



Shenzhen Belling Efficiency Testing Lab Co., Ltd



Report No.: BL240513005-9

Date of issue 2024-05-30

Version 1.0

Total pages 23

Test report of

IES LM-79-08

Approved Method: Electrical and Photometric

Measurements of Solid-State Lighting Products

Applicant:

Beyond LED Technology

Address:

1939 Parker Court, Stone Mountain, GA 30087

For Product:

High Bay Luminaries (Commercial and Industrial)

Model No.:

BLT-HB0B-300L-CS-3CCT

Test laboratory: Shenzhen Belling Efficiency Testing Lab Co., Ltd, 1Floor, No.1 Building, Meibaohe Industrial Park, Dalang Street, Longhua District, Shenzhen, Guangdong Prov.518101 China.

Complied by: Sam Chen

Review by: Jason Zhou

Project Engineer

Technical Manager

Note: The test data was only valid for the test sample(s). This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Shenzhen Belling Efficiency Testing Lab Co., Ltd. This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.



1 General

1.1 Product Information

Manufacturer	Beyond LED Technology
Manufacturer Address	1939 Parker Court, Stone Mountain, GA 30087
Brand Name	Beyond LED Technology
Luminaire Type	High Bay Luminaires (Commercial and Industrial)
Model Number	BLT-HB0B-300L-CS-3CCT
Rated Inputs	AC 120-277V, 50/60Hz
Field-Adjustable Product	Yes, Wattage setting: 200W, 240W, 300W
Color-Tunable Product	Yes, CCT setting: 4000K, 5000K, 5700K
Dimming Capability	Continuous
Integral Control Sensors	Optional
Date of Receipt Samples	2024-05-13
Date of test	2024-05-14 to 2024-05-22
Burning Time Before Test	0hour(For New Products)

1.2 Standards or methods

- ANSI C78.377-2017: Specifications for the Chromaticity of Solid State Lighting Products
- ANSI C82.77-10:2014: Harmonic Emission Limits - Related Power Quality Requirements for Lighting Equipment - Solid State
- CIE Publication No.13.3-1995: Method of Measuring and Specifying Color Rendering of Light Sources
- IESNA LM-79-08 Approved Method: Electric & Photometric Measurement of Solid-state Lighting Products



1.3 Equipment list

Device	Manufacture	Model No.	Serial No.	Calibration due date
Goniophotometric System	SENSING	GMS-3000	M101758514120011	2025-04-09
AC Power Source	ALL POWER	ALL POWER	970780	2025-04-17
Total Luminous Flux Standard Lamp	SENSING	110V/100W	S13100188	2025-04-16
Total Luminous Flux Standard Lamp	OSRAM	12V/20W	LSD12201737	2025-04-16
Total Spectral Radiant Flux Standard Lamp	Everfine	D204	M133806CA1411205	2025-04-16
Digital Power Meter	YOKOGAWA	WT310	C2QM02030V	2025-04-17
Thermostatic stabilized photometric sphere	SENSING	SPR-600M	N.A	2025-04-09
Plant spectral photosynthetically radiometer	Everfine	SP-20	P612946CF1411115	2025-04-09
Digital Power Meter	YOKOGAWA	WT210	91L929742	2025-04-17
Spectral radiometer	SENSING	SPR-3000	S1101108	2025-04-09
Environment Measurer	XUYAO	HS-1	N/A	2025-04-11
Environment Measurer	XUYAO	HS-1	N/A	2025-04-11
Stop watch	KISLO	K610	N/A	2025-04-17
Digital Anemometer	TECMAN	TD8901	026141	2024-09-06

Statement of Traceability: Shenzhen Belling Efficiency Testing Lab Co., Ltd attests that all calibration has been performed using suitable standards traceable to national primary standards and International System of Unit (SI).



2 Test conducted and method

2.1 Ambient Condition

The ambient temperature in which measurements are being taken was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, the air flow around the sample(s) being tested did not affect the performance.

2.2 Power Supply Characteristics

The AC power supply had a sinusoidal voltage wave shape at the prescribed frequency (60 Hz) such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item.

The voltage of AC power supply (RMS voltage) applied to the device under test was regulated to within ± 0.2 percent under load.

2.3 Seasoning and Stabilization

No seasoning was performed in accordance with IESNA LM-79-08. And before the measurement, the sample was stabilized until the light output and power variations were less than 0.5% in 30 minutes intervals (3 readings, 15 minutes apart).

2.4 Integrating Sphere System

The system includes AC power source, digital power meter, DC power supply, spectrophotometer, and integrating sphere. The integrating sphere system is calibrated by standard light source before measurement. The system and standard light source has been calibrated regularly and traceable to the National Primary Standards. 4π geometry was used during measurement. The product was operated in its intended orientation in application and was recorded in this report.

Integrating Sphere Uncertainty: The uncertainty of the light output (luminous flux) measurements is $U=1.8\%$ ($K=2$), at the 95% confidence level. The uncertainty of the correlated color temperature measurements is $U=20\text{K}$ ($K=2$), at the 95% confidence level. The uncertainty of the CRI is $U=1.8(K=2)$, at the 95% confidence level. The uncertainty of power meter AC current $U=0.18\%$ of rdg, AC Voltage $U=0.16\%$ of rdg, Power $U=0.20\%$ ($K=2$), at the 95% confidence level.



2.5 Goniophotometer System

The goniophotometer system is calibrated by standard light source before measurement. The standard light source has been calibrated regularly and traceable to the National Primary Standards.

Type C goniophotometer was used for measuring total luminous flux, luminous intensity distribution, and color spatial uniformity. The product was operated in its intended orientation in application and was recorded in this report. The method according to IESNA LM-79-08 following chapter.

Goniophotometer Uncertainty: The uncertainty of the luminous intensity is $U=1.6\%$ ($K=2$), at the 95% confidence level.



