

Photometric Test Report

Relevant Standards

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

Prepared For

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Issue Date: 2025-09-25

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		4093
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	133.8
			95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		30.6
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	9.45
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	5029±283	5008
			4 steps	5029±220	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		92.7
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		84
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		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		0.257
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		30.6
(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	2025-09-16	TKBEAM2B @30W5000K	-	250903025-S1
2	Goniophotometer Test	2025-09-16	TKBEAM2B @30W5000K	-	250903025-S1
3	THD and PF Test	2025-09-16	TKBEAM2B @30W5000K	-	250903025-S1

Remark (If any):

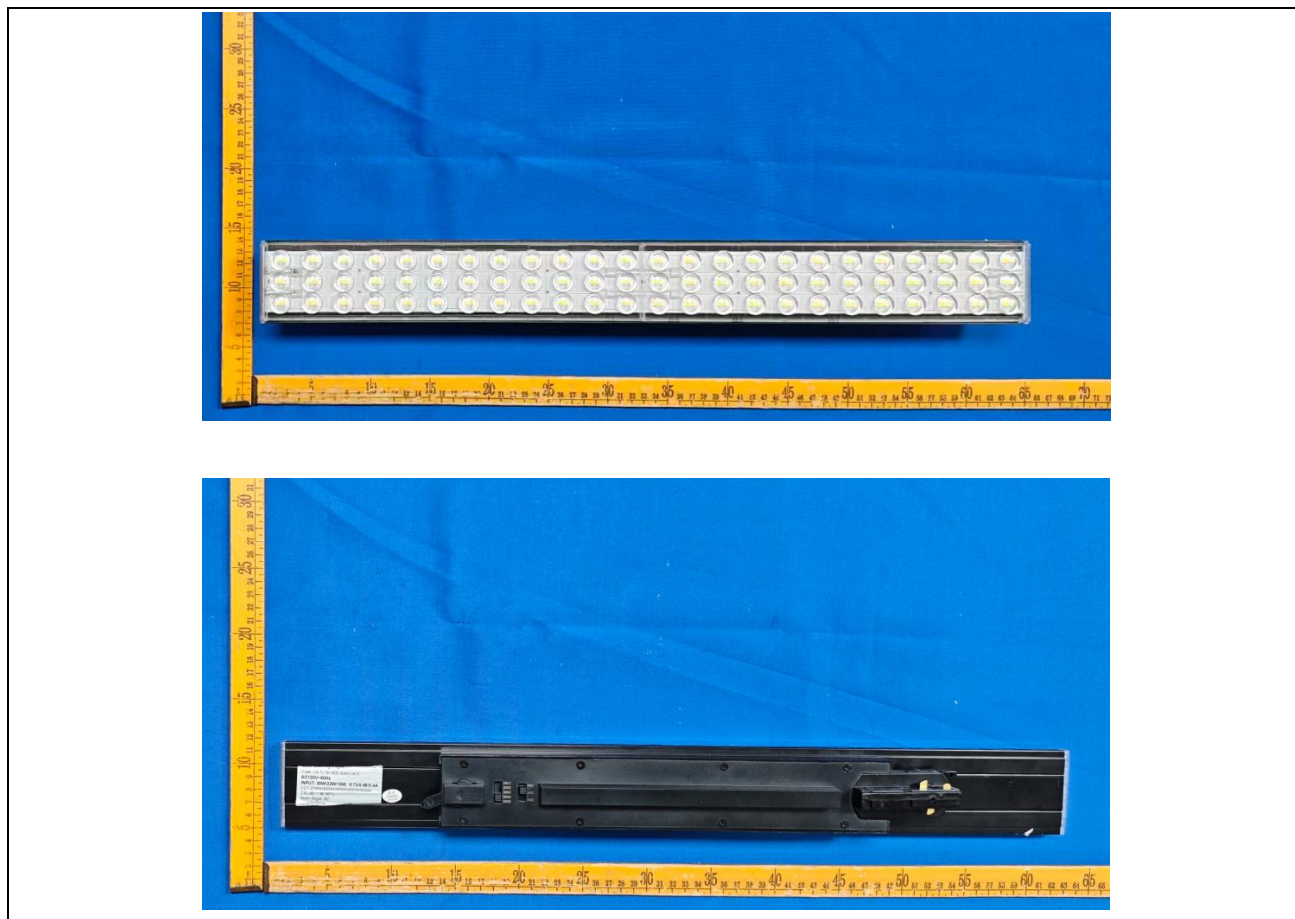
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. TKBEAM2B @30W5000K, 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.	TKBEAM2B @30W5000K	Sample ID	250903025-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

