

TEST REPORT

Test Report No.	BSR2411260101-9
Applicant	Hudson Valley Lighting, Inc
Applicant Address	151 Airport Drive Wappingers Falls NY 12590 USA
Description of Sample(s)	Fixture Lamp
Brand Name	TROY LIGHTING, CORBETT LIGHTING, MITZI LIGHTING, HUDSON VALLEY LIGHTING
Model	B7810-XXXXXXX ("XXXXXXX" indicates the shell color)
Investigation Requested	IDA: Approval Criteria Version 2.25 updated May 11, 2022
Test Method	IESNA TM-15-11 Luminaire Classification System for Outdoor Luminaires
Conclusion(s)	See test data in the following pages
Test Laboratory	Bell-Southcn Testing Laboratory
Address	First floor, Huaxia Building, No.116, Jiangmu Road, Jianghai District, Jiangmen City, Guangdong, China. Email:Marketing@bell-southcn.com
Accreditation Body	International Accreditation Service, Testing Laboratory TL-525
Date Sample(s) Received	2024-11-15
Date of Report	2024-12-16
Date of Tests	2024-11-18 ~ 2024-11-25
Test Engineer Signature	Neil 
Witness/Approval Signature	Peter Tao 

Note: This test report is prepared for the applicant shown above and for the device described herein. It may not be duplicated or use in part without prior written consent from Bell-Southcn Testing Laboratory (shenzhen). This report must not be used by the customer to claim product certification, approval, or endorsement By IAS, NIST, or any agency of the Federal Government. The test data was only obtained from samples submitted by the applicant.

Measurement Result :

Model No:	B7810-XXXXXXX ("XXXXXXX" indicates the shell color)
Test Model No:	B7810-PBR/BRZ
Voltage(V)	120.00
Current(A)	0.042
Power(W)	5.011
PF	0.984
Lumens(lm)	285.85
Luminous Efficacy(lm/W)	57.05
Angle of maximum intensity(cd)	C=0.0 γ =1.0
Beam Angle(50%Imax)	[C0/180] Total=121.2, [C90/270] Total=119.2
CIE Type	Direct lighting
Used Light Sources Type	LED
IES Classification	TypeVS
Longitudinal Classification	VeryShort
Cut-off/ Non-Cutoff type	FullCutoff
Correlated Color Temperature (K)	2947

Measurement Result : **Cut-off type <3000K ; Uplight flux less than 50lm**
 Have fixed mount and Source is not visible from the horizontal plane
 Comply with FSA (Fixture Seal of Approval) for Residential Luminaires

Remark :

Full Cut-off:	no luminous flux above 90°, no more than 10% of the luminous flux of the light source in the lamp at any position from 80° to 90°.
Cut-off:	Any position above 90° does not exceed 2.5% of the luminous flux of the light source in the luminaire, and any position between 80° -90° does not exceed 10% of the luminous flux of the light source inside the luminaire.
Semi-Cut-off:	Any position above 90° does not exceed 5% of the luminous flux of the light source in the luminaire, and any position between 80° and 90° does not exceed 20% of the luminous flux of the light source in the luminaire.
Non-Cut-off:	Unlimited.

Fixture Seal of Approval Criteria as of May 11, 2022

To receive the FSA, all of the following criteria shall be met.

Approved fixtures shall employ warm-toned (3000K and lower) white light sources or may employ amber light sources or filtered LED light sources. If other CCTs or mounting options are available for the luminaire, a notation needs to be made on the web page, spec sheets, and order forms that 3000k or warmer, and fixed mounts must be ordered for IDA certification compliance.

For Commercial luminaires:

- Photometric files are needed to validate performance characteristics.
- There is an uplight allowance of 0.5% of total output or 50 lumens; whichever is lower, with no more than 10 lumens in 90-100 degree UL zone. Allowable uplight as a byproduct of the structure and not the source.
- Street and area lights must have a pre or post-installation shielding option.
- Luminaires are required to have fixed mounts to ensure they are mounted as photometered. There can be up to + or- 10-degree adjustment for leveling if needed.
- Luminaires must have dimming capability to 10% of full rating.
- Light sources shall have a maximum correlated color temperature of 3000K.
- Luminaires must have Safety Certification by an independent laboratory.

