

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		3245
Minimum Luminaire Efficacy (lm/W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Standard	Premium	137.5
			95	110	
Power (Input Wattage) (W) (Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		23.6
Total Harmonic Distortion (A%) (THD & PF – Section 4.3)		ANSI C82.77:2002 ANSI C82-77-10:2020	20.00%	120V	9.79
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	2685
			4 steps	2725±83	
Minimum CRI (Integrating Sphere – Section 4.1)		ANSI/IES LM-79:2019 CIE13.3-1995	≥80		93.1
Minimum R9 (Integrating Sphere – Section 4.1)		ANSI/IES LM-79-2019 CIE13.3-1995	≥0		57
Minimum Rf (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥70		92
Minimum Rg (Integrating Sphere – Section 4.1)		ANSI/IES TM-30-18	≥89		99
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		0.198
(Goniophotometer – Section 4.2)			Non-Worst Case		N/A
Power (Input Wattage – W)					
(Goniophotometer – Section 4.2)		ANSI/IES LM-79:2019	Worst Case		23.6
(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 @22W2700K	-	250903025-S1
2	Goniophotometer Test	2025-09-16	TKBEAM2B @22W2700K	-	250903025-S1
3	THD and PF Test	2025-09-16	TKBEAM2B @22W2700K	-	250903025-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. TKBEAM2B @22W2700K, 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 @22W2700K	Sample ID	250903025-S1
Operate time (Min.)	10	Stabilization time (Min.)	60
Temperature (°C)	25.4	Humidity (%RH)	41.0

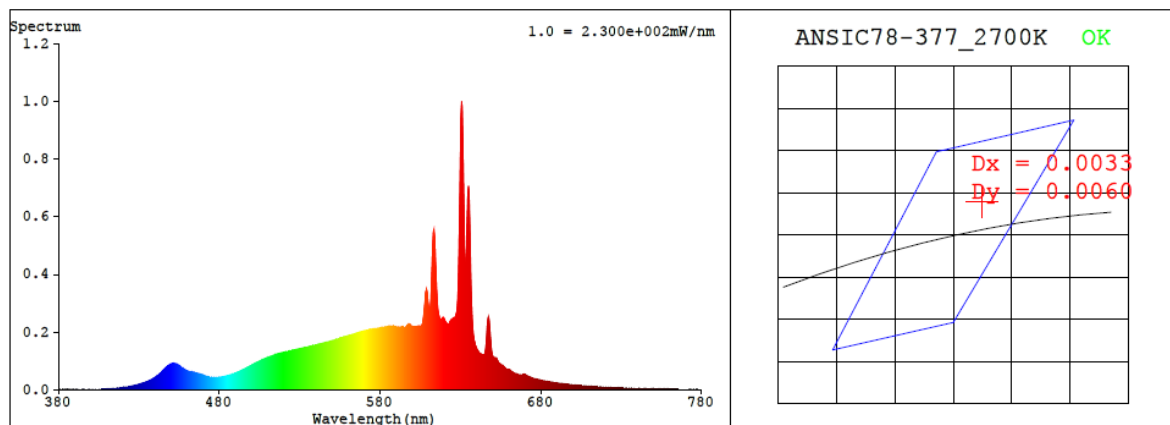
Test Method
<p>The Samples were tested according to the ANSI/IES LM-79:2019.</p> <p>Photometric parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25±1°C.</p> <p>The sample measurements were made 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	0.198	23.6	0.991

CCT (K)	CRI	R9	Duv	SDCM	Rf	Rg	IES Rcs,h1
2685	93.1	57	0.0019	1.9	92	99	-6%

4.1 Integrating Sphere Test



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4644$ $y = 0.4168$ / $u' = 0.2626$ $v' = 0.5304$ ($duv=1.90e-03$)

