

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: 2025-09-25

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		2430
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	152.8
			95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.9
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	10.38
Power Factor (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	0.9	120V	0.985
Allowable CCTs* (K) (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019	7 steps	3465±245	3438
			4 steps	3465±124	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		95.2
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		80
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		103
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		0.135
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		15.9
(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 @15W3500K	-	250903025-S1
2	Goniophotometer Test	2025-09-16	TKBEAM2B @15W3500K	-	250903025-S1
3	THD and PF Test	2025-09-16	TKBEAM2B @15W3500K	-	250903025-S1

Remark (If any):

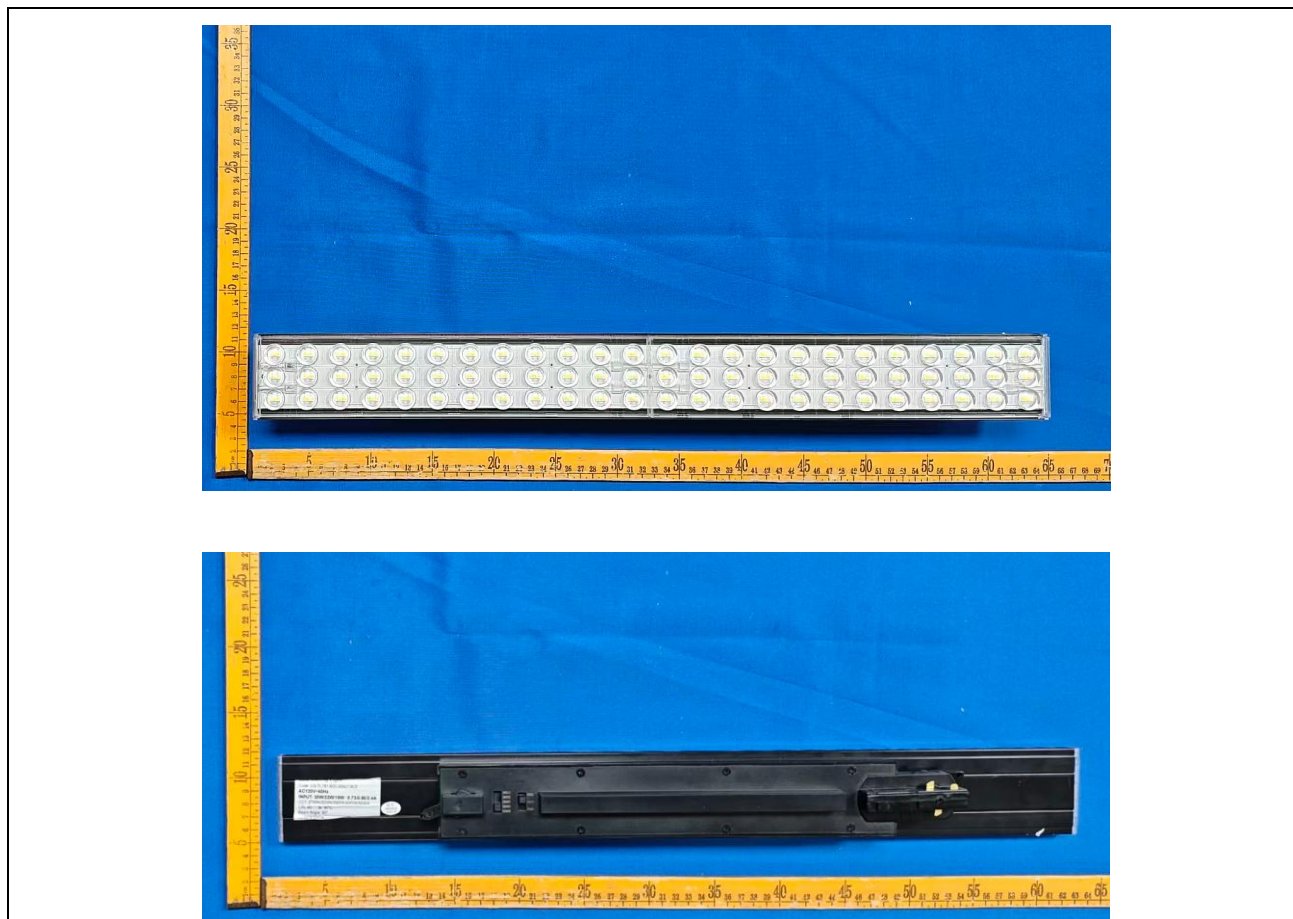
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3. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. Government.

