PowerBalance gen2 – sustainable performance

PowerBalance gen2

When it comes to lighting an office space with LED luminaires, people are usually willing to invest in sustainability provided the investment pays back. At the same time, the system should comply with office lighting norms to ensure a comfortable working environment. PowerBalance gen2 is Philips' most energy-efficient office-norm-compliant LED luminaire. It more than halves energy costs compared to a T5 solution, and the light source has a longer lifetime. This results in significantly lower operational costs, ensuring a payback that meets the needs of the specification market.The gen2 architecture enables a range of highly versatile modular and semi-modular luminaires. These luminaires can be easily mounted in ceilings with exposed T-bar and concealed T-bar, as well as plaster ceilings and bandraster-type ceilings. PowerBalance is also available in a surface-mounted version.

Benefits
- Extremely efficient office-norm-compliant LED luminaire
- Good-quality lighting solution for direct replacement of T5 luminaires in most indoor applications
- Significantly reduces operational costs, resulting in an attractive payback time

Features
- Variety of mounting options
- Advanced LED technology
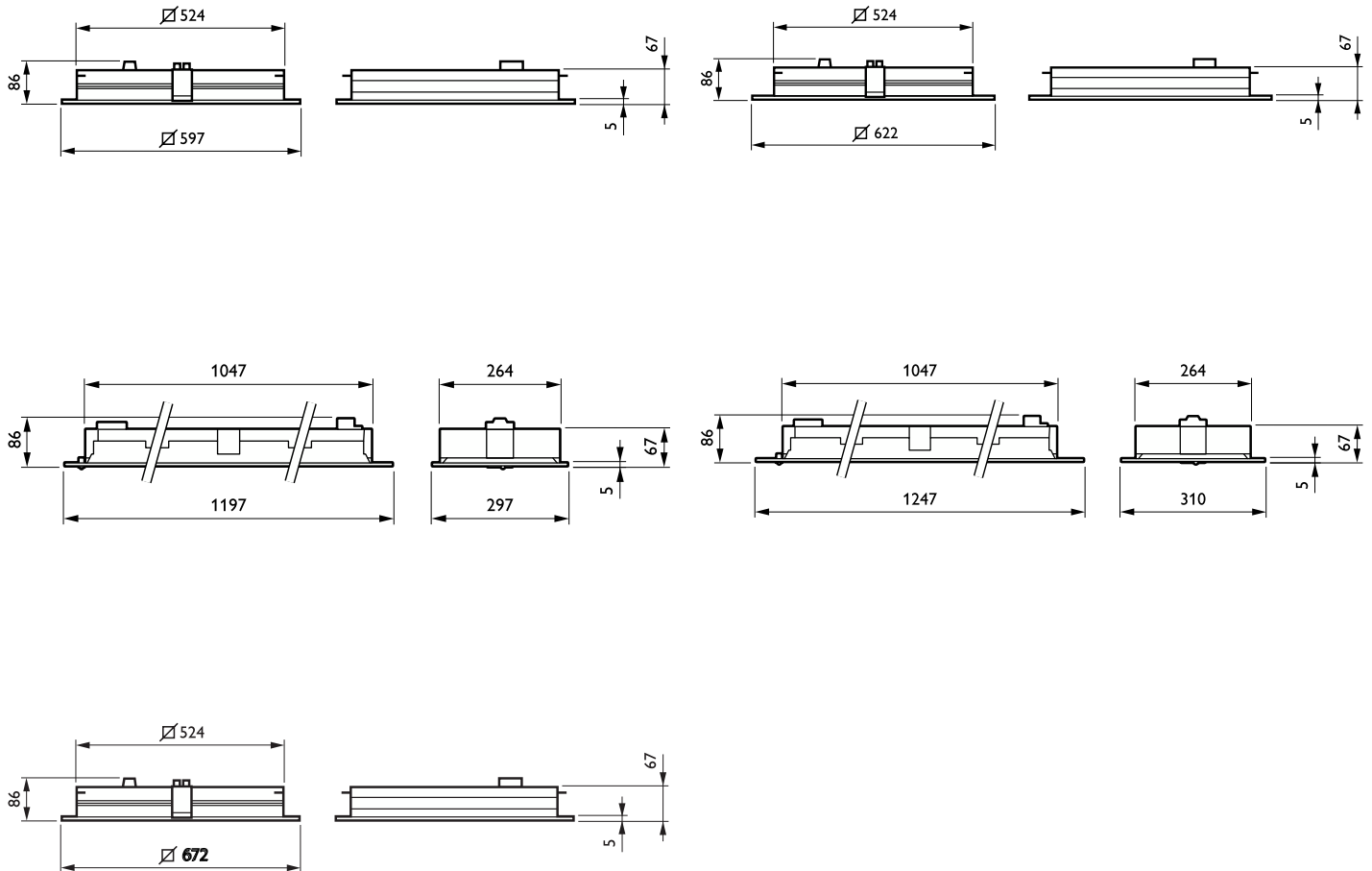- Available in different shapes and sizes
- Office-norm-compliant