For Residential luminaires:

- Uplight allowance: Not to exceed 50 lumens from source reflection or support structures. Source is not visible from the horizontal plane, i.e. the fixture is fully shielded.
- Require fixed mounts to ensure luminaire is mounted as photometered.
- Light sources shall have a maximum correlated color temperature of 3000K.
- Safety Lab Certification

Innovation: This is to encourage a Best in Class lighting development that significantly reduces light pollution and nocturnal habitat disruption.

- No Uplight allowance, BUG rating, U-0
- Dimmable to 1% of full rating
- Smart controls that meet program purposes
- No more than 7% of visible emissions in 380-520nm

Wildlife Tuned:

- Presently to recognize need of Florida turtle lighting approval program
- If research proceeds as expected and spectral sensitivities are known, this feature will be in place for future species-specific needs.
- No uplight, BUG U-0
- Sea turtle specific spectrum: 0% less than 565nm

Zonal flux distribution table**ZONAL LUMEN SUMMARY**

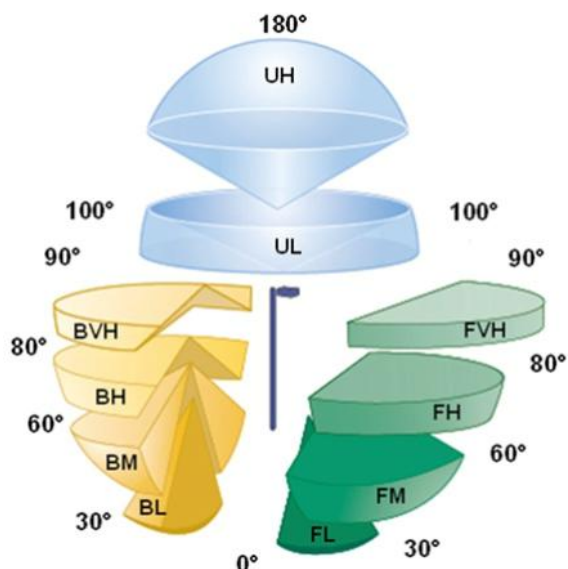
Zone	Lumens	%Fixt
0-30	78.15	27.34%
0-40	129.29	45.23%
0-60	236.13	82.61%
0-90	284.87	99.66%
0-120	285.01	99.70%
0-180	285.85	100.00%
60-90	48.74	17.05%
90-120	0.13	0.05%
90-130	0.29	0.10%
90-150	0.66	0.23%
90-180	0.98	0.34%
0-58.46	228.68	80.00%

ZONAL LUMEN SUMMARY

0-10	9.47
10-20	27.19
20-30	41.49
30-40	51.14
40-50	54.98
50-60	51.87
60-70	40.02
70-80	8.70
80-90	0.02
90-100	0.01
100-110	0.03
110-120	0.10
120-130	0.16
130-140	0.19
140-150	0.19
150-160	0.17
160-170	0.11
170-180	0.04

