



PHOTOMETRIC TEST REPORT No. 230906PH

Date: 8th September 2023

Client: Signify Australia Limited
Address: 65 Epping Road, North Ryde, NSW 2113
Contact: Jonas Olander

Luminaire: 144W Highlight

Catalogue No.: TC HB B 260S/840 PSU WH401LC-CTC AU
(sample tested), TC HB BS 260S/840 PSU WH401LC-CTC AU
(sample with sensor)

Description: 144W 4000K LED Highbay with 435mm diameter,
180mm deep, open clear plastic prismatic reflector

Optical System: LED module (marked RD-D193-UHBah-200W-
27C22B-2835-A0) with 5x concentric rings of 594x 4000K LEDs

Control Gear: LiFud LED Driver model number LF-
FHB200YAI V 5

Test Specification:

The luminaire was tested in accordance with the procedures given in IES LM79-19, “Optical and electrical measurements of Solid-State Lighting Products” using the **absolute** method.

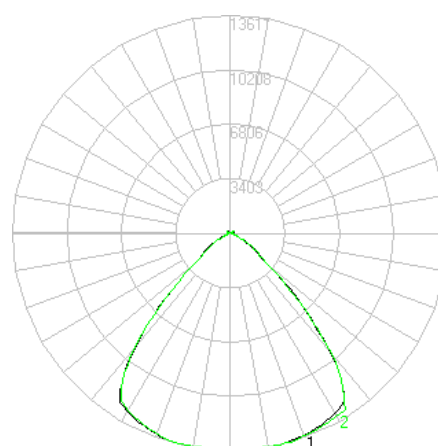
Results:

When tested at an ambient of 25°C at a supply voltage of 240.2V, 50Hz, the luminaire consumed 0.635A and 144.8W at a Power factor of 0.953. That is, Lamp Circuit Power (LCP), which includes power supply losses, is 144.8W.

The Total Luminous Flux was measured as 26323 Lumens.


The Correlated Colour Temperature was measured as 3910K average.

Luminous Intensity Distribution (I-TABLE) is given on Page 6.



C0-C180° Vertical Plane
C90-C270° Vertical Plane

Tested by: J. King/D. Orwin on 5th September 2023

Authorised Signatory: 
A. Yetendje



Test Configuration

The luminaire was photometered in IESNA Horizontal – Vertical Reference angles such that:

- The luminaire was mounted with photometric centre aligned with photometric zero (in the direction of nadir), centred on the light emitting area.
- In accordance with CIE S 025/E:2015 Clause 5.3.2 the centre of the prismatic reflector was co-incident with centre of the goniophotometer.
- The photometric test distance of 10.03m, is referenced to the photometric centre of the luminaire and the photocell.

Due to the Type B mounting arrangement, a primary correction factor to achieve correct orientation was determined but not applied as it was less than 0.5% and accounted for in the Uncertainty Budget. Should these Uncertainties be required contact LEDLab. Secondary corrections to the horizontal were applied.

Test Procedures and Equipment

Calibration report:	220855CAL using N.M.I. report RN 181690 on standard lamp 13478
Technical Procedure:	P113 & P118
Angular Resolution:	Test Configuration and issued .ies file C Plane Interval 15 Deg Gamma Angle Interval 1.0 Deg Abbreviated Test Report File (I-Table) C Plane Interval 15 Deg Gamma Angle Interval 5.0 Deg
Software:	Lisun LSG-1800B
Obstructions:	None
Lab. Book Page:	PH6/1928
Primary Orientation Correction:	1.0
Colour correction:	1.028
Goniophotometer:	Lisun Electronics Model LSG-1800B, Serial No. GSGHF070010.
Photocell:	Lisun Electronics Detector Serial No. 330220-1
Lux meter:	Lisun Electronics Model PM 400, Serial No. GSRXK090021
Lux meter integration time (PLC):	5
Power meter:	Lisun Electronics Model RT-200, Serial No. GSXY0100021
Power meter integration time (s):	0.5
Luminaire thermometer:	AMA 1362983 0.1°C Serial No 526,10942
Temperature Data Logger:	Lisun TMP-8 Multiplex Serial No GSJWM010028
Auxiliary Photocell:	Delta Ohm HD 2102.1 & LP471PHOT
Spectroradiometer:	Lisun LMS 9000A spectroradiometer Serial No GSXYE090207