3 Test Result Summary

3.1 Integrating Sphere System (Total operating time for integrating sphere test: 1.0 hour)

3.1.1 Model Number:

HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT, 4000K

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.08	60	2.485	297.46	0.997

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
49140.89	165.2	4089

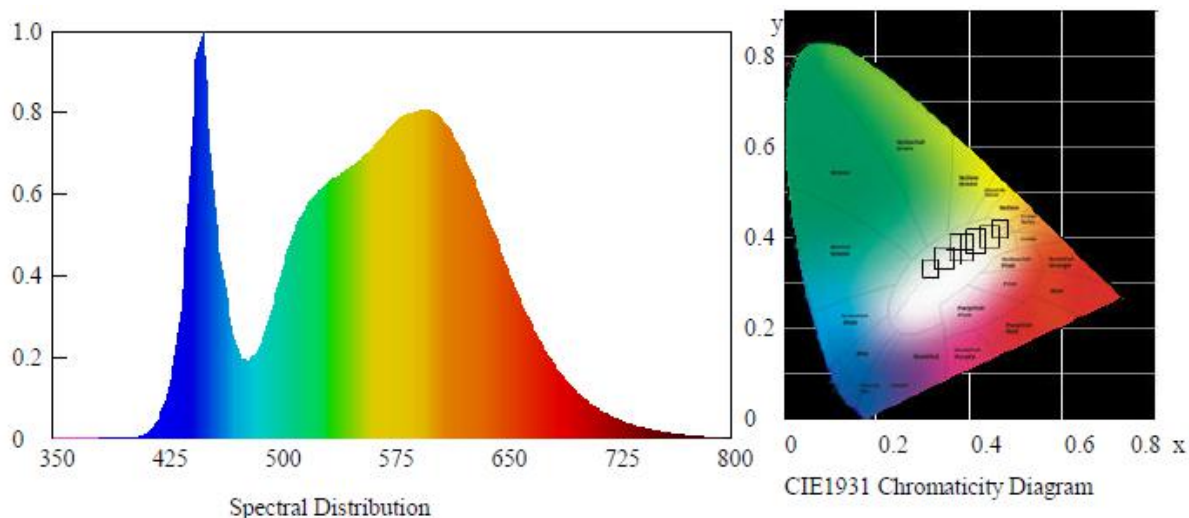
Chromaticity Coordinate

Duv	x	y	u'	v'
-0.0007	0.3762	0.3726	0.2240	0.4991

Color Rendering

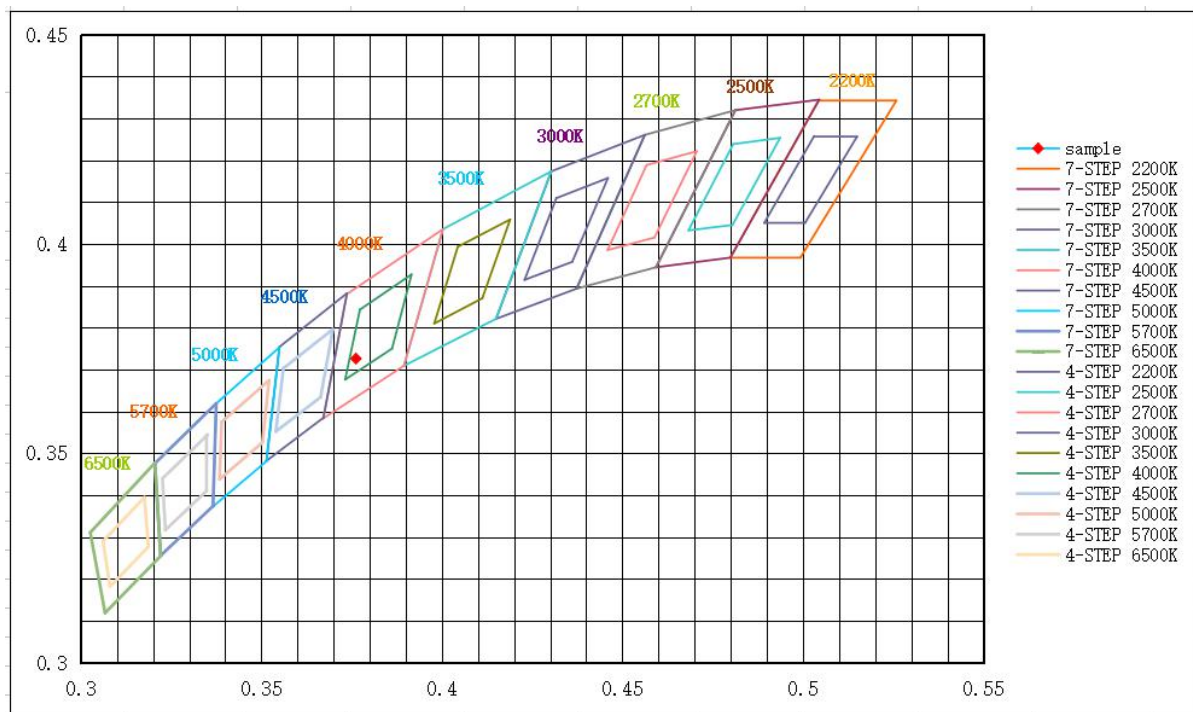
CRI	R9	Rf	Rg	Rcs,h1(%)
83.2	15	83	98	-11

Spectral Distribution





7/4 Step Quadrangle



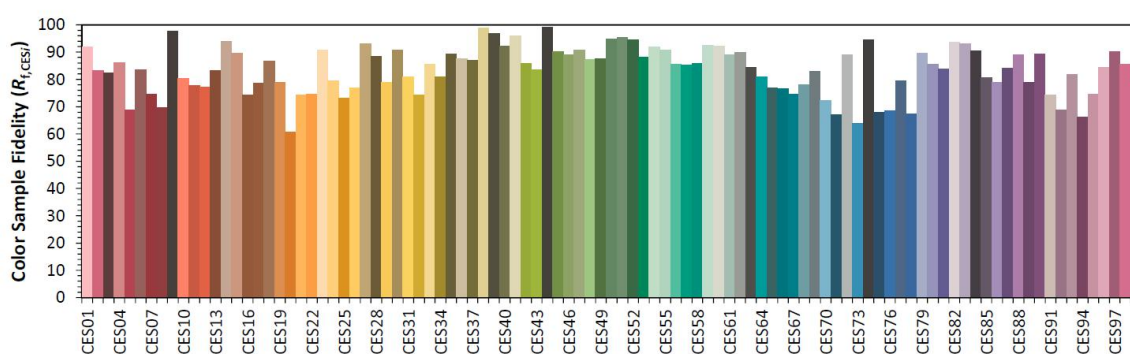
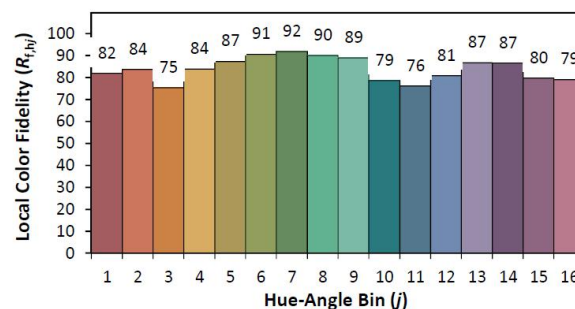
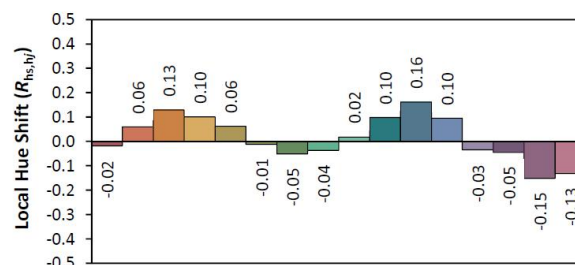
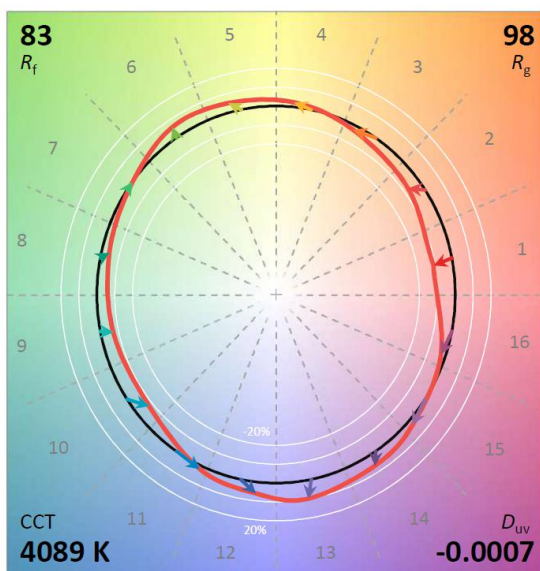
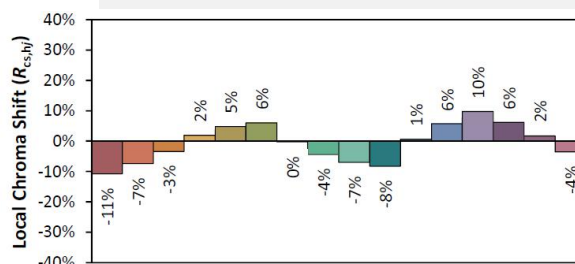
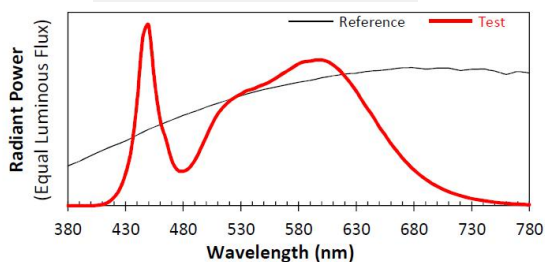
**ANSI/IES TM-30-18 Color Rendition Report**