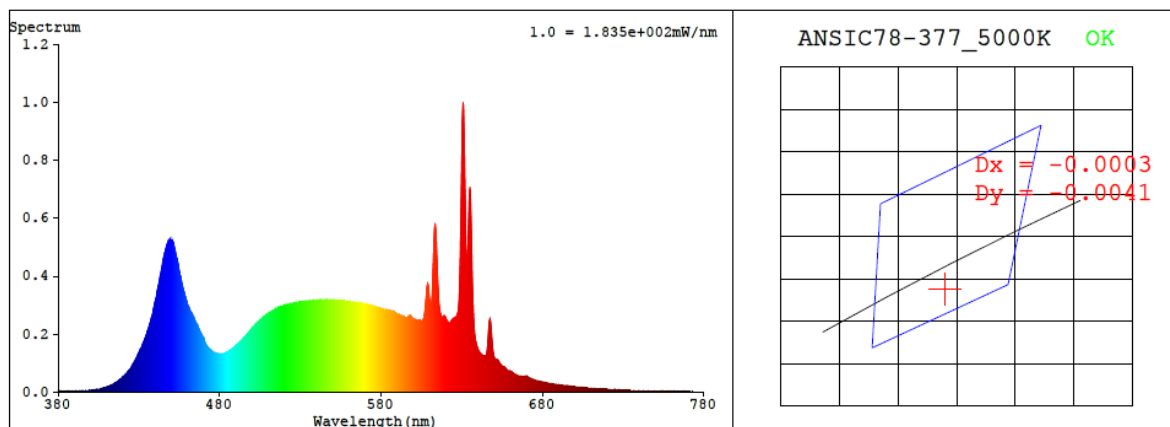
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.257	30.6	0.993

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
5008	92.7	84	-0.0020	4.1	89	104	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3446$ $y = 0.3473$ / $u' = 0.2127$ $v' = 0.4825$ ($duv = -1.96e-03$)

CCT= 5008K Prcp WL: $L_d = 575.4\text{nm}$ Purity=7.6%

Peak WL: $L_p = 631\text{nm}$ FWHM: $\approx 3.7\text{nm}$ Ratio: R=18.2% G=77.2% B=4.6%