3.0 Product Description

Luminaire Description: Model No. TKBEAM2B @15W3500K, 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 @15W3500K	Sample ID	250903025-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

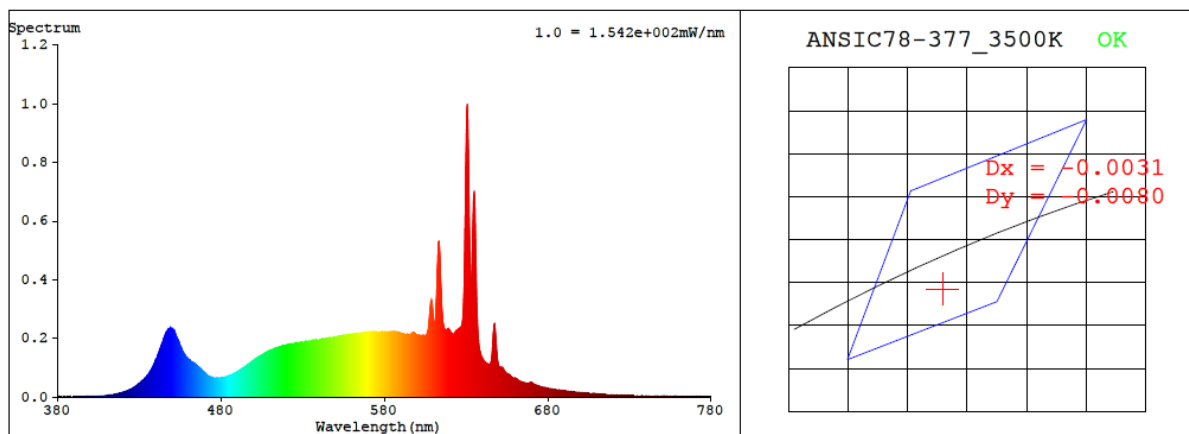
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.135	15.9	0.985

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
3438	95.2	80	-0.0029	3.6	91	103	-3%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4058$ $y = 0.3845$ / $u' = 0.2386$ $v' = 0.5087$ ($duv = -2.85e-03$)

