

RECOVER PRO 1650

099-2211037



Project / Type
Notes
Count / Date



General

Wall Surface
white RAL 9010 ¹
IP40
indirect 6 ² , 6 ³ , 18300 ⁴ lm direct 156 ² , 156 ³ , 683 ⁵ , 1480 ⁶ , 5 ⁴ lm
total 162 ² , 162 ³ , 683 ⁵ , 1480 ⁶ , 18300 ⁴ lm
162 ² , 162 ³ , 683 ⁵ , 1480 ⁶ , 18300 ⁴ lm

LED

3000 K ² , 3000 K ³ , 3000 K ⁵ , 3000 K ⁶ , tunable white ⁴ 2200 K - 31000 K
CRI ≥ 97 ² , 97 ³ , 97 ⁵ , 97 ⁶ , 70 ⁴
L80 / 50000 h
initial MacAdam ≤ 3 SDCM
R _g : 102 R _f : 96 R _{f(1-15)} : 96
MR 0.63 MDER 0.57

Electrical

DALI-2 master control
PC1 220-240 V
system 2.3 ² , 2.3 ³ , 12.2 ⁵ , 23.5 ⁶ , 199 ⁴ W
system 70 ² , 70 ³ , 56 ⁵ , 63 ⁶ , 92 ⁴ lm/W ⁷

Physical

length 1645 mm width 223 mm height 80 mm
12 kg

¹ RAL code ² NURSE LIGHT LEFT ³ NURSE LIGHT RIGHT
⁴ AMBIENT LIGHT ⁵ READING LIGHT ⁶ EXAMINATION LIGHT
⁷ incl. consideration of optical losses, internal control unit losses & operating device efficiency

Installation instructions



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 and 2 control lines for the examination light circuit and the reading light; power feed from the rear (wall mounting profile preassembled); Luminaire offers 4 kinds of lighting; 1) Reading light 3000K; flush mounted, equipped with lens technology to avoid glare to neighbouring bed; 2-stage reading light, switchable by means of a connection to a potential-free contact (e.g., via a patient terminal provided by the customer); reading light > 300lx; 2) Nurse's night light, 3000K, right and left side (operation via integrated buttons); 3) Examination light 3000K; Em> 1000lx; operation of the examination light via RECOVER MASTER UNIT; 4) Indirect, dynamic room lighting that recreates the changes in natural daylight; the dynamic colour temperature of 2200K to 31000K, which changes with daylight, and the dynamic light intensity can be individually set and saved via XAL RECOVER SOFTWARE and can then be retrieved from the RECOVER MASTER UNIT; monitoring of the bed area via integrated presence sensor; LED boards are dimmed via analogue controlled operating devices (flicker-free, no PWM); maximum power consumption 237W; luminous flux at 5000K 18290lm; L80 min. 80% of luminous flux after 50000 operating hours; colour rendering of examination/reading light and at 2700K indirect ambient light: CRI > 90, CRI typically 95; colour point binning at 2700K: 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; luminaire unit complies with the requirements of DIN 5035-3 and EN 12464-1 (reading area, examination...) when mounted centrally above the bed's central axis, conforms to planning recommendation DIN SPEC 67600 - biologically effective illumination. Dimensions of housing W 1650mm, visible H 47mm, wall profile H 80mm, D 223mm; Manufacturer XAL, type RECOVER pro 1650; necessary accessories per room: RECOVER MASTER UNIT (up to 6 pcs RECOVER PRO can be controlled), flush-mounted electronics wall socket; optional accessories: DAYLIGHT / MOVEMENT SENSOR per room (3 variants: recessed in ceiling - installation depth 46mm; semi-recessed, installation with base, installation depth 20mm; surface mounted - installation height 40mm).



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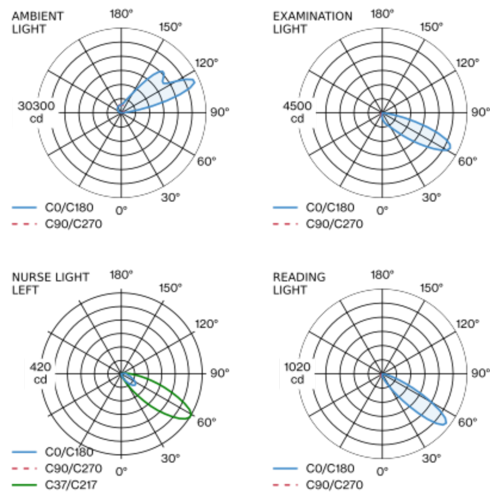


Project / Type

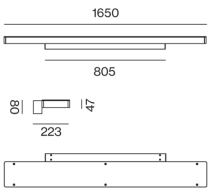
Notes

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Light distribution



Product drawing



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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 ^a	Room Surface Maintenance Factor
MF	Maintenance Factor	LLMF	Lamp Lumens Maintenance Factor
LMF ^a	Luminaire Maintenance Factor	LSF	Lamp Survival Factor

^a 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.

Mounting accessories

INSTALLATION HOUSING

L-W-H (MM)	ARTICLE NUMBER(S)
71-75-135	099-2290000



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



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

L-W-H (MM)	ARTICLE NUMBER(S)
108-15-182	099-2298007

