

File E359248
Project 4788795846

February 07, 2019

REPORT

on

LIGHT-EMITTING-DIODE SURFACE-MOUNTED LUMINAIRES

NERI SPA
LONGIANO, FC - ITALY

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PRODUCT COVERED:	USL, CNL - LED Surface-mounted Luminaire for Floor installation	
MODELS COVERED /NOMENCLATURE:	<p>Series "Brenta", models:</p> <p>B-XL (Bollards Size XL) B-L (Bollards Size L) B-M (Bollards Size M) B-S (Bollards Size S) W-L (Wall mount luminaire Size L) W-S (Wall mount luminaire Size S)</p> <p>The model name may be followed by additional alpha-numeric suffixes for commercial purpose only.</p>	
ENVIRONMENTAL RATING:	Suitable For Wet location	
GENERAL CONSTRUCTION:	This product complies with the applicable Standards for USL and/or CNL luminaires as explained under the "Technical Considerations" section noted below, the Section General pages (if provided), the UL 1598 FUII (Follow-Up Inspection Instructions), and the Description within this report.	
TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):	USL indicates product complies with the Standard for Luminaires, UL 1598 and the United States country specific requirements contained within the Standard, along with the relevant parts of the UL Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products, UL 8750.	CNL indicates product complies with the Standard for Luminaires, CSA C22.2 No. 250.0 and the Canadian country-specific requirements contained within the Standard.
ELECTRICAL RATINGS:	120-277V, 50/60HZ, for all models Input wattage for models B-XL, B-L and W-L: 26W Input wattage for models B-M, B-S and W-S: 13W	
MARKINGS:	<p>In accordance with the FUII's, the UL 1598 Standard and the following:</p> <p>SUITABLE FOR WET LOCATIONS (Verbatim)</p> <p>SUITABLE FOR MOUNTING WITHIN 1.2 m (4 ft) OF THE GROUND</p>	
INSTRUCTIONS:	In accordance with the Standard.	

Photo #	CONSTRUCTION FEATURE:	TECHNICAL DATA and/or DESCRIPTION The general design, shape and arrangement shall be as shown and as described. All dimensions are nominal, within engineering tolerances, except where specifically indicated as a minimum or a maximum. Components described as R/C (by CCN identifier) or Listed must be UL Certified for the USA. Unless otherwise specified, components described as /CN must be UL Certified for Canada or CSA Certified.
	Luminaire body	Made of concrete, see Ill. 1 for overall dimensions. The bollard body has only aesthetic and support function for the head which contains light source and electrical components. Bollard models: Composed by two parts joined by screws, head and body (body minimum thick and 10 mm). Wall mount models: Only the head provided. Head for models B-XL, B-L and W-L, overall dimensions 305 x 230 x 120 mm (See Ill.2). Head for models B-M, B-S and W-S, overall dimensions 170 x 130 x 100 mm (See Ill.3).
4	Water Shield	Made of tempered Glass, 3 mm Thickness, overall dimension 234 x 107 mm for models B-XL, B-L and W-M and 143 x 100 mm for models B-M, B-S and W-S. For models B-XL, B-L and W-M: fixed by an aluminum frame and secured to Heat Sink with screws. For models B-M, B-S and W-S: fixed Heat Sink by silicon glue.
	Fixing means	Wall mount luminaire: provided of two holes to fix it on a wall. Bollard: fixed on the floor with a steel frame (see ill.4, 5, 6, 7).
	Grounding/ Bonding	In accordance with the Standard.
5, 6	Heat Sink	Aluminum, shaped as shown in ill. 8 and 9, fixed with screws to the head of Luminaire body (see Ill. 2 and 3)
	Wiring plate	Iron or steel fixed into heat sink.
	Labels	PGDQ2/CN or PGJI2/CN suitable for surface, environment.
	Gasket (for models B-XL, B-L and W-L)	Made of Silicon Rubber. Located between Water shield and Heat sink , Kept in place by mechanical means.

