

Technical Report No.: 68.140.23.0478.02

Date: 2024-03-22

Client: Name: Schröder S.A
Address: Rue de Lusambo 67, 1190 Brussels, BELGIUM
Contact person: MOLNÁR-SORENSEN Gábor

Manufacturer: Name: Same as client
Address: Same as client

Factory: 1st Factory name: Shenzhen Huadian Lighting Co., Ltd.
1st Factory Address: 2/F, Building A, Jinkaijin Industrial Park, Shilongzai Industrial Area, Shuitian, Shiyao Town, Bao'an District, 518108 Shenzhen, Guangdong, PEOPLE'S REPUBLIC OF CHINA
2nd Factory name: Schröder Magyarország Zrt
2nd Factory Address: Tópart 2, 2084 Pilisszentiván, HUNGARY

Test object: Product: LED Flood Light
Model: BRITEL2a-bcc-dx-ye-f-g
(‘a’ represents product input power, can be 1, 1(600W), 2 or 2(1200W). 1=700W, 1(600W)=600W, 2=1400W, 2(1200W)=1200W;
‘b’ represents product CRI, can be 7, 8 or 9. 7=70, 8=80, 9=90;
‘cc’ represents product LED CCT, can be 27, 30, 35, 40, 50, 57. E.g. 27=2700K, 57=5700K;
‘d’ represents company internal code, can be combined by any numbers or letters from ‘0-9’ and ‘A-Z’ except d=V1 or V2. E.g. d=A1;
‘x’ represents the reflector, can be V1, V2 or Blank, when x=blank, means product without reflector;
‘y’ represents the LED driver position, can be blank or INT, when y=INT, means LED driver is mounting on the LED module enclosure, when y=blank, means LED driver is mounting on the luminaire mounting bracket or separated mounting with luminaire;
‘e’ represents input voltage, can be L, H or E. L=120-277VAC, H=277-480VAC, E=220-400VAC;
‘f’ represents luminaire dimming function, can be N, A, D or DMX. N=no dimming function, A=0-10V dimming, D=DALI dimming, DMX=DMX dimming function) ‘g’ represents with or without socket, can be NEMA7 or

Blank. NEMA7= with socket, Blank= no socket, when 'g' is blank, the whole '-g' shall be removed.)

Trademark: **Schröder** (Schreder)

Test specification: IK10 test according to IEC 62262:2002+AMD1:2021

Purpose of examination: · Testing and evaluation (visual / partial) according to the test specification

Test result: The test results show that the presented products are in compliance with the above listed test specifications.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question. It does not imply a general statement regarding the quality of products from regular production. For further details please see testing and certification regulation, chapter A-3.4.

1. Description of the test object

1.1 Picture(s)

Representative model:
BRITEL21-956-A1-L-D



Representative model:
BRITEL22-957-A1-L-D



1.2 Function

Manufacturer's specification for intended use:
LED Flood Light for indoor and outdoor use

1.3 Consideration of the foreseeable use

- ☐ Not applicable
- ☒ Covered through the applied standard
- ☐ Covered by the following comment*
- ☐ Covered by attached risk analysis

*

1.4 Technical Data

Floodlights (LED Flood Light)

Rated Voltage	: See 'model list' for details
Rated Frequency	: 50/60Hz
Rated Power	: See 'model list' for details
Protection Class	: I
Degree of Protection	: IP66
Impact Protection	: IK10 (the short cap and NEMA socket was not evaluated)

Report No.: 68.140.23.0478.02
Rev.: 00
Date: 2024-03-22

www.tuvsud.com
Telephone : +86 755 8828 6998
Telefax : +86 755 8828 5299

TUV[®]

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12 & 13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong 518052, China

2. Order

2.1 Date of Purchase Order, Customer's Reference

2024-02-26

2.2 Test Sample(s)

- Reception date(s): 2024-02-26
- Location(s) of reception: TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12 & 13, Zhiheng Wisdomland Business
Park, Guankou Erlu, Nantou, Nanshan District,
Shenzhen, Guangdong 518052, China
- Condition of test sample(s): Good

2.3 Testing

- Testing date(s): 2024-02-26 to 2024-03-22
- Location(s) of testing: TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12 & 13, Zhiheng Wisdomland Business
Park, Guankou Erlu, Nantou, Nanshan District,
Shenzhen, Guangdong 518052, China

2.4 Points of Non-Compliance or Exceptions of the Test Procedure

- None

3. Test Results

- "Decision rule according to IEC Guide 115:2023, clause 4.3 was applied."

