



SIDELITE® ECO KALEEA PARLEDO®

RECESSED & LAY-IN LUMINAIRES



SIDELITE® ECO / SIDELITE® ECO CYANOSIS

Recessed ceiling luminaires, Lay-in luminaires

- Extremely cost efficient luminaires with advanced LED technology, available as ceiling, wall, recessed or suspended lighting solutions for interiors
- High number of variants within the luminaire series
- Diffuser plastic (PMMA) microprismatic: ideal for office areas (UGR ≤ 19) and environments with computer screens in accordance with EN 12464-1
- Lightguide and diffuser made of nonyellowing PMMA with microprismatic
- RZB SIDELITE® technology: lateral light injection for extremely homogeneous light distribution
- SIDELITE ECO CYANOSIS:

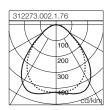
COI < 3.0 (only applicable to 4000K models)

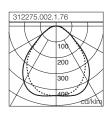
- **MultiLumen**: 4 steps adjustable luminous flux
- Luminous efficiency of up to 128 lm/W
- LED rated life 50,000 h (L80/B10)
- Colour consistency within 3-steps MacAdam (3 SDCM)
- Flicker < 5%
- External driver with simple plug-in locking system and extended connecting cable up to 1.90 m
- DALI versions also dimmable via TouchDIM
- Suitable for use in the food and drink industry
- Tunable white versions dynamically adjustable from 2700 K to 6500 K
- Ideal for use as part of a Human Centric Lighting concept
- Versions with Casambi smart+free Bluetooth® control for wireless network and operation using Android / iOS devices, free app available for download

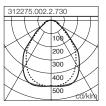
312273.002.1.76				
Floor 12 x 2,5 x 3m (0,2m)				
100 lx	150 lx	200 lx		
2	3	4		
Room 6 x 4 x 3 m (0,75 m)				
200 lx	300 lx	500 lx		
3	4	6		

312275.	002.1.76			
Floor 12	x 2,5 x 3m	(0,2m)		
100 lx	150 lx	200 lx		
2	3	4		
Room 6 x 4 x 3 m (0,75 m)				
200 lx	300 lx	500 lx		
3	1	6		

312275.002.2.730				
Floor 12 x 2,5 x 3m (0,2m)				
100 lx	150 lx	200 lx		
3	4	5		
Room 6 x 4 x 3 m (0,75 m)				
200 lx	300 lx	500 lx		
3	5	8		









An Overview of Cyanosis

Cyanosis is a pathologic condition referring to a bluish discoloration of the skin or mucous membrane. This condition indicates that the tissue near the skin or membrane has low saturation levels of oxygen. Hence, it becomes a priority for hospitals to have medical staff that are able to detect cyanosis through clinical observation.

To ensure cyanosis is correctly detected, the lighting in all clinical observation areas must meet standards and be of the highest quality. This is due to cyanosis being a visual cue of a medical symptom based on observable colour, lighting conditions and light quality which all play a significant part in its visual detection. For cyanosis observation, medical lighting should have an appropriate power output in the red part of the visible spectrum. If the output is too low, a patient's skin colour may appear darker and he/she may be diagnosed as cyanosed when this is not the case.

Reliable Detection of Cyanosis

Australia and New Zealand use the Cyanosis Observation Index (COI) where the interior lighting standards define the parameters of the COI for hospitals and medical facilities.

To be considered - 'Cyanosis Compliant' a medical examination light requires the following technical specifications:

- COI of 3.3 or Less the lower the better
- A Correlated Colour Temperature (CCT) of between 3300K and 5300K
- A Colour Rendering Index (CRI) of >80

(AS/NZS 1680.2.5:2018 - Section 7 Light Source Colour)