CCT= 3438K Prcp WL: $L_d = 582.4nm$ Purity=37.2%

Peak WL: $L_p = 631nm$ FWHM: $\approx 3.5nm$ Ratio: R=23.1% G=73.7% B=3.2%

Render Index: $R_a = 95.2$ AvgR = 93.0 TM30: $R_f = 91$ $R_g = 103$

EEL: 0.09418 A++ Highest

R1 =99 R2 =96 R3 =92 R4 =94 R5 =97 R6 =95 R7 =95

R8 =93 R9 =80 R10=89 R11=93 R12=82 R13=98 R14=94 R15=97

4.1 Integrating Sphere Test

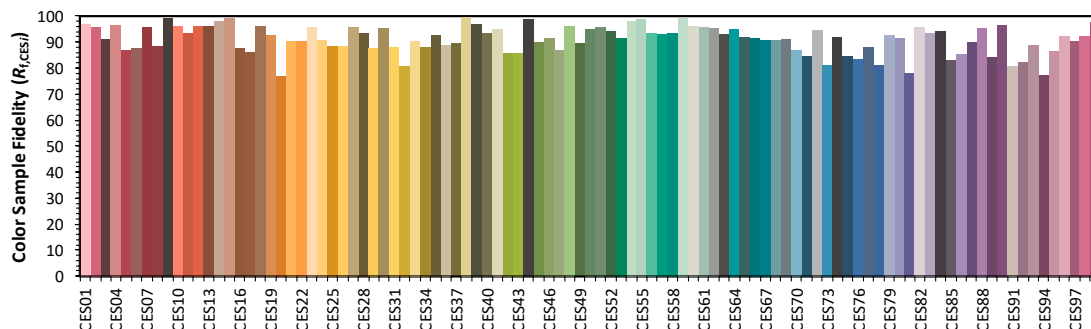
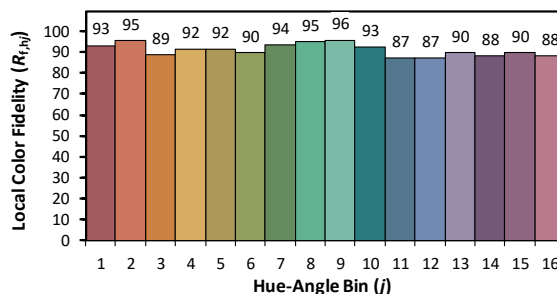
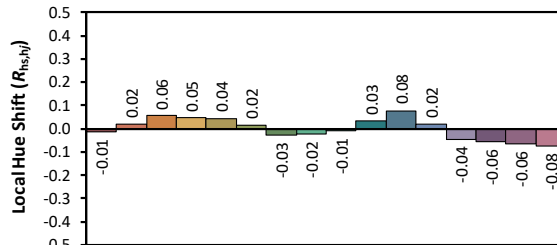
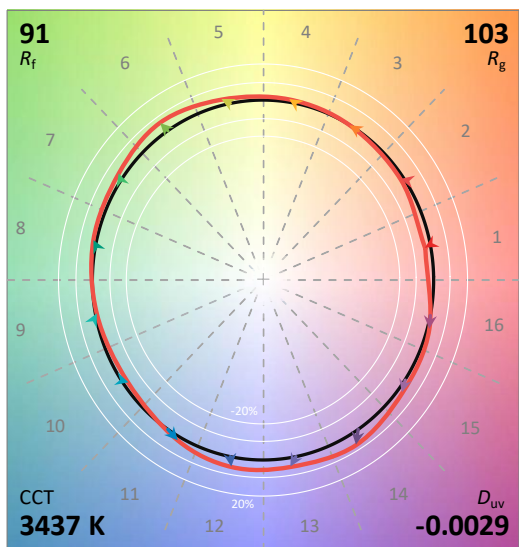
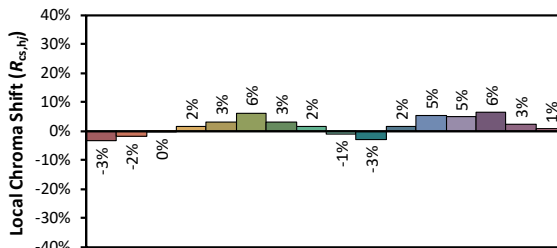
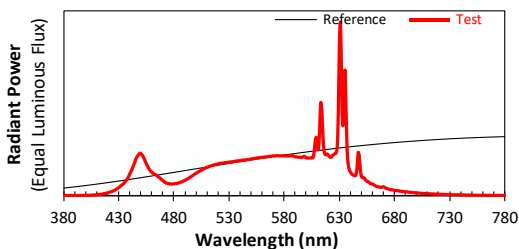
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/9/25