Render Index: $R_a = 92.7$ AvgR = 90.6 TM30: $R_f = 90$ $R_g = 104$

EEL: 0.10779 A++ Highest

R1 =97 R2 =93 R3 =87 R4 =91 R5 =96 R6 =90 R7 =93

R8 =94 R9 =84 R10=81 R11=91 R12=76 R13=96 R14=92 R15=97

4.1 Integrating Sphere Test

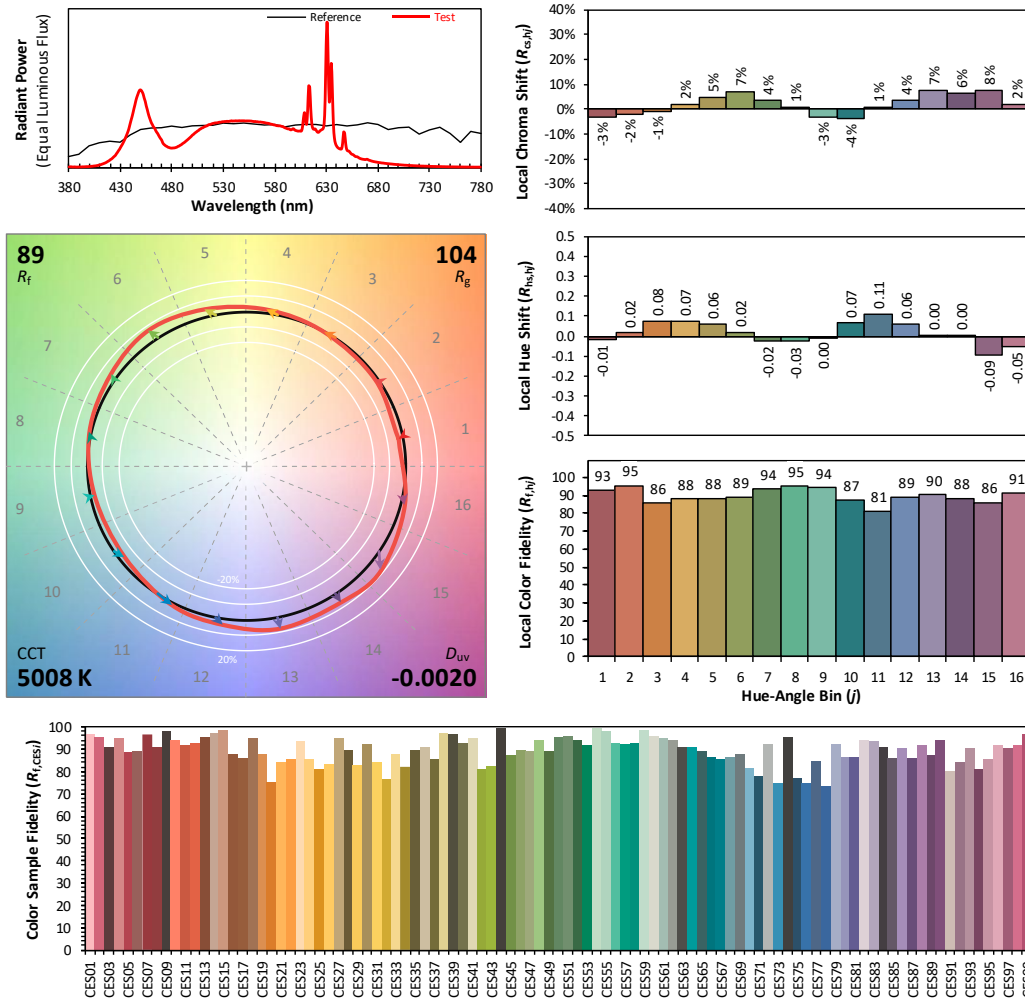
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/9/25

Model: TKBEAM2B @30W5000K



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

x 0.3445
 y 0.3472
 u' 0.2128
 v' 0.4824

CIE 13.3-1995
(CRI)

