



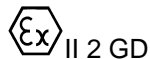
EU Type Examination Certificate CML 16ATEX3108 Issue 5

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **RLX CxZ1.21, RLX DxZ1.21 and RLX DxZ2.21 LED Floodlights**
- 3 Manufacturer **Luminell Norway AS**
- 4 Address **Borgundfjordvegen 116, 6017
Aelesund, Norway**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN IEC 60079-7:2015+A1:2018 EN 60079-18:2015+A1:2017
EN 60079-31:2014

- 10 The equipment shall be marked with the following:

RLX CxZ1.21 and RLX DxZ1.21

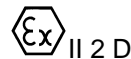


Ex eb mb IIC T* Gb

Ex tb IIIC T**°C Db

Ta= -**°C to +**°C

RLX DxZ2.21



Ex tb IIIC T135°C Db

Ta= -55°C to +55°C



CML 16ATEX3108
Issue 5

11 Description

The RLX CxZ1.21, RLX DxZ1.21, and RLX DxZ2.21 are compact LED floodlights rated at 100 to 277 V a.c. and 110 to 300 V d.c. The LEDs may be fitted with wide or narrow beam optics. The RLX CxZ1.21 LED floodlights are rated up to 160 W and the RLX DxZ1.21 and RLX DxZ2.21 LED floodlights are rated up to 240 W.

The equipment comprises an aluminium alloy enclosure with lens sealed into a front cover, which can be fitted with a mesh guard. The rear housing has cooling fins to assist heat dissipation and entries that allow connection to increased safety terminals.

Internally the luminaire has an encapsulated power supply and either an encapsulated LED assembly for RLX CxZ1.21 and RLX DxZ1.21 and an increased safety LED assembly for RLX DxZ2.21.

RLX CxZ1.21		
Power rating	Ambient	Temperature class
160 W	-55°C to +55°C	T3 / T200°C
	-55°C to +40°C	T4 / T135°C
120 W	-55°C to +55°C	T4 / T135°C
80 W	-55°C to +55°C	T4 / T135°C
	-55°C to +50°C	T5 / T100°C
40 W	-55°C to +55°C	T6 / T85°C

RLX DxZ1.21		
Power rating	Ambient	Temperature class
240 W	-55°C to +55°C	T4 / T135°C
160 W	-55°C to +55°C	T5 / T100°C
80 W	-55°C to +55°C	T6 / T85°C

RLX DxZ2.21		
Power rating	Ambient	Temperature class
240 W	-55°C to +55°C	T135°C



CML 16ATEX3108
Issue 5

Variation 1

This variation introduced the following changes:

- i. Correction of typographical errors on the approval drawings, instruction manual and marking plate.
- ii. Inclusion of an alternate mounting bracket.
- iii. Inclusion of an additional securing and grounding wire assembly for the back plate.
- iv. Inclusion of a smaller diameter of ventilation tubing on the LED board.
- v. Update of risk assessment.
- vi. Change of back plate design.
- vii. Change of input frequency.

Variation 2

This variation introduced the following changes:

- i. The inclusion of the RLX Dx range with new part numbers and new description.
- ii. Transfer of ATEX Certificate to a CML BV ATEX Certificate.
- iii. Removal of the ICL resistor on the RLX Dx driver board.
- iv. Update of applicable standards to the latest versions.
- v. Minor drawing changes.

Variation 3

This variation introduced the following changes:

- i. Updates to the circuitry that do not affect the type of protection or thermal characteristics.
- ii. Addition of optional internal arrangement to allow for alternate internal ventilation.
- iii. Addition of the option to apply gel to the terminal enclosure.
- iv. Addition for a new optional bracket.
- v. Change of thermal fuse temperature rating.
- vi. Amendment of the product name: RLX Cx and RLX Dx is now referred to as RLX CxZ1.21 and RLX DxZ1.21.
- vii. Update to the name of the manufacturer: Luminell AS amended to Luminell Norway AS
- viii. Correction of the manufacturer's address. The building name is replaced with the street name and number; Myrabakken Naeringscenter Bygg 2 is replaced with Spjelkavikvegen 132.

Variation 4

This variation introduced the following change:

- i. Updates to the circuitry that do not affect the type of protection or thermal characteristics.

Variation 5

This variation introduced the following changes:

- i. Change of applicant and manufacturer address from Spjelkavikvegen 132, 6010 Aelsund, Norway to Borgundfjordvegen 116, 6017 Aelesund, Norway.
- ii. Update of standard EN 60079-7:2015 to EN IEC 60079-7:2015+A1:2018.