Model: TKBEAM2B @15W3000K



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

x 0.4057
 y 0.3844
 u' 0.2386
 v' 0.5087

CIE 13.3-1995
(CRI)
 R_a 95
 R_g 80

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	2.80E-06	447	2.23E-04	514	1.67E-04	581	2.22E-04	648	2.20E-04	715	9.50E-06
381	1.80E-06	448	2.32E-04	515	1.70E-04	582	2.22E-04	649	1.43E-04	716	9.20E-06
382	1.30E-06	449	2.37E-04	516	1.72E-04	583	2.22E-04	650	1.07E-04	717	8.90E-06
383	1.20E-06	450	2.33E-04	517	1.73E-04	584	2.23E-04	651	1.01E-04	718	8.90E-06
384	1.50E-06	451	2.27E-04	518	1.75E-04	585	2.23E-04	652	1.01E-04	719	8.40E-06
385	0.00E+00	452	2.17E-04	519	1.76E-04	586	2.23E-04	653	9.38E-05	720	8.20E-06
386	2.00E-06	453	2.03E-04	520	1.77E-04	587	2.22E-04	654	8.49E-05	721	7.80E-06
387	8.00E-07	454	1.89E-04	521	1.80E-04	588	2.22E-04	655	8.03E-05	722	7.60E-06
388	1.20E-06	455	1.75E-04	522	1.81E-04	589	2.19E-04	656	7.82E-05	723	7.40E-06
389	1.10E-06	456	1.64E-04	523	1.81E-04	590	2.17E-04	657	7.38E-05	724	7.40E-06
390	1.50E-06	457	1.51E-04	524	1.81E-04	591	2.17E-04	658	6.83E-05	725	7.10E-06
391	9.00E-07	458	1.43E-04	525	1.83E-04	592	2.15E-04	659	6.54E-05	726	6.80E-06
392	9.00E-07	459	1.35E-04	526	1.85E-04	593	2.15E-04	660	6.53E-05	727	6.60E-06
393	1.00E-06	460	1.29E-04	527	1.85E-04	594	2.15E-04	661	6.18E-05	728	6.50E-06
394	1.40E-06	461	1.26E-04	528	1.85E-04	595	2.13E-04	662	5.68E-05	729	6.10E-06
395	1.60E-06	462	1.21E-04	529	1.87E-04	596	2.14E-04	663	5.38E-05	730	6.00E-06
396	1.40E-06	463	1.18E-04	530	1.87E-04	597	2.18E-04	664	5.17E-05	731	5.60E-06
397	1.60E-06	464	1.14E-04	531	1.88E-04	598	2.20E-04	665	4.97E-05	732	5.60E-06
398	1.70E-06	465	1.08E-04	532	1.89E-04	599	2.15E-04	666	4.88E-05	733	5.40E-06
399	1.50E-06	466	1.04E-04	533	1.90E-04	600	2.11E-04	667	4.72E-05	734	5.20E-06
400	2.10E-06	467	9.88E-05	534	1.91E-04	601	2.11E-04	668	4.73E-05	735	4.90E-06
401	2.40E-06	468	9.38E-05	535	1.91E-04	602	2.10E-04	669	4.89E-05	736	4.80E-06
402	2.90E-06	469	8.77E-05	536	1.93E-04	603	2.10E-04	670	5.00E-05	737	4.70E-06
403	2.20E-06	470	8.41E-05	537	1.94E-04	604	2.11E-04	671	4.58E-05	738	4.70E-06
404	2.90E-06	471	7.71E-05	538	1.95E-04	605	2.10E-04	672	4.22E-05	739	4.40E-06
405	3.10E-06	472	7.29E-05	539	1.95E-04	606	2.14E-04	673	4.03E-05	740	4.10E-06
406	3.40E-06	473	7.06E-05	540	1.94E-04	607	2.41E-04	674	3.82E-05	741	4.30E-06
407	4.00E-06	474	6.86E-05	541	1.97E-04	608	3.03E-04	675	3.64E-05	742	4.10E-06
408	4.30E-06	475	6.72E-05	542	1.99E-04	609	3.25E-04	676	3.46E-05	743	4.00E-06
409	4.80E-06	476	6.58E-05	543	1.98E-04	610	2.71E-04	677	3.37E-05	744	3.80E-06
410	5.40E-06	477	6.57E-05	544	1.99E-04	611	2.57E-04	678	3.27E-05	745	3.80E-06
411	6.00E-06	478	6.54E-05	545	2.00E-04	612	3.65E-04	679	3.12E-05	746	3.60E-06
412	7.10E-06	479	6.58E-05	546	2.01E-04	613	5.18E-04	680	3.01E-05	747	3.60E-06
413	7.80E-06	480	6.63E-05	547	2.01E-04	614	4.79E-04	681	2.89E-05	748	3.20E-06
414	8.40E-06	481	6.72E-05	548	2.02E-04	615	3.32E-04	682	2.80E-05	749	3.30E-06
415	9.50E-06	482	6.80E-05	549	2.04E-04	616	2.51E-04	683	2.74E-05	750	3.00E-06
416	1.08E-05	483	6.92E-05	550	2.04E-04	617	2.30E-04	684	2.67E-05	751	3.10E-06
417	1.19E-05	484	7.12E-05	551	2.06E-04	618	2.29E-04	685	2.53E-05	752	2.80E-06
418	1.34E-05	485	7.33E-05	552	2.07E-04	619	2.33E-04	686	2.45E-05	753	2.90E-06
419	1.45E-05	486	7.53E-05	553	2.09E-04	620	2.27E-04	687	2.39E-05	754	2.80E-06
420	1.65E-05	487	7.73E-05	554	2.09E-04	621	2.18E-04	688	2.29E-05	755	2.70E-06
421	1.84E-05	488	8.08E-05	555	2.11E-04	622	2.14E-04	689	2.25E-05	756	2.60E-06
422	2.01E-05	489	8.34E-05	556	2.11E-04	623	2.18E-04	690	2.17E-05	757	2.80E-06
423	2.20E-05	490	8.64E-05	557	2.12E-04	624	2.26E-04	691	2.15E-05	758	2.60E-06
424	2.49E-05	491	8.99E-05	558	2.13E-04	625	2.30E-04	692	2.03E-05	759	2.40E-06
425	2.70E-05	492	9.33E-05	559	2.14E-04	626	2.35E-04	693	1.97E-05	760	2.50E-06
426	3.07E-05	493	9.73E-05	560	2.14E-04	627	2.39E-04	694	1.92E-05	761	2.50E-06
427	3.37E-05	494	1.01E-04	561	2.15E-04	628	2.75E-04	695	1.84E-05	762	2.50E-06
428	3.82E-05	495	1.05E-04	562	2.15E-04	629	4.65E-04	696	1.78E-05	763	2.10E-06
429	4.17E-05	496	1.09E-04	563	2.17E-04	630	8.64E-04	697	1.72E-05	764	1.90E-06
430	4.69E-05	497	1.13E-04	564	2.17E-04	631	9.64E-04	698	1.66E-05	765	2.10E-06
431	5.17E-05	498	1.17E-04	565	2.17E-04	632	6.17E-04	699	1.60E-05	766	2.10E-06
432	5.64E-05	499	1.22E-04	566	2.19E-04	633	3.90E-04	700	1.56E-05	767	2.00E-06
433	6.13E-05	500	1.26E-04	567	2.20E-04	634	5.49E-04	701	1.50E-05	768	1.90E-06
434	6.66E-05	501	1.29E-04	568	2.20E-04	635	7.01E-04	702	1.48E-05	769	1.80E-06
435	7.40E-05	502	1.34E-04	569	2.22E-04	636	4.79E-04	703	1.40E-05	770	1.80E-06
436	8.13E-05	503	1.37E-04	570	2.22E-04	637	2.52E-04	704	1.37E-05	771	1.80E-06
437	8.95E-05	504	1.40E-04	571	2.22E-04	638	1.73E-04	705	1.33E-05	772	1.80E-06
438	9.89E-05	505	1.43E-04	572	2.22E-04	639	1.45E-04	706	1.28E-05	773	1.80E-06
439	1.12E-04	506	1.47E-04	573	2.23E-04	640	1.31E-04	707	1.25E-05	774	1.50E-06
440	1.25E-04	507	1.51E-04	574	2.23E-04	641	1.23E-04	708	1.22E-05	775	1.60E-06
441	1.37E-04	508	1.53E-04	575	2.23E-04	642	1.17E-04	709	1.18E-05	776	1.40E-06
442	1.51E-04	509	1.57E-04	576	2.22E-04	643	1.14E-04	710	1.14E-05	777	1.40E-06
443	1.67E-04	510	1.58E-04	577	2.22E-04	644	1.12E-04	711	1.09E-05	778	1.50E-06
444	1.82E-04	511	1.61E-04	578	2.22E-04	645	1.14E-04	712	1.07E-05	779	1.40E-06
445	1.99E-04	512	1.64E-04	579	2.23E-04	646	1.58E-04	713	1.02E-05	780	1.40E-06
446	2.13E-04	513	1.66E-04	580	2.22E-04	647	2.40E-04	714	1.00E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	TKBEAM2B @15W3500K	Sample ID	250903025-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	0.135	15.9	0.985
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