R_a 93
 R_g 84

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	3.70E-06	447	5.00E-04	514	2.83E-04	581	2.86E-04	648	2.32E-04	715	1.17E-05
381	4.30E-06	448	5.18E-04	515	2.87E-04	582	2.84E-04	649	1.61E-04	716	1.15E-05
382	4.20E-06	449	5.27E-04	516	2.91E-04	583	2.84E-04	650	1.22E-04	717	1.12E-05
383	3.20E-06	450	5.25E-04	517	2.92E-04	584	2.83E-04	651	1.12E-04	718	1.08E-05
384	2.60E-06	451	5.14E-04	518	2.94E-04	585	2.83E-04	652	1.12E-04	719	1.05E-05
385	3.60E-06	452	4.98E-04	519	2.97E-04	586	2.81E-04	653	1.04E-04	720	1.02E-05
386	3.00E-06	453	4.71E-04	520	2.99E-04	587	2.79E-04	654	9.53E-05	721	9.70E-06
387	2.50E-06	454	4.49E-04	521	3.01E-04	588	2.77E-04	655	8.96E-05	722	9.40E-06
388	2.20E-06	455	4.18E-04	522	3.03E-04	589	2.73E-04	656	8.73E-05	723	9.20E-06
389	3.20E-06	456	3.93E-04	523	3.03E-04	590	2.69E-04	657	8.23E-05	724	9.10E-06
390	3.00E-06	457	3.65E-04	524	3.04E-04	591	2.67E-04	658	7.62E-05	725	8.90E-06
391	3.60E-06	458	3.42E-04	525	3.05E-04	592	2.64E-04	659	7.31E-05	726	8.30E-06
392	3.20E-06	459	3.22E-04	526	3.07E-04	593	2.62E-04	660	7.27E-05	727	8.60E-06
393	4.00E-06	460	3.03E-04	527	3.07E-04	594	2.62E-04	661	6.92E-05	728	8.10E-06
394	3.80E-06	461	2.91E-04	528	3.08E-04	595	2.57E-04	662	6.45E-05	729	7.80E-06
395	4.30E-06	462	2.76E-04	529	3.11E-04	596	2.56E-04	663	6.07E-05	730	7.50E-06
396	4.70E-06	463	2.68E-04	530	3.11E-04	597	2.60E-04	664	5.85E-05	731	7.30E-06
397	5.30E-06	464	2.54E-04	531	3.12E-04	598	2.64E-04	665	5.64E-05	732	6.80E-06
398	5.10E-06	465	2.41E-04	532	3.12E-04	599	2.58E-04	666	5.51E-05	733	6.80E-06
399	5.90E-06	466	2.31E-04	533	3.13E-04	600	2.52E-04	667	5.43E-05	734	6.50E-06
400	6.20E-06	467	2.19E-04	534	3.14E-04	601	2.50E-04	668	5.31E-05	735	6.40E-06
401	6.60E-06	468	2.06E-04	535	3.13E-04	602	2.48E-04	669	5.47E-05	736	6.50E-06
402	7.80E-06	469	1.95E-04	536	3.15E-04	603	2.47E-04	670	5.53E-05	737	6.00E-06
403	8.10E-06	470	1.86E-04	537	3.15E-04	604	2.48E-04	671	5.16E-05	738	5.90E-06
404	9.60E-06	471	1.68E-04	538	3.17E-04	605	2.47E-04	672	4.84E-05	739	5.90E-06
405	1.00E-05	472	1.58E-04	539	3.15E-04	606	2.48E-04	673	4.65E-05	740	5.50E-06
406	1.10E-05	473	1.52E-04	540	3.16E-04	607	2.76E-04	674	4.36E-05	741	5.40E-06
407	1.24E-05	474	1.46E-04	541	3.16E-04	608	3.39E-04	675	4.20E-05	742	5.40E-06
408	1.36E-05	475	1.43E-04	542	3.17E-04	609	3.73E-04	676	4.00E-05	743	5.00E-06
409	1.56E-05	476	1.38E-04	543	3.16E-04	610	3.20E-04	677	3.88E-05	744	4.90E-06
410	1.74E-05	477	1.36E-04	544	3.17E-04	611	2.95E-04	678	3.72E-05	745	4.90E-06
411	1.95E-05	478	1.33E-04	545	3.17E-04	612	3.92E-04	679	3.62E-05	746	4.60E-06
412	2.22E-05	479	1.32E-04	546	3.17E-04	613	5.54E-04	680	3.48E-05	747	4.40E-06
413	2.46E-05	480	1.31E-04	547	3.16E-04	614	5.44E-04	681	3.37E-05	748	4.40E-06
414	2.74E-05	481	1.32E-04	548	3.17E-04	615	3.98E-04	682	3.27E-05	749	4.30E-06
415	3.02E-05	482	1.33E-04	549	3.17E-04	616	3.00E-04	683	3.16E-05	750	3.80E-06
416	3.37E-05	483	1.34E-04	550	3.17E-04	617	2.66E-04	684	3.03E-05	751	3.90E-06
417	3.81E-05	484	1.36E-04	551	3.16E-04	618	2.59E-04	685	2.99E-05	752	3.70E-06
418	4.23E-05	485	1.39E-04	552	3.16E-04	619	2.63E-04	686	2.91E-05	753	3.80E-06
419	4.64E-05	486	1.43E-04	553	3.17E-04	620	2.56E-04	687	2.78E-05	754	3.60E-06
420	5.23E-05	487	1.46E-04	554	3.16E-04	621	2.44E-04	688	2.72E-05	755	3.60E-06
421	5.65E-05	488	1.51E-04	555	3.16E-04	622	2.39E-04	689	2.61E-05	756	3.40E-06
422	6.22E-05	489	1.54E-04	556	3.16E-04	623	2.41E-04	690	2.55E-05	757	3.40E-06
423	6.92E-05	490	1.60E-04	557	3.16E-04	624	2.49E-04	691	2.48E-05	758	3.30E-06
424	7.55E-05	491	1.65E-04	558	3.14E-04	625	2.54E-04	692	2.41E-05	759	3.10E-06
425	8.21E-05	492	1.70E-04	559	3.13E-04	626	2.58E-04	693	2.33E-05	760	3.10E-06
426	9.30E-05	493	1.75E-04	560	3.11E-04	627	2.64E-04	694	2.28E-05	761	3.20E-06
427	1.03E-04	494	1.81E-04	561	3.13E-04	628	2.96E-04	695	2.18E-05	762	3.00E-06
428	1.14E-04	495	1.87E-04	562	3.10E-04	629	4.61E-04	696	2.12E-05	763	2.90E-06
429	1.24E-04	496	1.93E-04	563	3.11E-04	630	8.33E-04	697	2.04E-05	764	2.70E-06
430	1.36E-04	497	2.00E-04	564	3.09E-04	631	9.88E-04	698	1.99E-05	765	2.60E-06
431	1.48E-04	498	2.06E-04	565	3.08E-04	632	7.00E-04	699	1.93E-05	766	2.70E-06
432	1.60E-04	499	2.13E-04	566	3.09E-04	633	4.48E-04	700	1.87E-05	767	2.40E-06
433	1.75E-04	500	2.20E-04	567	3.07E-04	634	5.51E-04	701	1.81E-05	768	2.70E-06
434	1.89E-04	501	2.25E-04	568	3.07E-04	635	7.08E-04	702	1.76E-05	769	2.50E-06
435	2.05E-04	502	2.32E-04	569	3.06E-04	636	5.30E-04	703	1.70E-05	770	2.30E-06
436	2.22E-04	503	2.37E-04	570	3.05E-04	637	3.00E-04	704	1.64E-05	771	2.20E-06
437	2.40E-04	504	2.42E-04	571	3.03E-04	638	2.02E-04	705	1.60E-05	772	2.10E-06
438	2.61E-04	505	2.48E-04	572	3.01E-04	639	1.64E-04	706	1.52E-05	773	2.30E-06
439	2.88E-04	506	2.52E-04	573	3.01E-04	640	1.48E-04	707	1.50E-05	774	2.00E-06
440	3.15E-04	507	2.59E-04	574	2.99E-04	641	1.37E-04	708	1.47E-05	775	2.00E-06
441	3.40E-04	508	2.62E-04	575	2.97E-04	642	1.31E-04	709	1.42E-05	776	2.00E-06
442	3.68E-04	509	2.68E-04	576	2.95E-04	643	1.27E-04	710	1.36E-05	777	1.90E-06
443	3.99E-04	510	2.70E-04	577	2.94E-04	644	1.25E-04	711	1.33E-05	778	2.00E-06
444	4.27E-04	511	2.75E-04	578	2.92E-04	645	1.26E-04	712	1.29E-05	779	2.00E-06
445	4.57E-04	512	2.78E-04	579	2.90E-04	646	1.64E-04	713	1.26E-05	780	2.00E-06
446	4.81E-04	513	2.81E-04	580	2.89E-04	647	2.40E-04	714	1.23E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	TKBEAM2B @30W5000K	Sample ID	250903025-S1
Operate time (Min.)	30	Stabilization time (Min.)	60
Temperature (°C)	25.0	Humidity (%RH)	40.8

