

Edge-Lit Panel G4 'Smart' — Sensor-integrated luminaire



Description:

Ecopoint's fourth generation Edge-Lit Panel has proven to be a capable, flexible and reliable product across a wide range of end-user requirements, and minimising total-cost-of-ownership has been a key development focus throughout the whole product lifecycle process.

This new option embeds simplified but flexible lighting control and automation into this advanced product. A PIR sensor/controller unit, paired with a dimmable driver, provides point-by-point control based on manual inputs (dim-up, dim-down), detected occupancy (with optional stand-by mode), and/or detected ambient light conditions.

Integration:

Available as an option for all standard Edge-Lit G4 Panel products, including SOLUS versions, in the 600x600 and 1200x300 sizes.

Options/Accessories:

Plaster recess kit, Surface-mount kit, Suspension kit.

Programming remote ordered separately; minimum one per project required, two per project recommended.

GENERAL LUMINAIRE SPECIFICATIONS:

Flux Maintenance	L90 @ 50,000 hrs, L80 @ 100,000 hrs (25° C)
Colour Specifications	840 / SOLUS 4000K / Others possible on request
Colour Consistency	3 SDCM
Construction	Extruded alum. frame, PMMA micro-prism optics
Luminaire Colour Options	Matte White
Operating Conditions	-10° to 40° C
Protection Rating/s	IP40 (room-side) + IP20 (cavity-side), IK06
Insulation Rating	IC-4 (driver above insulation)

DRIVER SPECIFICATIONS:

Standard Driver Type	0-10V dim with 12V aux. output, DIP-switch power select
Electrical Supply	200-240 V AC / 47-63 Hz
Power Specifications	PF > 0.95, THD(I) < 10%
Flicker (TLM/TLA)	< 0.2% mod. @ 100Hz / P _s LM 0.000 / SVM 0.003
Electrical Protection	OCP, SCP, 2 KV Surge (L-N)
Environmental Protection	IP20 driver
Rated Life	100,000 hours (case temp < 70° C)
Dimming Options	0-10V dimmable as standard

STANDARD MODELS

Type	Dimensions	CCT	Colour Rendering	Optic	Power	Flux*	Flux Maintenance**
Edge-Lit Panel G4 600x600 840 Smart	595 x 595 x 11 mm 3.1 kg	4000K	R _a ≥ 80, R ₉ ≥ 10 R _f ≥ 80, R _g ≥ 95	Micro-prismatic, UGR < 19****	14— 31 W	1,860— 4,130 lm	L90 @ 54,000 hrs L80 > 100,000 hrs
Edge-Lit Panel G4 1200x300 840 Smart	1195 x 295 x 11 mm 3.2 kg	4000K	R _a ≥ 80, R ₉ ≥ 10 R _f ≥ 80, R _g ≥ 95	Micro-prismatic, UGR < 19****	14— 31 W	1,740— 3,840 lm	L90 @ 54,000 hrs L80 > 100,000 hrs
Edge-Lit Panel G4 1200x600 840 Smart	1195 x 595 x 11 mm 6.9 kg	4000K	R _a ≥ 80, R ₉ ≥ 10 R _f ≥ 80, R _g ≥ 95	Micro-prismatic, UGR < 19****	34— 53 W	4,300— 6,570 lm	L90 @ 54,000 hrs L80 > 100,000 hrs