Source: BL240513005-9

Manufacturer: RZ Lighting Co Ltd

Date: 2024-05-30

Model: HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT, 4000K



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

x 0.3762
 y 0.3726
 u' 0.2240
 v' 0.4991

CIE 13.3-1995
(CRI)

R_a 83
 R_g 15

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

**3.1.2 Model Number:****HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT, 5000K****Electrical data**

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.12	60	2.433	291.41	0.997

Photometric data

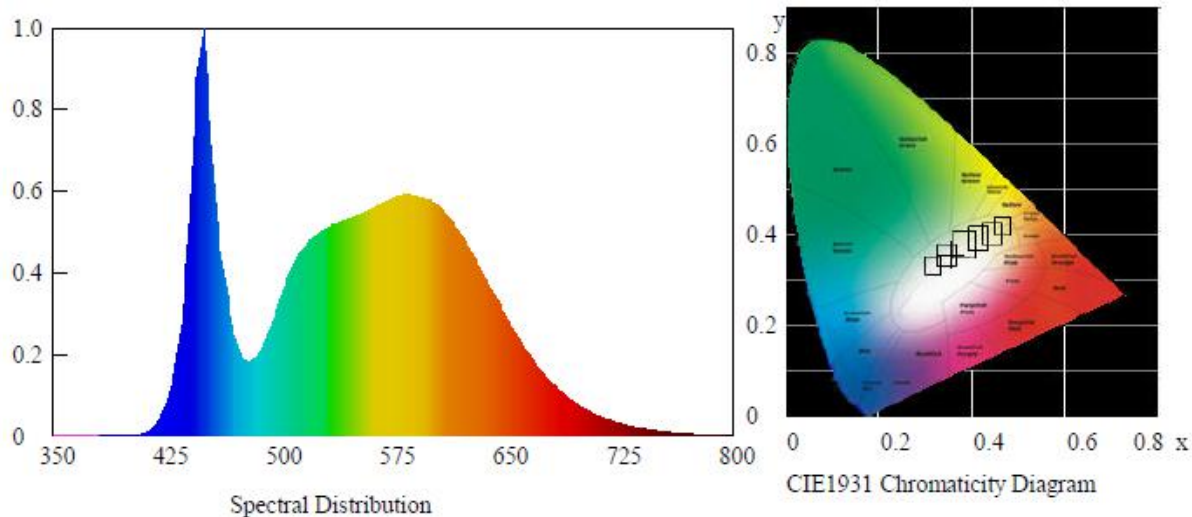
Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
50880.25	174.6	4813