Application
- Offices
- Other indoor applications

PowerBalance gen2

Warnings and Safety

- The product is IP20 and, as such, is not protected against water ingress. Therefore we strongly recommend that the environment in which the luminaire is to be installed should be suitably checked
- If the advice above is not taken and the luminaires are subject to water ingress, Philips / Signify cannot guarantee safe failure and the product warranty will become void

Dimensional drawing

Product details

IPDP_RC460Bi_0153-Detail photo

IPDP_RC460Bi_0043-Detail
photo

IPDP_RC460Bi_0049-Detail
photo

IPDP_RC460Bi_0055-Detail
photo

General Information

Driver included	Yes
Gear	–
Light source replaceable	No
Number of gear units	1 unit
Service tag	Yes

Light Technical

Beam angle of light source	120 degree(s)
Color rendering index (CRI)	>90
Optic type	Wide beam office compliant

Operating and Electrical

Protection class IEC	Safety class I
Input Voltage	220 to 240 V
Line Frequency	50 to 60 Hz
Suitable for random switching	No

Controls and Dimming

Dimmable	Yes
Embedded control	–
Maximum dim level	1%

Mechanical and Housing

Explosion hazard class	–
Housing Color	White
Mech. impact protection code	IK03
Ingress protection code	IP20/40

Approval and Application

Ambient temperature range	+10 to +35 °C
CE mark	Yes
ENEC mark	ENEC mark
Flammability mark	For mounting on normally flammable surfaces
Glow-wire test	Temperature 650 °C, duration 30 s
Flickering value (PstLM) – Flickering value as per EN 61000-3-3	1
Stroboscopic effect visibility measure (SVM)	0.4

Initial Performance (IEC Compliant)

Initial chromaticity	(0.38, 0.38) SDCM ≤3
Luminous flux tolerance	+/-10%

General Information

Order Code	Full Product Name	Lamp family code
98000900	RC463B 80S/TW9 DIA W62L62 VPC	–
98001600	RC468B 80S/TW9 DIA W67L67 VPC	–
98009200	RC468B 80S/TW9 DIA W67L67 VPC W3W2	–
96451100	RC461B 34S/940 DEIA W60L60 VPC	LED34S
96456600	RC461B 40S/940 DEIA W60L60 VPC	LED40S
97998000	RC461B 80S/TW9 DIA W60L60 VPC ELD3	–
97999700	RC461B 80S/TW9 DIA W60L60 VPC ELD3 PIPSC	–
97988100	RC463B 80S/TW9 DEIA W31L125 VPC	–
97994200	RC463B 80S/TW9 DEIA W31L125 CPC	–
97986700	RC461B 80S/TW9 DEIA W30L120 VPC	–
97987400	RC461B 80S/TW9 DEIA W30L120 VPC SC	–

Light Technical

PowerBalance gen2

Order Code	Full Product Name	Correlated Color Temperature (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux	Number of light sources
98000900	RC463B 80S/TW9 DIA W62L62 VPC	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–
98001600	RC468B 80S/TW9 DIA W67L67 VPC	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–
98009200	RC468B 80S/TW9 DIA W67L67 VPC W3W2	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–
96451100	RC461B 34S/940 DEIA W60L60 VPC	4000 K	142 lm/W	3,400 lm	1
96456600	RC461B 40S/940 DEIA W60L60 VPC	4000 K	146 lm/W	4,000 lm	1
97998000	RC461B 80S/TW9 DIA	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–