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	0.257	30.6	0.993
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

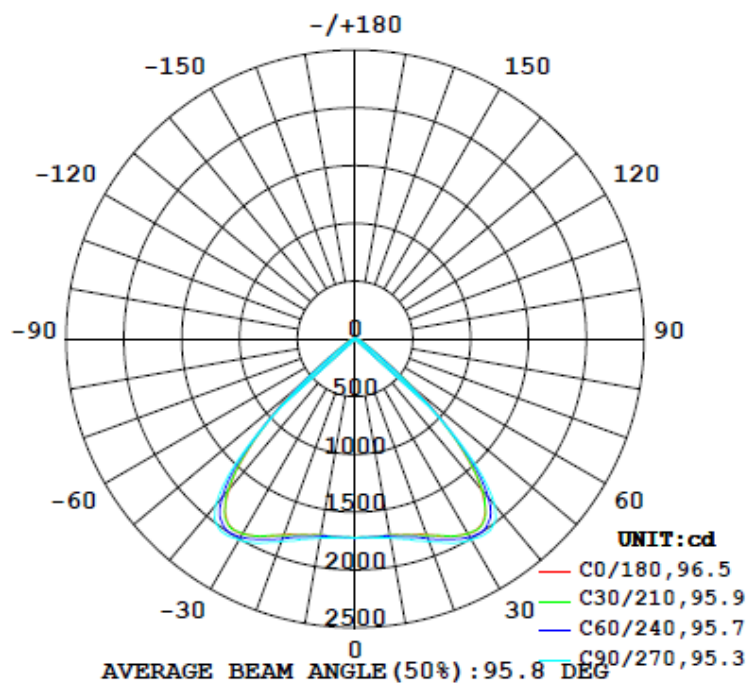
Test Result

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°)
4093	96.4	109.4	70.6	93.3	133.8	99.4%