Chromaticity Coordinate

Duv	x	y	u'	v'
-0.00062	0.3504	0.3546	0.2139	0.4869

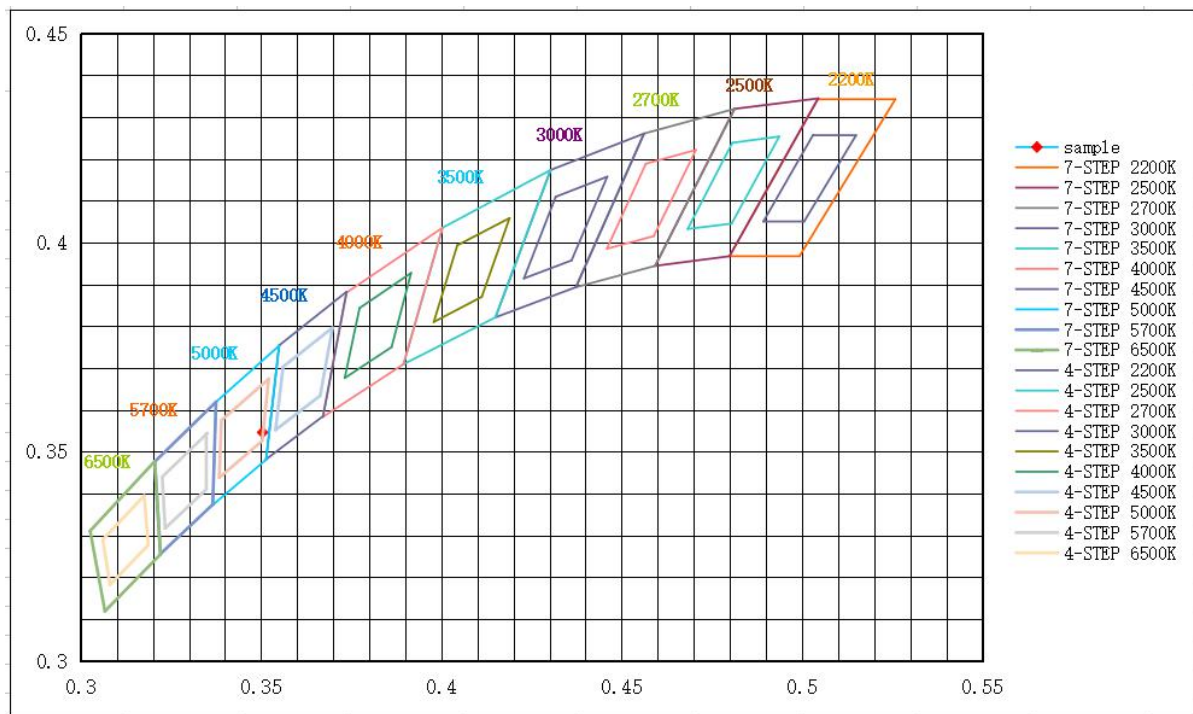
Color Rendering

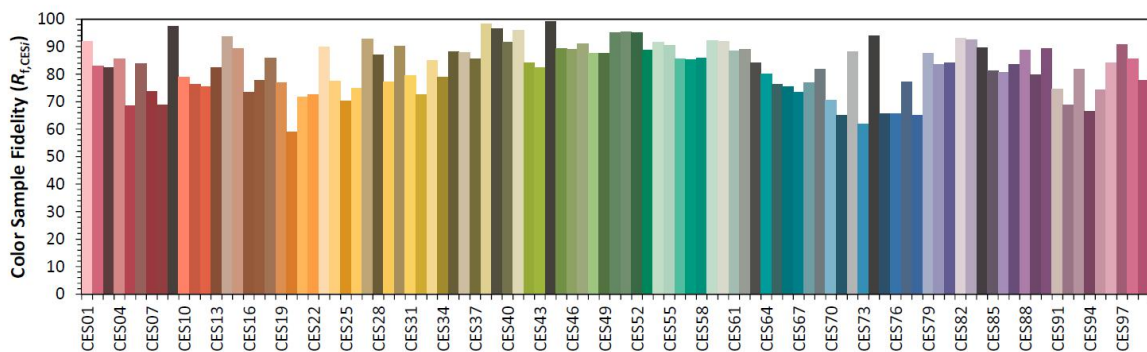
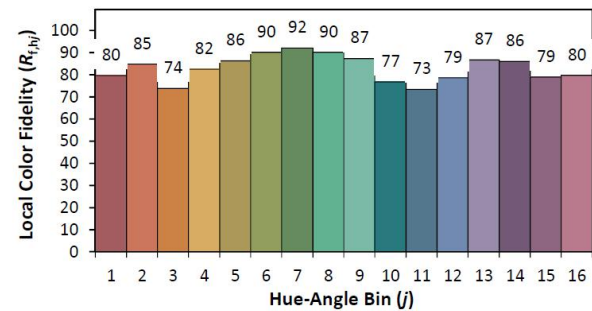
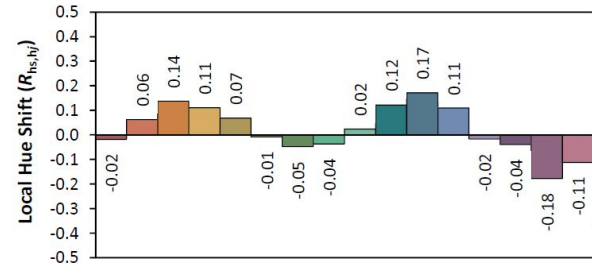
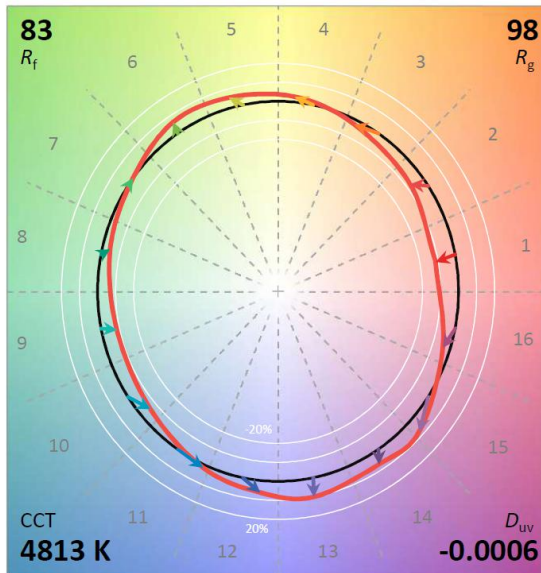
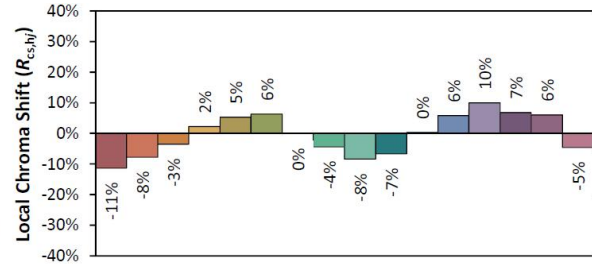
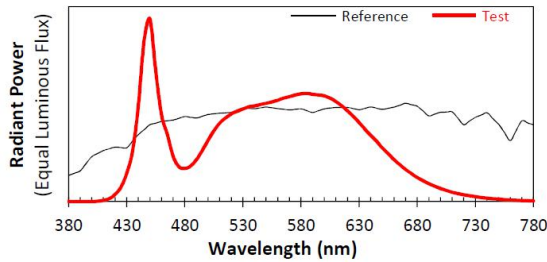
CRI	R9	Rf	Rg	Rcs,h1(%)
83.2	15	83	98	-11

Spectral Distribution



7/4 Step Quadrangle



**ANSI/IES TM-30-18 Color Rendition Report****Source:** BL240513005-9**Manufacturer:** RZ Lighting Co Ltd**Date:** 2024-05-30**Model:** HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT, 5000K

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

x 0.3504
 y 0.3546
 u' 0.2139
 v' 0.4869

CIE 13.3-1995
(CRI)

R_a 83
 R_g 15

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

**3.1.3 Model Number:****HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT, 5700K****Electrical data**

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.01	60	2.483	297.13	0.997

Photometric data

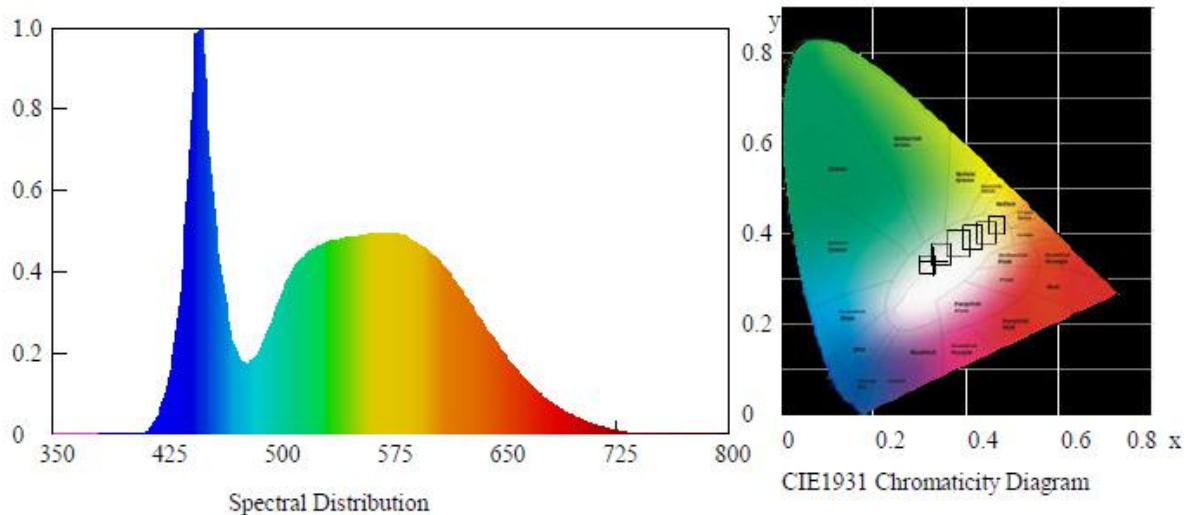
Luminous Flux (lm)	Efficacy (lm/W)	CCT (K)
50155.61	168.8	5870