CCT= 2685K Prcp WL: Ld=583.7nm Purity=64.5%

Peak WL: Lp=631nm FWHM: =3.7nm Ratio:R=27.1% G=70.8% B=2.1%

Render Index: Ra = 93.1 AvgR = 89.8 TM30:Rf=91 Rg=99

EEL: 0.10452 A++ Highest

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

R8 =82 R9 =57 R10=87 R11=97 R12=83 R13=94 R14=96 R15=89

4.1 Integrating Sphere Test

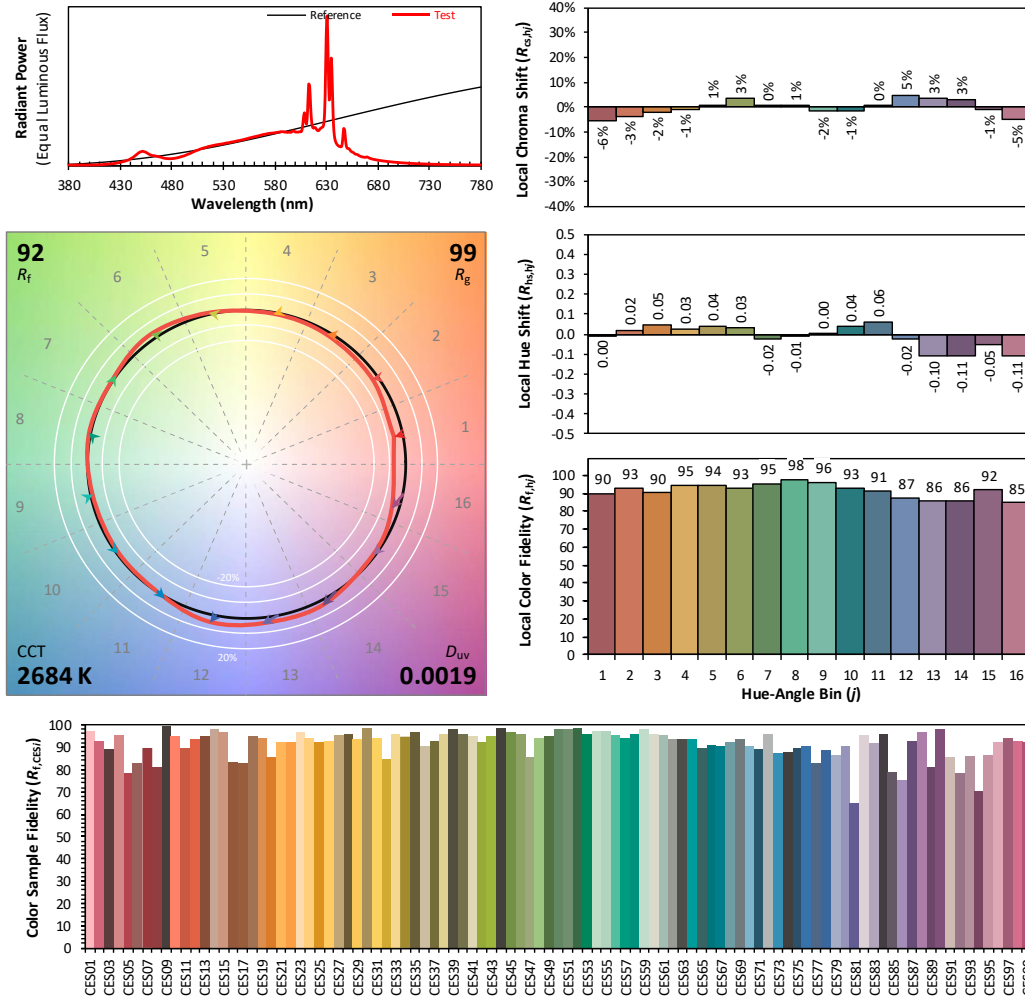
ANSI/IES TM-30-18 Color Rendition Report

Source: 1 CIE F1

Manufacturer: RAB Lighting Inc.