SOLUS 'FULL SPECTRUM' MODELS

Type	Dimensions	CCT	Colour Rendering	Optic	Power	Flux*	Flux Maintenance***
Edge-Lit Panel G4 600x600 S40 Smart	595 x 595 x 11 mm 3.1 kg	4000K	R _a ≥ 97, R ₉ ≥ 95 R _f ≥ 95, R _g ≥ 100	Micro-prismatic, UGR < 19****	14— 31 W	1,420— 3,200 lm	L90 @ 30,000 hrs L80 @ 70,000 hrs
Edge-Lit Panel G4 1200x300 S40 Smart	1195 x 295 x 11 mm 3.2 kg	4000K	R _a ≥ 97, R ₉ ≥ 95 R _f ≥ 95, R _g ≥ 100	Micro-prismatic, UGR < 19****	14— 31 W	1,360— 3,110 lm	L90 @ 30,000 hrs L80 @ 70,000 hrs
Edge-Lit Panel G4 1200x600 S40 Smart	1195 x 145 x 11 mm 6.9 kg	4000K	R _a ≥ 97, R ₉ ≥ 95 R _f ≥ 95, R _g ≥ 100	Micro-prismatic, UGR < 19****	34— 53 W	3,350— 5,120 lm	L90 @ 30,000 hrs L80 @ 70,000 hrs

Notes:

* Multiple flux/power combinations possible via DIP-switch selection on driver. Consult reference table overleaf for full set of standard combinations.

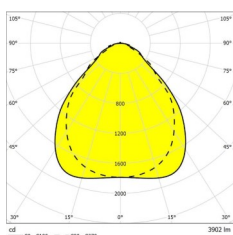
** Flux maintenance per TM-21, t₈₀ 25° C (10,000 hrs LM-80 data; predictions > 60,000 hrs are outside of TM-21 reporting guidelines and indicative only). Data reflects B50 'median useful life'.

*** Flux maintenance per TM-21, t₈₀ 25° C (6,000 hrs LM-80 data; predictions > 36,000 hrs are outside of TM-21 reporting guidelines and indicative only). Data reflects B50 'median useful life'.

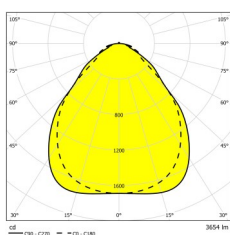
**** UGR values determined by the tabular method for 4H x 8H room with 70%/50%/20% reflectances. Request IES files for an accurate glare evaluation.

DISTRIBUTION:

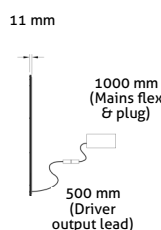
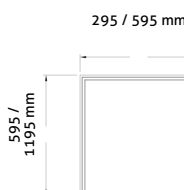
600 x 600, 840, 30 W (750 mA)



1200 x 300, 840, 30 W (750 mA)

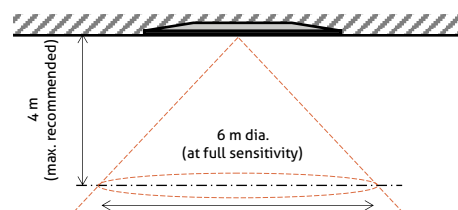


DIMENSIONS:



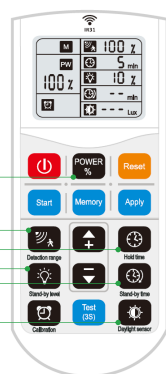
SENSOR COVERAGE:

Diagram indicates approximate sensor coverage—detection accuracy also depends on speed, direction, and size of movements.



PROGRAMMING DETAILS:

- Manual Trimming:** Dim-up and dim-down functions
- Detection Sensitivity:** Effective range of the PIR sensor
- Sensor Hold Time:** Length of period after last detected activity during which lights are held at 'on' setting
- Stand-by Dim Level:** Output level (relative to full power) for the luminaire to operate at during the stand-by period
- Stand-by Period:** Period after the sensor hold period, during which lights are held at the stand-by dim level
- Daylight Harvesting:** Reference illuminance level (measured at the sensor), or disable daylight harvesting functions



SENSOR SPECIFICATIONS:

Sensor Type	Passive Infrared
Mounting Height	3 — 4 m (recommended)
Detection Area	6 m dia. @ 100% sensitivity (75%, 50% and 25% opt.)
Programming/Commissioning	Remote Control (IR)
Occupancy Hold Time	Variable; 5 sec to 60 min
Stand-by Time / Settings	Variable; 0 sec to 60 mins (or never off) / 10 to 50%
Daylight Type / Settings	Dimming; modulation based on detected ambient light
Input Power	Driver auxiliary output (12-24V DC / ≥ 8 mA)