Order Code	Full Product Name	Correlated Color Temperature (Nom)	Luminous Efficacy (rated) (Nom)	Luminous Flux	Number of light sources
	W60L60 VPC ELD3				
97999700	RC461B 80S/TW9 DIA W60L60 VPC ELD3 PIPSC	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–
97988100	RC463B 80S/TW9 DEIA W31L125 VPC	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–
97994200	RC463B 80S/TW9 DEIA W31L125 CPC	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–
97986700	RC461B 80S/TW9 DEIA W30L120 VPC	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–
97987400	RC461B 80S/TW9 DEIA W30L120 VPC SC	Tunable white 2700-6500 K	122 lm/W	8,000 lm	–

Operating and Electrical

Order Code	Full Product Name	Power Consumption
98000900	RC463B 80S/TW9 DIA W62L62 VPC	64 W
98001600	RC468B 80S/TW9 DIA W67L67 VPC	64 W
98009200	RC468B 80S/TW9 DIA W67L67 VPC W3W2	64 W
96451100	RC461B 34S/940 DEIA W60L60 VPC	24 W
96456600	RC461B 40S/940 DEIA W60L60 VPC	29 W
97998000	RC461B 80S/TW9 DIA W60L60 VPC ELD3	64 W

Order Code	Full Product Name	Power Consumption
97999700	RC461B 80S/TW9 DIA W60L60 VPC ELD3 PIPSC	64 W
97988100	RC463B 80S/TW9 DEIA W31L125 VPC	64 W
97994200	RC463B 80S/TW9 DEIA W31L125 CPC	64 W
97986700	RC461B 80S/TW9 DEIA W30L120 VPC	64 W
97987400	RC461B 80S/TW9 DEIA W30L120 VPC SC	64 W

Mechanical and Housing

Order Code	Full Product Name	Optical cover type
98000900	RC463B 80S/TW9 DIA W62L62 VPC	–
98001600	RC468B 80S/TW9 DIA W67L67 VPC	–
98009200	RC468B 80S/TW9 DIA W67L67 VPC W3W2	–
96451100	RC461B 34S/940 DEIA W60L60 VPC	Polycarbonate bowl/cover
96456600	RC461B 40S/940 DEIA W60L60 VPC	Polycarbonate bowl/cover

Order Code	Full Product Name	Optical cover type
97998000	RC461B 80S/TW9 DIA W60L60 VPC ELD3	–
97999700	RC461B 80S/TW9 DIA W60L60 VPC ELD3 PIPSC	–
97988100	RC463B 80S/TW9 DEIA W31L125 VPC	–
97994200	RC463B 80S/TW9 DEIA W31L125 CPC	–
97986700	RC461B 80S/TW9 DEIA W30L120 VPC	–
97987400	RC461B 80S/TW9 DEIA W30L120 VPC SC	–

Emergency Operation

Order Code	Full Product Name	Central Emergency	Emergency lighting
98000900	RC463B 80S/TW9 DIA W62L62 VPC	No	–
98001600	RC468B 80S/TW9 DIA W67L67 VPC	No	–

Order Code	Full Product Name	Central Emergency	Emergency lighting
98009200	RC468B 80S/TW9 DIA W67L67 VPC W3W2	No	–
96451100	RC461B 34S/940 DEIA W60L60 VPC	Yes	–

PowerBalance gen2

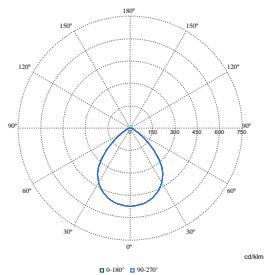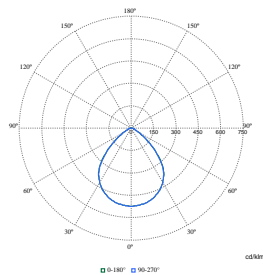| Order Code	Full Product Name	Central Emergency	Emergency lighting
96456600	RC461B 40S/940 DEIA W60L60 VPC	Yes	–
97998000	RC461B 80S/TW9 DIA W60L60 VPC ELD3	No	Emergency lighting 3 hours duration with DALI interface
97999700	RC461B 80S/TW9 DIA W60L60 VPC ELD3 PIPSC	No	–
97988100	RC463B 80S/TW9 DEIA W31L125 VPC	No	–

Order Code	Full Product Name	Central Emergency	Emergency lighting
97994200	RC463B 80S/TW9 DEIA W31L125 CPC	No	–
97986700	RC461B 80S/TW9 DEIA W30L120 VPC	No	–
97987400	RC461B 80S/TW9 DEIA W30L120 VPC SC	No	–