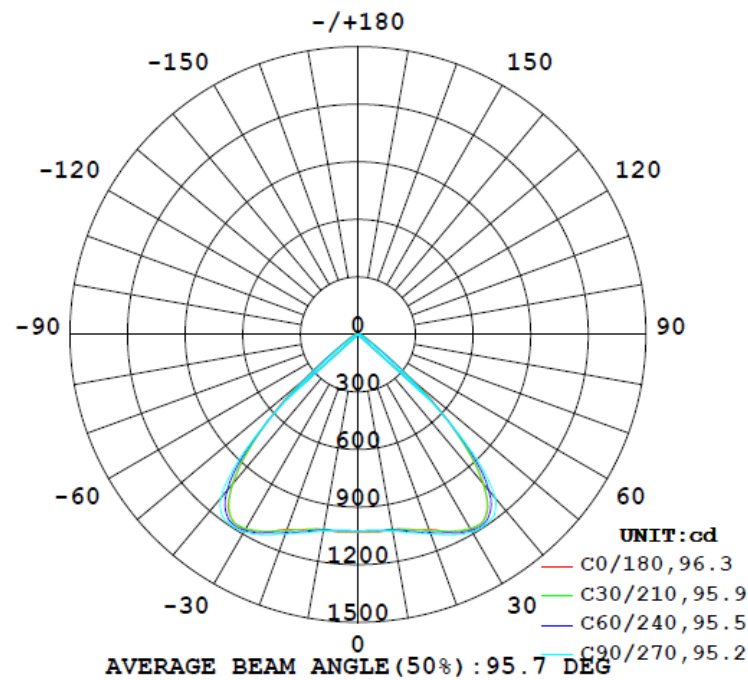
Test Result

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°)
2430	95.9	109.3	70.5	93.3	152.8	99.4%