3.1 Positive Test Results

IK code test (IEC 62262)		☐ Fail	☒ Pass	
Test condition:				
a) Impact energy: 20J.				
b) Number of Impacts: 5 times.				
c) Type of test apparatus: the vertical hammer.				
d) Method of mounting: on a rigid plane support.				
e) See following table for details:				
IK Code: IK10				
Test part	Impact No.	Impact energy (J)	Result	Test verdict
Plastic cover [1], [2], [3]	5	20	No damage	Pass
Metal Enclosure [4], [5], [6]	5	20	No damage	Pass
Reflector V1 [7]	5	20	No damage	Pass
Reflector V2 [8]	5	20	No damage	Pass
Remark: Test locations indicated in the following pictures.				
				



The Short cap and NEMA socket were not evaluated IK rating in this report

3.2 Points of Non-Compliance according to the test specification

- None

4. Test History

This report is based on and replace previous report 68.140.23.0478.01 (dated 2023-11-17) with below modifications:

1. Updated model no. descriptions.
2. Added new reflector V1/V2, details see photo documentation.

5. Remarks

5.1 Model list

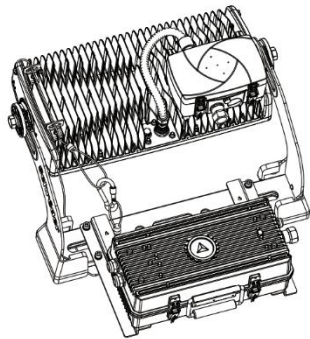
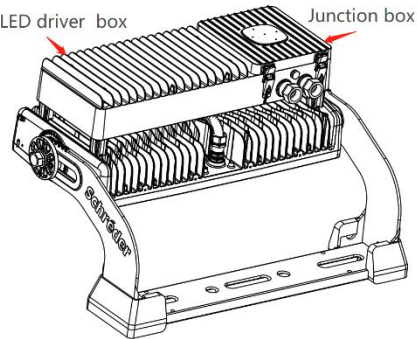
Model no.	Rated Power	Rated Voltage (code 'e')	LED driver	Dimming function (code 'f')	Photo
BRITEL21-bcc-dx-ye-f-g	700W	277-480VAC	ESM-680S240BG ×1	DALI	
		277-480VAC	ESM-680S240MG ×1	0-10V or DMX*	
		120-277VAC	EUM-680S240BG ×1	Programmable programs (DALI)	
		120-277VAC	EUM-680S240MG ×1	Programmable programs (0-10V) or DMX*	
BRITEL21(600W)-bcc-dx-ye-f-g	600W	277-480VAC	ESM-680S240BG ×1	DALI	
		277-480VAC	ESM-680S240MG ×1	0-10V or DMX*	
		120-277VAC	EUM-680S240BG ×1	Programmable programs (DALI)	
		120-277VAC	EUM-680S240MG ×1	Programmable programs (0-10V) or DMX*	
BRITEL22-bcc-dx-ye-f-g	1400W	277-480VAC	ESM-680S240BG ×2	DALI	
		277-480VAC	ESM-680S240MG ×2	0-10V or DMX*	
		120-277VAC	EUM-680S240BG ×2	Programmable programs (DALI)	
		120-277VAC	EUM-680S240MG ×2	Programmable programs (0-10V) or DMX*	
		220-400VAC	578AKS ×1	DALI	
		220-400VAC	578BKS ×1	DMX	
BRITEL22(1200W)-bcc-dx-ye-f-g	1200W	277-480VAC	ESM-680S240BG ×2	DALI	
		277-480VAC	ESM-680S240MG ×2	0-10V or DMX*	
		120-277VAC	EUM-680S240BG ×2	Programmable programs (DALI)	
		120-277VAC	EUM-680S240MG ×2	Programmable programs (0-10V) or DMX*	
		220-400VAC	S6-1K2D500 ×1	DALI	
		220-400VAC	S6-1K2R500 ×1	DMX	
		220-400VAC	578AKS ×1	DALI	
		220-400VAC	578BKS ×1	DMX	

**: models with built-in converter can transfer DMX signal to 0-10V dimming function.

Continued information:

Model no.	Product size (mm)	Weight (kg)	Max. Projected area (m ²)
BRITEL21-bcc-dx-ye-f-g BRITEL21(600W)-bcc-dx-ye-f-g	L609*W436*H332 (for luminaire) (when LED driver on luminaire mounting bracket without reflector) L416*W221*H121 (for LED driver box)	16,5 (for luminaire) 6,2 (for LED driver box)	0,1406
	L609*W508*H626 (for luminaire) (when LED driver on luminaire mounting bracket with V1 reflector) L416*W221*H121 (for LED driver box)	18,27 (for luminaire) 6,2 (for LED driver box)	0,4565
	L609*W436*H345 (for luminaire) (when LED driver on luminaire mounting bracket with V2 reflector) L416*W221*H121 (for LED driver box)	17,27 (for luminaire) 6,2 (for LED driver box)	0,3105
	L609*W436*H351 (when LED driver fixed on LED module enclosure without reflector)	21,5 (for whole product)	0,1450
	L609*W507*H628 (when LED driver fixed on LED module enclosure with V1 reflector)	23,26 (for whole product)	0,3694
	L609*W436*H344 (when LED driver fixed on LED module enclosure with V2 reflector)	22,26 (for whole product)	0,2408
BRITEL22-bcc-dx-ye-f-g BRITEL22(1200W)-bcc-dx-ye-f-g	L679*W723*H367 (for luminaire without reflector)	30 (no reflector)	0,2915 (no reflector)
	L679*W899*H666 (for luminaire with V1 reflector)	32,68 (V1 reflector)	0,6060 (V1 reflector)
	L679*W591*H682 (for luminaire with V2 reflector)	31,64 (V2 reflector)	0,5005 (V2 reflector)
	L426*W283*H110 (for 'EUM'&'ESM' LED driver box)	10 ('EUM'&'ESM' driver box)	0,5005 (V2 reflector)
	L500*W150*H120 (for 'S6'&'578' LED driver box)	5,8 ('S6'&'578' driver box)	

For 600W and 700W models, product with two kinds of construction for LED driver box position, see below:

LED driver box fixed on luminaire mounting bracket	LED driver fixed on LED module enclosure (code 'y'=INT)
	
Construction: without NEMA socket, with converter in LED driver box. the converter is alternative for models with LED driver ESM-680S240MG and EUM-680S240MG. for other models, no converter used.	Construction 1: with NEMA socket on junction box, without converter. Construction 2: without NEMA socket, with converter in junction box, the converter is alternative for models with LED driver ESM-680S240MG and EUM-680S240MG. for other models, no converter used.

For 1200W and 1400W models with 'EUM'&'ESM' series LED driver, the LED driver box can only be fixed on luminaire mounting bracket. the product with two constructions, with NEMA socket only or with alternative converter only, both shall be fixed on LED driver box.



For 1200W and 1400W models with 'S6' & '578' series LED driver, there is no additional driver box, the LED driver is separated installed outside of luminaire. there is no NEMA socket or converter.



Reflector details information as below:

Reflector (Code 'x')			
BRITEL21-bcc-dx-ye-f-g BRITEL21(600W)-bcc-dx-ye-f-g		BRITEL22-bcc-dx-ye-f-g BRITEL22(1200W)-bcc-dx-ye-f-g	
Code 'x'=V1 (fixed angle hood)	Code 'x'=V2 (adjustable angle hood)	Code 'x'=V1 (fixed angle hood)	Code 'x'=V2 (adjustable angle hood)
			

5.2 Appendix 2: photo documentation

The results relate only to the items tested.

6. Documentation

- None

7. Summary

The test specifications are met.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
TÜV SÜD Group

Tested by:


Steven Tian, Project Handler

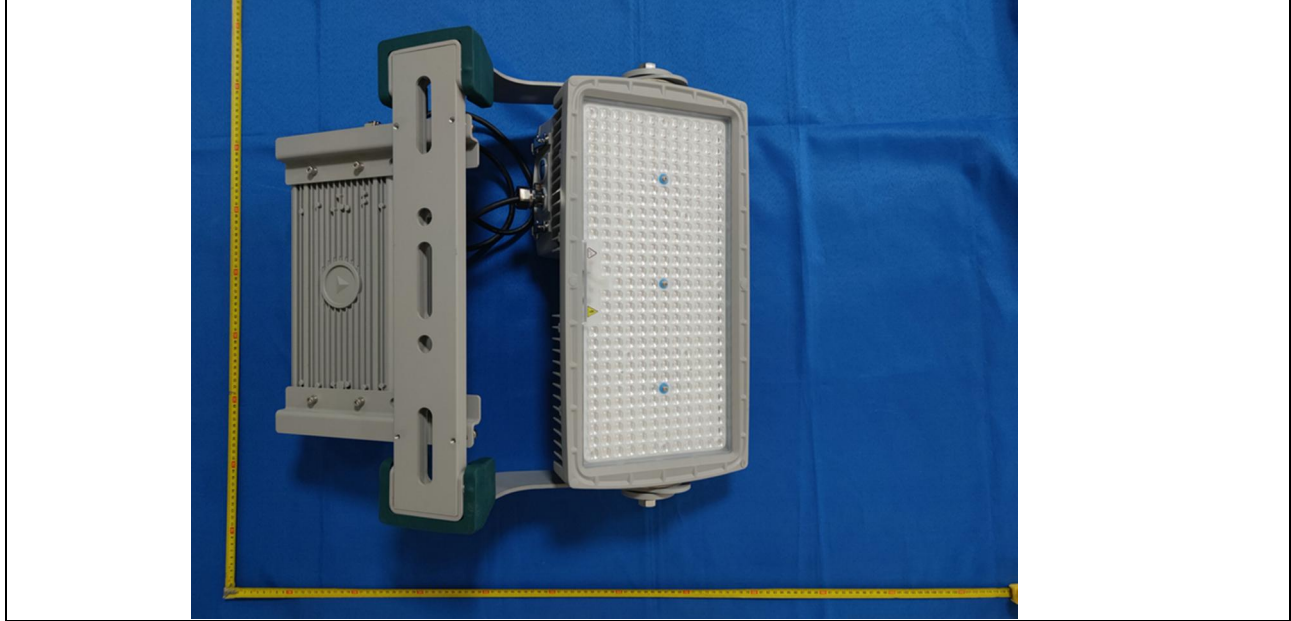
Approved by:


