

# RECOVER DALI 1650

099-2211D37



Project / Type
Notes
Count / Date



IP 40
220-240 V

## General

Wall   Surface
pure white   RAL 9010
IP40
indirect 8380 lm   direct 559 <sup>1</sup> , 1480 <sup>2</sup> , 2 <sup>3</sup> lm
total 559 <sup>1</sup> , 1480 <sup>2</sup> , 8380 <sup>3</sup> lm
559 <sup>1</sup> , 1480 <sup>2</sup> , 8380 <sup>3</sup> lm

## LED

3000 K <sup>1</sup> , 3000 K <sup>2</sup> , tunable white <sup>3</sup>   2700 K - 6500 K
CRI ≥ 97 <sup>1</sup> , 97 <sup>2</sup> , 70 <sup>3</sup>
L80 / 50000 h <sup>1</sup> , L80 / 50000 h <sup>2</sup> , L95 / 50000 h <sup>3</sup>
initial MacAdam ≤ 3 SDCM
MR 0.63 <sup>1</sup> , 0.63 <sup>2</sup> , 0.92 <sup>3</sup>   MDER 0.57 <sup>1</sup> , 0.57 <sup>2</sup> , 0.83 <sup>3</sup>
R <sub>g</sub> : 102   R <sub>f</sub> : 96   R <sub>t(1-15)</sub> : 96

## Electrical

non DIM <sup>1</sup> , non DIM <sup>2</sup> , DALI-2 <sup>3</sup>
PC1   220-240 V
system 9.4 <sup>1</sup> , 23.5 <sup>2</sup> , 75 <sup>3</sup> W
system 59 <sup>1</sup> , 63 <sup>2</sup> , 112 <sup>3</sup> lm/W <sup>4</sup>

## Physical

length 1645 mm   width 223 mm   height 80 mm
12 kg

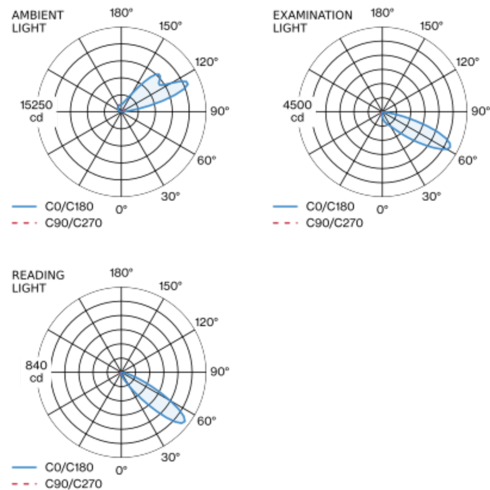
LED wall mounted light for standard nursing area; IP 40 protection; 1 pc per bed; mounting height of upper edge of luminaire: 180cm; rectangular luminaire profile with direct / indirect light distribution, surface white powder coated; end cap in same colour; direct and indirect light exit with clear toughened glass cover; cable inlet on the wall side for 220-240V power supply, for the examination light circuit and the reading light and 2 DALI control lines; power feed from the rear (wall mounting profile preassembled); Luminaire offers 3 kinds of lighting; 1) Reading light 3000K; flush mounted, equipped with lens technology to avoid glare to neighbouring bed; reading light switchable by means of a connection to a potential-free contact (e.g., via a patient terminal provided by the customer); 2) Examination light 3000K; switchable by means of a connection to a button; 3) Indirect, tuneable white room lighting; 2700K – 6500K; controllable via DALI Control; maximum power consumption 106W at 6500K; luminous flux 8380lm at 6500K; L80 min. 80% of luminous flux after 50000 operating hours; reading and examination light: colour temperature 3000K; colour rendering CRI > 90, CRI typically 95; colour point binning: directly on the BBL, colour homogeneity: initial <3-Step SDCM scale, colour point stability: final after 10000 hrs <4-Step SDCM scale; PC I; complies with the following provisions: EN (IEC) 60598-1 and the supplement EN (IEC) 60598-2-25; dimensions of housing W 1650mm, visible H 47mm, wall profile H 80mm, D 223mm; Manufacturer XAL, type RECOVER dali 1650; necessary accessories per room: DALI POWER SUPPLY and DALI control

<sup>1</sup> READING LIGHT <sup>2</sup> EXAMINATION LIGHT <sup>3</sup> AMBIENT LIGHT  
<sup>4</sup> incl. consideration of optical losses, internal control unit losses & operating device efficiency

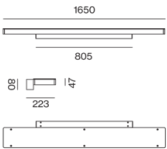
## Installation instructions



## Light distribution



## Product drawing



[099-2211D37] The technical data represent rated values for an ambient temperature of 25°C. The data values for the luminous flux are initially subject to a tolerance of +/- 10%, those for the electrical connected load are initially subject to a tolerance of +/- 10%, and those for the colour temperature are initially subject to a tolerance of +/- 150 K. No liability is assumed for typographical or printing errors. The general terms and conditions of XAL GmbH apply.  
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## Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.93	0.89	0.85	0.81
LSF	1	1	1	1	1
MF	LMF × RSMF × LLMF × LSF		RSMF <sup>a</sup> Room Surface Maintenance Factor		
MF	Maintenance Factor		LLMF Lamp Lumens Maintenance Factor		
LMF <sup>a</sup>	Luminaire Maintenance Factor		LSF Lamp Survival Factor		