Chromaticity Coordinate

Duv	x	y	u'	v'
+0.00153	0.3245	0.3369	0.2030	0.4742

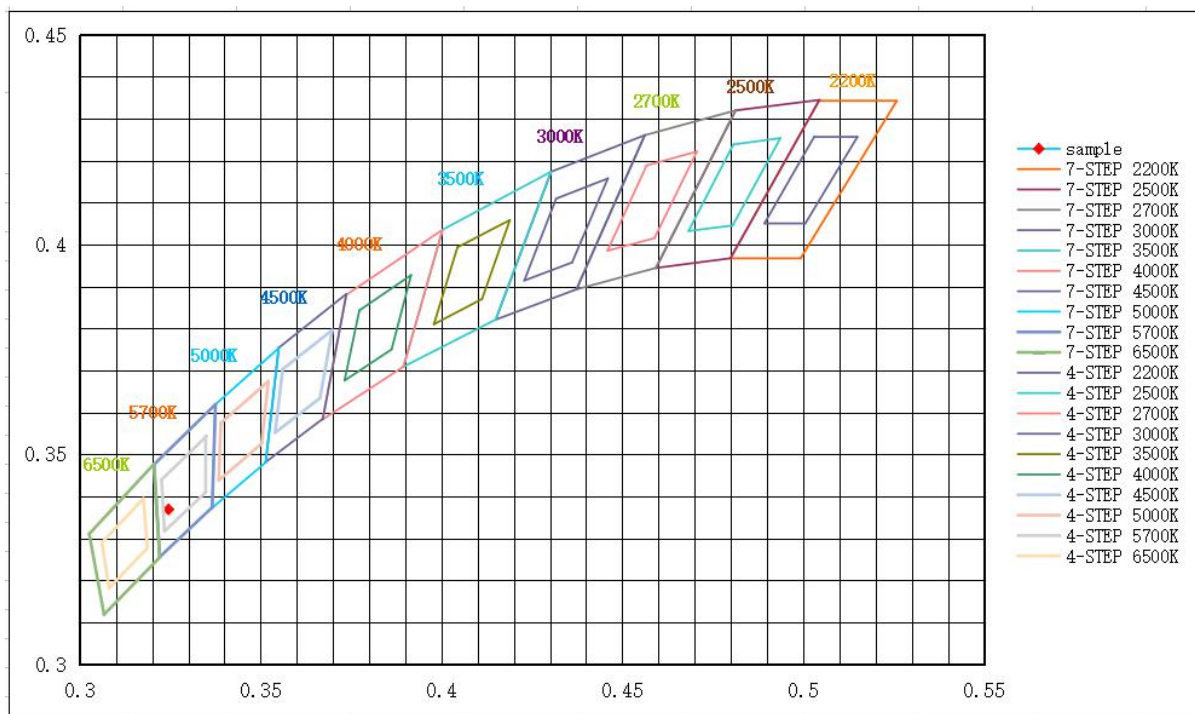
Color Rendering

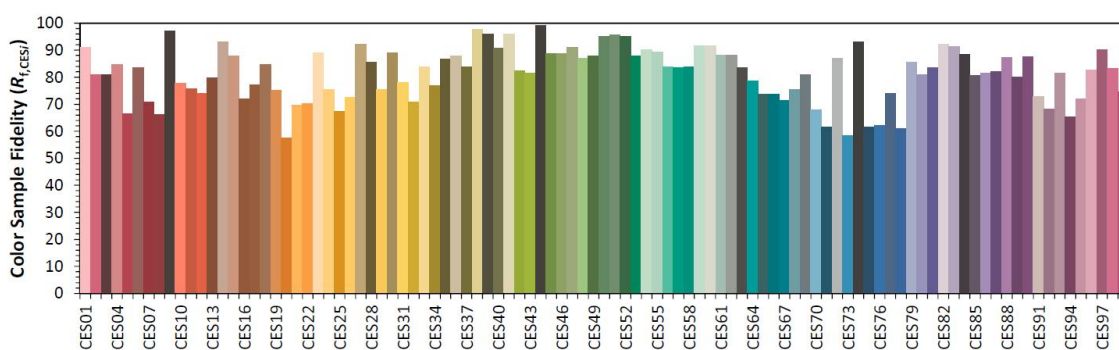
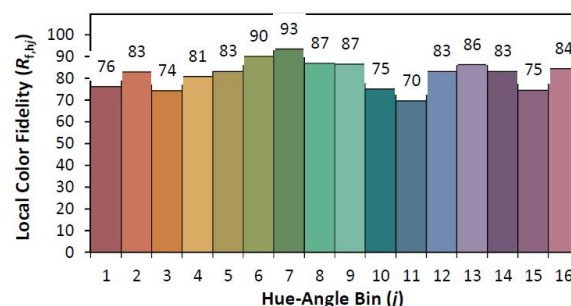
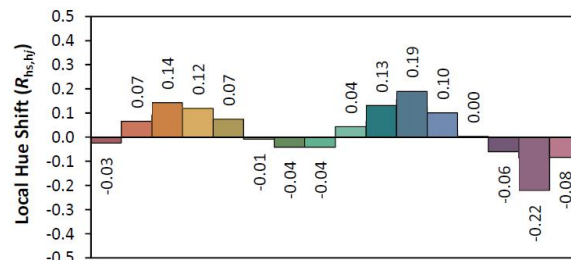
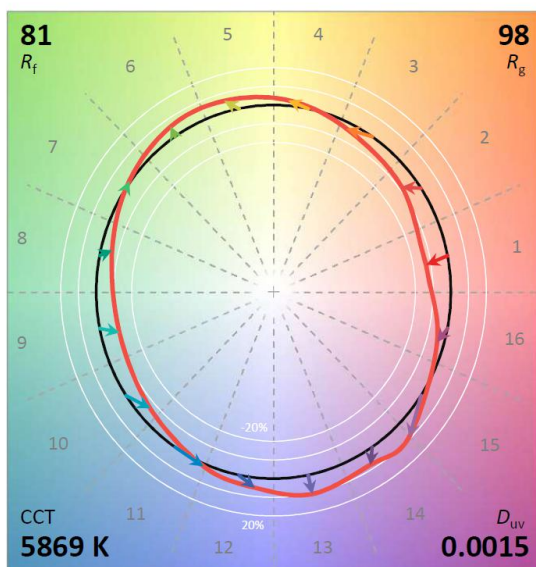
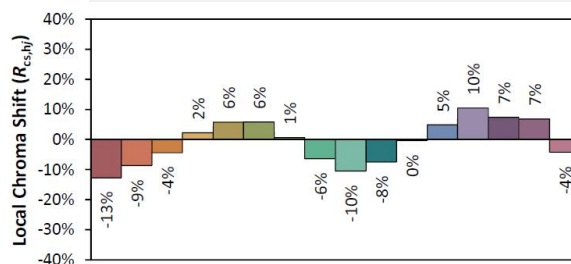
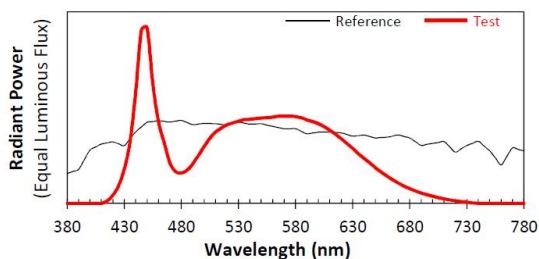
CRI	R9	Rf	Rg	Rcs,h1(%)
81.2	5	81	98	-13

Spectral Distribution



7/4 Step Quadrangle



**ANSI/IES TM-30-18 Color Rendition Report****Source:** BL240513005-9**Manufacturer:** RZ Lighting Co Ltd**Date:** 2024-05-30**Model:** HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT, 5700K

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

x 0.3245
 y 0.3369
 u' 0.2030
 v' 0.4742

CIE 13.3-1995
(CRI)

R_a 81
 R_g 5

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.



3.2 Goniophotometer System (Total operating time for luminous intensity distribution: 1.0 hour)

3.2.1 Model Number:

HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT, 4000K

Electrical data

Input Voltage(V)	Frequency (Hz)	Input Current (A)	Power (W)	Power Factor
120.05	60	2.4840	297.32	0.9972

Photometric data

Luminous Flux (lm)	Efficacy (lm/W)	Zonal Lumen in 20-50°(%lm)
49196.85	165.47	64.10