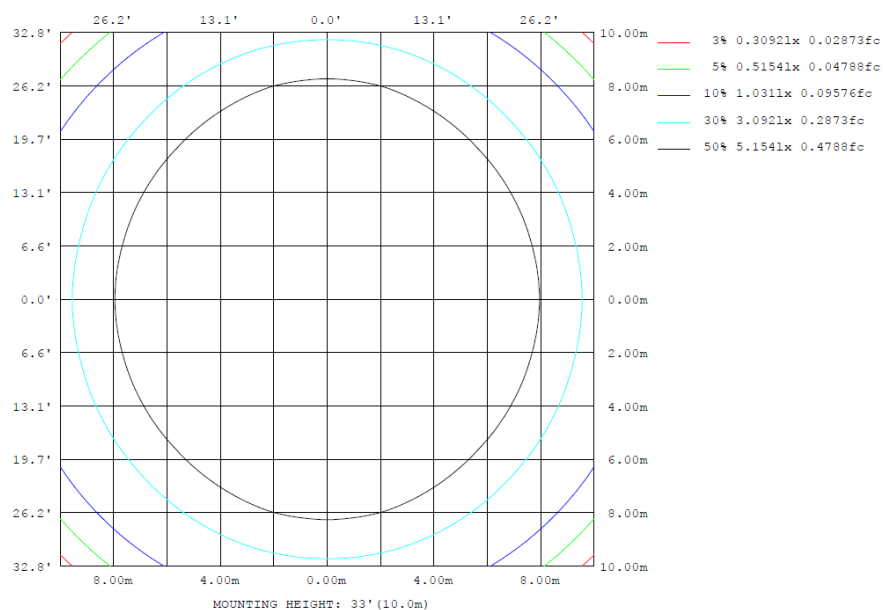
4.2 Goniophotometer Test

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	%lum, lamp
10	1034	1032	1039	1032	1034	1032	1039	1032	0- 10	98.28	98.28	4.04,4.04
20	1082	1091	1106	1091	1082	1091	1106	1091	10- 20	301.2	399.4	16.4,16.4
30	1171	1170	1187	1170	1171	1170	1187	1170	20- 30	527.3	926.7	38.1,38.1
40	1017	1027	1112	1027	1017	1027	1112	1027	30- 40	720.7	1647	67.8,67.8
50	380.8	351.7	304.0	351.7	380.8	351.7	304.0	351.7	40- 50	554.9	2202	90.6,90.6
60	75.78	65.56	46.24	65.56	75.78	65.56	46.24	65.56	50- 60	136.5	2339	96.2,96.2
70	35.87	30.89	23.21	30.89	35.87	30.89	23.21	30.89	60- 70	42.76	2382	98.98
80	11.35	14.96	14.29	14.96	11.35	14.96	14.29	14.96	70- 80	22.77	2404	98.9,98.9
90	2.050	7.286	8.162	7.286	2.050	7.286	8.162	7.286	80- 90	10.60	2415	99.4,99.4
100	1.546	3.313	6.434	3.313	1.546	3.313	6.434	3.313	90-100	4.499	2419	99.6,99.6
110	1.257	1.038	3.123	1.038	1.257	1.038	3.123	1.038	100-110	2.266	2422	99.7,99.7
120	2.217	0.8516	0.8520	0.8516	2.217	0.8516	0.8520	0.8516	110-120	1.179	2423	99.7,99.7
130	4.154	1.040	0.8516	1.040	4.154	1.040	0.8516	1.040	120-130	1.068	2424	99.8,99.8
140	5.798	1.798	1.608	1.798	5.798	1.798	1.608	1.798	130-140	1.339	2425	99.8,99.8
150	6.379	2.555	2.366	2.555	6.379	2.555	2.366	2.555	140-150	1.733	2427	99.9,99.9
160	6.379	2.555	2.460	2.555	6.379	2.555	2.460	2.555	150-160	1.410	2428	99.9,99.9
170	9.182	3.688	3.303	3.688	9.182	3.688	3.303	3.688	160-170	1.038	2429	100,100
180	9.665	4.069	3.501	4.069	9.665	4.069	3.501	4.069	170-180	0.4618	2430	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	98.28	0-10	98.28	4.05%
10-20	301.15	0-20	399.43	16.44%
20-30	527.32	0-30	926.75	38.15%
30-40	720.69	0-40	1647.44	67.81%
40-50	554.85	0-50	2202.29	90.65%
50-60	136.52	0-60	2338.81	96.27%
60-70	42.76	0-70	2381.57	98.03%
70-80	22.77	0-80	2404.34	98.97%
80-90	10.60	0-90	2414.94	99.40%
90-100	4.50	0-100	2419.44	99.59%
100-110	2.27	0-110	2421.71	99.68%
110-120	1.18	0-120	2422.89	99.73%
120-130	1.07	0-130	2423.96	99.77%
130-140	1.34	0-140	2425.30	99.83%
140-150	1.73	0-150	2427.03	99.90%
150-160	1.41	0-160	2428.44	99.96%
160-170	1.04	0-170	2429.48	100.00%
170-180	0.46	0-180	2429.94	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	1031	1028	1027	1025	1026	1027	1026	1027	1026	1025	1027	1028	1031	1028	1027	1025	1026	1027	1026
5	1033	1027	1031	1023	1026	1032	1025	1032	1026	1023	1031	1027	1033	1027	1031	1023	1026	1032	1025
10	1034	1027	1032	1032	1035	1042	1039	1042	1035	1032	1032	1027	1034	1027	1032	1032	1035	1042	1039
15	1051	1044	1054	1054	1064	1066	1071	1066	1064	1054	1054	1044	1051	1044	1054	1054	1064	1066	1071
20	1082	1083	1086	1091	1098	1107	1106	1107	1098	1091	1086	1083	1082	1083	1086	1091	1098	1107	1106
25	1134	1130	1132	1134	1140	1153	1153	1153	1140	1134	1132	1130	1134	1130	1132	1134	1140	1153	1153
30	1171	1164	1168	1170	1179	1186	1187	1186	1179	1170	1168	1164	1171	1164	1168	1170	1179	1186	1187
