-06
437	6.16E-05	504	1.00E-04	571	2.12E-04	638	1.81E-04	705	1.30E-05	772	1.60E-06
438	6.74E-05	505	1.04E-04	572	2.14E-04	639	1.50E-04	706	1.26E-05	773	1.50E-06
439	7.38E-05	506	1.06E-04	573	2.14E-04	640	1.35E-04	707	1.23E-05	774	1.50E-06
440	7.99E-05	507	1.09E-04	574	2.16E-04	641	1.26E-04	708	1.19E-05	775	1.50E-06
441	8.63E-05	508	1.11E-04	575	2.16E-04	642	1.21E-04	709	1.14E-05	776	1.50E-06
442	9.22E-05	509	1.13E-04	576	2.16E-04	643	1.16E-04	710	1.11E-05	777	1.40E-06
443	9.69E-05	510	1.16E-04	577	2.18E-04	644	1.15E-04	711	1.07E-05	778	1.30E-06
444	1.01E-04	511	1.18E-04	578	2.18E-04	645	1.18E-04	712	1.06E-05	779	1.30E-06
445	1.04E-04	512	1.21E-04	579	2.18E-04	646	1.58E-04	713	1.02E-05	780	1.30E-06
446	1.06E-04	513	1.22E-04	580	2.19E-04	647	2.39E-04	714	9.80E-06	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	TKBEAM4B @50W2700K	Sample ID	251017004-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	24.8	Humidity (%RH)	40.1

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	0.401	47.7	0.991
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

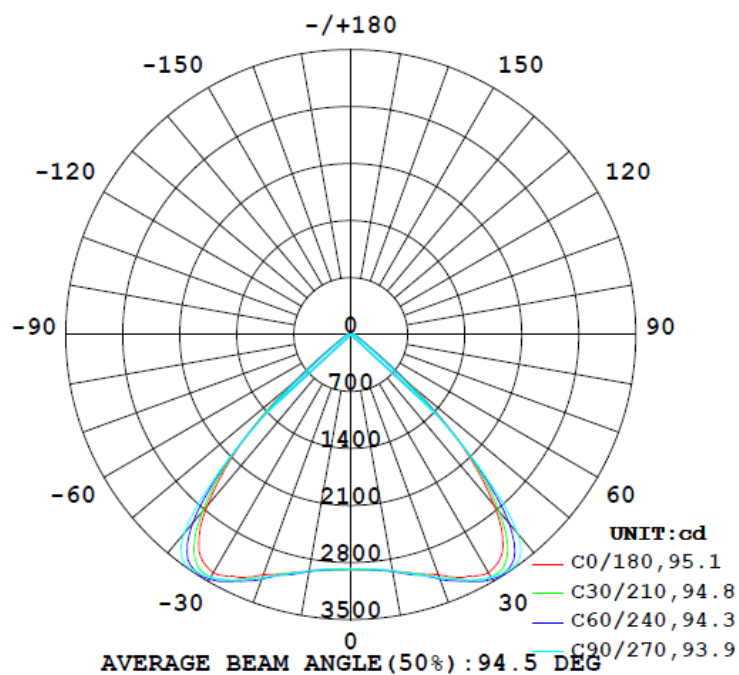
Test Result

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°)
6838	93.5	107.9	67.9	90.4	143.4	99.4%