**Zonal Flux Diagram**

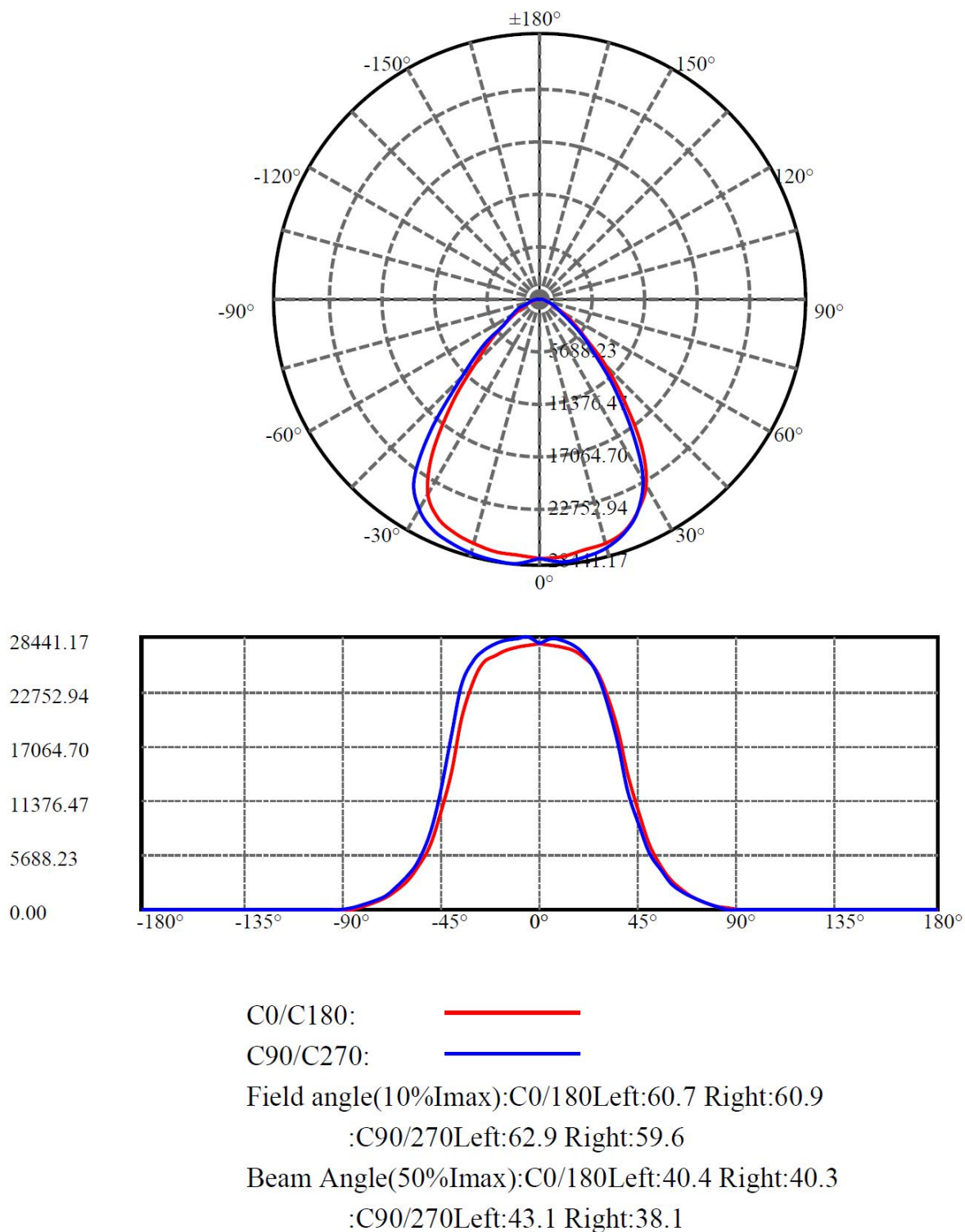
Zonal flux distribution table

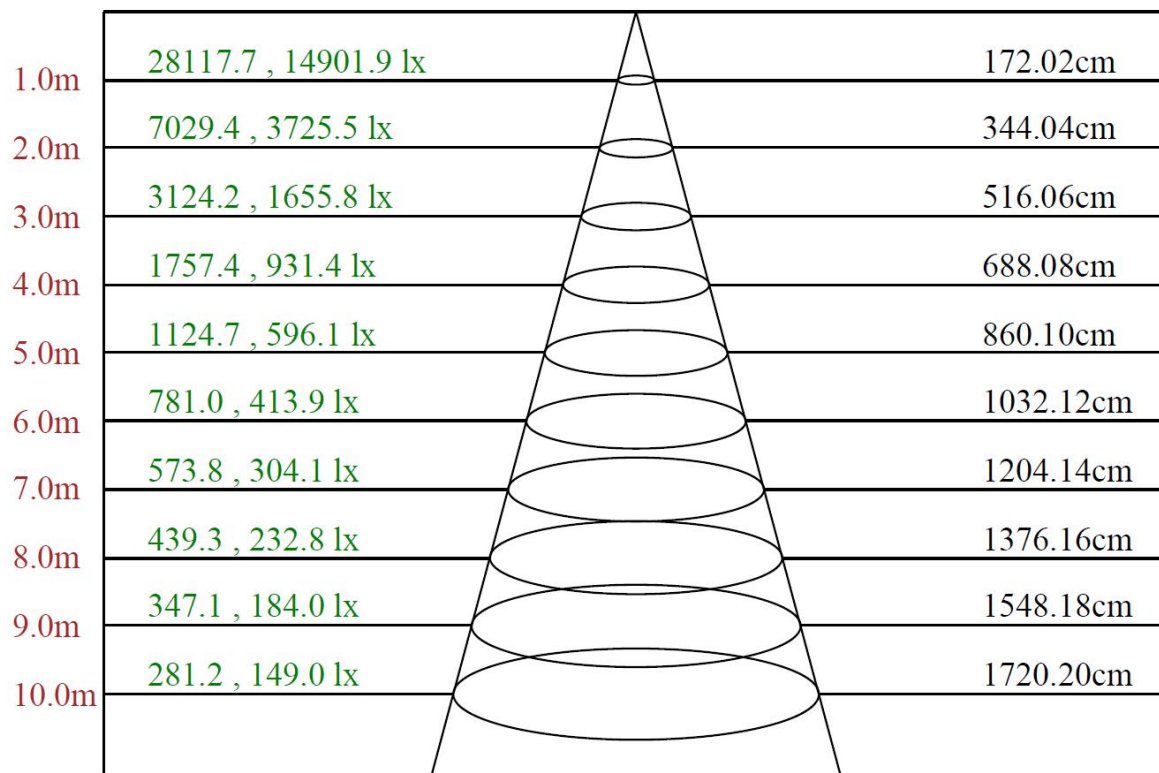
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	27767.869	0.000	0	0.00%	0.00%
5.0	27706.143	663.176	663.176	0.00%	1.35%
10.0	27499.691	1974.886	2638.062	0.00%	5.36%
15.0	27181.275	3243.638	5881.7	0.00%	11.96%
20.0	26559.758	4429.016	10310.717	0.00%	20.96%
25.0	25449.713	5454.833	15765.55	0.00%	32.05%
30.0	23413.801	6183.718	21949.268	0.00%	44.62%
35.0	19723.029	6352.200	28301.468	0.00%	57.53%
40.0	14454.566	5702.274	34003.742	0.00%	69.12%
45.0	9855.252	4501.160	38504.902	0.00%	78.27%
50.0	6685.018	3342.203	41847.106	0.00%	85.06%
55.0	4524.821	2437.392	44284.498	0.00%	90.01%
60.0	3063.142	1753.936	46038.434	0.00%	93.58%
65.0	1990.087	1228.450	47266.883	0.00%	96.08%
70.0	1292.187	831.093	48097.976	0.00%	97.77%
75.0	786.125	543.238	48641.214	0.00%	98.87%
80.0	364.778	307.950	48949.164	0.00%	99.50%
85.0	71.106	118.440	49067.604	0.00%	99.74%
90.0	3.000	20.291	49087.895	0.00%	99.78%
95.0	3.016	1.647	49089.542	0.00%	99.78%
100.0	3.201	1.689	49091.231	0.00%	99.79%
105.0	4.005	1.928	49093.159	0.00%	99.79%
110.0	5.305	2.433	49095.593	0.00%	99.79%
115.0	7.330	3.199	49098.792	0.00%	99.80%
120.0	10.037	4.222	49103.014	0.00%	99.81%
125.0	13.825	5.516	49108.529	0.00%	99.82%
130.0	18.403	7.007	49115.537	0.00%	99.83%
135.0	23.753	8.518	49124.055	0.00%	99.85%
140.0	29.228	9.810	49133.865	0.00%	99.87%
145.0	35.244	10.757	49144.622	0.00%	99.89%
150.0	40.981	11.225	49155.846	0.00%	99.92%
155.0	46.347	11.051	49166.898	0.00%	99.94%
160.0	49.935	10.098	49176.996	0.00%	99.96%
165.0	51.899	8.393	49185.389	0.00%	99.98%
170.0	53.013	6.223	49191.612	0.00%	99.99%
175.0	55.162	3.870	49195.482	0.00%	100.00%
180.0	58.976	1.364	49196.846	0.00%	100.00%



Luminous Intensity Distribution Diagram

Light Distribution Curve [Unit:cd]