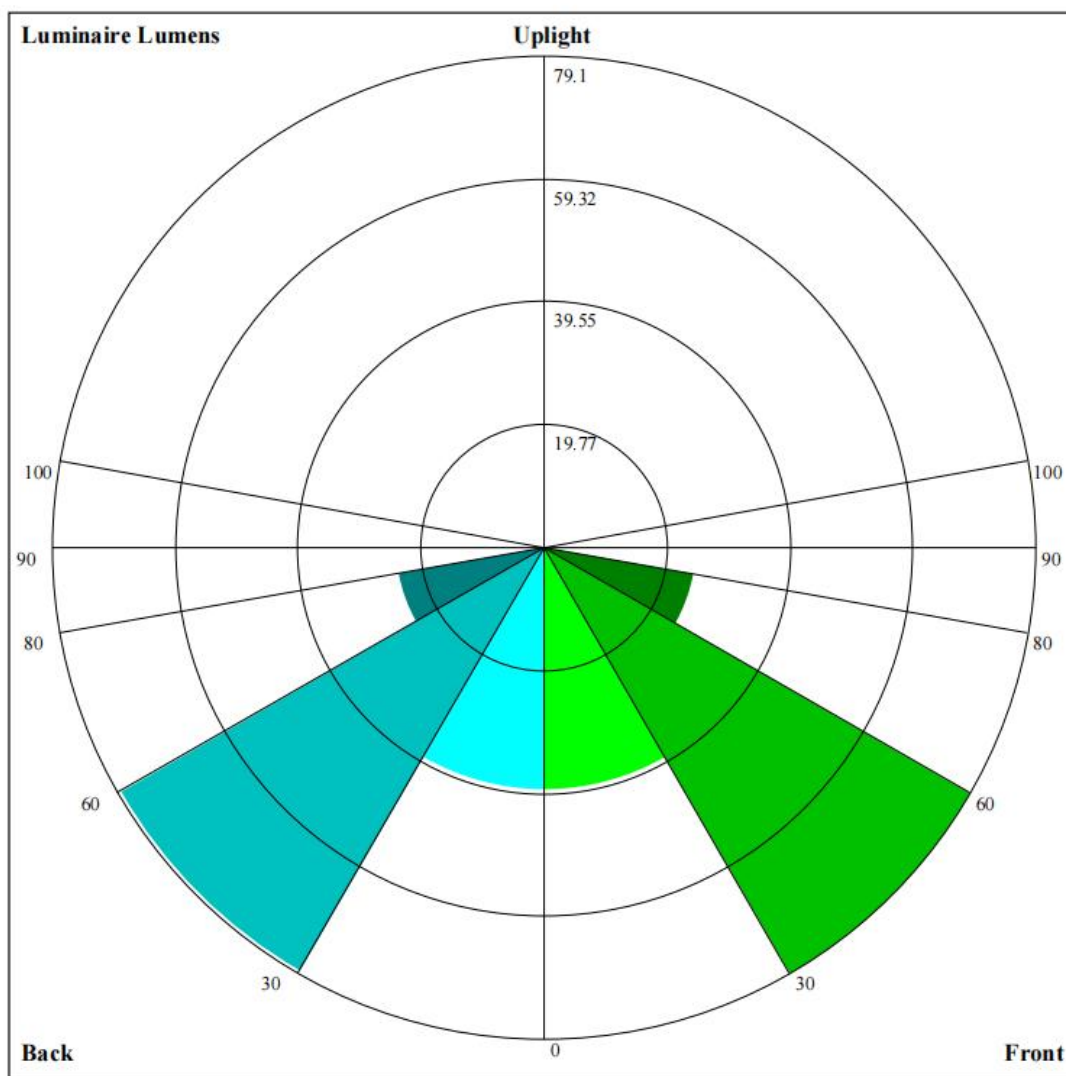
LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	%Lamp	%Luminaire
FL-Front-Low (0-30)	39.11	-	13.68%
FM-Front-Medium (30-60)	79.1	-	27.67%
FH-Front-High (60-80)	24.34	-	8.51%
FVH-Front-Very High (80-90)	0.00	-	0.00%
BL-Back-Low (0-30)	39.02	-	13.65%
BM-Back-Medium (30-60)	78.79	-	27.56%
BH-Back-High (60-80)	23.91	-	8.36%
BVH-Back-Very High (80-90)	0	-	0.00%
UL-Uplight-Low (90-100)	0	-	0.00%
UH-Uplight-High (100-180)	0	-	0.00%
Total	285.85	-	100.00%
BUG Rating		B0-U0-G0	



Remark: The Luminaire Classification System (LCS) defines the distribution of light from a luminaire within three primary solid angles. These are further divided into 10 secondary solid angles. LCS can be described as either percent bare lamp lumens or luminaire lumens for each primary and secondary solid angle. It is based in part on IES-funded research. The LCS quantifies light distribution in front of the luminaire (Forward Light), behind the luminaire (Back Light), and above the luminaire (Uplight).

LCS Graph



Luminaire Lumens:

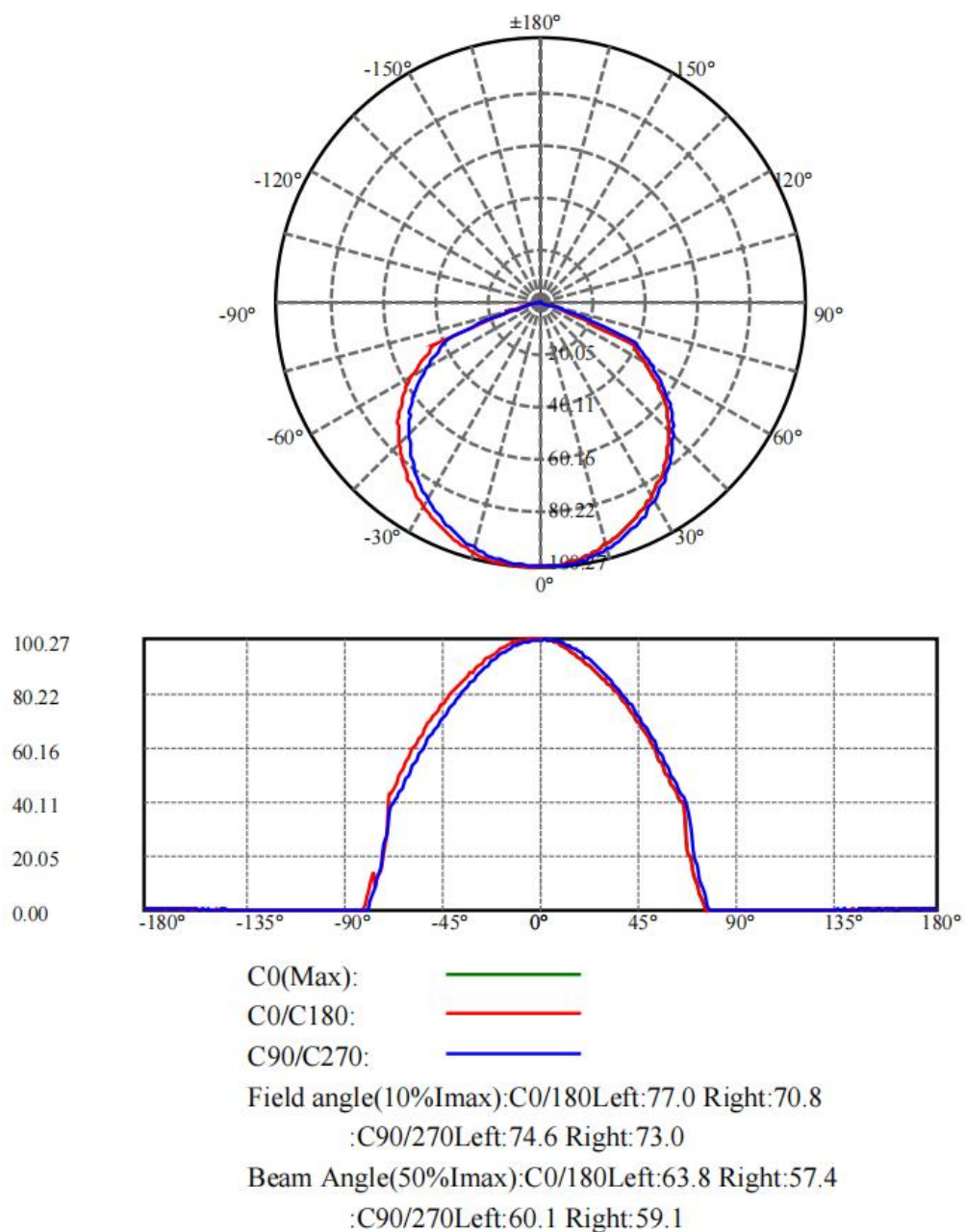
FL=39.11,FM=79.1,FH=24.34,FVH=0

BL=39.02,BM=78.79,BH=23.91,BVH=0

UL=0,UH=0

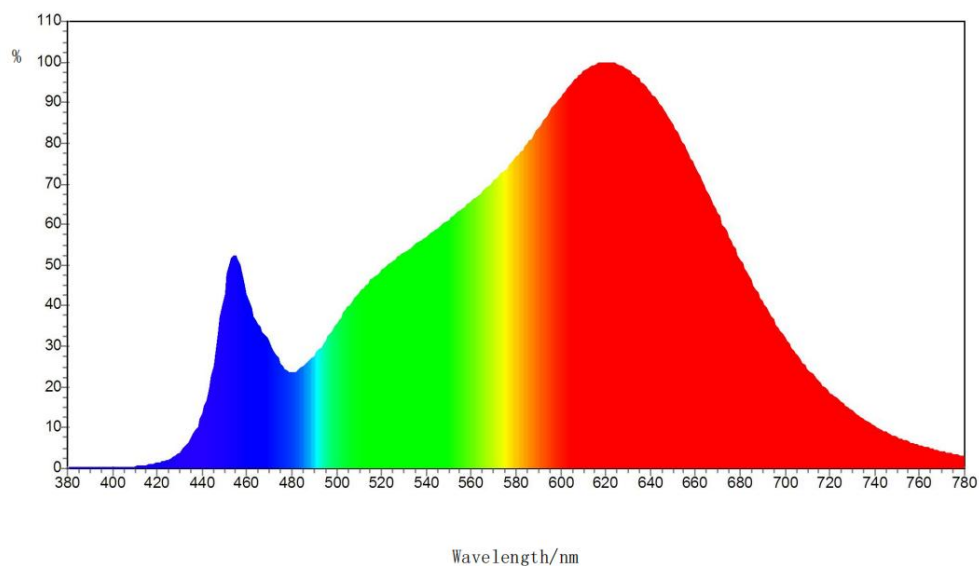
BUG Rating:B0-U0-G0

Light Distribution Curve



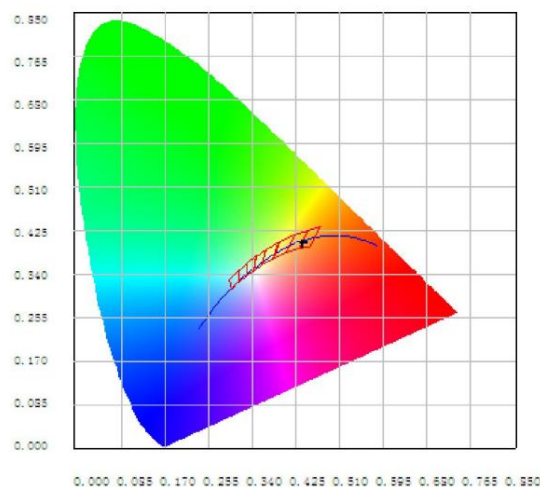
Correlated Color Temperature and Spectral power distribution

LED Photometric Colorimetric and Electric Test Report



Spectrum Parameters

x: 0.4396 y: 0.4026
u: 0.2530 v: 0.3475
WD: 583.4 nm WP: 620.3 nm
HW: 159.1 nm Purity: 0.528
CCT: 2947 K Ra: 94.3
SDCM: 3.75 DUV: -0.0009