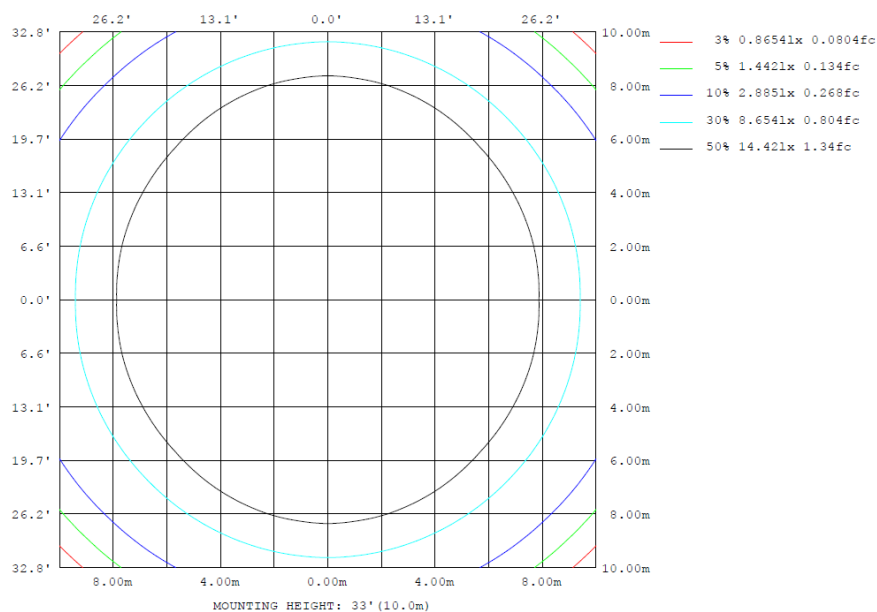
4.2 Goniophotometer Test

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	Φ zone	Φ total	Φ lum, lamp
10	2941	2941	2946	2941	2941	2941	2946	2941	0~ 10	278.4	278.4	4.07, 4.07
20	3139	3171	3182	3171	3139	3171	3182	3171	10~ 20	868.4	1147	16.8, 16.8
30	3378	3444	3439	3444	3378	3444	3439	3444	20~ 30	1542	2689	39.3, 39.3
40	2744	2889	3186	2889	2744	2889	3186	2889	30~ 40	2080	4769	69.7, 69.7
50	956.0	852.4	707.9	852.4	956.0	852.4	707.9	852.4	40~ 50	1481	6250	91.4, 91.4
60	199.5	172.5	119.3	172.5	199.5	172.5	119.3	172.5	50~ 60	337.4	6587	96.3, 96.3
70	100.2	85.02	67.64	85.02	100.2	85.02	67.64	85.02	60~ 70	116.8	6704	98.98
80	34.61	47.72	42.33	47.72	34.61	47.72	42.33	47.72	70~ 80	64.08	6768	99.99
90	3.175	21.66	27.62	21.66	3.175	21.66	27.62	21.66	80~ 90	31.71	6800	99.4, 99.4
100	2.886	8.728	20.68	8.728	2.886	8.728	20.68	8.728	90~100	12.78	6813	99.6, 99.6
110	4.919	1.598	7.931	1.598	4.919	1.598	7.931	1.598	100~110	5.407	6818	99.7, 99.7
120	10.32	1.500	1.144	1.500	10.32	1.500	1.144	1.500	110~120	2.642	6821	99.8, 99.8
130	11.45	2.062	1.524	2.062	11.45	2.062	1.524	2.062	120~130	2.608	6824	99.8, 99.8
140	11.45	4.124	3.145	4.124	11.45	4.124	3.145	4.124	130~140	3.456	6827	99.8, 99.8
150	13.12	5.531	4.288	5.531	13.12	5.531	4.288	5.531	140~150	3.997	6831	99.9, 99.9
160	11.45	5.811	4.385	5.811	11.45	5.811	4.385	5.811	150~160	3.221	6834	99.9, 99.9
170	22.69	8.237	6.768	8.237	22.69	8.237	6.768	8.237	160~170	2.449	6837	100, 100
180	23.55	8.812	7.532	8.812	23.55	8.812	7.532	8.812	170~180	1.077	6838	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	278.40	0-10	278.40	4.07%
10-20	868.37	0-20	1146.77	16.77%
20-30	1542.42	0-30	2689.19	39.34%
30-40	2079.87	0-40	4769.06	69.76%
40-50	1480.97	0-50	6250.03	91.42%
50-60	337.41	0-60	6587.44	96.36%
60-70	116.83	0-70	6704.27	98.06%
70-80	64.08	0-80	6768.35	99.00%
80-90	31.71	0-90	6800.06	99.47%
90-100	12.78	0-100	6812.84	99.65%
100-110	5.41	0-110	6818.25	99.73%
110-120	2.64	0-120	6820.89	99.77%
120-130	2.61	0-130	6823.50	99.81%
130-140	3.46	0-140	6826.96	99.86%
140-150	4.00	0-150	6830.96	99.92%
150-160	3.22	0-160	6834.18	99.96%
160-170	2.45	0-170	6836.63	100.00%
170-180	1.08	0-180	6837.71	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	2882	2888	2886	2882	2882	2883	2875	2883	2882	2882	2886	2888	2882	2888	2886	2882	2882	2883	2875
5	2901	2911	2904	2898	2895	2900	2889	2900	2895	2898	2904	2911	2901	2911	2904	2898	2895	2900	2889
10	2941	2960	2950	2941	2955	2954	2946	2954	2955	2941	2950	2960	2941	2960	2950	2941	2955	2954	2946
15	3036	3046	3035	3032	3056	3058	3048	3058	3056	3032	3035	3046	3036	3046	3035	3032	3056	3058	3048
20	3139	3163	3182	3171	3196	3201	3182	3201	3196	3171	3182	3163	3139	3163	3182	3171	3196	3201	3182
25	3289	3312	3333	3325	3341	3349	3323	3349	3341	3325	3333	3312	3289	3312	3333	3325	3341	3349	3323
30	3378	3417	3445	3444	3468	3465	3439	3465	3468	3444	3445	3417	3378	3417	3445	3444	3468	3465	3439