**Lux distance Curve**

Max , Ave

Beam angle of C270 plane 81.40



UGR Glare

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	25.27	26.57	25.63	26.89	27.21	24.84	26.14	25.21	26.46	26.78
	3H	25.99	27.15	26.38	27.49	27.84	25.59	26.75	25.98	27.10	27.45
	4H	26.22	27.30	26.62	27.65	28.02	25.81	26.89	26.21	27.24	27.61
	6H	26.35	27.34	26.76	27.72	28.12	25.90	26.89	26.32	27.27	27.67
	8H	26.33	27.29	26.75	27.67	28.08	25.87	26.82	26.29	27.20	27.61
4H	12H	26.30	27.20	26.72	27.60	28.02	25.81	26.72	26.24	27.12	27.54
	2H	25.47	26.55	25.88	26.91	27.28	25.10	26.18	25.50	26.54	26.91
	3H	26.34	27.23	26.76	27.63	28.05	26.00	26.89	26.42	27.29	27.71
	4H	26.70	27.48	27.14	27.90	28.35	26.34	27.12	26.77	27.54	27.99
	6H	26.85	27.54	27.32	27.99	28.44	26.44	27.13	26.91	27.58	28.04
8H	8H	26.87	27.51	27.36	27.97	28.44	26.44	27.09	26.93	27.54	28.02
	12H	26.86	27.46	27.35	27.91	28.43	26.42	27.01	26.90	27.46	27.98
	4H	26.72	27.36	27.20	27.81	28.29	26.37	27.02	26.86	27.47	27.95
	6H	26.91	27.44	27.41	27.91	28.43	26.52	27.05	27.02	27.53	28.04
	8H	27.00	27.46	27.53	27.98	28.48	26.59	27.05	27.12	27.57	28.07
12H	12H	27.00	27.38	27.53	27.89	28.41	26.57	26.94	27.10	27.46	27.98
	4H	26.69	27.28	27.18	27.74	28.25	26.35	26.95	26.84	27.40	27.92
	6H	26.93	27.39	27.45	27.91	28.40	26.55	27.01	27.08	27.53	28.03
	8H	26.99	27.37	27.53	27.88	28.41	26.58	26.96	27.12	27.48	28.00
Variation with the observer position at spacings:											
S = 1.0H		0.8/-1.5					0.7/-1.4				
S = 1.5H		1.8/-2.6					1.8/-2.5				
S = 2.0H		4.1/-3.2					4.1/-3.1				
Standard tables:		BK2					BK2				
Uncorrected UGR		10.1					10.5				

UGR calculation is based on CIE Publ. 117 ,S/H = 1

**Luminous Intensity Distribution Data**

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	27767.87	27570.21	27307.93	27008.54	26340.47	25024.13	22784.86	18954.60	14119.76
22.5	27767.87	27441.54	27147.10	26840.28	25944.58	24482.25	21923.79	18026.72	13439.32
45.0	27767.87	27382.16	27102.56	26771.00	25786.22	24133.37	21468.52	17442.78	12892.49
67.5	27767.87	27389.58	27149.57	26723.99	25751.58	24135.84	21329.95	17205.25	12724.24
90.0	27767.87	28255.60	28025.49	27520.72	26607.70	24940.00	22052.46	17427.94	12308.55
112.5	27767.87	27951.26	27713.72	27337.62	26481.51	24915.26	22215.76	17967.34	12528.76
135.0	27767.87	27765.68	27500.93	27206.48	26454.29	25224.55	22794.76	18368.18	12988.99
157.5	27767.87	27641.96	27406.90	27097.61	26560.68	25447.24	23383.64	19187.18	13436.84
180.0	27767.87	27528.15	27352.47	27048.13	26543.36	25707.04	23811.70	19899.79	14236.05
202.5	27767.87	27495.98	27320.30	27072.87	26590.38	25786.22	24180.38	20627.24	14998.14
225.0	27767.87	27446.49	27288.14	27013.49	26595.32	25867.87	24365.95	21097.37	15394.04
247.5	27767.87	27431.65	27268.34	27008.54	26625.02	25939.63	24509.46	21233.45	15908.70
270.0	27767.87	28441.17	28310.04	28045.28	27671.66	27090.19	25885.19	23433.13	18108.38
292.5	27767.87	28094.77	27961.15	27703.82	27350.00	26711.62	25417.54	22648.77	16891.01
315.0	27767.87	27825.07	27671.66	27350.00	26986.27	26189.54	24680.19	21708.53	16235.31
337.5	27767.87	27637.02	27468.76	27152.05	26667.08	25600.64	23816.65	20340.22	15062.48
360.0	27767.87	27570.21	27307.93	27008.54	26340.47	25024.13	22784.86	18954.60	14119.76
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	9883.71	6709.14	4459.98	2964.00	1947.79	1247.31	789.56	384.02	88.83
22.5	9351.73	6501.30	4527.03	3094.15	2015.84	1259.19	793.77	368.43	76.21
45.0	9198.32	6493.88	4487.69	3060.99	1985.90	1254.24	764.57	346.90	70.27
67.5	9151.31	6355.31	4294.69	2923.42	1909.19	1216.63	741.80	338.98	61.61
90.0	8569.84	5862.92	4022.02	2730.42	1785.23	1228.50	701.72	287.76	32.66
112.5	8371.89	5771.37	4044.29	2732.90	1750.59	1230.98	685.88	277.62	34.15
135.0	8846.96	5974.27	4046.77	2718.05	1762.96	1233.45	686.87	288.51	34.15
157.5	8936.04	6048.50	4192.75	2774.96	1827.29	1240.88	702.46	300.63	44.04
180.0	9633.80	6513.67	4408.02	2928.37	1876.78	1240.88	749.23	338.49	53.94
202.5	10066.81	6847.71	4652.98	3089.20	2062.35	1300.26	795.50	373.38	73.49
225.0	10633.43	7208.96	4892.99	3311.89	2126.69	1352.22	863.29	397.38	74.23
247.5	10841.27	7379.69	4878.14	3198.07	2037.61	1322.53	832.86	408.76	82.89
270.0	11838.43	7706.30	4923.42	3564.52	2303.60	1456.14	913.52	455.03	108.13
292.5	11368.30	7560.31	4920.45	3365.83	2214.77	1397.25	871.46	437.96	108.62
315.0	10819.00	7142.15	4884.57	3344.06	2136.34	1354.45	854.88	430.78	102.93
337.5	10173.20	6884.82	4761.35	3209.45	2098.48	1340.10	830.63	401.83	91.55
360.0	9883.71	6709.14	4459.98	2964.00	1947.79	1247.31	789.56	384.02	88.83
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	3.22	2.97	3.46	4.21	5.20	7.18	9.90	14.10	18.31
22.5	2.97	2.72	2.97	3.96	5.20	7.42	10.39	14.35	19.30
45.0	2.97	3.22	3.22	4.45	5.69	8.17	10.64	14.85	19.80
67.5	2.97	2.97	3.22	4.21	5.69	7.67	10.64	14.60	19.80
90.0	2.97	2.97	3.46	4.45	5.94	7.92	11.13	15.59	20.78
112.5	2.47	2.97	2.97	4.21	5.44	7.92	10.64	15.09	20.29
135.0	2.97	3.22	3.46	4.21	5.44	7.92	10.39	14.60	19.05
157.5	3.22	2.97	3.22	3.96	5.44	7.18	10.15	14.10	18.56
180.0	2.97	2.97	2.97	3.71	5.44	7.18	10.15	13.61	17.57
202.5	2.97	3.22	3.46	3.71	5.20	6.93	9.65	13.11	17.32
225.0	2.97	2.97	3.22	3.96	5.20	6.93	9.40	13.11	17.07
247.5	3.22	3.22	3.22	3.96	5.20	6.93	9.65	12.62	17.07
270.0	2.97	2.97	3.22	3.96	4.95	6.93	9.65	12.62	17.32
292.5	2.97	2.97	3.22	3.71	4.95	6.93	9.16	12.62	17.07
315.0	3.22	2.97	2.97	3.71	4.95	6.93	9.40	12.62	17.32
337.5	2.97	2.97	2.97	3.71	4.95	7.18	9.65	13.61	17.82
360.0	3.22	2.97	3.46	4.21	5.20	7.18	9.90	14.10	18.31