Lay-in luminaires | Sidelite ECO

Type of Protection: IP 20, IP 40 on room side Protection Class: II

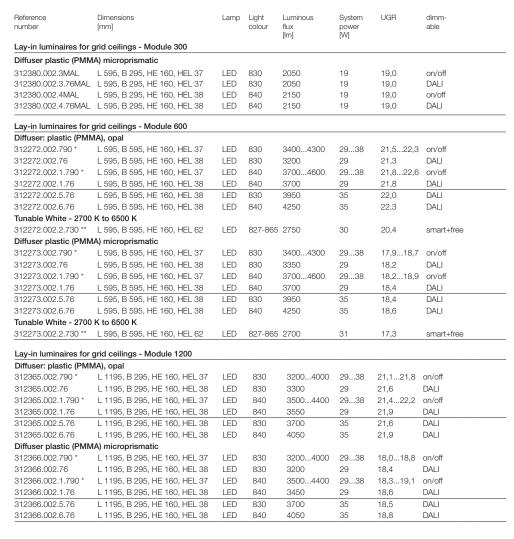
Impact Protection: IK03

Frame: aluminium, powder-coated. Diffuser made of non-yellowing plastic, opal or microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing plastic (PMMA). Lateral light emission thanks to LED. Extended connection cable (1.90 m). External driver. DALI variants suitable for through wiring as standard.

Available colour: 2 = white

MultiLumen version: 4 steps adjustable luminous flux. Factory-set to lowest luminous flux.

Versions with Casambi smart+free Bluetooth® control for wireless network and operation using Android / iOS devices, free app available for download.



^{*} MultiLumen version: Specification of the lowest and highest possible lumen output. You will find more detailed information on www.rzb-lighting.com.

MultiLumen: Adjustable luminous flux

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31227X	31227X.002.790 / 31227X.002.1.790				
Step	Luminous flux [lm]	Luminous flux [lm]	System power		
	3000 K	4000 K	[W]		
1	3400	3700	29		
2	3750	4050	33		
3	3950	4250	35		
4	4300	4600	38		

MultiLumen: Adjustable luminous flux

31236X	31236X.002.790 / 31236X.002.1.790				
Step	Luminous flux [lm]	Luminous flux [lm]	System power		
3000 K		4000 K	[W]		
1	3200	3500	29		
2	3500	3850	33		
3	3700	4050	35		
4	4000	4400	38		





Comparison

LED vs. conventional lamps

LED 29 / 30 / 31 W ≈

4 x 14 W T16 (68 W Psys)

LED 35 W ≈

3 x 21 W T16 (69 W Psys)

LED 38 W ≈

4 x 21 W T16 (90 W Psys)



Lay-in luminaires | Sidelite ECO Cyanosis

Type of Protection: IP 20, IP 40 on room side Protection Class: II

Impact Protection: IK03

Cyanosis Observation Index (COI) < 3.0 (only applicable to 4000K)

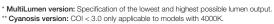
Frame: aluminium, powder-coated. Diffuser made of non-yellowing plastic microprismatic (Suitable for use in environments with computer screens in accordance with EN 12464-1). Lightguide and diffuser made of non-yellowing plastic (PMMA). Lateral light emission thanks to LED. Extended connection cable (1.90 m). External driver. DALI variants suitable for through wiring as standard.

Available colour: 2 = white

 $\textbf{MultiLumen version:} \ 4 \ \text{steps adjustable luminous flux.} \ \textbf{Factory-set to lowest luminous flux.}$

Versions with Casambi smart+free Bluetooth® control for wireless network and operation using Android / iOS devices, free app available for download.

Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [lm]	System power [W]	UGR	dimm- able
Lay-in luminaires for grid ceilin	gs - Module 300						
Diffuser plastic (PMMA) microp	prismatic						
312380.002.3MAL.CRI90	L 595, B 295, HE 160, HEL 37	LED	930	1800	19	19,0	on/off
312380.002.3.76MAL.CRI90	L 595, B 295, HE 160, HEL 37	LED	930	1800	19	19,0	DALI
312380.002.4MAL.CRI90 **	L 595, B 295, HE 160, HEL 38	LED	940	1900	19	19,0	on/off
312380.002.4.76MAL.CRI90 **	L 595, B 295, HE 160, HEL 38	LED	940	1900	19	19,0	DALI
Lay-in luminaires for grid ceilin	gs - Module 600						
Diffuser plastic (PMMA) microp	orismatic						
312273.002.790MAL.CRI90 *	L 595, B 595, HE 160, HEL 37	LED	930	26503600	2938	19,0	on/off
312273.002.76MAL.CRI90	L 595, B 595, HE 160, HEL 37	LED	930	2650	29	19,0	DALI
312273.002.1.790MAL.CRI90 * *	** L 595, B 595, HE 160, HEL 38	LED	940	28503850	2938	19,0	on/off
312273.002.1.76MAL.CRI90 **	L 595, B 595, HE 160, HEL 38	LED	940	2850	29	19,0	DALI
		-					
Lay-in luminaires for grid ceilin	Lay-in luminaires for grid ceilings - Module 1200						
Diffuser plastic (PMMA) microp	orismatic						
312366.002.790MAL.CRI90 *	L 1195, B 295, HE 160, HEL 37	LED	930	25003350	2938	19,0	on/off
312366.002.76MAL.CRI90	L 1195, B 295, HE 160, HEL 37	LED	930	2500	29	19,0	DALI
312366.002.1.790MAL.CRI90 * *	** L 1195, B 295, HE 160, HEL 38	LED	940	26003550	2938	19,0	on/off
312366.002.1.76MAL.CRI90 **	L 1195, B 295, HE 160, HEL 38	LED	940	2600	29	19,0	DALI











Accessories | Recessed mounting frame
Recessed mounting frame: sheet steel, powder-coated, white. For installation on suspended ceilings. Minimum recess depth: 300 mm.
Ceiling thickness: 1-30 mm

Mounting frame for $\underline{\text{installation in suspended ceilings}}$

981941.012	L 624, B 624, H 2, HE 94	for module 600
982106.012	L 1224, B 324, H 2, HF 94	for module 1200





Accessories | Surface mounting frame

Mounting frame: sheet steel, powder-coated, white.

Surface mounting frame

982187.032	L 602, B 602, H 52	for module 600
982190.042	L 1202, B 302, H 47	for module 1200





Ceiling surface mounting kit

981980.012	consisting of 4 cylindrical spacers (Ø 30, H 38) for module 600 / 1200

not suitable for tunable white version



Accessories | Pendant kit
Pendant kit consisting of 4 steel cables and ceiling mounting with rapid cable adjustment

Pendant kit 981978.010

not suitable for tunable white version

LP 1500





982035.022	L 300, B 100, H 50, LP 300-1500	Y-pendant set with canopy for module 1200

for module 600



Accessories | Through-wiring box
Pluggable converter add-on with 5 pins. Cable cross-sections of up to 5 x 1.5 mm² or 3 x 2.5 mm² possible.
Pre-installed 150-mm-long connecting cable with open cable ends for easy connection to the converter.

Through-wiring box DALI

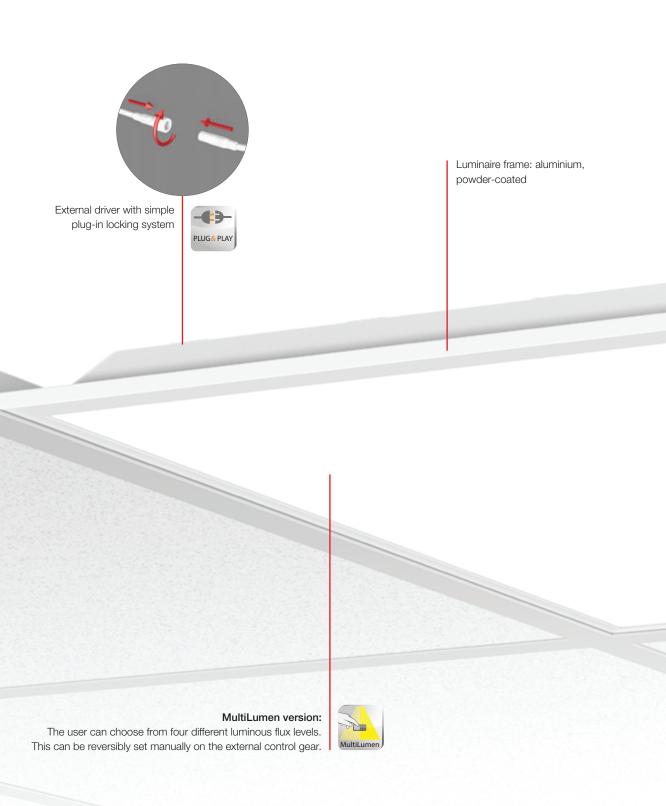
982703.002 L 98,	B 55, H 28
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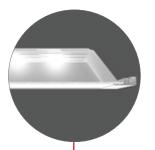