Date: 2025/9/25

Model: TKBEAM2B @22W2700K



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

x 0.4645
 y 0.4167
 u' 0.2627
 v' 0.5304

CIE 13.3-1995
(CRI)

R_a 93
 R_g 58

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	1.00E-06	447	7.74E-05	514	1.19E-04	581	2.15E-04	648	2.30E-04	715	1.09E-05
381	1.00E-06	448	8.26E-05	515	1.22E-04	582	2.15E-04	649	1.55E-04	716	1.03E-05
382	5.00E-07	449	8.64E-05	516	1.24E-04	583	2.17E-04	650	1.18E-04	717	1.00E-05
383	6.00E-07	450	8.89E-05	517	1.25E-04	584	2.18E-04	651	1.10E-04	718	9.80E-06
384	7.00E-07	451	9.08E-05	518	1.26E-04	585	2.19E-04	652	1.09E-04	719	9.30E-06
385	0.00E+00	452	9.09E-05	519	1.29E-04	586	2.21E-04	653	1.02E-04	720	9.10E-06
386	8.00E-07	453	8.82E-05	520	1.29E-04	587	2.21E-04	654	9.24E-05	721	8.80E-06
387	8.00E-07	454	8.69E-05	521	1.31E-04	588	2.21E-04	655	8.77E-05	722	8.60E-06
388	8.00E-07	455	8.31E-05	522	1.33E-04	589	2.19E-04	656	8.46E-05	723	8.10E-06
389	5.00E-07	456	7.97E-05	523	1.34E-04	590	2.18E-04	657	8.00E-05	724	7.90E-06
390	4.00E-07	457	7.45E-05	524	1.35E-04	591	2.18E-04	658	7.44E-05	725	7.90E-06
391	1.10E-06	458	7.09E-05	525	1.36E-04	592	2.17E-04	659	7.15E-05	726	7.50E-06
392	6.00E-07	459	6.79E-05	526	1.38E-04	593	2.16E-04	660	7.07E-05	727	7.20E-06
393	1.10E-06	460	6.51E-05	527	1.38E-04	594	2.19E-04	661	6.72E-05	728	7.00E-06
394	9.00E-07	461	6.34E-05	528	1.38E-04	595	2.17E-04	662	6.24E-05	729	6.60E-06
395	2.00E-07	462	6.20E-05	529	1.41E-04	596	2.17E-04	663	5.91E-05	730	6.60E-06
396	8.00E-07	463	6.20E-05	530	1.41E-04	597	2.23E-04	664	5.66E-05	731	6.40E-06
397	7.00E-07	464	5.98E-05	531	1.43E-04	598	2.27E-04	665	5.46E-05	732	6.10E-06
398	6.00E-07	465	5.81E-05	532	1.45E-04	599	2.24E-04	666	5.32E-05	733	6.10E-06
399	1.30E-06	466	5.74E-05	533	1.46E-04	600	2.19E-04	667	5.22E-05	734	5.70E-06
400	1.00E-06	467	5.59E-05	534	1.47E-04	601	2.18E-04	668	5.12E-05	735	5.50E-06
401	8.00E-07	468	5.44E-05	535	1.48E-04	602	2.18E-04	669	5.32E-05	736	5.60E-06
402	1.20E-06	469	5.25E-05	536	1.49E-04	603	2.19E-04	670	5.35E-05	737	5.40E-06
403	1.30E-06	470	5.10E-05	537	1.51E-04	604	2.21E-04	671	5.00E-05	738	5.20E-06
404	1.50E-06	471	4.80E-05	538	1.52E-04	605	2.20E-04	672	4.65E-05	739	5.00E-06
405	1.60E-06	472	4.64E-05	539	1.53E-04	606	2.23E-04	673	4.43E-05	740	4.80E-06
406	1.80E-06	473	4.55E-05	540	1.55E-04	607	2.52E-04	674	4.19E-05	741	4.60E-06
407	2.00E-06	474	4.37E-05	541	1.56E-04	608	3.16E-04	675	3.97E-05	742	4.30E-06
408	2.30E-06	475	4.37E-05	542	1.58E-04	609	3.45E-04	676	3.83E-05	743	4.40E-06
409	2.40E-06	476	4.28E-05	543	1.59E-04	610	2.95E-04	677	3.71E-05	744	4.10E-06
410	2.90E-06	477	4.26E-05	544	1.61E-04	611	2.74E-04	678	3.54E-05	745	4.10E-06
411	3.10E-06	478	4.25E-05	545	1.62E-04	612	3.73E-04	679	3.44E-05	746	4.10E-06