PHOTOMETRIC & COLOUR PERFORMANCE SUMMARIES:

Standard $R_a > 80$ 4000K	Driver Model	Current Setting (mA)	Power (W)	Flux (lm)
Edge-Lit Panel G4 600x600 840 Smart	350-800 mA	350	14	1,860
		400	16	2,090
		450	18	2,360
		500	19	2,610
		550	22	2,920
		600	23	3,090
		650	25	3,350
		700	27	3,590
		750	30	3,910
		800	31	4,130
Edge-Lit Panel G4 1200x300 840 Smart	350-800 mA	350	14	1,740
		400	16	1,950
		450	18	2,200
		500	19	2,440
		550	22	2,710
		600	23	3,020
		650	25	3,280
		700	27	3,520
		750	30	3,650
		800	31	3,840
Edge-Lit Panel G4 1200x600 840 Smart	850-1300 mA	850	34	4,300
		900	36	4,550
		950	38	4,800
		1000	40	5,060
		1050	42	5,310
		1100	44	5,560
		1150	47	5,810
		1200	49	6,070
		1250	51	6,320
		1300	53	6,570

SOLUS $R_a > 97$ 4000K	Driver Model	Current Setting (mA)	Power (W)	Flux (lm)
Edge-Lit Panel G4 600x600 S40 Smart	350-800 mA	350	14	1,420
		400	16	1,600
		450	18	1,810
		500	19	2,000
		550	22	2,230
		600	23	2,400
		650	25	2,610
		700	27	2,800
		750	30	3,010
		800	31	3,200
Edge-Lit Panel G4 1200x300 S40 Smart	350-800 mA	350	14	1,360
		400	16	1,530
		450	18	1,730
		500	19	1,910
		550	22	2,140
		600	23	2,340
		650	25	2,540
		700	27	2,730
		750	30	2,910
		800	31	3,110
Edge-Lit Panel G4 1200x600 S40 Smart	850-1300 mA	850	34	3,350
		900	36	3,550
		950	38	3,740
		1000	40	3,950
		1050	42	4,140
		1100	44	4,340
		1150	47	4,530
		1200	49	4,730
		1250	51	4,930
		1300	53	5,120

Standard 840	Metric/s	Typical Values
	Nominal CCT	4000K
	CIE 13.3-1995	R_g 82 / R_g 10
	IES-TM30-18	R_f 84 / R_g 97 / $-12\% < R_{cs} < 8\%$
	COI (AS/NZS 1680.2.5)	-
	Melanopic Ratio (IWBI)	0.668

SOLUS S40	Metric/s	Typical Values
	Nominal CCT	4000K
	CIE 13.3-1995	R_g 98 / R_g 98
	IES-TM30-18	R_f 95 / R_g 101 / $-3\% < R_{cs} < 8\%$
	COI (AS/NZS 1680.2.5)	0.3
	Melanopic Ratio (IWBI)	0.738

* Detailed colour performance specification sheets are available — request a copy if additional information is required.

LIGHT LOSS FACTOR GUIDE:

Variant	Service Life (hrs)	5,000	10,000	15,000	20,000	25,000	30,000	35,000	40,000	45,000	50,000	55,000	60,000	65,000	70,000	75,000	80,000
Standard 840	LLMF	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84
	Based on...	LSF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	L80 > 100,000 hrs	LaMF _{Combined}	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.84
SOLUS S40	LLMF	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80	0.79	0.77
	Based on...	LSF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.97
	L80 @ 70,000 hrs	LaMF _{Combined}	0.99	0.97	0.96	0.94	0.93	0.91	0.90	0.89	0.87	0.86	0.84	0.83	0.81	0.80	0.75

* Refer ISO/CIE TS 22012:2019 for details of derivation and application of these standardised reference tables. Nearest relevant flux maintenance specifications are presented here — request a customised TM-21 calculation for a more accurate, project-specific, projection of LLMF based on your nominated service life.