KALEEA

Everything at a glance







LED backlight technology for homogeneous illumination of the entire light-emitting surface

Ideal for office areas (UGR \leq 19) and environments with computer screens in accordance with DIN EN 12464-1



Diffusor made of **non-yellowing PMMA**, microprismatic



KALEEA / KALEEA CYANOSIS

Lay-in luminaires

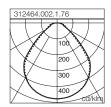
- Range of high-efficiency LED luminaires for interiors
- Ideal for office areas (UGR ≤ 19) and environments with computer screens in accordance with EN 12464-1
- Extremely uniform appearance of the light-emitting surface
- **Diffusor** made of **non-yellowing PMMA**, microprismatic
- Luminous efficiency up to 130 $\mbox{Im/W}$
- LED rated life 50,000 h (L80)
- Colour consistency within 3-steps MacAdam (3 SDCM)
- **MultiLumen**: 4 steps adjustable luminous flux
- DALI versions also dimmable via TouchDIM
- Flicker < 5%
- External converter with simple plug-in locking system

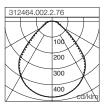
KALEEA CYANOSIS:

COI < 3.0 R9 > 80

312464.002.1.76				
Floor 12 x 2,5 x 3m (0,2m)				
100 lx	150 lx	200 lx		
2	3	4		
Room 6 x 4 x 3 m (0,75 m)				
200 lx	300 lx	500 lx		
3	4	6		

312464.002.2.76					
Floor 12	x 2,5 x 3m	(0,2m)			
100 lx	150 lx	200 lx			
2	2	3			
Room 6 x 4 x 3 m (0,75 m)					
200 lx	300 lx	500 lx			
2	3	5			







Lay-in luminaires | Kaleea

Type of Protection: IP 20, $\mbox{\bf IP 40}$ on room side Protection Class: II

Impact Protection: IK02

Housing: sheet steel, powder-coated. Luminaire frame: aluminium, powder-coated. LED backlight technology for homogeneous illumination of the entire light-emitting surface. Diffuser made of non-yellowing plastic (PMMA) microprismatic. Suitable for use in environments with computer screens in accordance with EN 12464-1. External driver.

Available colour: 2 = white

MultiLumen version: 4 steps adjustable luminous flux. Factory-preset to step 2.



Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [lm]	System power [W]	UGR	dimm- able
Lay-in luminaires for grid ceiling	gs - Module 300						
312463.002.1MAL-M300	L 595, B 295, HE 160, HEL 33	LED	840	2200	19	19,0	on/off
312463.002.1.76MAL-M300	L 595, B 295, HE 160, HEL 33	LED	840	2200	19	19,0	DALI
Lay-in luminaires for grid ceiling	gs - Module 600 L 595, B 595, HE 160, HEL 33	LED	840	31004400	2436	17,618,9	on/off
312463.002.1.76	L 595, B 595, HE 160, HEL 33	LED	840	3500	28	18,1	DALI
312463.002.2.76	L 595, B 595, HE 160, HEL 33	LED	840	4400	36	18,9	DALI
Lay-in luminaires for grid ceilings - Module 1200							
312463.002.1.790MAL-M1200	L 1195, B 295, HE 160, HEL 33	LED	840	29504050	2535	19,0	on/off
312463.002.1.76MAL-M1200	L 1195, B 295, HE 160, HEL 33	LED	840	2950	25	19,0	DALI

^{*} MultiLumen version: Specification of the lowest and highest possible lumen output. You will find more detailed information on www.rzb-lighting.com.



