



**PI-LED® AERA FLAT**



**Tunable white**  
1,800K - 16,000K



**Brightness dimmable**  
1%-100%



**RGB/CIE-xy adjustable**  
Colour points and sequen-



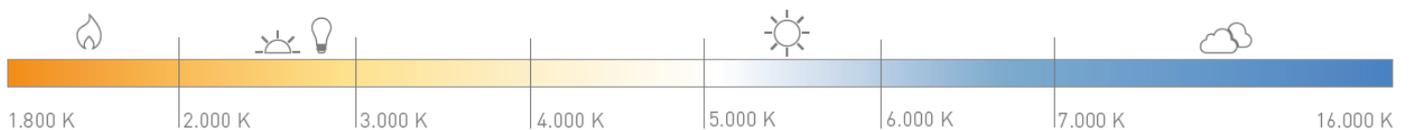
**Biorhythmic lighting**  
Vitalisation and recreation

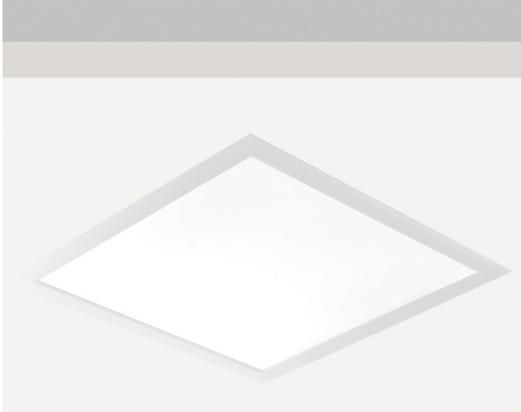


**2 Control modes**  
DALI DT8,  
NeoLink/ZigBee 3.0



**Excellent CRI**  
CRI>90





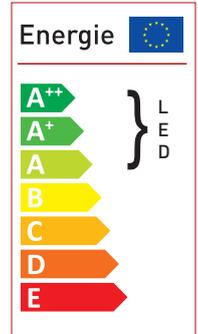
### HIGHLIGHTS

- Ideal for lighting large interior areas.
- Size according to the common grid dimensions, direct 230 V mains connection
- High colour rendition CRI >90
- Low tolerance for colour temperature MacAdam 1 (typisch / initial)
- 2 control modes: DALI DT8, NeoLink/ZigBee 3.0
- Integrated overtemperature protection
- Adjustable colour temperature 1.800K - 16.000K
- Adjustable CIE-xy colour points and RGB colours
- Dimming: 1%-100%



### TECHNICAL DATA

Luminous source	SMD LED module
Supply voltage	230 VAC
Power	50 W (@4,000K)
LED luminous flux	4,100 lm (@4,000K)
Control modes	DALI DT8, NeoLink/ZigBee 3.0
Dimmable	1%-100%
Protection rating	IP20
Protection class	I
Mounting	Inlaid   Recessed   Surface   Pendant
Weight	6.8 kg (incl. packaging)



### ORDERING DATA AND TECHNICAL DATA - AERA FLAT

Type	Description	Type	Accessories
tbd	Aera Flat Luminaire / PI-LED / NeoLink / 595mm	tbd	mounting frame 595x595x60mm AERA FLAT
tbd	Aera Flat Luminaire / PI-LED / NeoLink / 620mm	tbd	mounting frame 620x620x60mm AERA FLAT
tbd	Aera Flat Luminaire / PI-LED / DALI DT8 / 595mm	tbd	installation frame 595x595x90mm AERA FLAT
tbd	Aera Flat Luminaire / PI-LED / DALI DT8 / 620mm	tbd	installation frame 620x620x60mm AERA FLAT