CML 16ATEX3108
Issue 5

- iii. Update of standards EN 60079-18:2015 to EN 60079-18:2015+A1:2017.
- iv. Removal of reference to standard EN 60079-28:2015.
- v. Update marking drawings to remove “op is”, to include the new address, and to include a new notified body number “2804”.
- vi. Minor adjustments to the PCB layouts and schematics.
- vii. Introduction of a new Zone 2/21 model with the type identification RLX DxZ2.21.
- viii. Update of product description to include the new RLX DxZ2.21 model.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	08 Feb 2017	R1011A/00	Issue of Prime Certificate
1	06 Jul 2017	R2315A/00	Introduction of Variation 1
2	09 Nov 2018	R11649A/00	Introduction of Variation 2
3	11 Jul 2019	R12661A/00	Introduction of Variation 3
4	12 Sep 2019	R12773A/00	Introduction of Variation 4
5	09 Mar 2020	R13101A/00	Introduction of Variation 5

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. All encapsulated parts shall be subjected to a visual inspection at the point of manufacture. No damage shall be evident, such as cracks in the compound, exposure of the encapsulated parts, flaking, inadmissible shrinkage, decomposition, failure of adhesion, separation of any adhered parts or softening in accordance with EN 60079-18 clause 9.1.
- ii. Each unit manufactured shall be subjected to an electric strength test in accordance with EN 60079-7 clause 7.1. It shall be carried out either at 1000 V + 2U for 60 seconds or at 1.2 times this test voltage for at least 100 ms.
- iii. Each encapsulated LED PCB manufactured shall be subjected to an electric strength test in accordance with EN 60079-18 clause 9.2. The test shall be carried out at 500 V for 60 seconds or at 1.2 times this test voltage for at least 100 ms.
- iv. Each encapsulated driver unit manufactured shall be subjected to an electric strength test in accordance with EN 60079-18 clause 9.2. It shall be carried out either at 1000 V + 2U for 60 seconds or at 1.2 times this test voltage for at least 100 ms.

14 Specific Conditions of Use (Special Conditions)

None.

Certificate Annex

Certificate Number CML 16ATEX3108
Equipment RLX CxZ1.21, RLX DxZ1.21 and RLX DxZ2.21 LED Floodlights
Manufacturer Luminell Norway AS



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
L0361	1 of 1	1.5	08 Feb 2017	L0361 RLX Cx Back Cover Marking
L0360	1 of 1	1.3	08 Feb 2017	L0360 RLX Cx – Spec. Variations and Dimensions
L0359	1 to 2	1.4	08 Feb 2017	L0359 RLX Cx – Section View, Distances and BOM
L0341-1	1 to 3	2.0	08 Feb 2017	UP003.D002-1 L0341-1 MCPCB 28x XPL V4 5000K, with NTC
L0338	1 to 4	2.0	08 Feb 2017	UP003.D002-3 L0337 SMPS Terminal Board – Diecast C
L0337	1 of 1	2.0	08 Feb 2017	UP003.D002 L0337 SMPS Ground Shield PCB
UP003.D007	1 to 18	2.2	08 Feb 2017	RLX Cx – Risk Assessment

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
L0359	1 to 2	1.5	06 July 2017	RLX Cx – Section view, distances and BOM
L0360	1 of 1	1.4	06 July 2017	RLX Cx – Spec, Variations and Dimensions
L0361	1 of 1	2.0	06 July 2017	RLX Cx Back Cover Marking
UP003.D007	1 to 18	2.3	06 July 2017	RLX Cx Risk Assessment

Issue 2

Drawing No	Sheets	Rev	Approved date	Title
L0476	1 of 1	1.4	09 Nov 2018	RLX Dx Back Cover Marking
L0361	1 of 1	2.1	09 Nov 2018	RLX Cx Back Cover Marking
L0359	1 to 2	1.5	09 Nov 2018	RLX Cx – Section View, Distances and BOM
L0480	1 to 2	1.2	09 Nov 2018	RLX Dx – Section View, Distances and BOM

Certificate Annex

Certificate Number CML 16ATEX3108
Equipment RLX CxZ1.21, RLX DxZ1.21 and RLX DxZ2.21 LED Floodlights
Manufacturer Luminell Norway AS