Comparison LED vs. conventional lamps

LED 24 W ≈

4 x 14 W T16 (68 W Psys)

LED 28 W ≈

3 x 24 W T16 (75 W Psys)

LED 36 W ≈

4 x 24 W T16 (98 W Psys)

Lay-in luminaires | Kaleea Cyanosis

Type of Protection: IP 20, IP 40 on room side

Protection Class: II Impact Protection: IK02

Cyanosis Observation Index (COI) < 3.0

R9 value > 80

Housing: sheet steel, powder-coated. Luminaire frame: aluminium, powder-coated. LED backlight technology for homogeneous illumination of the entire light-emitting surface. Diffuser made of non-yellowing plastic (PMMA) microprismatic. Suitable for use in environments with computer screens in accordance with EN 12464-1. External driver.

Available colour: 2 = white

MultiLumen version: 4 steps adjustable luminous flux. Factory-preset to step 2.

Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [lm]	System power [W]	UGR	dimm- able
Lay-in luminaires for grid ceilings -	Module 300						
312463.002.1MAL-M300-CRI95	L 595, B 295, HE 160, HEL 33	LED	940	1700	19	19,0	on/off
312463.002.1.76MAL-M300-CRI95	L 595, B 295, HE 160, HEL 33	LED	940	1700	19	19,0	DALI
Lay-in luminaires for grid ceilings -							
312463.002.1.790MAL-CRI95 *	L 595, B 595, HE 160, HEL 33	LED	940	26503750	2536	19,0	on/off
312463.002.1.790MAL-CRI95 * 312463.002.1.76MAL-CRI95	L 595, B 595, HE 160, HEL 33 L 595, B 595, HE 160, HEL 33	LED LED	940 940	26503750 2650	2536 25	19,0 19,0	on/off DALI
	L 595, B 595, HE 160, HEL 33					- , -	
312463.002.1.76MAL-CRI95	L 595, B 595, HE 160, HEL 33 Module 1200					- , -	

^{*} MultiLumen version: Specification of the lowest and highest possible lumen output.

MultiLumen: Adjustable luminous flux

312463.002.1.790					
Step	Luminous flux [lm]	System power			
	[W]				
1	3100	24			
2	3500	28			
3	4000	32			
4	4400	36			



Accessories | Surface mounting frame
Surface mounting frame, white. Consists of 4 powder-coated extruded aluminum profiles and 4 plastic corner connectors.

Surface mounting frame

982727.002 L 602, B 602, H 75 for module 600



Accessories | Through-wiring box

Pluggable converter add-on with 5 pins. Cable cross-sections of up to $5 \times 1.5 \text{ mm}^2$ or $3 \times 2.5 \text{ mm}^2$ possible. Pre-installed 150-mm-long connecting cable with open cable ends for easy connection to the converter.

Through-wiring box DALI

L 98, B 55, H 28



Accessories | Through-wiring box
Pluggable converter add-on for Kaleea on/off versions. Through-wiring possibility L-N-PE. Cable cross-section from 1.5 to 2.5 mm².