#### Notes:

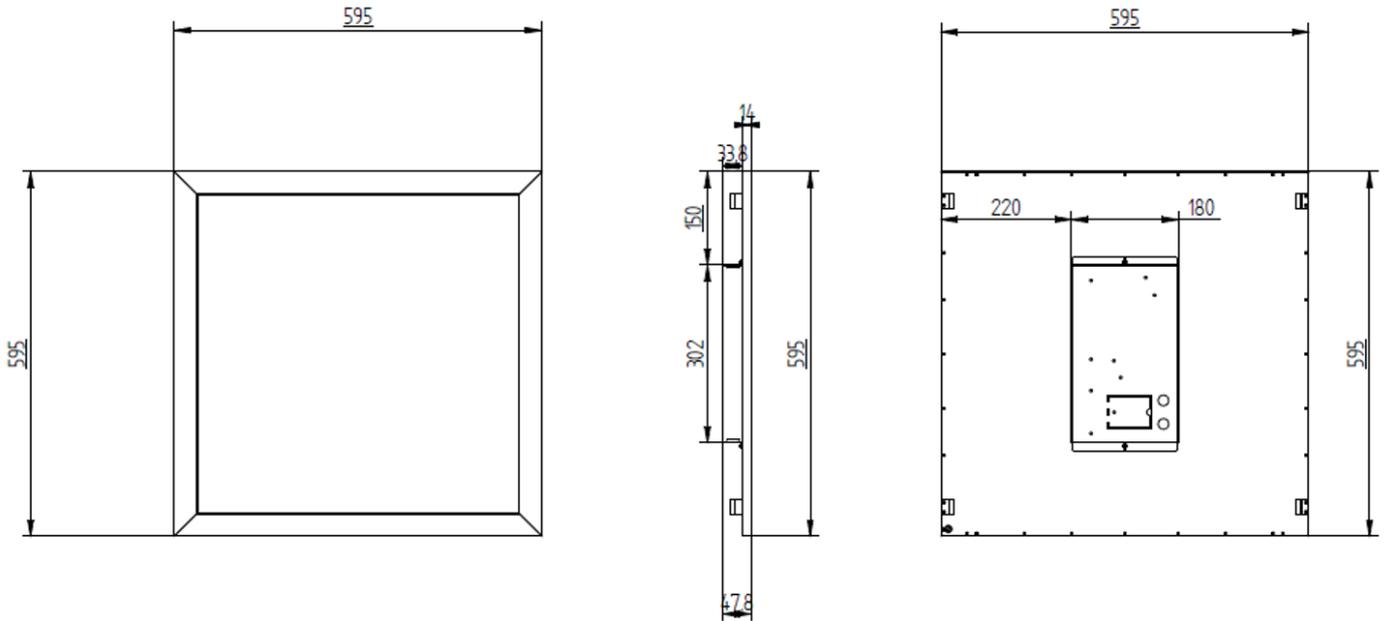
- All values apply at ta=25°C, tc=50°C and 4000K
- Tolerance ranges: illumination data +/-10% | electrical data +/-15% | supply voltage 48V DC +/- 5%
- Illumination specifications in accordance with CIE1931
- According to colour temperature and temperature of the PI-LED system, the Mac Adam tolerance takes on values < 4