412	3.40E-06	479	4.22E-05	546	1.63E-04	613	5.34E-04	680	3.29E-05	747	4.00E-06
413	3.90E-06	480	4.30E-05	547	1.64E-04	614	5.16E-04	681	3.19E-05	748	3.80E-06
414	4.40E-06	481	4.35E-05	548	1.66E-04	615	3.71E-04	682	3.09E-05	749	3.80E-06
415	4.80E-06	482	4.44E-05	549	1.68E-04	616	2.78E-04	683	2.98E-05	750	3.70E-06
416	5.40E-06	483	4.55E-05	550	1.69E-04	617	2.48E-04	684	2.89E-05	751	3.50E-06
417	6.10E-06	484	4.70E-05	551	1.71E-04	618	2.45E-04	685	2.80E-05	752	3.20E-06
418	6.40E-06	485	4.83E-05	552	1.73E-04	619	2.49E-04	686	2.71E-05	753	3.40E-06
419	6.80E-06	486	4.99E-05	553	1.75E-04	620	2.43E-04	687	2.65E-05	754	3.10E-06
420	8.00E-06	487	5.14E-05	554	1.76E-04	621	2.32E-04	688	2.54E-05	755	3.00E-06
421	8.90E-06	488	5.43E-05	555	1.79E-04	622	2.28E-04	689	2.46E-05	756	2.90E-06
422	9.50E-06	489	5.54E-05	556	1.80E-04	623	2.30E-04	690	2.37E-05	757	2.60E-06
423	1.00E-05	490	5.79E-05	557	1.82E-04	624	2.40E-04	691	2.30E-05	758	2.70E-06
424	1.11E-05	491	6.00E-05	558	1.84E-04	625	2.45E-04	692	2.25E-05	759	2.70E-06
425	1.18E-05	492	6.16E-05	559	1.85E-04	626	2.50E-04	693	2.17E-05	760	2.50E-06
426	1.31E-05	493	6.45E-05	560	1.87E-04	627	2.55E-04	694	2.11E-05	761	2.60E-06
427	1.47E-05	494	6.73E-05	561	1.89E-04	628	2.89E-04	695	2.02E-05	762	2.50E-06
428	1.61E-05	495	7.03E-05	562	1.89E-04	629	4.60E-04	696	1.95E-05	763	2.50E-06
429	1.68E-05	496	7.30E-05	563	1.92E-04	630	8.41E-04	697	1.89E-05	764	2.20E-06
430	1.91E-05	497	7.56E-05	564	1.93E-04	631	9.82E-04	698	1.83E-05	765	2.30E-06
431	2.10E-05	498	7.86E-05	565	1.95E-04	632	6.78E-04	699	1.78E-05	766	2.10E-06
432	2.23E-05	499	8.20E-05	566	1.97E-04	633	4.32E-04	700	1.71E-05	767	2.00E-06
433	2.41E-05	500	8.49E-05	567	1.99E-04	634	5.51E-04	701	1.69E-05	768	1.90E-06
434	2.56E-05	501	8.79E-05	568	2.01E-04	635	7.07E-04	702	1.61E-05	769	1.90E-06
435	2.79E-05	502	9.09E-05	569	2.02E-04	636	5.17E-04	703	1.55E-05	770	1.90E-06
436	3.01E-05	503	9.42E-05	570	2.03E-04	637	2.86E-04	704	1.50E-05	771	1.80E-06
437	3.25E-05	504	9.66E-05	571	2.04E-04	638	1.93E-04	705	1.48E-05	772	1.80E-06
438	3.52E-05	505	9.89E-05	572	2.06E-04	639	1.59E-04	706	1.41E-05	773	1.90E-06
439	3.91E-05	506	1.01E-04	573	2.07E-04	640	1.43E-04	707	1.37E-05	774	1.70E-06
440	4.28E-05	507	1.05E-04	574	2.09E-04	641	1.33E-04	708	1.33E-05	775	1.80E-06
441	4.68E-05	508	1.06E-04	575	2.10E-04	642	1.27E-04	709	1.28E-05	776	1.50E-06
442	5.06E-05	509	1.10E-04	576	2.11E-04	643	1.23E-04	710	1.25E-05	777	1.70E-06
443	5.59E-05	510	1.12E-04	577	2.11E-04	644	1.21E-04	711	1.21E-05	778	1.60E-06
444	6.09E-05	511	1.14E-04	578	2.12E-04	645	1.23E-04	712	1.15E-05	779	1.60E-06
445	6.69E-05	512	1.15E-04	579	2.12E-04	646	1.63E-04	713	1.11E-05	780	1.60E-06
446	7.23E-05	513	1.17E-04	580	2.14E-04	647	2.41E-04	714	1.09E-05	N/A	N/A