Kevin Liu, Designated Reviewer

Appendix 1: Photo documentation

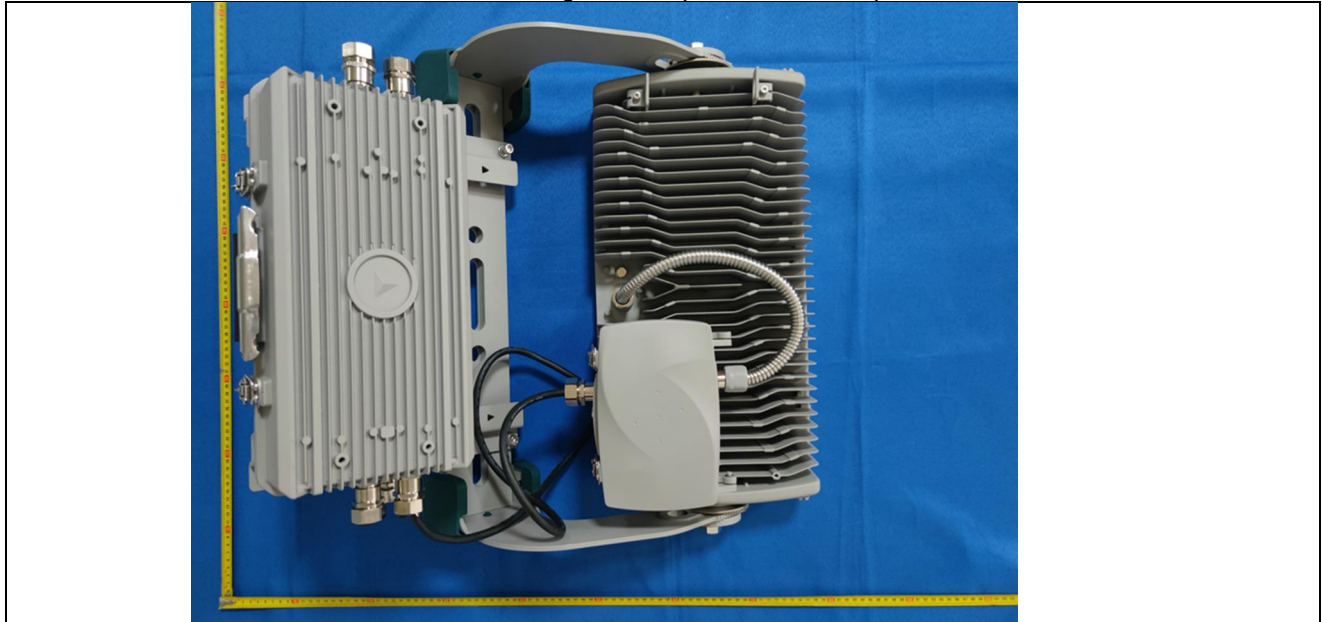
Details of: Overview for models with one LED module
(Representative model: BRITEL21-957-A1-L-DMX)

Remark: LED driver box fixed on mounting bracket (without reflector)



Details of: Overview for models with one LED module
(Representative model: BRITEL21-957-A1-L-DMX)

Remark: LED driver box fixed in mounting bracket (without reflector)



Details of: Overview for models with one LED module

(Representative model: BRITEL21-957-A1V1-L-DMX)