Photo #	COMPONENTS	TECHNICAL DATA and/or DESCRIPITON Components described as R/C (by CCN identifier) or Listed must be UL Certified for the USA. Unless otherwise specified, components described as /CN must be UL Certified for Canada or CSA Certified.
	Supply Cord (Bollard models only)	Any Listed (ZJCZ/CN), type SJTW, 3 or 5x18AWG, rated min 300 V, min. 90°C. Terminated in Supply connector.
	Internal Wiring	Supply leads: Listed or R/C (AVLV2/CN), min. 18 AWG, rated minimum 300V, 60°C. Secondary leads: any located in a Class 2 circuit, minimum 24AWG, 90°C, 300V, leads routed and secured.
	Splice	Listed (ZMNA/CN), by TYCO ELECTRONICS CORP (E308110), model 2213800-2, 2 poles rated, 600 V, min 6.2 A, min 130°C. Two or more provided for primary and secondary connections and, eventually for 1-10V dimming.
	Supply connector (optionally provided in Bollard models only)	Listed (CYJV/CN), by TECHNO SRL (E355693), model THB.387.A4A, rated 400V, 15A, 105°C, intended for factory and field-wiring.
	LED Driver	R/C (FKSZ2/CN) by EFORE SPA (E330583), One provided. For models B-XL, B-L, W-L: RTL040-900A-SA-RF, Class 2 type. Rated Input 120-277 Vac, 50/60 Hz, 0.4 A; Output constant current 0.2-0.9 A, max 56 V. For models B-M, B-S, W-S: RTL040-1400A-SA-RF, Class 2 type. Rated Input 120-277 Vac, 50/60 Hz, 0.4 A; Output constant current 0.2-1.4 A, max 43 V. Located into the head body and fixed on the Wiring plate.
7, 8	LED Module	Located in class 2 circuit, R/C (ZPMV2/CN), metal base, rated min. 90°C, min V-1, min. 1.5 mm thick. For model B-XL, B-L, W-L: overall dimensions approx. 70 by 24 mm, composed by 18 LEDs 1400 mA max, Vf 3 V series connected, provided with a TVS power diode in parallel and screwless terminals. For model B-M, B-S, W-S: overall dimensions approx. 94 by 44 mm, composed by 2 LEDs 450 mA max, Vf 11,2 V series connected, provided with screwless terminals.

Photographs and Illustrations

Photo 1
(models
B-XL and
B-L)



Photo 2
(models
B-M and
B-S)



Photo 3
(models
W-L and
W-S)