4.0 LM-79 Measurement and Test Results

4.2 Goniophotometer Test

Model No.	TKBEAM2B @22W2700K	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	0.198	23.6	0.991
NON-WORST CASE	N/A	N/A	N/A	N/A	N/A

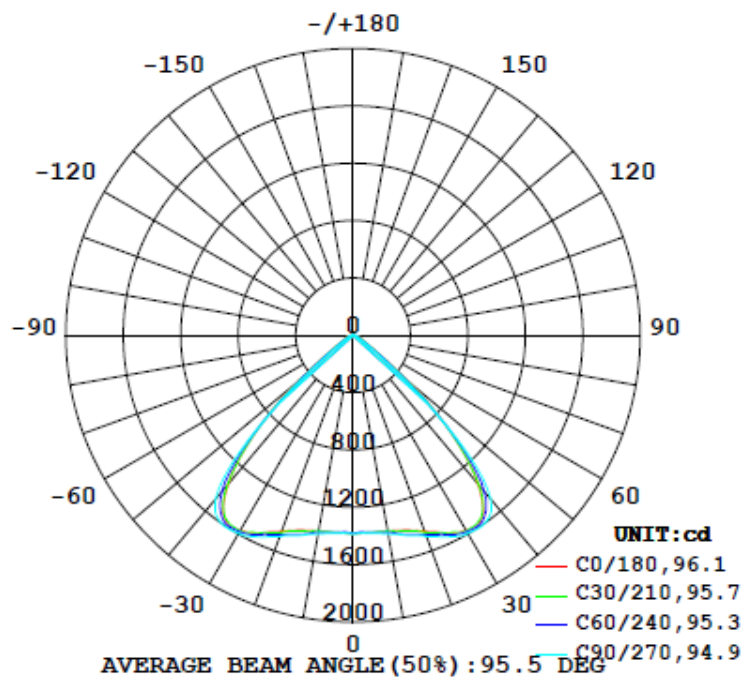
Test Result

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°)
3245	95.2	109.2	70.2	93.2	137.5	99.4%