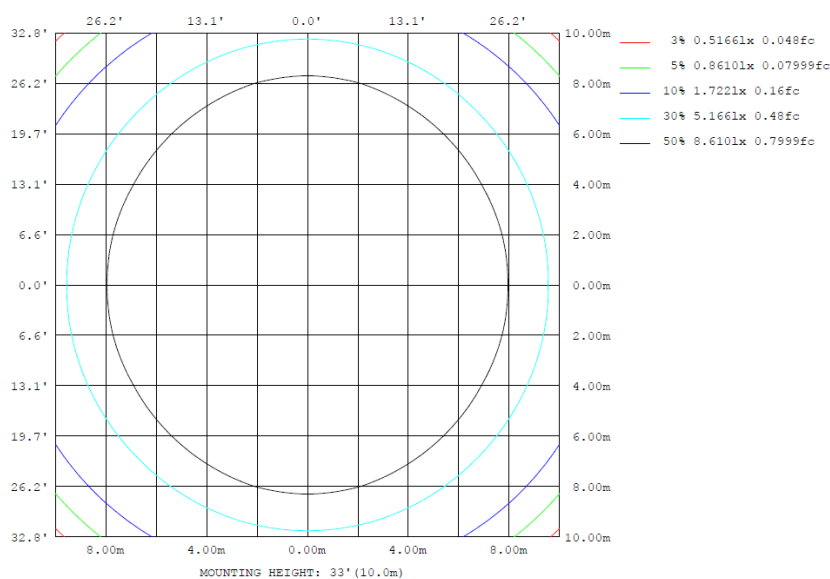
4.2 Goniophotometer Test

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	1728	1733	1750	1733	1728	1733	1750	1733	0- 10	164.8	164.8	4.03,4.03
20	1802	1825	1867	1825	1802	1825	1867	1825	10- 20	504.7	669.4	16.4,16.4
30	1950	1967	2009	1967	1950	1967	2009	1967	20- 30	883.7	1553	37.9,37.9
40	1699	1739	1877	1739	1699	1739	1877	1739	30- 40	1213	2767	67.6,67.6
50	640.7	604.5	516.1	604.5	640.7	604.5	516.1	604.5	40- 50	939.1	3706	90.5,90.5
60	128.5	113.1	79.33	113.1	128.5	113.1	79.33	113.1	50- 60	233.3	3939	96.2,96.2
70	61.87	52.55	39.70	52.55	61.87	52.55	39.70	52.55	60- 70	73.00	4012	98.98
80	19.13	25.26	24.10	25.26	19.13	25.26	24.10	25.26	70- 80	38.64	4051	99.99
90	3.085	12.38	13.45	12.38	3.085	12.38	13.45	12.38	80- 90	17.82	4068	99.4,99.4
100	2.208	5.480	11.24	5.480	2.208	5.480	11.24	5.480	90-100	7.409	4076	99.6,99.6
110	1.824	1.417	4.923	1.417	1.824	1.417	4.923	1.417	100-110	3.559	4079	99.7,99.7
120	3.641	1.228	1.042	1.228	3.641	1.228	1.042	1.228	110-120	1.707	4081	99.7,99.7
130	7.295	1.605	1.322	1.605	7.295	1.605	1.322	1.605	120-130	1.564	4083	99.8,99.8
140	9.981	3.115	2.834	3.115	9.981	3.115	2.834	3.115	130-140	2.352	4085	99.8,99.8
150	10.85	4.251	3.780	4.251	10.85	4.251	3.780	4.251	140-150	2.970	4088	99.9,99.9
160	10.56	4.251	3.969	4.251	10.56	4.251	3.969	4.251	150-160	2.347	4090	99.9,99.9
170	15.45	6.517	5.575	6.517	15.45	6.517	5.575	6.517	160-170	1.765	4092	100,100
180	16.32	7.180	6.143	7.180	16.32	7.180	6.143	7.180	170-180	0.7925	4093	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	164.79	0-10	164.79	4.03%
10-20	504.65	0-20	669.44	16.36%
20-30	883.70	0-30	1553.14	37.95%
30-40	1213.47	0-40	2766.61	67.61%
40-50	939.11	0-50	3705.72	90.56%
50-60	233.27	0-60	3938.99	96.26%
60-70	73.00	0-70	4011.99	98.04%
70-80	38.64	0-80	4050.63	98.99%
80-90	17.82	0-90	4068.45	99.42%
90-100	7.41	0-100	4075.86	99.60%
100-110	3.56	0-110	4079.42	99.69%
110-120	1.71	0-120	4081.13	99.73%
120-130	1.56	0-130	4082.69	99.77%
130-140	2.35	0-140	4085.04	99.83%
140-150	2.97	0-150	4088.01	99.90%
150-160	2.35	0-160	4090.36	99.96%
160-170	1.76	0-170	4092.12	100.00%
170-180	0.80	0-180	4092.92	100.02%