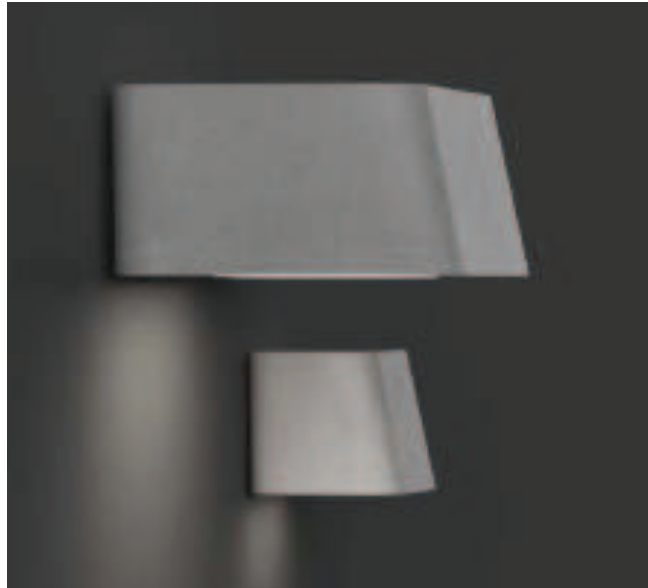


Photo 4



Photo 5

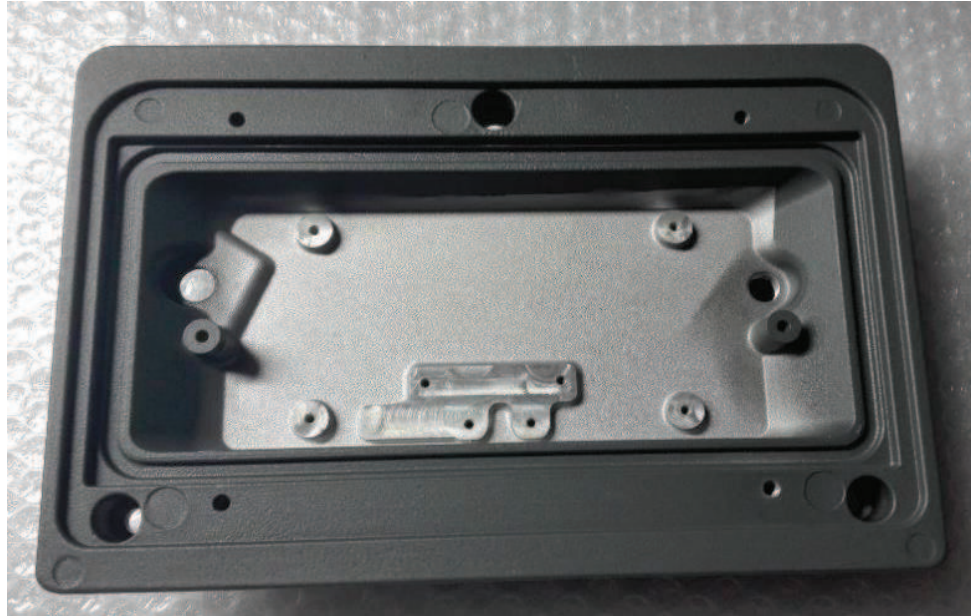


Photo 6



Photo 7

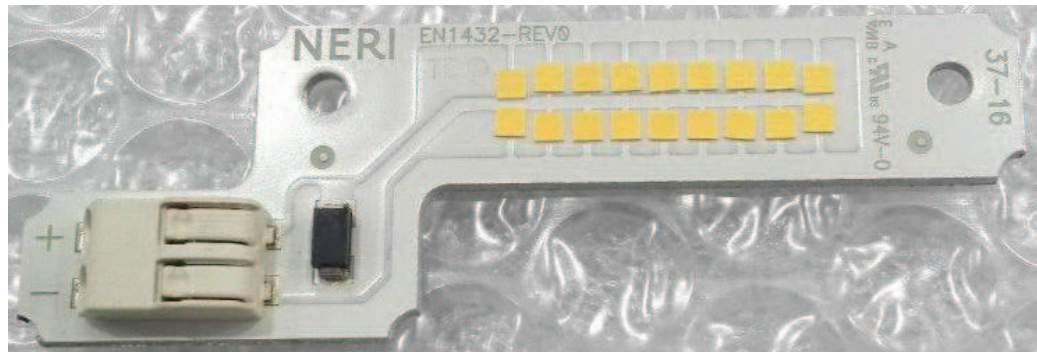
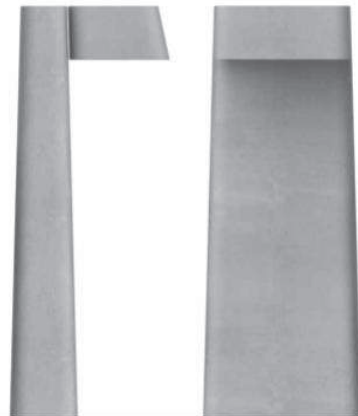


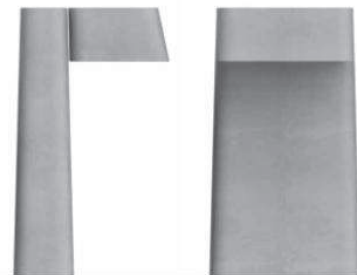
Photo 8



Ill. 1



Illuminating bollard XL
340 × 350 × 900mm



Illuminating bollard L
340 × 340 × 600mm



Illuminating bollard M
240 × 200 × 600mm



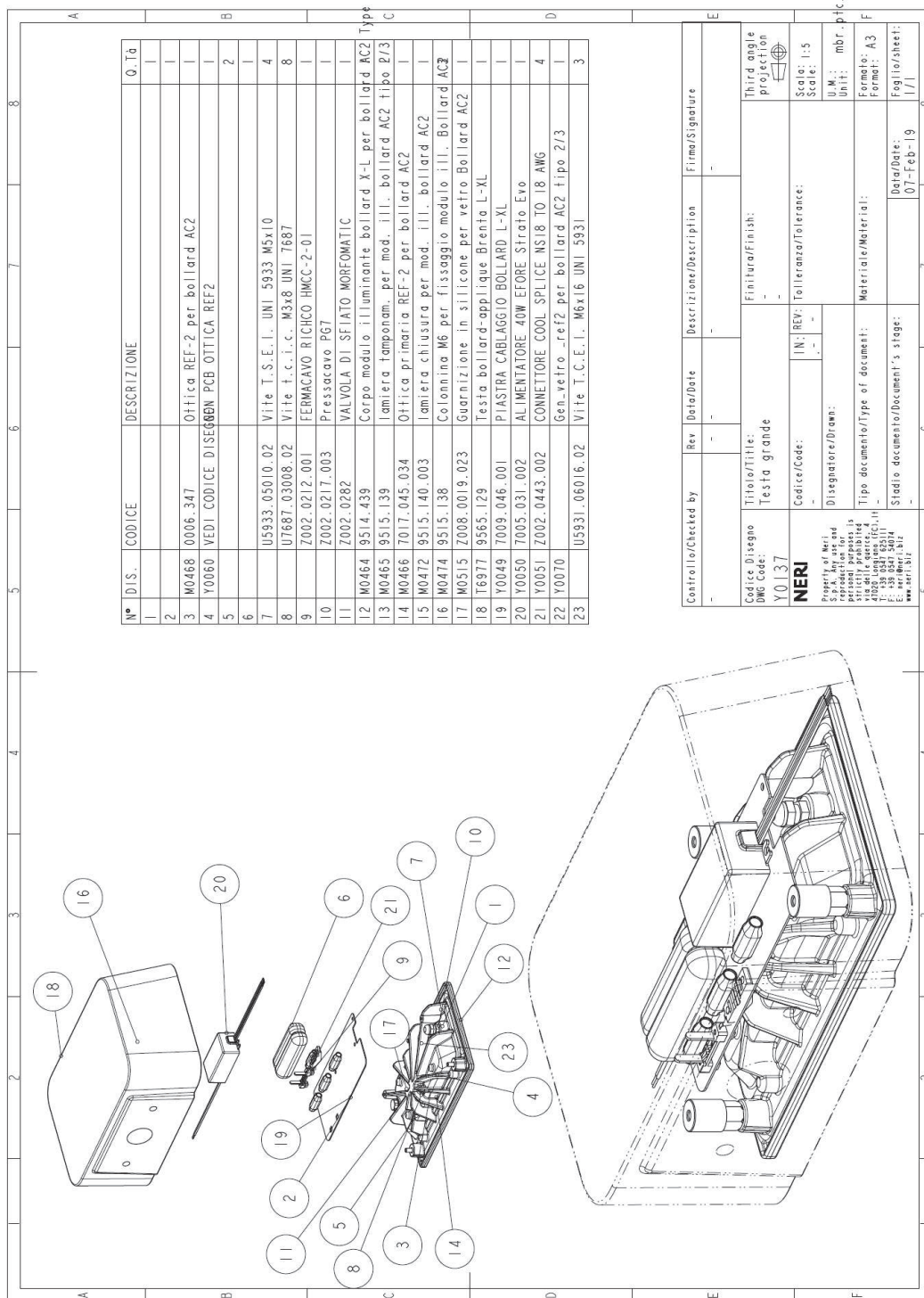
Illuminating bollard S
240 × 180 × 300mm