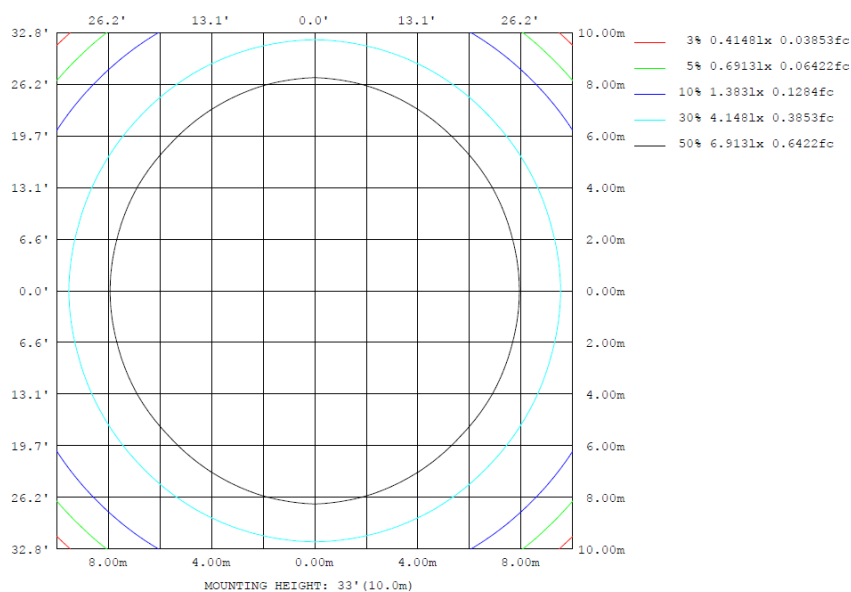
4.2 Goniophotometer Test

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,lm
10	1389	1390	1405	1390	1389	1390	1405	1390	0- 10	132.0	132.0	4.07,4.07
20	1454	1468	1494	1468	1454	1468	1494	1468	10- 20	404.7	536.7	16.5,16.5
30	1574	1570	1596	1570	1574	1570	1596	1570	20- 30	708.2	1245	38.4,38.4
40	1356	1373	1491	1373	1356	1373	1491	1373	30- 40	965.4	2210	68.1,68.1
50	498.7	461.4	397.4	461.4	498.7	461.4	397.4	461.4	40- 50	737.2	2947	90.8,90.8
60	99.74	86.93	60.75	86.93	99.74	86.93	60.75	86.93	50- 60	178.7	3126	96.3,96.3
70	47.68	40.34	30.40	40.34	47.68	40.34	30.40	40.34	60- 70	56.24	3182	98.1,98.1
80	14.86	19.33	18.81	19.33	14.86	19.33	18.81	19.33	70- 80	29.54	3212	99.99
90	2.330	9.138	10.36	9.138	2.330	9.138	10.36	9.138	80- 90	13.57	3226	99.4,99.4
100	1.938	3.997	8.593	3.997	1.938	3.997	8.593	3.997	90-100	5.699	3231	99.6,99.6
110	1.550	1.143	4.011	1.143	1.550	1.143	4.011	1.143	100-110	2.795	3234	99.7,99.7
120	2.990	1.047	0.8622	1.047	2.990	1.047	0.8622	1.047	110-120	1.413	3235	99.7,99.7
130	5.809	1.327	1.053	1.327	5.809	1.327	1.053	1.327	120-130	1.263	3237	99.8,99.8
140	7.751	2.474	2.286	2.474	7.751	2.474	2.286	2.474	130-140	1.840	3239	99.8,99.8
150	8.720	3.331	2.960	3.331	8.720	3.331	2.960	3.331	140-150	2.337	3241	99.9,99.9
160	8.623	3.331	2.960	3.331	8.623	3.331	2.960	3.331	150-160	1.853	3243	99.9,99.9
170	12.78	5.233	4.483	5.233	12.78	5.233	4.483	5.233	160-170	1.409	3244	100,100
180	13.37	5.710	4.870	5.710	13.37	5.710	4.870	5.710	170-180	0.6329	3245	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Zonal (lm)		Total (lm)		Percent
0-10	132.04	0-10	132.04	4.07%
10-20	404.69	0-20	536.73	16.54%
20-30	708.23	0-30	1244.96	38.38%
30-40	965.35	0-40	2210.31	68.13%
40-50	737.16	0-50	2947.47	90.86%
50-60	178.72	0-60	3126.19	96.36%
60-70	56.24	0-70	3182.43	98.10%
70-80	29.54	0-80	3211.97	99.01%
80-90	13.57	0-90	3225.54	99.43%
90-100	5.70	0-100	3231.24	99.60%
100-110	2.79	0-110	3234.03	99.69%
110-120	1.41	0-120	3235.44	99.73%
120-130	1.26	0-130	3236.70	99.77%
130-140	1.84	0-140	3238.54	99.83%
140-150	2.34	0-150	3240.88	99.90%
150-160	1.85	0-160	3242.73	99.96%
160-170	1.41	0-170	3244.14	100.00%
170-180	0.64	0-180	3244.78	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	1380	1378	1380	1383	1380	1378	1384	1378	1380	1383	1380	1378	1380	1378	1380	1383	1380	1378	1384
5	1385	1378	1382	1378	1382	1379	1387	1379	1382	1378	1382	1378	1385	1378	1382	1378	1382	1379	1387
10	1389	1377	1384	1390	1396	1397	1405	1397	1396	1390	1384	1377	1389	1377	1384	1390	1396	1397	1405
15	1405	1399	1413	1416	1436	1429	1446	1429	1436	1416	1413	1399	1405	1399	1413	1416	1436	1429	1446
20	1454	1451	1465	1468	1480	1482	1494	1482	1480	1468	1465	1451	1454	1451	1465	1468	1480	1482	1494
25	1526	1516	1521	1530	1537	1537	1554	1537	1530	1521	1516	1526	1516	1521	1530	1537	1537	1554	
30	1574	1558	1577	1570	1582	1580	1596	1580	1582	1570	1577	1558	1574	1558	1577	1570	1582	1580	1596