<sup>a</sup> According to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

## Circuit Breaker Types

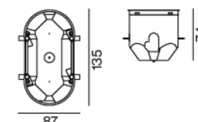
Automatic Circuit Breaker Type	Number of Fixtures
B10	50
B13	65
B16	80
B20	100
C10	50
C13	65
C16	80
C20	100

## Mounting accessories

### INSTALLATION HOUSING

L-W-H (MM)  
71-75-135

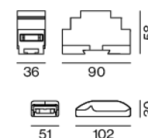
ARTICLE NUMBER(S)  
099-2290000



## Electrical accessories

### DALI POWER SUPPLY

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
for top-hat-rail mounting 240 mA	90-36-58	002-59871
for ceiling insertion 200 mA	102-51-30	002-59880



### DALI MODULE

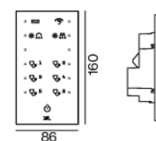
TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
for control of 4 scenes / 2 groups	48-28-15	002-54026



## Electrical accessories

### MASTER UNIT

TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
single patient room	85-48-160	099-2291137
double patient room	85-48-160	099-2291237
three patient room	85-48-160	099-2291337
four patient room	85-48-160	099-2291437
five patient room	85-48-160	099-2291537
six patient room	85-48-160	099-2291637



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12.08.2025

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## Electrical accessories

### DALI LIGHT SENSOR

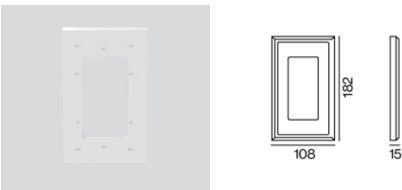
TYPE	Ø (MM)	ARTICLE NUMBER(S)
recessed ceiling mounted	86	002-54051
surface mounted	86	002-54058
socket mounted	103	002-54053



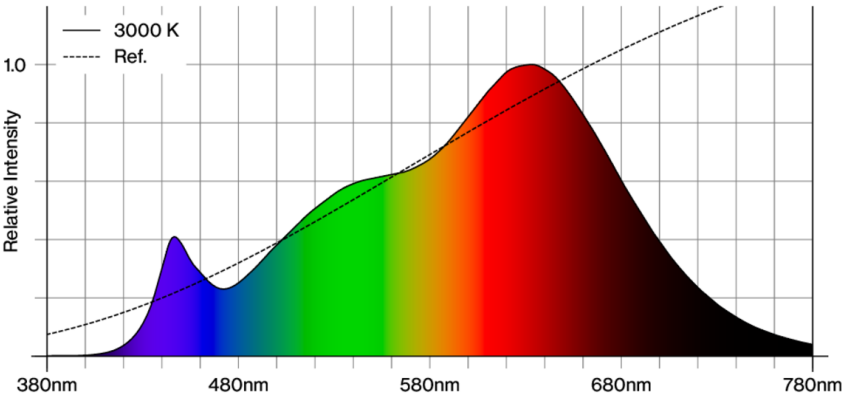
## Other accessories

### SAFETY FRAME FOR MASTER UNIT

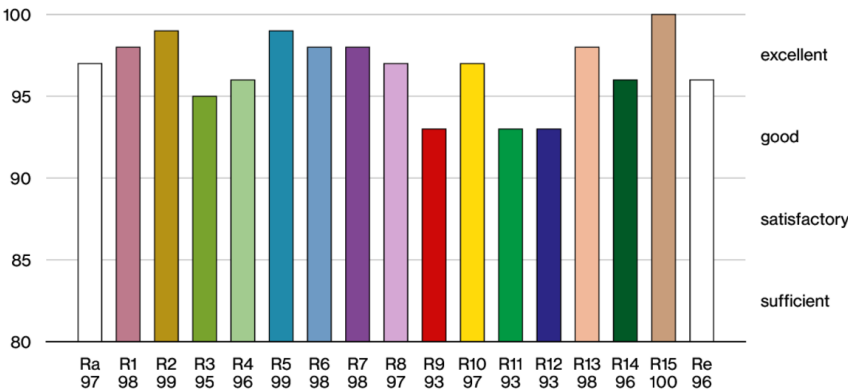
TYPE	L-W-H (MM)	ARTICLE NUMBER(S)
mandatory for MASTER UNIT	108-15-182	099-2298007



## Colour rendering



### CRI/R<sub>a</sub> ≥ 97 R<sub>e</sub> ≥ 96 (3000 K)



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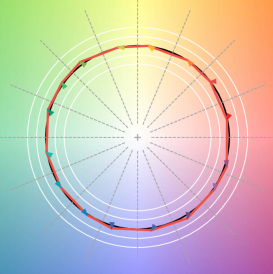


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## TM30 colour vector graphic



The black line represents the black body reference. The red line indicates the results of the test light source. The deviation from the test light source to the reference is shown and is marked by arrows. The shorter the arrows, the higher the color rendering.