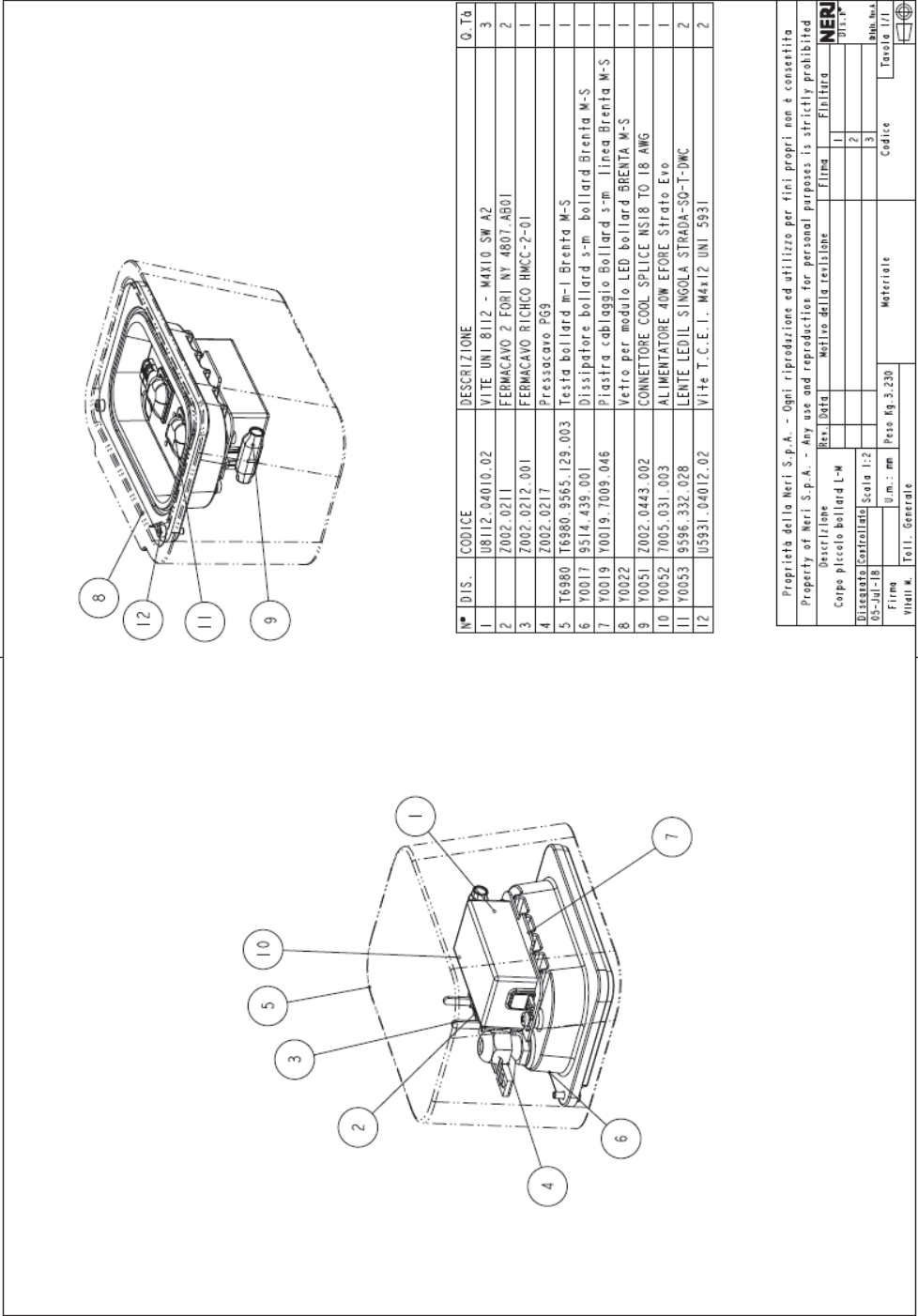
Wall mounted luminaire L
230 × 300 × 120mm