**PI-LED® AERA FLAT**

**III TECHNICAL DRAWINGS AND DATA**

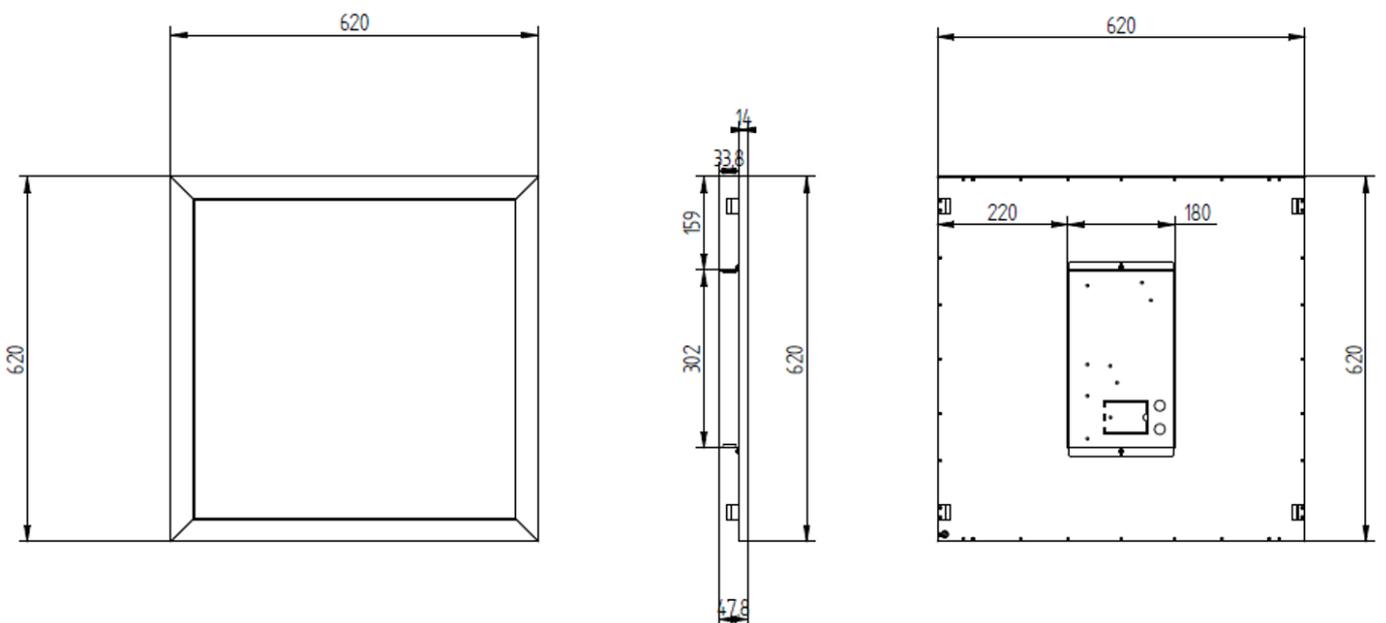
Grid dimension 595 mm

Ceiling cut-out  
Recessed luminaire 612 mm



Grid dimension 620 mm

Ceiling cut-out  
Recessed luminaire 635 mm



III MELANOPIC EFFECT FACTOR

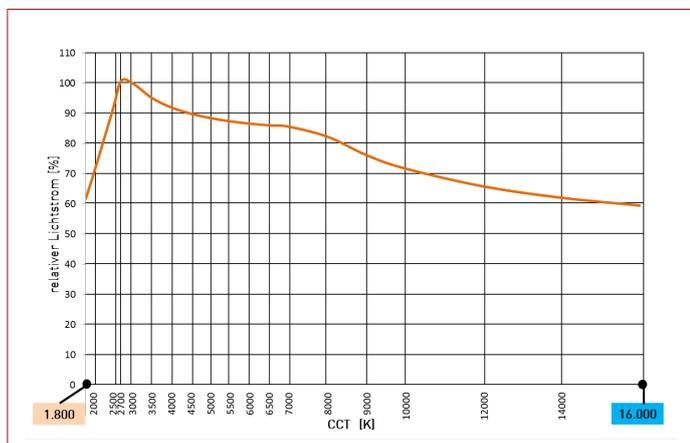
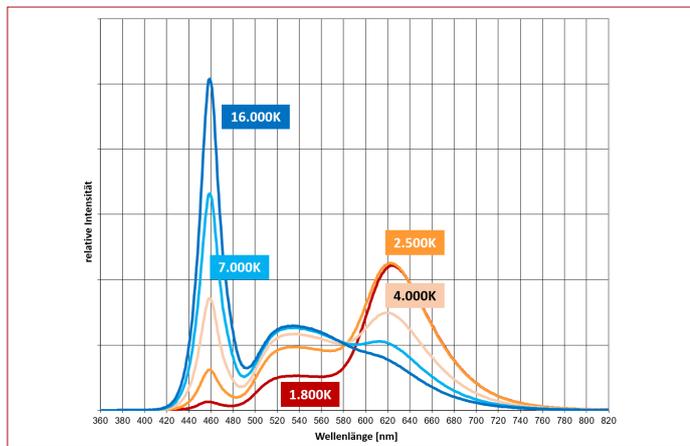
CCT [K]	VISUAL	BIOLOGIC
	Luminous flux [lm]	alpha [smel]
1,800	1,835	.845
2,000	2,075	0.297
2,500	2,725	0.386
2,700	2,995	0.419
3,000	3,415	0.467
3,500	4,140	0.540
4,000	4,100	0.606
4,500	4,015	0.665
5,000	3,955	0.718
5,500	3,910	0.766
6,000	3,880	0.808
6,500	3,855	0.846
7,000	3,840	0.879
8,000	3,815	0.937
9,000	3,805	0.985
10,000	3,795	1.024
12,000	3,785	1.083
14,000	3,785	1.127
16,000	3,785	1.160