Product Data

Order Code	Full Product Name	Product family code
98000900	RC463B 80S/TW9 DIA W62L62 VPC	RC463B
98001600	RC468B 80S/TW9 DIA W67L67 VPC	RC468B
98009200	RC468B 80S/TW9 DIA W67L67 VPC W3W2	RC468B
96451100	RC461B 34S/940 DEIA W60L60 VPC	RC461B
96456600	RC461B 40S/940 DEIA W60L60 VPC	RC461B
97998000	RC461B 80S/TW9 DIA W60L60 VPC ELD3	RC461B

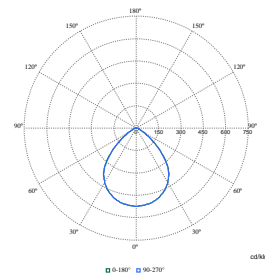| Order Code	Full Product Name	Product family code
97999700	RC461B 80S/TW9 DIA W60L60 VPC ELD3 PIPSC	RC461B
97988100	RC463B 80S/TW9 DEIA W31L125 VPC	RC463B
97994200	RC463B 80S/TW9 DEIA W31L125 CPC	RC463B
97986700	RC461B 80S/TW9 DEIA W30L120 VPC	RC461B
97987400	RC461B 80S/TW9 DEIA W30L120 VPC SC	RC461B

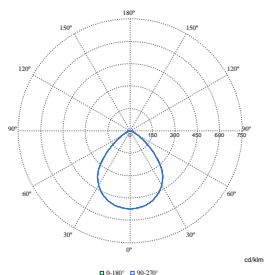## Polar Wide Diagrams

Polar Normal (separate) – RC460BN – 910505100245
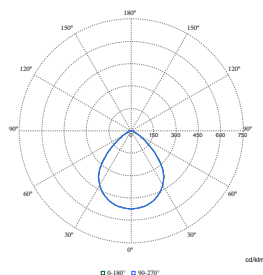

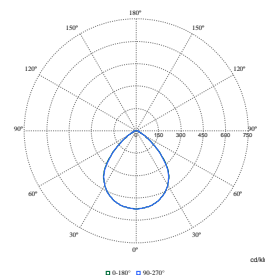**Polar Normal (separate) – RC460BN – 910505100250**

Polar Normal (separate) – RC460BP – 910505101674

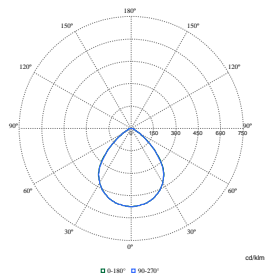**Polar Normal (separate) – RC460BN – 910505101680**
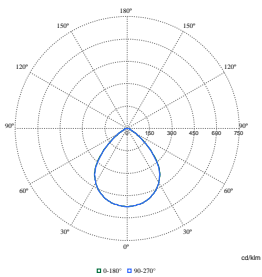

Polar Normal (separate) – RC460BP – 910505101667

Polar Normal (separate) – RC460BN – 910505101689

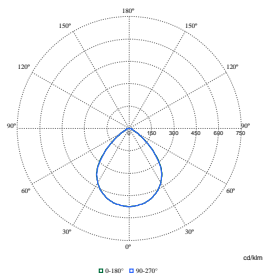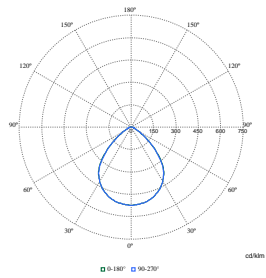# PowerBalance gen2

Polar Wide Diagrams

Polar Normal (separate) – RC460BN – 910505101679
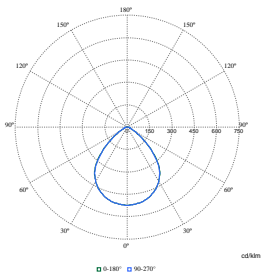

Polar Normal (separate) – RC460BN – 910505101681

Polar Normal (separate) – RC460BP – 910505101668

Polar Normal (separate) – RC460BP – 910505101666

Polar Normal (separate) – RC460BN – 910505101678

www.lighting.philips.com

2025, December 13 – data subject to change