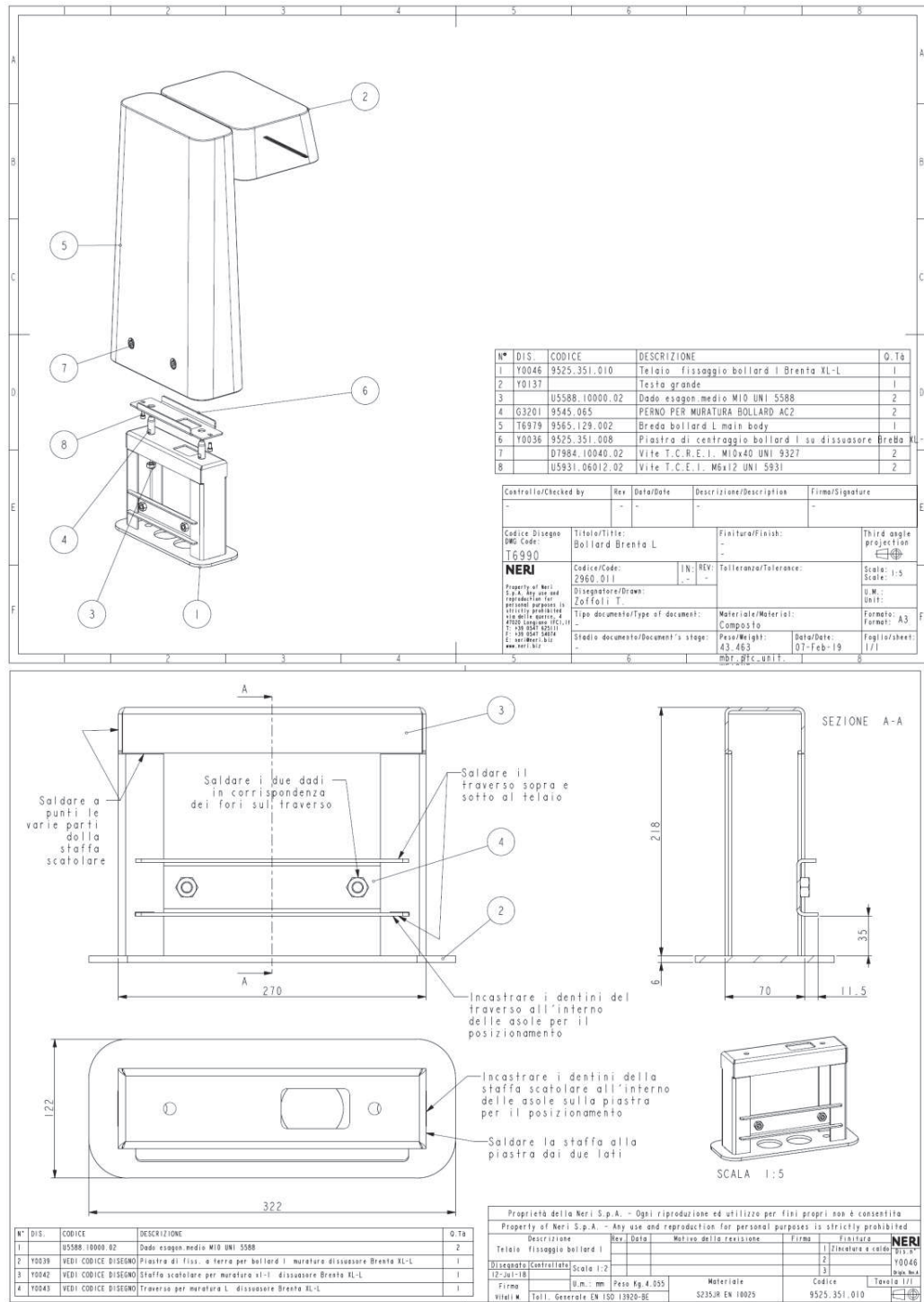
Wall mounted luminaire S
130 × 160 × 100mm