Ratio: R%: 51.4 G%: 36.3 B%: 12.3
Kred 22.52% Kgreen 74.02% Kblue 3.47%
R1: 95.4 R2: 98.5 R3: 98.4
R4: 93.4 R5: 94.1 R6: 97.5
R7: 92.6 R8: 84.2 R9: 64.5
R10: 95.0 R11: 85.8 R12: 79.2
R13: 96.7 R14: 99.4 R15: 91.7

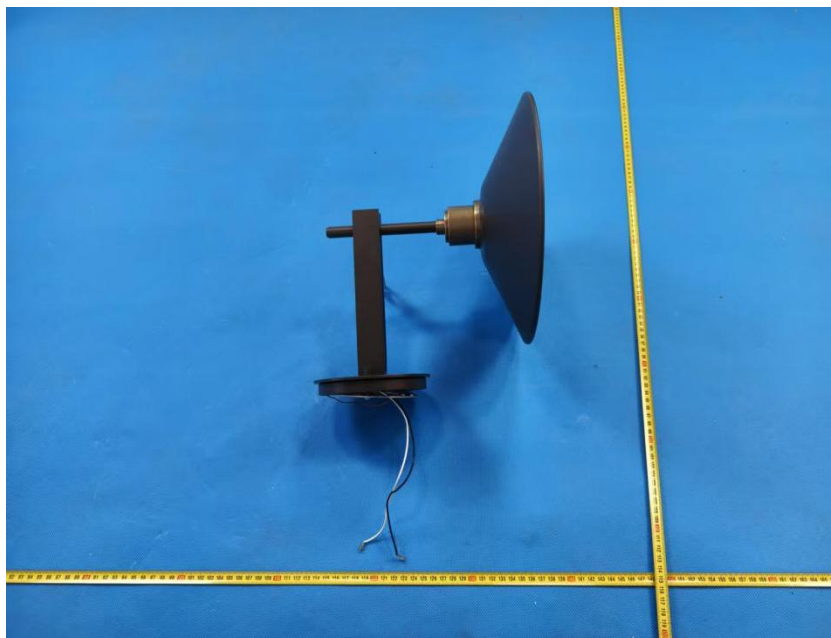


Electrical parameters

Flux: 287.481 lm E: 57.324 lm/w P: 712.03 mw
I: 42.5 mA V: 120.00 V P: 5.015 w PF: 0.984

Product Photos:

(Luminaire Position Under Test: Lighting Downward)



(Light Source is not visible from the horizontal plane)



B7810-PBR/BRZ

--- End of the Report---