TEST REPORT and IES file archive

The data files for this report are contained in the *archive file: 230906PH.zip*

IES file : 230906PH.IES

Document file : 230906PH.pdf

Uncertainties

At a Confidence Level of 95% with a Coverage Factor of 2

As per NATA electrotechnical ruling and LEDLab terms and Conditions as agreed by the client, LEDLab Uncertainties in measurement will be considered but will not be applied when assessing the Pass / Fail conclusion. In borderline cases, the measured value, its uncertainty and the limit are reported.

Angular direction: $\pm 0.4^\circ$

Luminous Intensity: $\pm 4\% + 0.5\text{cd}$

Total Luminous Flux: $\pm 4.1\% + 0.05\text{lm}$

Supply Voltage (AC): $\pm 0.15\%$

Supply Current (AC): $\pm 0.2\%$

Supply Power (AC): $\pm 0.25\%$

Ambient Temperature: $\pm 1^\circ\text{C}$

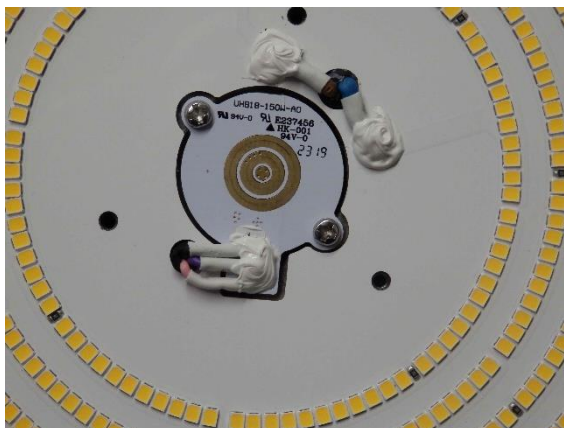
Luminous Opening: $\pm 3\text{mm}$

CCT: $\pm 100\text{K}$

Duv: ± 0.001

CRI: ± 4

Photos



Highlight (HB Series)

PHILIPS

TC HB B 260S/840 PSU WH401LC-CTC AU
~220...240V 50/60Hz 144W PF:0.9 IP65 IK02 Ta40°C
912500108455 2023090618
Not configured



Signify, I.B.R.S.10461,5600 VB,NL

TEST.2023090618.0000 09/2023

Highlight (HB Series)