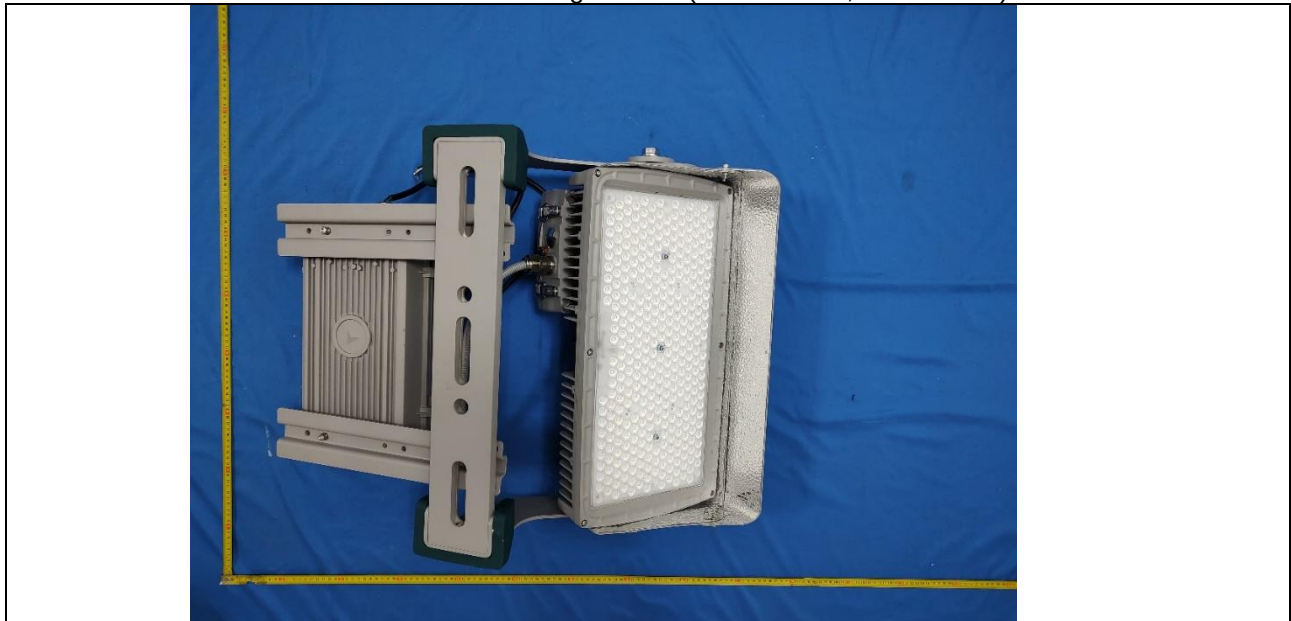
Remark: LED driver box fixed on mounting bracket (with reflector, code 'x'=V1)



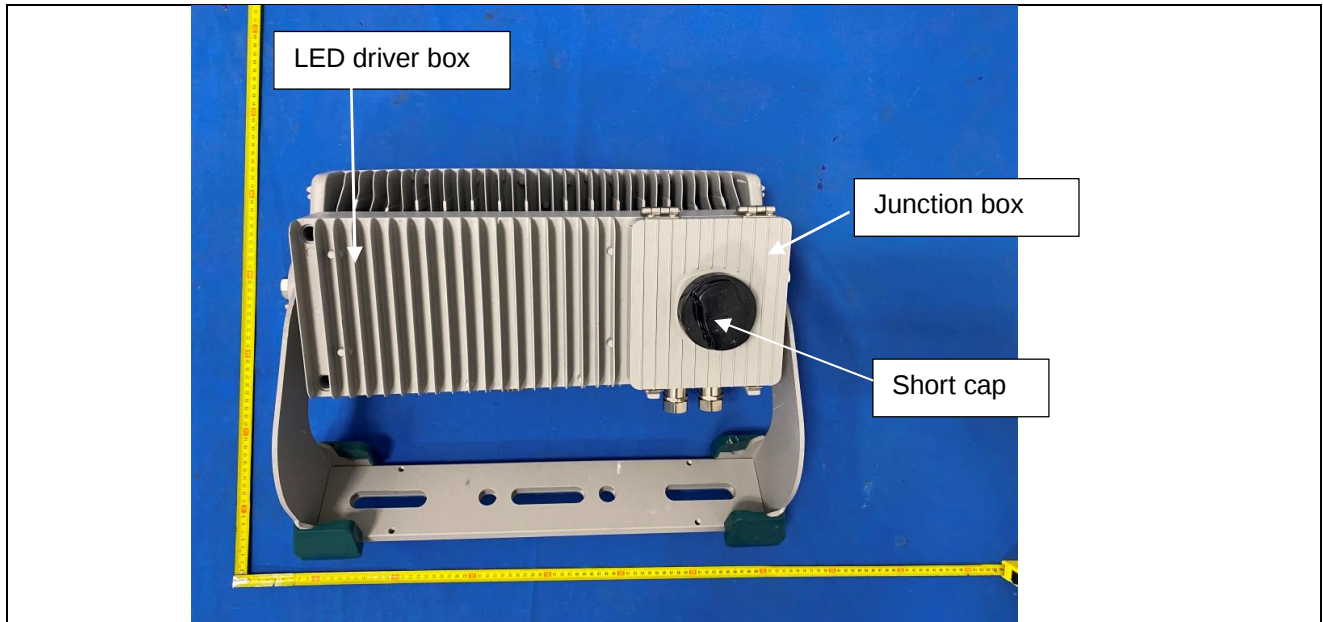
Details of: Overview for models with one LED module