35	1559	1552	1555	1562	1576	1579	1600	1579	1576	1562	1555	1552	1559	1552	1555	1562	1576	1579	1600
40	1356	1354	1363	1373	1417	1464	1491	1464	1417	1373	1363	1354	1356	1354	1363	1373	1417	1464	1491
45	977	969	973	982	1000	1012	1027	1012	1000	982	973	969	977	969	973	982	1000	1012	1027
50	499	490	481	461	452	412	397	412	452	461	481	490	499	490	481	461	452	412	397
55	189	188	181	172	163	144	132	144	163	172	181	188	189	188	181	172	163	144	132
60	99.7	100	93.6	86.9	78.1	66.6	60.8	66.6	78.1	86.9	93.6	100	99.7	100	93.6	86.9	78.1	66.6	60.8
65	68.0	66.0	61.6	56.2	48.3	41.5	38.8	41.5	48.3	56.2	61.6	66.0	68.0	66.0	61.6	56.2	48.3	41.5	38.8
70	47.7	47.4	45.2	40.3	34.8	30.1	30.4	30.1	34.8	40.3	45.2	47.4	47.7	47.4	45.2	40.3	34.8	30.1	30.4
75	35.9	30.6	29.6	28.3	25.2	21.5	22.6	21.5	25.2	28.3	29.6	30.6	35.9	30.6	29.6	28.3	25.2	21.5	22.6
80	14.9	16.8	18.5	19.3	21.9	19.5	18.8	19.5	21.9	19.3	18.5	16.8	14.9	16.8	18.5	19.3	21.9	19.5	18.8
85	8.24	9.79	12.5	12.2	12.9	11.7	16.6	11.7	12.9	12.2	12.5	9.79	8.24	9.79	12.5	12.2	12.9	11.7	16.6
90	2.33	4.91	11.0	9.14	7.66	7.53	10.4	7.53	7.66	9.14	11.0	4.91	2.33	4.91	11.0	9.14	7.66	7.53	10.4
95	1.94	2.49	4.40	4.87	5.17	6.00	9.26	6.00	5.17	4.87	4.40	2.49	1.94	2.49	4.40	4.87	5.17	6.00	9.26
100	1.94	1.73	2.30	4.00	5.45	7.05	8.59	7.05	5.45	4.00	2.30	1.73	1.94	1.73	2.30	4.00	5.45	7.05	8.59
105	1.74	1.53	1.43	1.62	2.49	4.01	5.36	4.01	2.49	1.62	1.43	1.53	1.74	1.53	1.43	1.62	2.49	4.01	5.36
110	1.55	1.44	1.24	1.14	1.62	2.86	4.01	2.86	1.62	1.14	1.24	1.44	1.55	1.44	1.24	1.14	1.62	2.86	4.01
115	1.55	1.44	1.24	1.05	0.96	1.53	2.11	1.53	0.96	1.05	1.24	1.44	1.55	1.44	1.24	1.05	0.96	1.53	2.11
120	2.99	1.44	1.24	1.05	0.96	0.86	0.86	0.86	0.96	1.05	1.24	1.44	2.99	1.44	1.24	1.05	0.96	0.86	0.86
125	4.45	1.53	1.24	1.05	0.96	0.86	0.86	0.86	0.96	1.05	1.24	1.53	4.45	1.53	1.24	1.05	0.96	0.86	0.86
130	5.81	1.92	1.43	1.33	1.15	1.14	1.05	1.14	1.15	1.33	1.43	1.92	5.81	1.92	1.43	1.33	1.15	1.14	1.05
135	6.88	2.68	2.10	1.80	1.72	1.62	1.62	1.62	1.72	1.80	2.10	2.68	6.88	2.68	2.10	1.80	1.72	1.62	1.62
140	7.75	3.64	2.86	2.47	2.39	2.38	2.29	2.38	2.39	2.47	2.86	3.64	7.75	3.64	2.86	2.47	2.39	2.38	2.29
145	8.52	4.50	3.62	3.23	3.06	2.86	2.77	2.86	3.06	3.23	3.62	4.50	8.52	4.50	3.62	3.23	3.06	2.86	2.77
150	8.72	4.89	3.82	3.33	3.15	3.05	2.96	3.05	3.15	3.33	3.82	4.89	8.72	4.89	3.82	3.33	3.15	3.05	2.96
155	8.72	4.89	3.91	3.33	3.15	3.05	2.96	3.05	3.15	3.33	3.91	4.89	8.72	4.89	3.91	3.33	3.15	3.05	2.96
160	8.62	4.60	3.72	3.33	3.15	3.05	2.96	3.05	3.15	3.33	3.72	4.60	8.62	4.60	3.72	3.33	3.15	3.05	2.96
165	11.2	6.70	4.86	4.19	3.91	3.90	3.72	3.90	3.91	4.19	4.86	6.70	11.2	6.70	4.86	4.19	3.91	3.90	3.72
170	12.8	8.53	6.20	5.23	4.68	4.48	4.48	4.48	4.68	5.23	6.20	8.53	12.8	8.53	6.20	5.23	4.68	4.48	4.48
175	13.4	9.01	6.68	5.61	5.16	5.05	4.87	5.05	5.16	5.61	6.68	9.01	13.4	9.01	6.68	5.61	5.16	5.05	4.87
180	13.4	9.02	6.78	5.71	5.16	5.05	4.87	5.05	5.16	5.71	6.78	9.02	13.4	9.02	6.78	5.71	5.16	5.05	4.87