35	3250	3309	3342	3371	3444	3489	3484	3489	3444	3371	3342	3309	3250	3309	3342	3371	3444	3489	3484
40	2744	2799	2831	2889	3030	3136	3186	3136	3030	2889	2831	2799	2744	2799	2831	2889	3030	3136	3186
45	1941	1968	1977	1966	1985	1985	2009	1985	1985	1966	1977	1968	1941	1968	1977	1966	1985	1985	2009
50	956	948	910	852	833	749	708	749	833	852	910	948	956	948	910	852	833	749	708
55	368	373	347	323	303	261	235	261	303	323	347	373	368	373	347	323	303	261	235
60	199	205	187	172	156	135	119	135	156	172	187	205	199	205	187	172	156	135	119
65	138	138	127	117	103	88.4	81.6	88.4	103	117	127	138	138	127	117	103	88.4	81.6	88.4
70	100	99.3	93.9	85.0	75.9	65.7	67.6	65.7	75.9	85.0	93.9	99.3	100	99.3	93.9	85.0	75.9	65.7	67.6
75	77.0	62.6	63.1	60.7	55.9	48.7	50.3	48.7	55.9	60.7	63.1	62.6	77.0	62.6	63.1	60.7	55.9	48.7	50.3
80	34.6	35.4	44.9	47.7	50.4	46.6	42.3	46.6	50.4	47.7	44.9	35.4	34.6	35.4	44.9	47.7	50.4	46.6	42.3
85	17.1	21.6	29.0	28.6	29.2	27.0	43.8	27.0	29.2	28.6	29.0	21.6	17.1	21.6	29.0	28.6	29.2	27.0	43.8
90	3.17	10.2	24.3	21.7	18.0	17.7	27.6	17.7	18.0	21.7	24.3	10.2	3.17	10.2	24.3	21.7	18.0	17.7	27.6
95	2.89	3.96	9.78	11.2	12.2	13.7	22.2	13.7	12.2	11.2	9.78	3.96	2.89	3.96	9.78	11.2	12.2	13.7	22.2
100	2.89	2.26	4.05	8.73	12.5	16.2	20.7	16.2	12.5	8.73	4.05	2.26	2.89	2.26	4.05	8.73	12.5	16.2	20.7
105	3.07	2.17	2.07	2.63	4.56	8.02	11.6	8.02	4.56	2.63	2.07	2.17	3.07	2.17	2.07	2.63	4.56	8.02	11.6
110	4.92	2.17	1.88	1.60	2.37	5.16	7.93	5.16	2.37	1.60	1.88	2.17	4.92	2.17	1.88	1.60	2.37	5.16	7.93
115	7.99	2.54	1.88	1.50	1.23	2.30	3.65	2.30	1.23	1.50	1.88	2.54	7.99	2.54	1.88	1.50	1.23	2.30	3.65
120	10.3	3.48	1.88	1.50	1.23	1.15	1.14	1.15	1.23	1.50	1.88	3.48	10.3	3.48	1.88	1.50	1.23	1.15	1.14
125	11.5	4.89	1.97	1.50	1.23	1.14	1.14	1.14	1.23	1.50	1.97	4.89	11.5	4.89	1.97	1.50	1.23	1.14	1.14
130	11.4	6.40	2.72	2.06	1.70	1.71	1.52	1.71	1.70	2.06	2.72	6.40	11.4	6.40	2.72	2.06	1.70	1.71	1.52
135	11.4	7.53	3.75	3.00	2.84	2.67	2.38	2.67	2.84	3.00	3.75	7.53	11.4	7.53	3.75	3.00	2.84	2.67	2.38
140	11.4	8.94	4.96	4.12	3.88	3.81	3.14	3.81	3.88	4.12	4.96	8.94	11.4	8.94	4.96	4.12	3.88	3.81	3.14
145	12.3	10.2	5.82	5.15	4.83	4.95	4.10	4.95	4.83	5.15	5.82	10.2	12.3	10.2	5.82	5.15	4.83	4.95	4.10
150	13.1	10.7	6.29	5.53	5.31	5.15	4.29	5.15	5.31	5.53	6.29	10.7	13.1	10.7	6.29	5.53	5.31	5.15	4.29
155	12.2	10.6	6.29	5.62	5.68	5.43	4.39	5.43	5.68	5.62	6.29	10.6	12.2	10.6	6.29	5.62	5.68	5.43	4.39
160	11.4	9.99	6.29	5.81	5.68	5.43	4.39	5.43	5.68	5.81	6.29	9.99	11.4	9.99	6.29	5.81	5.68	5.43	4.39
165	17.4	14.4	8.06	7.21	6.82	6.47	5.62	6.47	6.82	7.21	8.06	14.4	17.4	14.4	8.06	7.21	6.82	6.47	5.62
170	22.7	16.8	9.76	8.24	7.76	7.62	6.77	7.62	7.76	8.24	9.76	16.8	22.7	16.8	9.76	8.24	7.76	7.62	6.77
175	23.6	17.6	10.3	8.81	8.52	8.10	7.34	8.10	8.52	8.81	10.3	17.6	23.6	17.6	10.3	8.81	8.52	8.10	7.34
180	23.6	17.6	10.3	8.81	8.52	8.39	7.53	8.39	8.52	8.81	10.3	17.6	23.6	17.6	10.3	8.81	8.52	8.39	7.53