(Representative model: BRITEL21-957-A1V2-L-DMX)

Remark: LED driver box fixed on mounting bracket (with reflector, code 'x'=V2)



Details of: Overview for models with one LED module (representative model: BRITEL21-957-A1-INTL-D-NEMA7)
 Remark: Alternative construction: LED driver box fixed in luminaire enclosure with NEMA socket



Details of: Overlook for models with one LED module (Representative model: BRITEL21-957-A1-INTL-D-NEMA7)
 Remark: Alternative construction: LED driver box fixed in luminaire enclosure with NEMA socket



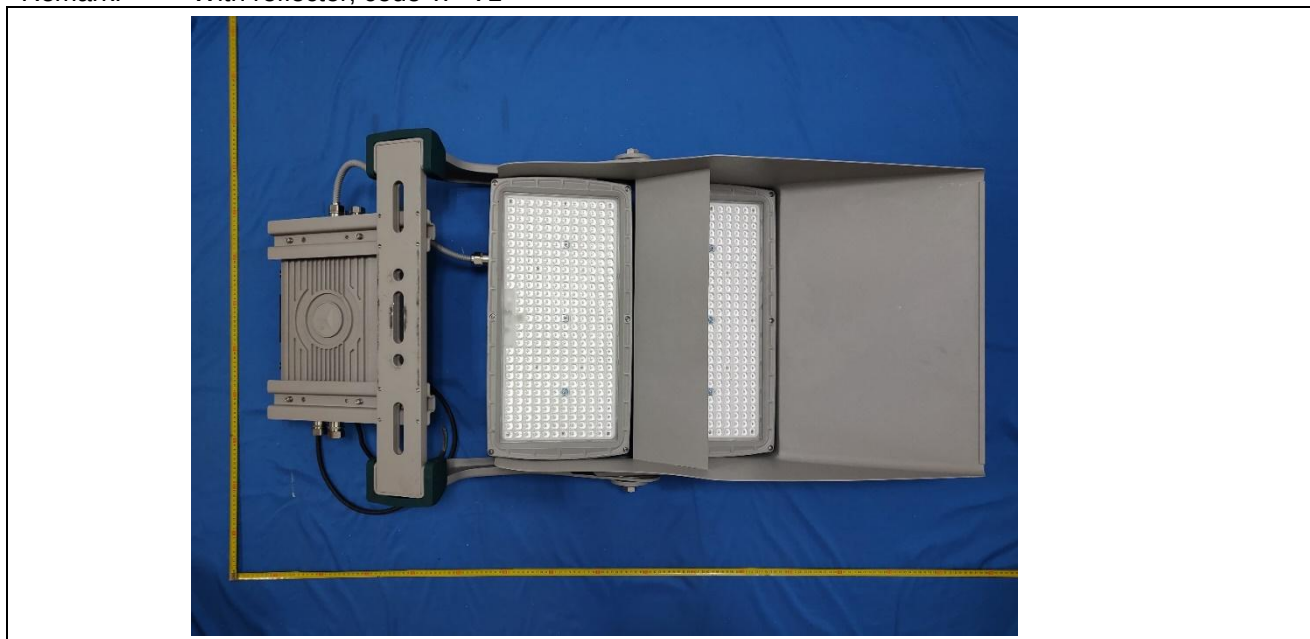
Details of: Overview for models with two LED module
(Representative model BRITEL22-957-A1-H-D-NEMA7)
Remark: Without reflector