PHILIPS

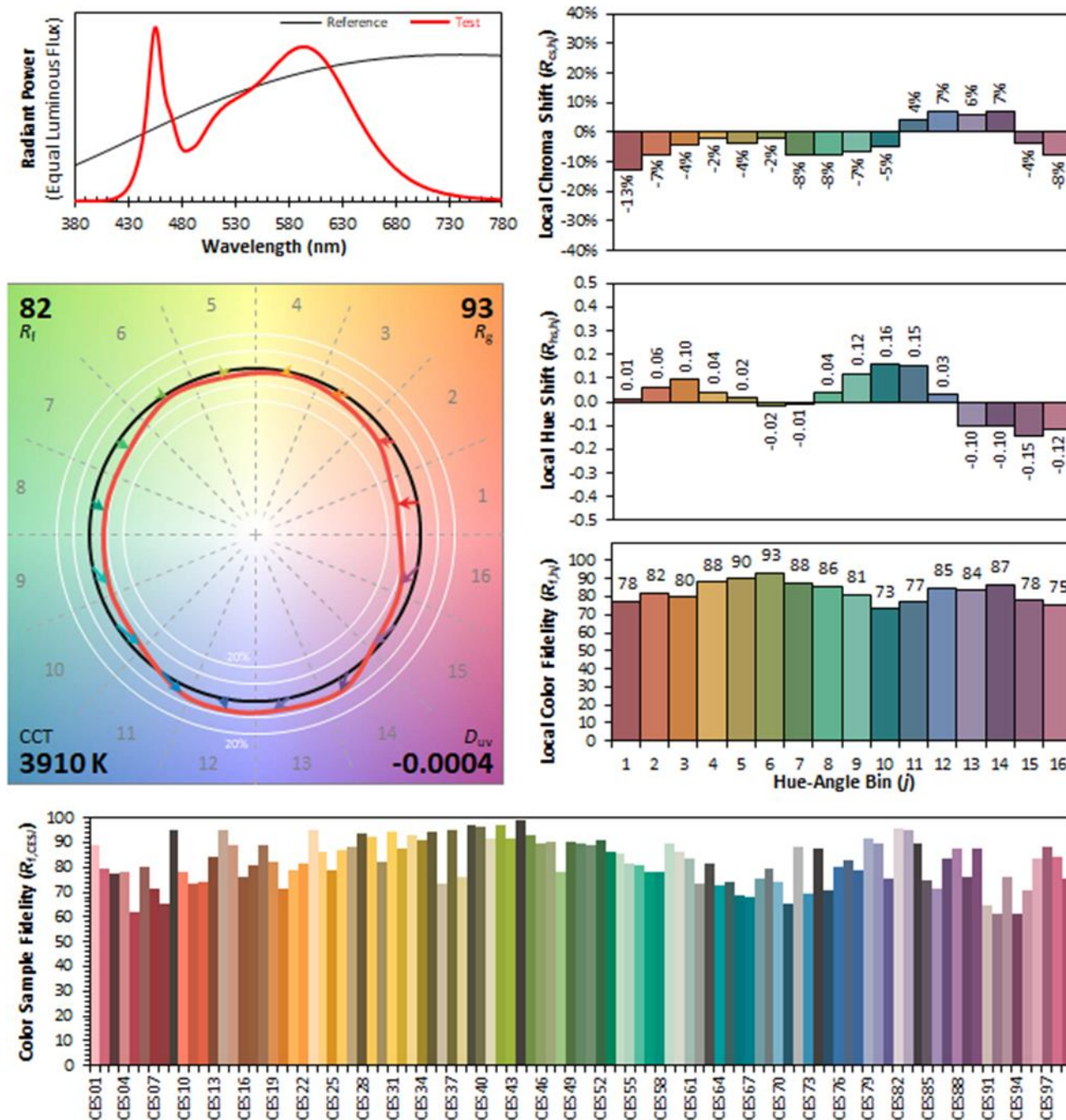
TC HB BS 260S/840 PSU WH401LC-CTC AU
~220...240V 50/60Hz 144W PF:0.9 IP65 IK02 Ta40°C
912500108458 2023090622
Made in Australia



Signify, I.B.R.S.10461,5600 VB,NL

TEST.2023090622.0000 09/2023

ANSI/IES TM-30-18 COLOR RENDITION REPORT



Notes:

x 0.3842
 y 0.3781
 u' 0.2270
 v' 0.5027

CIE 13.3-1995
 (CRI)
 R_a 83



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LUMINOUS INTENSITY DISTRIBUTION (I-Table) - cd																									
Vertical Angle (V) Degrees	Horizontal Angle (H Plane) - Degrees																								
	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360
0	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510	13510
5	13514	13515	13515	13528	13513	13531	13517	13527	13522	13513	13526	13513	13513	13512	13500	13503	13491	13509	13498	13503	13504	13499	13505	13506	13514
10	13558	13563	13561	13576	13566	13580	13569	13575	13564	13564	13579	13558	13559	13552	13542	13528	13537	13538	13530	13531	13529	13525	13553	13546	13558
15	13574	13578	13581	13584	13591	13603	13597	13611	13597	13594	13589	13561	13557	13547	13531	13523	13522	13534	13534	13549	13542	13547	13568	13569	13574
20	13464	13467	13473	13495	13490	13510	13510	13523	13509	13477	13462	13419	13404	13386	13368	13358	13357	13365	13377	13400	13407	13421	13438	13464	13464
25	13272	13278	13314	13331	13349	13371	13385	13397	13367	13303	13281	13216	13187	13140	13121	13096	13112	13097	13132	13164	13182	13191	13248	13265	13272
30	13025	13053	13099	13142	13164	13209	13255	13268	13214	13131	13050	12965	12879	12819	12770	12740	12753	12763	12798	12839	12890	12931	12964	12996	13025
35	12329	12407	12440	12472	12485	12464	12445	12336	12206	12138	12070	11995	11988	11891	11804	11823	11855	11867	11896	11949	12053	12169	12205	12258	12329
40	9731	9888	9895	9920	9928	9806	9801	9636	9456	9327	9224	9105	9199	9053	8989	8975	9033	9074	9154	9233	9340	9459	9593	9713	9731
45	6167	6232	6293	6301	6305	6247	6170	5980	5849	5698	5721	5699	5685	5608	5609	5592	5623	5620	5721	5723	5789	5808	5969	6189	6167
50	3209	3272	3247	3286	3203	3154	3028	2878	2729	2724	2620	2669	2664	2653	2675	2601	2607	2535	2624	2615	2675	2785	2973	3056	3209
55	1916	1942	2022	2082	2125	2105	2015	1984	1851	1897	1832	1924	1920	1930	1833	1758	1719	1680	1709	1708	1739	1738	1851	1827	1916
60	1207	1228	1360	1449	1471	1347	1231	1157	1085	1137	1095	1239	1267	1274	1160	1100	1056	1015	1023	1028	1039	1057	1099	1098	1207
65	546	591	706	706	684	610	544	526	502	515	509	552	567	546	497	460	459	437	451	464	465	477	480	492	546
70	271	290	328	325	311	290	269	269	259	258	249	257	252	244	236	234	239	225	234	245	249	242	248	248	271
75	174	178	202	192	190	173	166	173	168	165	159	156	158	153	153	152	158	151	160	169	171	166	169	164	174
80	140	136	147	136	137	127	126	135	133	131	122	125	124	119	123	125	134	127	131	142	139	132	133	126	140
85	114	109	119	104	107	100	101	113	108	104	99	101	102	101	107	102	113	106	109	116	115	107	108	106	114
90	90	87	91	81	87	77	84	91	90	85	80	81	82	82	86	81	89	80	85	90	92	86	90	84	90
95	88	87	86	76	80	76	83	89	90	85	79	81	81	80	85	80	88	81	84	91	90	82	87	85	88
100	95	91	94	81	87	81	86	94	96	89	86	83	86	87	92	85	96	87	91	97	95	93	95	92	95
105	105	96	98	90	98	94	96	106	103	98	91	91	95	92	100	91	105	93	96	99	106	99	98	101	105
110	137	122	116	114	121	116	119	138	137	121	117	113	115	112	115	115	129	125	126	136	137	135	128	128	137
115	219	213	192	185	192	195	200	209	218	202	186	171	174	181	185	188	208	198	202	213	217	217	222	211	219
120	181	182	197	199	197	194	200	196	183	175	167	171	172	165	169	163	164	152	157	163	158	159	159	168	181
125	107	106	118	116	124	115	119	120	117	104	101	101	106	104	107	96	102	93	90	100	99	92	96	98	107
130	71	65	75	73	79	73	74	76	72	65	61	64	67	64	70	65	71	58	62	67	63	63	60	62	71
135	48	46	51	48	51	47	47	51	50	38	37	41	45	44	49	43	51	42	42	48	47	43	44	43	48
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145	39	37	38	33	42	33	31	37	36	30	24	28	32	29	34	27	35	30	32	41	41	36	34	34	39
150	40	36	37	37	43	35	34	40	38	34	32	31	34	32	35	24	37	32	32	42	42	38	36	36	40
155	41	39	41	36	42	36	37	40	41	34	30	30	34	29	34	28	34	29	28	41	39	36	34	33	41
160	36	34	39	34	40	35	36	38	37	33	28	29	31	27	30	27	34	27	28	35	35	30	29	28	36
165	30	29	29	25	32	29	30	38	32	25	24	25	27	25	28	0	27	25	26	30	31	24	22	24	30
170	25	0	25	0	28	23	24	30	29	0	0	0	0	0	0	0	23	0	0	24	26	0	0	0	25
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0