35	1159	1159	1158	1165	1176	1190	1190	1190	1176	1165	1158	1159	1159	1158	1158	1165	1176	1190	1190
40	1017	1011	1019	1027	1060	1104	1112	1104	1060	1027	1019	1011	1017	1011	1019	1027	1060	1104	1112
45	733	728	731	738	753	766	769	766	753	738	731	728	733	728	731	738	753	766	769
50	381	373	365	352	343	315	304	315	343	352	365	373	381	373	365	352	343	315	304
55	144	144	138	131	125	110	101	110	125	131	138	144	144	144	138	131	125	110	101
60	75.8	75.6	71.1	65.6	58.8	51.1	46.2	51.1	58.8	65.6	71.1	75.6	75.8	75.6	71.1	65.6	58.8	51.1	46.2
65	51.9	50.2	46.8	42.6	36.7	31.9	29.6	31.9	36.7	42.6	46.8	50.2	51.9	50.2	46.8	42.6	36.7	31.9	29.6
70	35.9	36.5	34.2	30.9	26.5	23.3	23.2	23.3	26.5	30.9	34.2	36.5	35.9	36.5	34.2	30.9	26.5	23.3	23.2
75	27.7	23.6	23.1	21.9	19.4	16.9	17.3	16.9	19.4	21.9	23.6	27.7	23.6	23.1	21.9	19.4	16.9	17.3	17.3
80	11.4	13.1	14.6	15.0	16.6	15.1	14.3	15.1	16.6	15.0	14.6	13.1	11.4	13.1	14.6	15.0	16.6	15.1	14.3
85	6.58	7.68	9.99	9.76	10.1	9.15	11.9	9.15	10.1	9.76	9.99	7.68	6.58	7.68	9.99	9.76	10.1	9.15	11.9
90	2.05	4.03	8.17	7.29	6.10	6.01	8.16	6.01	6.10	7.29	8.17	4.03	2.05	4.03	8.17	7.29	6.10	6.01	8.16
95	1.64	2.02	3.71	3.98	4.27	4.48	7.19	4.48	4.27	3.98	3.71	2.02	1.64	2.02	3.71	3.98	4.27	4.48	7.19
100	1.55	1.34	2.00	3.31	4.08	5.61	6.43	5.61	4.08	3.31	2.00	1.34	1.55	1.34	2.00	3.31	4.08	5.61	6.43
105	1.35	1.25	1.14	1.24	2.01	3.34	4.08	3.34	2.01	1.24	1.14	1.25	1.35	1.25	1.14	1.24	2.01	3.34	4.08
110	1.26	1.15	1.05	1.04	1.33	2.38	3.12	2.38	1.33	1.04	1.05	1.15	1.26	1.15	1.05	1.04	1.33	2.38	3.12
115	1.26	1.15	1.05	0.85	0.86	1.34	1.81	1.34	0.86	0.85	1.05	1.15	1.26	1.15	1.05	0.85	0.86	1.34	1.81
120	2.22	1.34	1.05	0.85	0.85	0.86	0.85	0.86	0.85	0.85	1.05	1.34	2.22	1.34	1.05	0.85	0.85	0.86	0.85
125	3.38	1.34	1.05	0.95	0.85	0.86	0.85	0.86	0.85	0.95	1.05	1.34	3.38	1.34	1.05	0.95	0.85	0.86	0.85
130	4.15	1.44	1.05	1.04	0.95	0.95	0.85	0.95	0.95	1.04	1.05	1.44	4.15	1.44	1.05	1.04	0.95	0.95	0.85
135	5.02	2.01	1.52	1.14	1.23	1.24	1.13	1.24	1.23	1.14	1.52	2.01	5.02	2.01	1.52	1.14	1.23	1.24	1.13
140	5.80	2.68	2.18	1.80	1.71	1.71	1.61	1.71	1.71	1.80	2.18	2.68	5.80	2.68	2.18	1.80	1.71	1.71	1.61
145	6.38	3.35	2.66	2.36	2.28	2.10	2.08	2.10	2.28	2.36	2.66	3.35	6.38	3.35	2.66	2.36	2.28	2.10	2.08
150	6.38	3.64	2.76	2.55	2.47	2.48	2.37	2.48	2.47	2.55	2.76	3.64	6.38	3.64	2.76	2.55	2.47	2.48	2.37
155	6.38	3.54	2.85	2.55	2.47	2.48	2.46	2.48	2.47	2.55	2.85	3.54	6.38	3.54	2.85	2.55	2.47	2.48	2.46
160	6.38	3.54	2.85	2.55	2.47	2.48	2.46	2.48	2.47	2.55	2.85	3.54	6.38	3.54	2.85	2.55	2.47	2.48	2.46
165	8.22	4.88	3.61	3.12	2.85	2.67	2.65	2.67	2.85	3.12	3.61	4.88	8.22	4.88	3.61	3.12	2.85	2.67	2.65
170	9.18	6.22	4.56	3.69	3.42	3.33	3.30	3.33	3.42	3.69	4.56	6.22	9.18	6.22	4.56	3.69	3.42	3.33	3.30
175	9.57	6.61	4.85	4.07	3.70	3.62	3.50	3.62	3.70	4.07	4.85	6.61	9.57	6.61	4.85	4.07	3.70	3.62	3.50
180	9.67	6.61	4.85	4.07	3.89	3.62	3.50	3.62	3.89	4.07	4.85	6.61	9.67	6.61	4.85	4.07	3.89	3.62	3.50