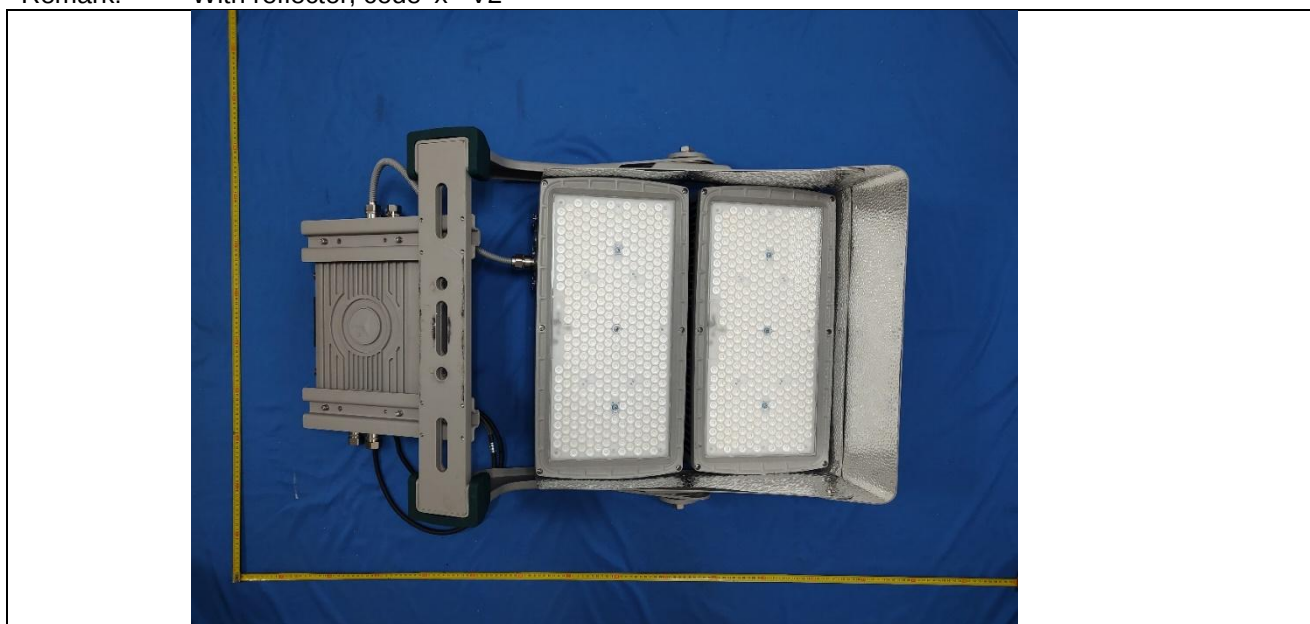
Details of: Outlook view for models with two LED module
(Representative model BRITEL22-957-A1-H-D-NEMA7)
Remark: Without reflector



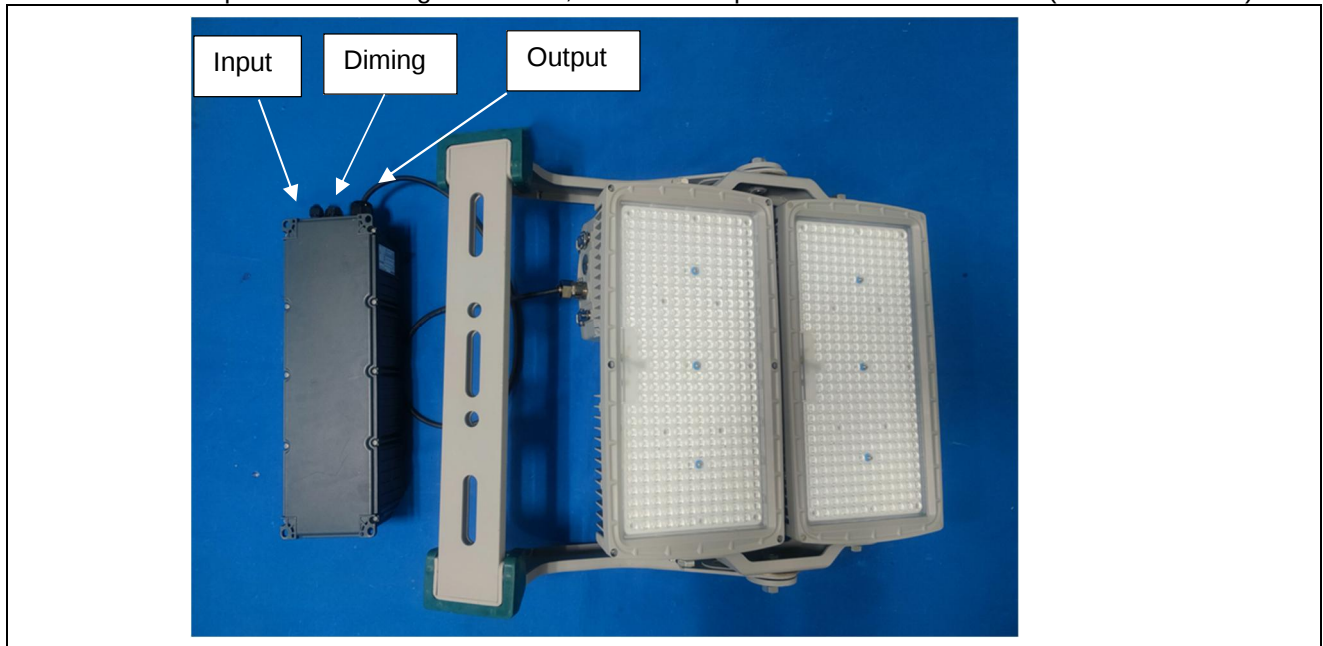
Details of: Outlook view for models with two LED module
(Representative model BRITEL22-957-A1V1-H-D-NEMA7)
Remark: With reflector, code 'x'=V1