111. 2

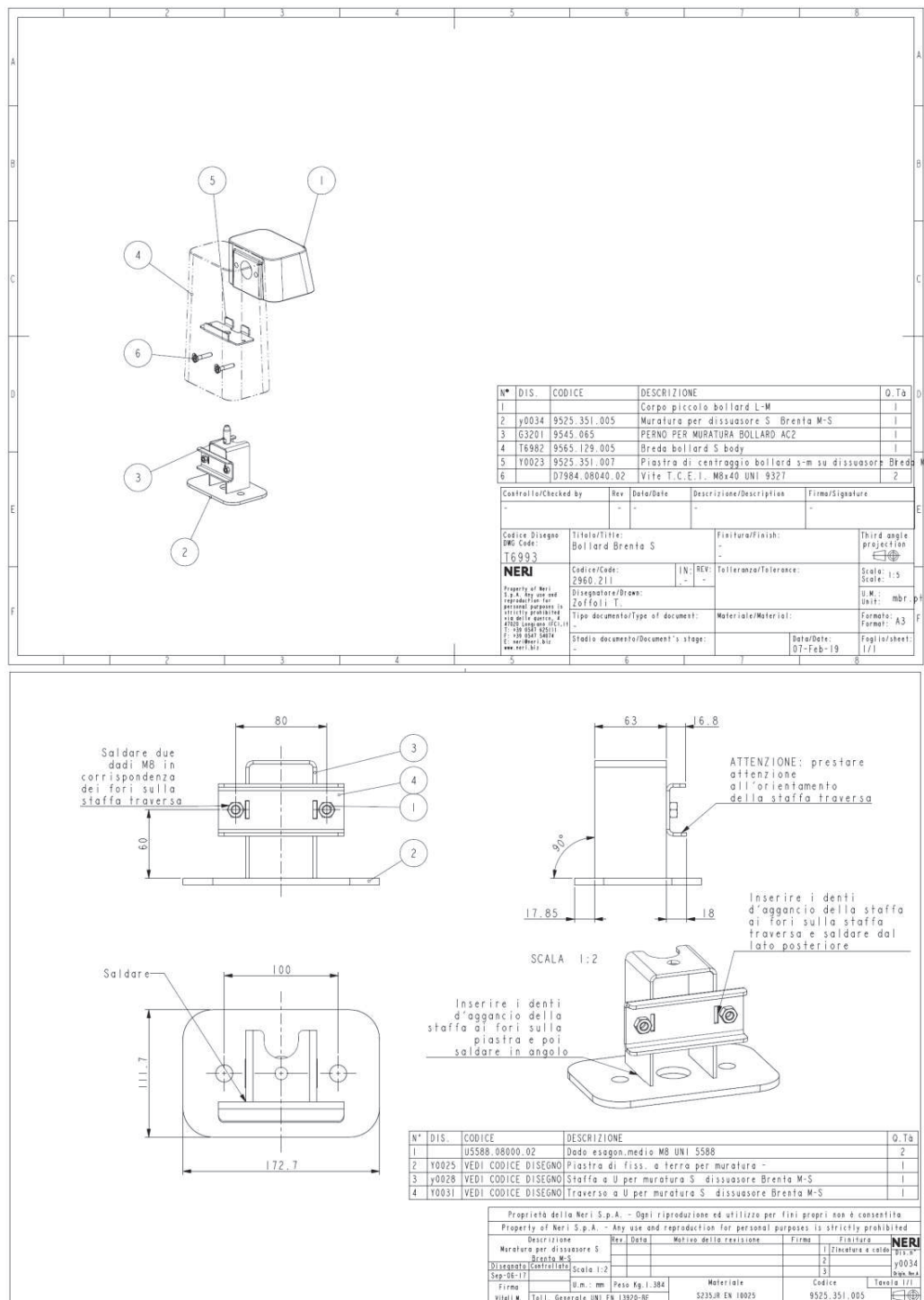
Ill.3

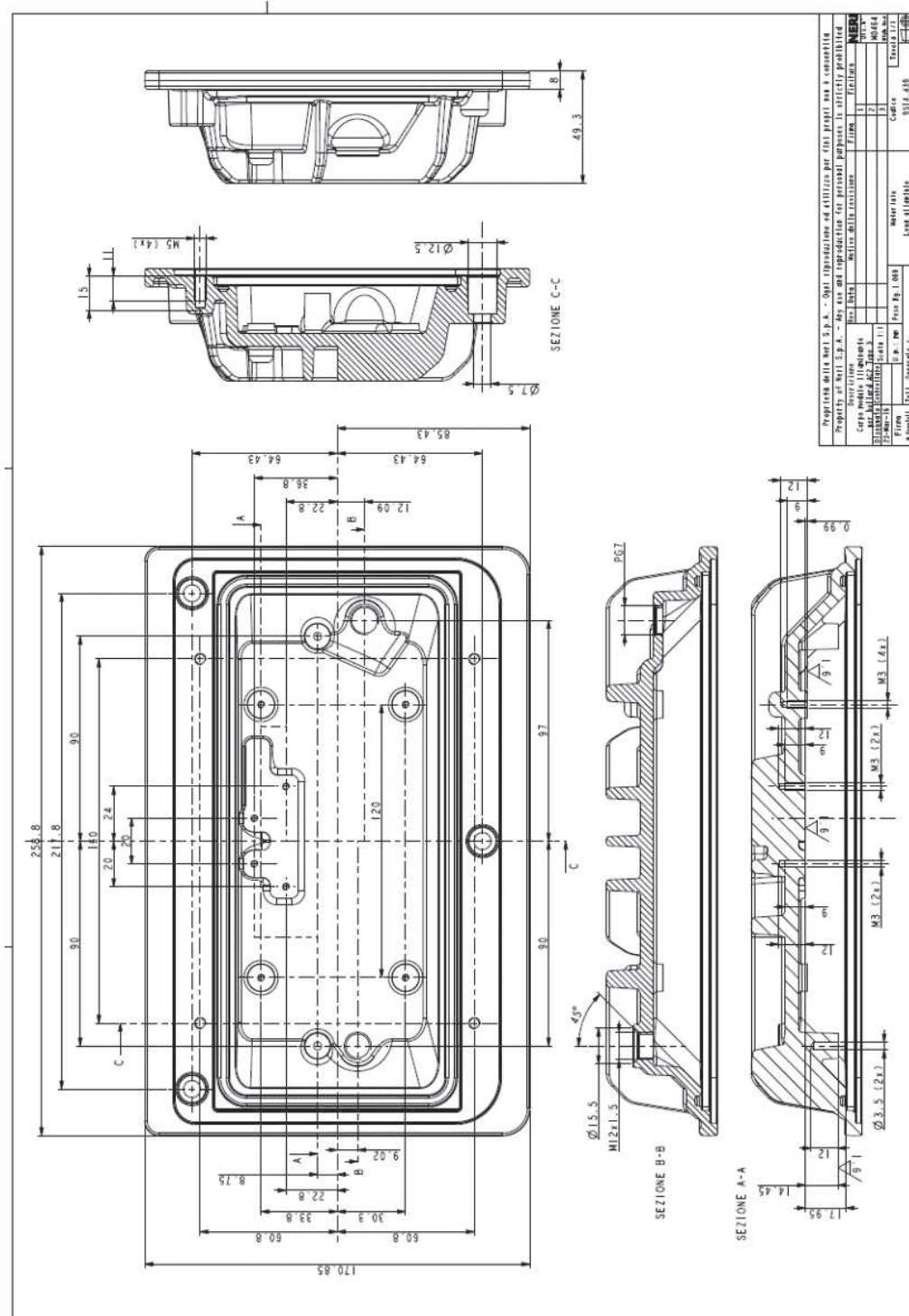


Ill.5

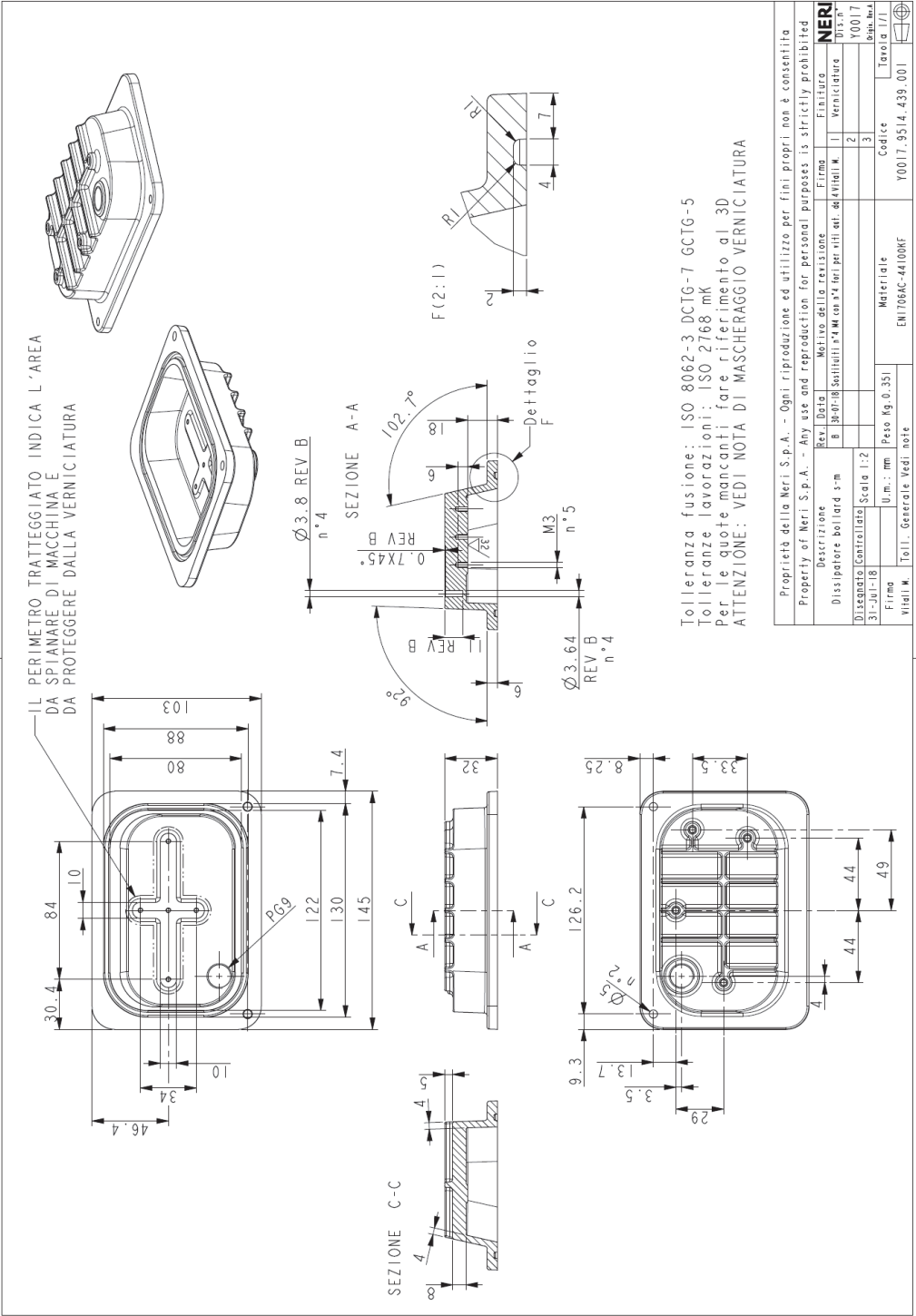


111.7





Ill.9



TEST RECORD NO. 1

SAMPLES:

Samples of the LED luminaires series Brenta as indicated below and constructed as described herein, were submitted by the manufacturer for examination and test.

Models	Description	Input ratings
B-XL	Bollards Size XL	26 W, 120-277 Vac, 50/60Hz
B-L	Bollards Size L	26 W, 120-277 Vac, 50/60Hz
B-M	Bollards Size M	13 W, 120-277 Vac, 50/60Hz
B-S	Bollards Size S	13 W, 120-277 Vac, 50/60Hz
W-L	Wall Size L	26 W, 120-277 Vac, 50/60Hz
W-S	Wall Size S	13 W, 120-277 Vac, 50/60Hz
The model name may be followed by additional alpha-numeric suffixes for commercial purpose only.		

[X]The following tests were conducted:

TEST	STANDARD	CODE (See Below)	CLAUSE
Dielectric Voltage- Withstand	UL 1598	OS	18.1
Bonding Circuit Impedance	UL 1598	OS	18.2
Led Normal Temperature, Surface, General	UL 1598	OS	15, 19
Input Test	UL 8750 CSA 250.13, 9.2	OS	8.2 9.2
Rain Test	UL 1598	OS	17.5.2