4.2 Goniophotometer Test

Luminous Distribution Intensity Data

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1722	1726	1721	1717	1726	1726	1724	1726	1726	1717	1721	1726	1722	1726	1721	1717	1726	1726	1724
5	1723	1722	1720	1714	1720	1726	1726	1726	1720	1714	1720	1722	1723	1722	1720	1714	1720	1726	1726
10	1728	1735	1726	1733	1737	1745	1750	1745	1737	1733	1726	1735	1728	1735	1726	1733	1737	1745	1750
15	1753	1750	1758	1781	1775	1786	1796	1786	1775	1781	1758	1753	1750	1758	1781	1775	1786	1796	1796
20	1802	1816	1808	1825	1840	1853	1867	1853	1840	1825	1808	1816	1802	1816	1808	1825	1840	1853	1867
25	1887	1894	1884	1901	1917	1933	1950	1933	1917	1901	1884	1894	1887	1894	1884	1901	1917	1933	1950
30	1950	1961	1949	1967	1983	1993	2009	1993	1983	1967	1949	1961	1950	1961	1949	1967	1983	1993	2009
35	1932	1941	1936	1963	1983	2020	2028	2020	1983	1963	1936	1941	1932	1941	1936	1963	1983	2020	2028
40	1699	1705	1715	1739	1791	1860	1877	1860	1791	1739	1715	1705	1699	1705	1715	1739	1791	1860	1877
45	1240	1233	1233	1255	1274	1297	1304	1297	1274	1255	1233	1233	1240	1233	1233	1255	1274	1297	1304
50	641	639	620	605	582	536	516	536	582	605	620	639	641	639	620	605	582	536	516
55	244	251	237	227	213	188	172	188	213	227	237	251	244	251	237	227	213	188	172
60	128	130	122	113	100	87.0	79.3	87.0	100	113	122	130	128	130	122	113	100	87.0	79.3
65	87.2	86.1	79.6	72.6	62.9	53.7	49.9	53.7	62.9	72.6	79.6	86.1	87.2	86.1	79.6	72.6	62.9	53.7	49.9
70	61.9	62.4	58.2	52.6	44.9	38.9	39.7	38.9	44.9	52.6	58.2	62.4	61.9	62.4	58.2	52.6	44.9	38.9	39.7
75	46.2	40.3	39.4	37.5	33.0	28.3	29.3	28.3	33.0	37.5	39.4	40.3	46.2	40.3	39.4	37.5	33.0	28.3	29.3
80	19.1	22.4	25.1	25.3	28.1	25.5	24.1	25.5	28.1	25.3	25.1	22.4	19.1	22.4	25.1	25.3	28.1	25.5	24.1
85	10.8	12.7	16.7	16.3	16.8	15.6	20.9	15.6	16.8	16.3	16.7	12.7	10.8	12.7	16.7	16.3	16.8	15.6	20.9
90	3.08	6.42	13.7	12.4	10.2	9.99	13.4	9.99	10.2	12.4	13.7	6.42	3.08	6.42	13.7	12.4	10.2	9.99	13.4
95	2.50	3.18	5.96	6.62	6.99	7.96	11.7	7.96	6.99	6.62	5.96	3.18	2.50	3.18	5.96	6.62	6.99	7.96	11.7
100	2.21	2.01	2.94	5.48	7.27	9.47	11.2	9.47	7.27	5.48	2.94	2.01	2.21	2.01	2.94	5.48	7.27	9.47	11.2
105	1.92	1.73	1.61	1.99	3.13	5.22	6.73	5.22	3.13	1.99	1.61	1.73	1.92	1.73	1.61	1.99	3.13	5.22	6.73
110	1.82	1.72	1.42	1.42	1.98	3.61	4.92	3.61	1.98	1.42	1.42	1.72	1.82	1.72	1.42	1.42	1.98	3.61	4.92
115	1.92	1.72	1.42	1.23	1.14	2.00	2.57	2.00	1.14	1.23	1.42	1.72	1.92	1.72	1.42	1.23	1.14	2.00	2.57
120	3.64	1.72	1.42	1.23	1.13	1.04	1.04	1.13	1.23	1.42	1.72	3.64	1.72	1.42	1.23	1.13	1.04	1.04	1.04
125	5.94	1.91	1.42	1.23	1.13	1.14	1.04	1.14	1.13	1.23	1.42	1.91	5.94	1.91	1.42	1.23	1.13	1.14	1.04
130	7.30	2.59	1.80	1.61	1.41	1.42	1.32	1.42	1.41	1.61	1.80	2.59	7.30	2.59	1.80	1.61	1.41	1.42	1.32
135	8.93	3.45	2.65	2.36	2.17	2.18	2.07	2.18	2.17	2.36	2.65	3.45	8.93	3.45	2.65	2.36	2.17	2.18	2.07
140	9.98	4.69	3.68	3.12	3.02	3.03	2.83	3.03	3.02	3.12	3.68	4.69	9.98	4.69	3.68	3.12	3.02	3.03	2.83
145	10.8	5.94	4.53	4.15	3.96	3.79	3.69	3.79	3.96	4.15	4.53	5.94	10.8	5.94	4.53	4.15	3.96	3.79	3.69
150	10.8	6.22	4.91	4.25	4.06	3.98	3.78	3.98	4.06	4.25	4.91	6.22	10.8	6.22	4.91	4.25	4.06	3.98	3.78
155	10.9	6.22	4.82	4.25	4.06	3.98	3.97	3.98	4.06	4.25	4.82	6.22	10.9	6.22	4.82	4.25	4.06	3.98	3.97
160	10.6	5.65	4.54	4.25	4.06	3.98	3.97	3.98	4.06	4.25	4.54	5.65	10.6	5.65	4.54	4.25	4.06	3.98	3.97
165	13.8	8.33	6.22	5.38	5.00	4.92	4.72	4.92	5.00	5.38	6.22	8.33	13.8	8.33	6.22	5.38	5.00	4.92	4.72
170	15.5	10.5	7.74	6.52	6.04	5.87	5.57	5.87	6.04	6.52	7.74	10.5	15.5	10.5	7.74	6.52	6.04	5.87	5.57
175	16.3	11.3	8.41	7.18	6.42	6.25	6.23	6.25	6.42	7.18	8.41	11.3	16.3	11.3	8.41	7.18	6.42	6.25	6.23
180	16.3	11.3	8.50	7.18	6.52	6.25	6.14	6.25	6.52	7.18	8.50	11.3	16.3	11.3	8.50	7.18	6.52	6.25	6.14