Besides the visual and emotional characteristics of PI-LED HCL lighting, it is above all its biological effect which - following the example of natural daylight - creates healthy light.

The factor alpha(smel) describes the melanopic effectiveness of the light source on humans and their circadian rhythms. In order to support natural human biorhythms in the best possible way, higher alpha(smel) values can minimise melatonin release during the day, while lower values can promote it in the evening. Lighting that is not only visually but also melanopically effective is made possible by PI-LED. LUMITECH recommends following DIN SPEC 5031-100 as a basis for standardised lighting design.

Further information and numeric examples can be found in the [guide for melanopic lighting design and more](#).

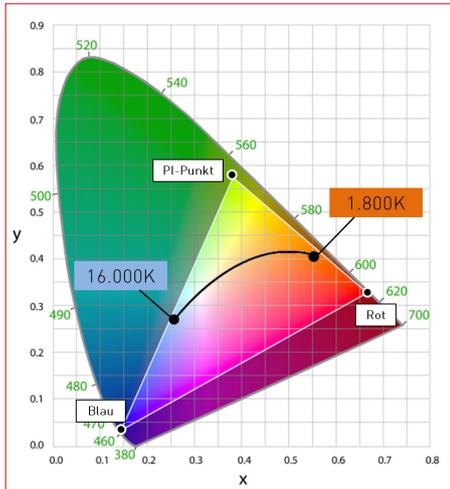
III TYPICAL GENERAL OPTICAL PROPERTIES OF PI-LED



Notes:

- The actual drop in the luminous flux can vary across the delivered LED modules.
- The diagrams show typical curves and not the exact behaviour of the LED module or the PI-LED system.

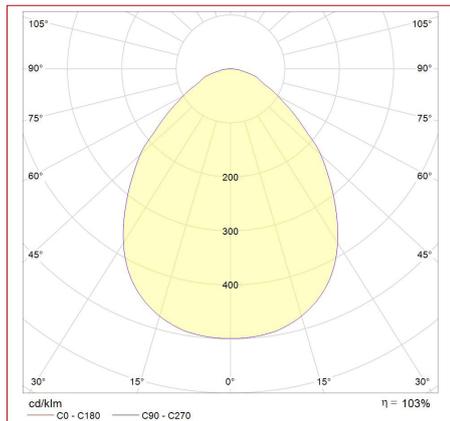
III COORDINATES AND TOLERANCES ACCORDING TO CIE 1931



Representable PI-LED colour space in the CIE 1931 system

If a colour point outside of the triangle (PI-LED colour space) is set, the closest colour point within the triangle is referenced.

III LIGHT DISTRIBUTION



III LIFETIME

L80B10 [h]

50.000

Notes:

- Value L is a statistical value, the actual drop in the luminous flux can vary across the delivered LED modules.

III REFERENCES