Drawing No	Sheets	Rev	Approved date	Title
L0481	1 of 1	1.2	09 Nov 2018	RLX Dx – Spec, Variations and Dimensions
L0360	1 of 1	1.5	09 Nov 2018	RLX Cx – Spec, Variations and Dimensions
UP032.D006	1 to 23	1.2	09 Nov 2018	RLX Cx and Dx Risk Assessment
L0503	1 to 3	1.1	09 Nov 2018	Fault Evaluation L0447 PSU D G3 Assembly 240 W
L0502	1 to 3	2.3	09 Nov 2018	Fault Evaluation L0335, L0346 Cx 160 PSU
L0337	1 of 1	2.0	09 Nov 2018	SMPS Ground Shield PCB
L0338	1 to 4	2.0	09 Nov 2018	SMPS Terminal Board – Diecast
L0341-1	1 to 3	2.0	09 Nov 2018	MCPCB 28x XPL V4 5000k, with NTC
L0346	1 to 5	2.0	09 Nov 2018	SMPS Mainboard 24VDC 160W – CC Configurable
240W SMPU Board	1 of 1	Pre 2	09 Nov 2018	Luminell 240W LED Driver UP037
L0445	1 to 10	1.2	09 Nov 2018	PSU DG3 Power Board
240W Terminal Board	1 to 7	Pre 1	09 Nov 2018	Luminell 240W LED Driver UP037
L0446	1 to 10	1.2	09 Nov 2018	PSU DG3 Term. Board
L0445-1	1 to 4	1.1	09 Nov 2018	PSU DG3 Power Board 240W - BOM
L0446-1	1 of 1	1.0	09 Nov 2018	PSU DG3 Terminal Board with Unity – BOM

Issue 3

Drawing No	Sheets	Rev	Approved date	Title
L0361	1 of 1	2.2	11 Jul 2019	RLX CxZ1.21 Back Cover Marking
L0476	1 of 1	1.7	11 Jul 2019	RLX DxZ1.21 Back Cover Marking
L0360	1 to 2	1.6	11 Jul 2019	RLX CxZ1.21 – Spec Variations and Dimensions
L0481	1 to 2	1.3	11 Jul 2019	RLX DxZ1.21 – Spec, Variations and Dimensions
L0359	1 to 2	1.6	11 Jul 2019	RLX CxZ1.21 – Section View, Distances and BOM
L0480	1 to 3	1.3	11 Jul 2019	RLX DxZ1.21 – Section View, Distances and BOM

Certificate Annex

Certificate Number CML 16ATEX3108
Equipment RLX CxZ1.21, RLX DxZ1.21 and RLX DxZ2.21 LED Floodlights
Manufacturer Luminell Norway AS



Issue 4

Drawing No.	Sheets	Rev	Approved /issued date	Title
L0502	1 to 17	2.4	12 Sep 2019	Fault Assessment – Power Supply L0336, L0346 Cx SMPS Mainboard 24VDC 160W
L0503	1 to 3	1.2	12 Sep 2019	Fault Assessment – Power Supply L0503 Fault Evaluation L0447 PSU D G3 Assembly 240W
L0445-1	1 to 30	1.4	12 Sep 2019	PSU DG3 Power Board 240W - BOM

Issue 5

Drawing No.	Sheets	Rev	Approved /issued date	Title
L0341-1	1 to 3	2.1	09 Mar 2020	MCPCB 28x XPL V4 5000k, with NTC
L0359	1 to 2	1.7	09 Mar 2020	RLX CxZ1.21 – Section view, distances and BOM
L0360	1 to 2	1.6	09 Mar 2020	RLX CxZ1.21 – Spec, variations and dimensions
L0361	1 of 1	2.3	09 Mar 2020	RLX CxZ1.21 Back Cover Marking
L0445-0	1 to 15	1.4	09 Mar 2020	PSU DG3 Powerboard
240W SMPU Board	1 of 1	Pre 2	09 Mar 2020	Luminell 240 W LED driver UP037
240W SMPU Board	1 of 1	Pre 2	09 Mar 2020	Luminell 240 W LED driver UP037
L0445-0	1 to 10	1.2	09 Mar 2020	PSU DG3 PowerBoard
L0476	1 of 1	1.8	09 Mar 2020	RLX DxZ1.21 Back Cover Marking
L0480	1 to 3	1.4	09 Mar 2020	RLX DxZ1.21 – Section view, distances and BOM
L0481	1 to 2	1.3	09 Mar 2020	RLX DxZ1.21 – Spec, Variations and Dimensions
UP032.D006	1 to 23	1.3	09 Mar 2020	Risk Assessment – RLX CxZ1.21 and DxZ1.21
L0602	1 of 1	1.0	09 Mar 2020	RLX DxZ2.21 Back Cover Marking
L0605	1 to 3	1.0	09 Mar 2020	RLX DxZ2.21 – Section view, distances and BOM
L0606	1 of 1	1.0	09 Mar 2020	RLX DxZ2.21 – Spec, Variations and Dimensions