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	2883	2882	2882	2886	2888														
5	2900	2895	2898	2904	2911														
10	2954	2955	2941	2950	2960														
15	3058	3056	3032	3035	3046														
20	3201	3196	3171	3182	3163														
25	3349	3341	3325	3333	3312														
30	3465	3468	3444	3445	3417														
35	3489	3444	3371	3342	3309														
40	3136	3030	2889	2831	2799														
45	1985	1985	1966	1977	1968														
50	749	833	852	910	948														
55	261	303	323	347	373														
60	135	156	172	187	205														
65	88.4	103	117	127	138														
70	65.7	75.9	85.0	93.9	99.3														
75	48.7	55.9	60.7	63.1	62.6														
80	46.6	50.4	47.7	44.9	35.4														
85	27.0	29.2	28.6	29.0	21.6														
90	17.7	18.0	21.7	24.3	10.2														
95	13.7	12.2	11.2	9.78	3.96														
100	16.2	12.5	8.73	4.05	2.26														
105	8.02	4.56	2.63	2.07	2.17														
110	5.16	2.37	1.60	1.88	2.17														
115	2.30	1.23	1.50	1.88	2.54														
120	1.15	1.23	1.50	1.88	3.48														
125	1.14	1.23	1.50	1.97	4.89														
130	1.71	1.70	2.06	2.72	6.40														
135	2.67	2.84	3.00	3.75	7.53														
140	3.81	3.88	4.12	4.96	8.94														
145	4.95	4.83	5.15	5.82	10.2														
150	5.15	5.31	5.53	6.29	10.7														
155	5.43	5.68	5.62	6.29	10.6														
160	5.43	5.68	5.81	6.29	9.99														
165	6.47	6.82	7.21	8.06	14.4														
170	7.62	7.76	8.24	9.76	16.8														
175	8.10	8.52	8.81	10.3	17.6														
180	8.39	8.52	8.81	10.3	17.6														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	TKBEAM4B @50W2700K	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	0.401	47.7	0.991	9.65

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*****