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	1027	1026	1025	1027	1028														
5	1032	1026	1023	1031	1027														
10	1042	1035	1032	1032	1027														
15	1066	1064	1054	1054	1044														
20	1107	1098	1091	1086	1083														
25	1153	1140	1134	1132	1130														
30	1186	1179	1170	1168	1164														
35	1190	1176	1165	1158	1159														
40	1104	1060	1027	1019	1011														
45	766	753	738	731	728														
50	315	343	352	365	373														
55	110	125	131	138	144														
60	51.1	58.8	65.6	71.1	75.6														
65	31.9	36.7	42.6	46.8	50.2														
70	23.3	26.5	30.9	34.2	36.5														
75	16.9	19.4	21.9	23.1	23.6														
80	15.1	16.6	15.0	14.6	13.1														
85	9.15	10.1	9.76	9.99	7.68														
90	6.01	6.10	7.29	8.17	4.03														
95	4.48	4.27	3.98	3.71	2.02														
100	5.61	4.08	3.31	2.00	1.34														
105	3.34	2.01	1.24	1.14	1.25														
110	2.38	1.33	1.04	1.05	1.15														
115	1.34	0.86	0.85	1.05	1.15														
120	0.86	0.85	0.85	1.05	1.34														
125	0.86	0.85	0.95	1.05	1.34														
130	0.95	0.95	1.04	1.05	1.44														
135	1.24	1.23	1.14	1.52	2.01														
140	1.71	1.71	1.80	2.18	2.68														
145	2.10	2.28	2.36	2.66	3.35														
150	2.48	2.47	2.55	2.76	3.64														
155	2.48	2.47	2.55	2.85	3.54														
160	2.48	2.47	2.55	2.85	3.54														
165	2.67	2.85	3.12	3.61	4.88														
170	3.33	3.42	3.69	4.56	6.22														
175	3.62	3.70	4.07	4.85	6.61														
180	3.62	3.89	4.07	4.85	6.61														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	TKBEAM2B @15W3500K	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	0.135	15.9	0.985	10.38

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*****