$C/\gamma(^{\circ})$	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	24.25	29.94	35.63	41.07	46.27	50.23	51.96	52.95	55.18
22.5	24.99	30.19	35.88	41.57	46.77	50.23	52.21	53.69	55.43
45.0	25.24	30.68	36.62	42.06	47.51	51.22	53.20	53.94	55.43
67.5	25.24	30.43	36.62	42.56	48.25	51.22	53.20	53.45	55.43
90.0	26.48	32.41	38.60	45.03	49.98	52.95	54.44	54.68	56.17
112.5	25.24	31.18	37.61	43.80	49.49	52.21	53.94	54.44	55.67
135.0	24.74	30.68	36.62	42.56	47.76	51.47	52.70	53.69	55.43
157.5	23.75	29.45	35.63	41.32	46.52	49.73	51.22	52.70	54.93
180.0	22.76	28.46	34.15	40.08	45.28	48.99	50.72	51.47	54.19
202.5	22.52	27.22	33.40	38.85	44.04	47.76	49.49	51.47	53.94
225.0	21.77	27.22	32.91	38.60	43.30	47.01	49.49	50.97	53.69
247.5	21.53	26.72	32.91	38.60	43.80	47.26	49.49	50.72	53.45
270.0	22.52	28.21	34.64	40.08	46.52	50.72	53.20	54.44	56.91
292.5	22.52	27.71	34.15	39.84	45.28	49.73	52.46	53.45	55.92
315.0	23.01	28.21	33.90	39.34	45.28	49.24	51.47	53.20	55.43
337.5	23.51	28.95	34.64	40.33	45.53	48.99	51.22	52.95	55.43
360.0	24.25	29.94	35.63	41.07	46.27	50.23	51.96	52.95	55.18
$C/\gamma(^{\circ})$	180.0								
0.0	58.98								
22.5	58.98								
45.0	58.98								
67.5	58.98								
90.0	58.98								
112.5	58.98								
135.0	58.98								
157.5	58.98								
180.0	58.98								
202.5	58.98								
225.0	58.98								
247.5	58.98								
270.0	58.98								
292.5	58.98								
315.0	58.98								
337.5	58.98								
360.0	58.98								



4 Additional Test

Electrical data

Model Number	CCT	Test Voltage (V)	Frequency (Hz)	Power Factor	THD(%)
HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT	4000	120	60	0.997	3.4
		277	60	0.944	9.1
	5000	277	60	0.946	8.9
	5700	277	60	0.945	8.7

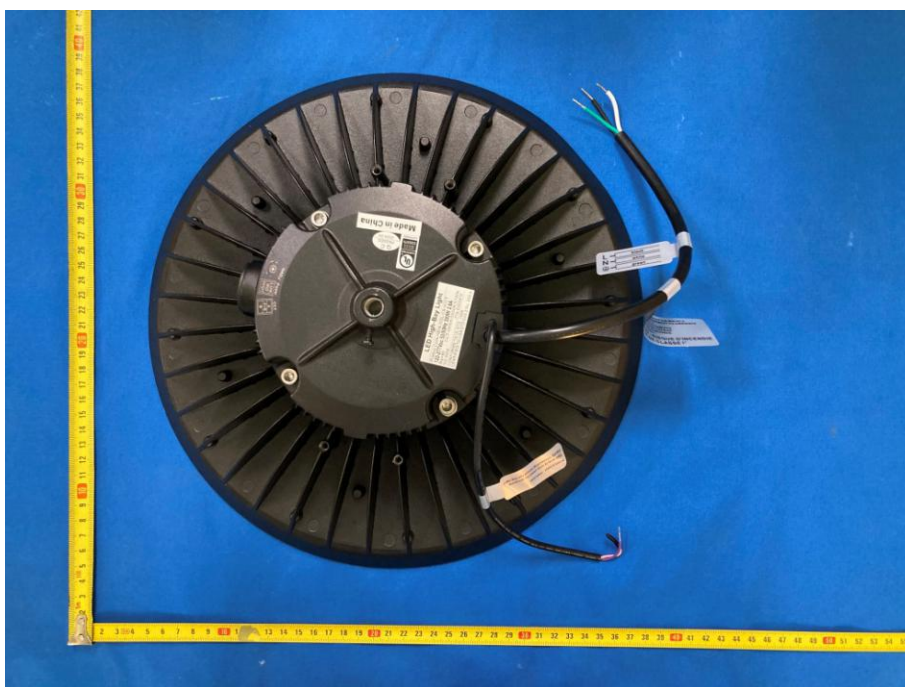
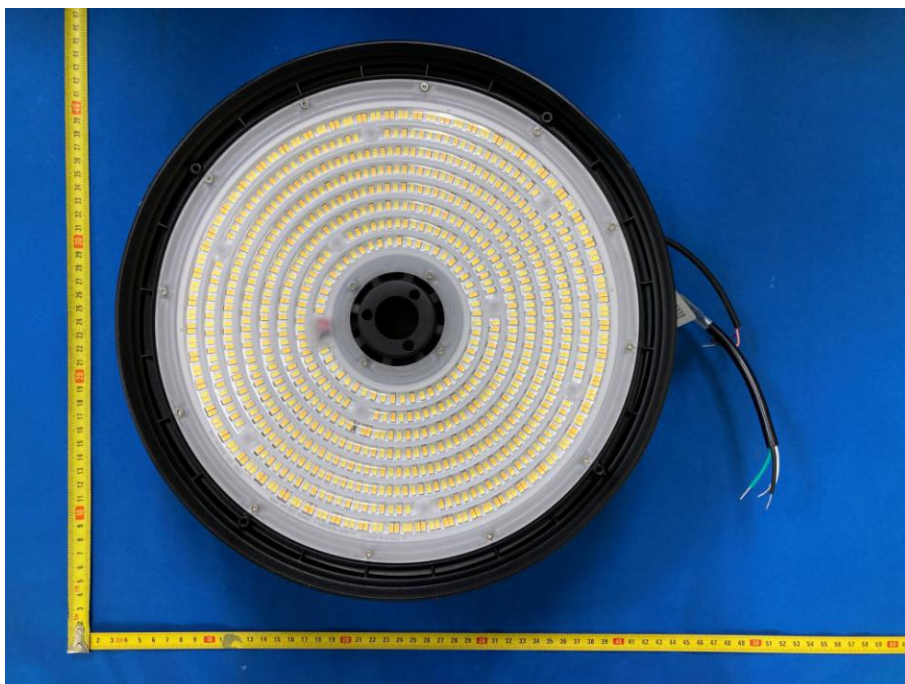
5 Data reporting for white-tunable submissions

(HB08-300L-[C;CS;CP;CM;CI;CMB;CIB;CSP;CSM;CSI;CSMB;CSIB]-3CCT)

ANSI CCT Quadrangle (omit any outside product range) / Worst-Case Value	Actual CCT (K)	Power Consumption (W)	Lumen Output (lm)	Input Control Signal Applied
4000K	4089	297.46	49140.89	0%
5000K	4813	291.41	50880.25	50%
5700K	5870	297.13	50155.61	100%
Lowest Efficacy	4089	297.46	49140.89	0%
Maximum Power	4089	297.46	49140.89	0%



Photo Document



End of test report