Through-wiring box ON/OFF 982688.002 L 70, B

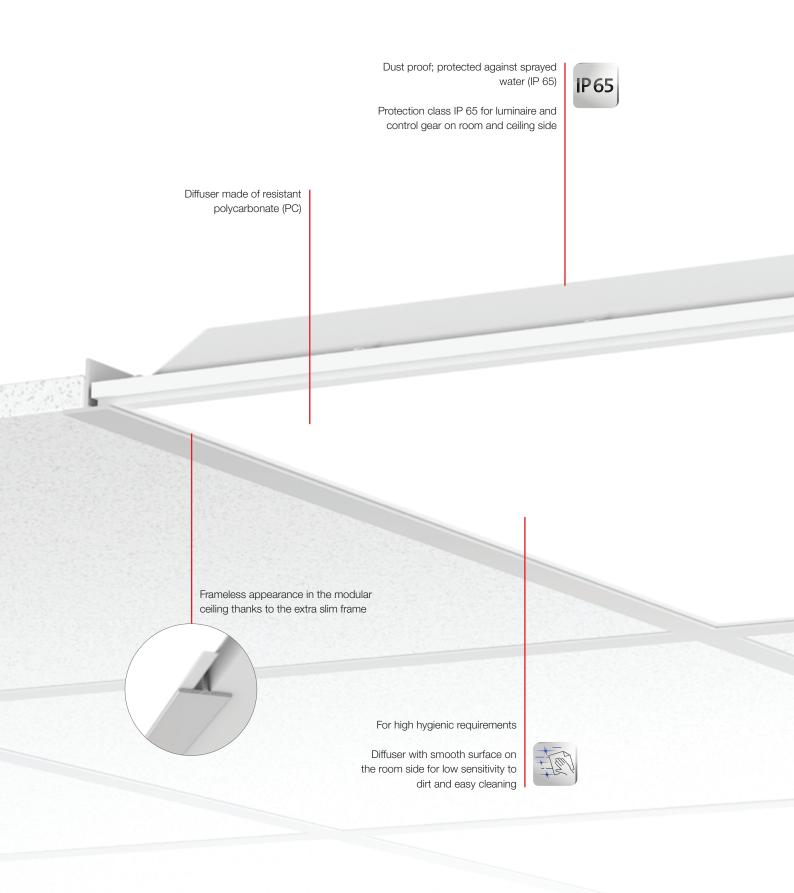
L 70, B 35, H 25





PARLEDO®

Everything at a glance



DALI variants: IoT Ready



Easy to install thanks extended connection cable (2 m)



The user can choose from four different luminous flux levels. This can be reversibly set manually on the external control gear.



Excellent glare control even with high luminous fluxes

Diffuser microprismatic: ideal for office areas (UGR ≤ 19) and environments with computer screens in accordance with EN 12464-1





PARLEDO® / PARLEDO® CYANOSIS

Lay-in luminaires

- For high hygienic requirements
- Diffuser with smooth surface on the room side for low sensitivity to dirt and easy cleaning
- Diffuser made of resistant polycarbonate (PC)
- Dust proof; protected against sprayed water (IP 65)
- Protection class IP 65 for luminaire and control gear on room and ceiling side
- Impact protection IK06 for high impact resistance
- Frameless appearance in the modular ceiling thanks to the extra slim frame
- Diffuser microprismatic: ideal for office areas (UGR ≤ 19) and environments with computer screens in accordance with EN 12464-1

- Excellent glare control even with high luminous fluxes
- **MultiLumen:** 4 steps adjustable luminous flux
- Luminous efficiency up to 147 lm/W
- LED rated life 60,000 h (L80)
- Colour consistency within 3-steps MacAdam (3 SDCM)
- Flicker: DALI ≤ 1%, MultiLumen < 5%
- Easy to install thanks extended connection cable (2 m)
- Suitable for through wiring as standard
- DALI variants: IoT Ready and dimming via TouchDIM possible
- PARLEDO CYANOSIS : (COI) < 3.0

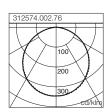
312577.002.76					
Floor 12 x 2,5 x 3m (0,2m)					
100 lx	150 lx	200 lx			
2	3	3			
Room 6 x 4 x 3 m (0,75 m)					
200 lx	300 lx	500 lx			
2	3	5			

312	577.	002.7	76		
			100 200 300	X	
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312578.002.76					
Floor 12 x 2,5 x 3m (0,2m)					
100 lx	150 lx	200 lx			
2	2	3			
Room 6 x 4 x 3 m (0,75 m)					
200 lx	300 lx	500 lx			
2	3	4			

100 200 300 400	= _ /

0.70					
312574.002.76					
Floor 12 x 2,5 x 3m (0,2m)					
150 lx	200 lx				
3	3				
Room 6 x 4 x 3 m (0,75 m)					
300 lx	500 lx				
4 6					
	2,5 x 3m 150 lx 3				





Lay-in luminaires | Parledo

Type of Protection: **IP 65**Protection Class: I
Impact Protection: IK06



Housing: sheet steel, powder-coated. Luminaire frame: aluminium, powder-coated. LED backlight technology for homogeneous illumination of the entire light-emitting surface. Smooth diffuser: plastic (polycarbonate), opal or microprismatic (suitable for use in environments with computer screens in accordance with EN 12464-1). External driver. Extended connection cable (2.0 m). Suitable for through wiring as standard. DALI variants IoT Ready and dimming via TouchDIM possible.

Available colour: 2 = white

MultiLumen version: 4 steps adjustable luminous flux. Factory-set to lowest luminous flux.

Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [lm]	System power [W]	UGR	dimm- able
Recessed ceiling lum	ninaires for visible mounting rails	s - Modul	e 600				
Diffuser: plastic (poly	carbonate), opal						
312567.002.790 *	L 595, B 595, HE 160, HEL 41	LED	840	45505600	3140	21,722,4	on/off
312568.002.76	L 595, B 595, HE 160, HEL 41	LED	840	4550	31	21,7	DALI
312569.002.76	L 595, B 595, HE 160, HEL 41	LED	840	5600	40	22,4	DALI
Diffuser plastic (poly	carbonate) microprismatic						
312570.002.790 *	L 595, B 595, HE 160, HEL 41	LED	840	40505000	3140	17,318,0	on/off
312571.002.76	L 595, B 595, HE 160, HEL 41	LED	840	4050	31	17,3	DALI
312572.002.76	L 595, B 595, HE 160, HEL 41	LED	840	5000	40	18,0	DALI

^{*} MultiLumen version: Specification of the lowest and highest possible lumen output. You will find more detailed information on www.rzb-lighting.com.



Comparison

LED vs. conventional lamps

LED 31 W ≈

2 x 35 W T16 (75 W Psys) 2 x 39 W T16 (82 W Psys)

LED 40 W ≈

3 x 35 W T16 (113 W Psys) 3 x 39 W T16 (123 W Psys)

Lay-in luminaires | Parledo Cyanosis

Type of Protection: **IP 65**Protection Class: I
Impact Protection: IK06

Cyanosis Observation Index (COI) < 3.0

Housing: sheet steel, powder-coated. Luminaire frame: aluminium, powder-coated. LED backlight technology for homogeneous illumination of the entire light-emitting surface. Smooth diffuser: plastic (polycarbonate), opal or microprismatic (suitable for use in environments with computer screens in accordance with EN 12464-1). External driver. Extended connection cable (2.0 m). Suitable for through wiring as standard. DALI variants IoT Ready and dimming via TouchDIM possible. Suitable for use in cyanosis application.

Available colour: 2 = white

MultiLumen version: 4 steps adjustable luminous flux. Factory-set to lowest luminous flux.

Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [lm]	System power [W]	UGR	dimm- able
Recessed ceiling luminaires fo	r visible mounting rails - Module	600					
Diffuser: plastic (polycarbonate	e), opal						
312567.002.790MAL-CRI95 *	L 595, B 595, HE 160, HEL 41	LED	940	35504350	3140	21,722,4	on/off
312568.002.76MAL-CRI95	L 595, B 595, HE 160, HEL 41	LED	940	3550	31	21,7	DALI
312569.002.76MAL-CRI95	L 595, B 595, HE 160, HEL 41	LED	940	4350	40	22,4	DALI
Diffuser plastic (polycarbonate) microprismatic						
312570.002.790MAL-CRI95 *	L 595, B 595, HE 160, HEL 41	LED	940	31503900	3140	17,318,0	on/off
312571.002.76MAL-CRI95	L 595, B 595, HE 160, HEL 41	LED	940	3150	31	17,3	DALI
312572.002.76MAL-CRI95	L 595, B 595, HE 160, HEL 41	LED	940	3900	40	18,0	DALI

 $^{^{\}star}$ MultiLumen version: Specification of the lowest and highest possible lumen output.



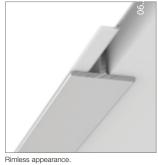
Accessories | Recessed mounting frame
Recessed mounting frame: sheet steel, powder-coated. For installation on suspended ceilings. Minimum recess depth: 300 mm.
Ceiling thickness: 1-30 mm

Mounting frame for installation in suspended ceilings
981941.002 L 624, B 624, H 2, HE 94 for module 600

MultiLumen: Adjustable luminous flux

312567.002.790					
Step	System power				
	[W]				
1	4550	31			
2	4950	35			
3	5300	38			
4	5600	40			

312570.002.790		
Step	Luminous flux [lm]	System power [W]
	4000 K	
1	4050	31
2	4400	35
3	4750	38
4	5000	40







RZB Lighting Asia & Pacific Sdn Bhd

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