Details of: Outlook view for models with two LED module
(Representative model BRITEL22-957-A1V2-H-D-NEMA7)
Remark: With reflector, code 'x'=V2



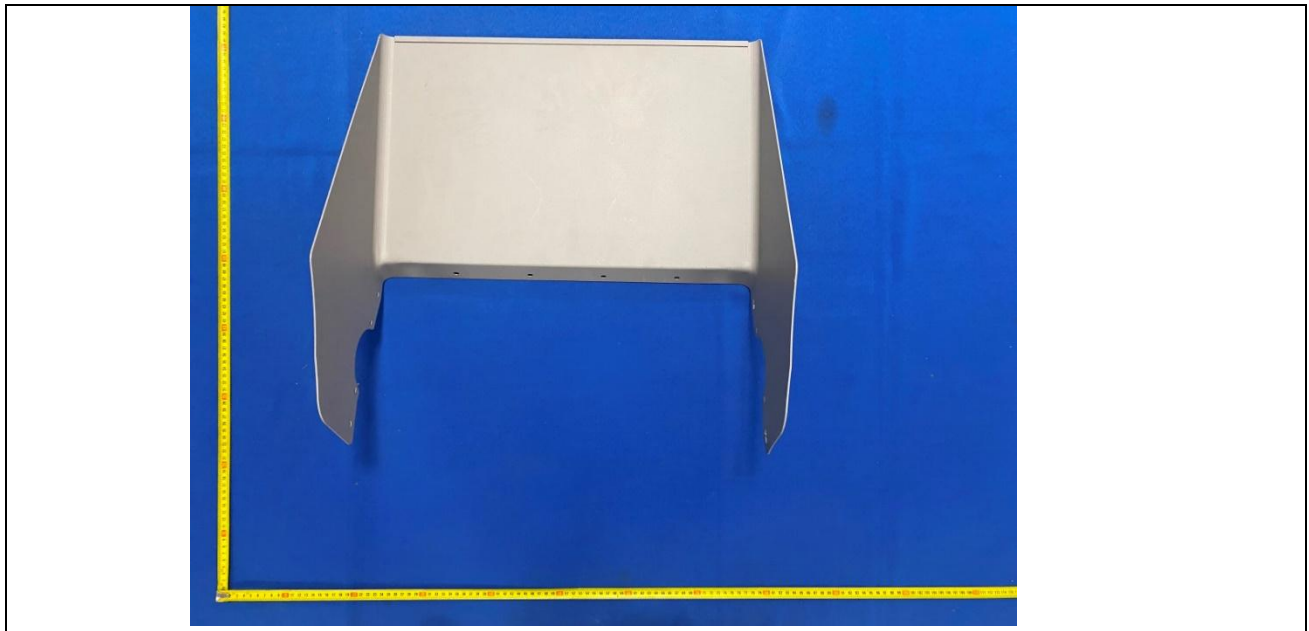
Details of: Outlook view for models with two LED module (representative model BRITEL22-957-A1-E-D)
 Remark: Separated mounting LED driver, LED module parts is identical as above (without reflector)



Details of: Outlook view for models with two LED module (representative model BRITEL22-957-A1-E-D)
 Remark: Separated mounting LED driver, LED module parts is identical as above (without reflector)



Details of: Reflector view (code 'x'=V1 for 600W&700W models)



Details of: Reflector view (code 'x'=V2 for 600W&700W models)



Details of: Reflector view (code 'x'=V1 for 1200W&1400W models)



Details of: Reflector view (code 'x'=V2 for 1200W&1400W models)



END OF REPORT