Table--2

UNIT: cd

C (DEG) y (DEG)	285	300	315	330	345														
0	1378	1380	1383	1380	1378														
5	1379	1382	1378	1382	1378														
10	1397	1396	1390	1384	1377														
15	1429	1436	1416	1413	1399														
20	1482	1480	1468	1465	1451														
25	1537	1537	1530	1521	1516														
30	1580	1582	1570	1577	1558														
35	1579	1576	1562	1555	1552														
40	1464	1417	1373	1363	1354														
45	1012	1000	982	973	969														
50	412	452	461	481	490														
55	144	163	172	181	188														
60	66.6	78.1	86.9	93.6	100														
65	41.5	48.3	56.2	61.6	66.0														
70	30.1	34.8	40.3	45.2	47.4														
75	21.5	25.2	28.3	29.6	30.6														
80	19.5	21.9	19.3	18.5	16.8														
85	11.7	12.9	12.2	12.5	9.79														
90	7.53	7.66	9.14	11.0	4.91														
95	6.00	5.17	4.87	4.40	2.49														
100	7.05	5.45	4.00	2.30	1.73														
105	4.01	2.49	1.62	1.43	1.53														
110	2.86	1.62	1.14	1.24	1.44														
115	1.53	0.96	1.05	1.24	1.44														
120	0.86	0.96	1.05	1.24	1.44														
125	0.86	0.96	1.05	1.24	1.53														
130	1.14	1.15	1.33	1.43	1.92														
135	1.62	1.72	1.80	2.10	2.68														
140	2.38	2.39	2.47	2.86	3.64														
145	2.86	3.06	3.23	3.62	4.50														
150	3.05	3.15	3.33	3.82	4.89														
155	3.05	3.15	3.33	3.91	4.89														
160	3.05	3.15	3.33	3.72	4.60														
165	3.90	3.91	4.19	4.86	6.70														
170	4.48	4.68	5.23	6.20	8.53														
175	5.05	5.16	5.61	6.68	9.01														
180	5.05	5.16	5.71	6.78	9.02														

4.0 LM-79 Measurement and Test Results

4.3 THD and PF Test

Model No.	TKBEAM2B @22W2700K	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	0.198	23.6	0.991	9.79

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*****