Sprinkler Test	UL 1598	OS	17.5.3
Loading	UL 1598	OS	17.15
S = Same test. C = Combined test (identified by the test names of two or more similar tests in multiple standards) to represent the worst-case parameters of the similar tests. OS = Testing requirements come from one standard only. MS = One of the two or more standards identified is more severe and the more severe one is indicated by underlining.			
Test results relate only to the items tested.			

The following tests were conducted.

Dielectric Voltage-Withstand:	UL 1598, 18.1 UL 8750, 8.6 CSA 250.13, 9.4
Bonding Circuit Impedance:	UL 1598, 18.2
Led Normal Temperature, Surface, General:	UL 1598, 15, 19
Input Test	UL 8750, 8.2 CSA 250.13, 9.2
Rain Test	UL 1598, 17.5.2
Sprinkler Test	UL 1598, 17.5.3
Loading	UL 1598, 17.15

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in below Standards.

Test Record Summary:

The results of this investigation, including construction review and testing, indicate that the products evaluated comply with the applicable requirements in the standard(s) noted below and, therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.

Standard	Title	Edition or Publication Date	Revision Date
CSA C22.2 NO 250.0	Luminaires	Fourth	August 28, 2018
UL 1598	Luminaires	Fourth	August 28, 2018
UL 8750	Light Emitting Diode (LED) Equipment for Use in Lighting Products	Second	August 22, 2018
CSA C22.2 No. 250.13	LED Equipment for Lighting Applications	Third	October 1, 2017

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products are found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the samples investigated by UL and does not signify UL certification or that the products described are covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the Certification Mark of UL on such products which comply with UL's Follow-Up Service Procedure and any other applicable requirements of UL LLC. The Certification Mark of UL on the product, or the UL symbol on the product and the Certification Mark of UL on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Listing and Follow-Up Service.

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