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	1726	1726	1717	1721	1726														
5	1726	1720	1714	1720	1722														
10	1745	1737	1733	1726	1735														
15	1786	1775	1781	1758	1750														
20	1853	1840	1825	1808	1816														
25	1933	1917	1901	1884	1894														
30	1993	1983	1967	1949	1961														
35	2020	1983	1963	1936	1941														
40	1860	1791	1739	1715	1705														
45	1297	1274	1255	1233	1233														
50	536	582	605	620	639														
55	188	213	227	237	251														
60	87.0	100	113	122	130														
65	53.7	62.9	72.6	79.6	86.1														
70	38.9	44.9	52.6	58.2	62.4														
75	28.3	33.0	37.5	39.4	40.3														
80	25.5	28.1	25.3	25.1	22.4														
85	15.6	16.8	16.3	16.7	12.7														
90	9.99	10.2	12.4	13.7	6.42														
95	7.96	6.99	6.62	5.96	3.18														
100	9.47	7.27	5.48	2.94	2.01														
105	5.22	3.13	1.99	1.61	1.73														
110	3.61	1.98	1.42	1.42	1.72														
115	2.00	1.14	1.23	1.42	1.72														
120	1.04	1.13	1.23	1.42	1.72														
125	1.14	1.13	1.23	1.42	1.91														
130	1.42	1.41	1.61	1.80	2.59														
135	2.18	2.17	2.36	2.65	3.45														
140	3.03	3.02	3.12	3.68	4.69														
145	3.79	3.96	4.15	4.53	5.94														
150	3.98	4.06	4.25	4.91	6.22														
155	3.98	4.06	4.25	4.82	6.22														
160	3.98	4.06	4.25	4.54	5.65														
165	4.92	5.00	5.38	6.22	8.33														
170	5.87	6.04	6.52	7.74	10.5														
175	6.25	6.42	7.18	8.41	11.3														
180	6.25	6.52	7.18	8.50	11.3														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	TKBEAM2B @30W5000K	Sample ID	250903025-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	0.257	30.6	0.993	9.45

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*****