


Description:

As a luminaire type with broad utility, bulkhead/oyster fixtures must be flexible to suit a wide variety of environments and applications. This new Tio luminaire provides that versatility through robust protection from ingress and impact, material selection which is durable in many indoor and outdoor environments, adjustable-power electronics, and a simple aesthetic which blends in to any space. Long-life components and improved luminous efficacy lend the Tio to situations where energy efficiency is a priority, and this can be further enhanced by integrating an optional occupancy/daylight sensor for stand-alone automated control.

Mounting:

Surface-mounted as standard.

Standard Inclusions:

Luminaire, surface-mounting hardware

Options/Accessories:

Integrated microwave occupancy sensor (specifications may vary)

Integrated battery-backup (on request)

GENERAL LUMINAIRE SPECIFICATIONS:

Flux Maintenance	L90 @ 46,000 hrs (25° C)
Colour Specifications	Ra ≥80, 4000K
Colour Consistency	3 SDCM
Construction	Polycarbonate housing and diffuser, UV-protected
Luminaire Colour Options	White
Operating Conditions	-20° to 45° C
Protection Rating/s	IP65, IK08
Cable Entry	Rear entry, rubber grommet to terminal compartment

DRIVER SPECIFICATIONS:

Standard Driver Type	Internal, DALI dimmable, DIP-switch power select, replaceable
Electrical Supply	200-240 V AC / 50-60 Hz
Power Specifications	PF > 0.95, THD(I) < 10%
Flicker (TLM/TLA)	<6% mod. @ 100Hz / SVM ≤ 0.4 / $P_{st}^{LM} \leq 1.0$
Electrical Protection	OCP, SCP, OVP, OTP
Environmental Protection	IP20
Rated Life	100,000 hours (ambient temp <75° C)
Dimming Options	DALI-2 and Push-Dim as standard

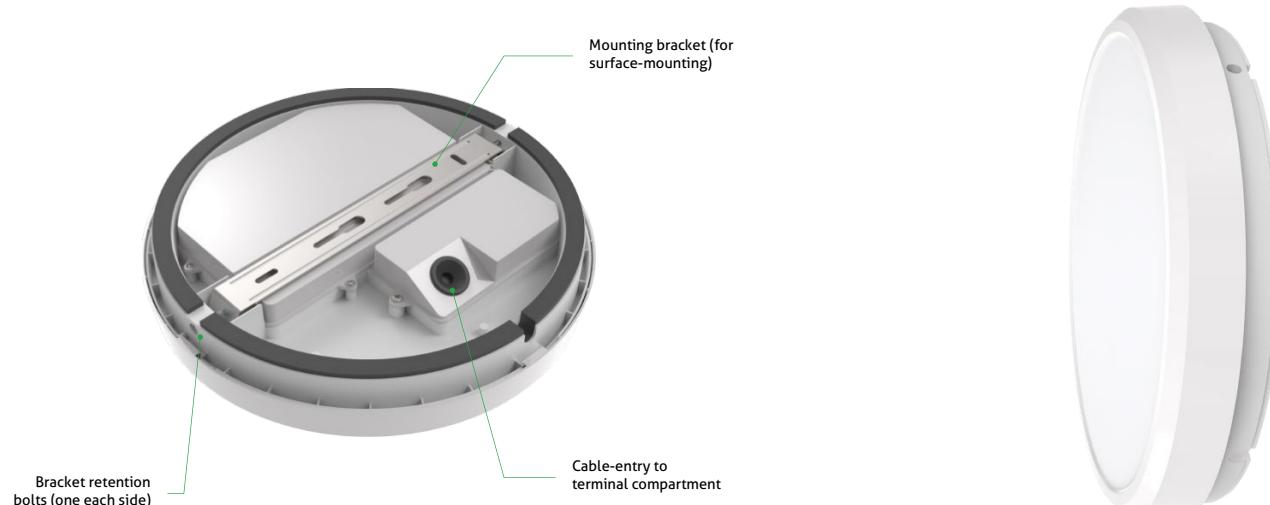
TIO CEILING LIGHT G2

Type	Dimensions	CCT	Colour Rendering	Optic	Power	Flux ^a	Flux Maintenance ^{**}
TIO Ceiling Light G2 D295 840	Ø295 mm x 57 mm 1.25 kg	4000K	R _a ≥ 80, R _g ≥ 10 R _f ≥ 80, R _g ≥ 95	Opalised diffuser	6 — 25 W	700 — 3,250 lm	L90 @ 46,000 hrs L80 @ 95,000 hrs

Notes:

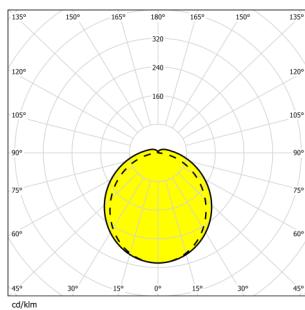
* Multiple flux/power combinations possible via DIP-switch selection on driver. Flux varies between optics. Consult reference table overleaf for full set of standard combinations.

** Flux maintenance per TM-21, t₈ 25° C (9,000 hrs LM-80 data; predictions >54,000 hrs are outside of TM-21 reporting guidelines and indicative only). Data reflects B50 'median useful life'.

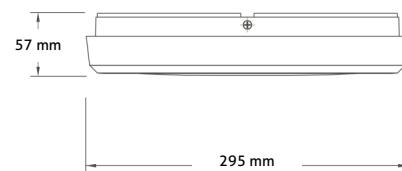
Mounting and Connections


DISTRIBUTION:

TIO Ceiling Light G2 @ 18 W



DIMENSIONS:



PHOTOMETRIC & COLOUR PERFORMANCE SUMMARIES:

Surface Mount Bulkhead	Current Setting (mA)	Power (W)	Flux (lm)
TIO Ceiling Light G2 D295 (@4000K)	150	6	700
	200	8	900
	250	9	1,150
	300	11	1,400
	350	13	1,600
	400	14	1,850
	450	16	2,050
	500	18	2,300
	550	20	2,550
	600	21	2,750
	650	23	3,000
	700	25	3,250

Set @ 4000K	Metric/s	Typical Values
	Nominal CCT	4000K
	CIE 13.3-1995	R _a 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

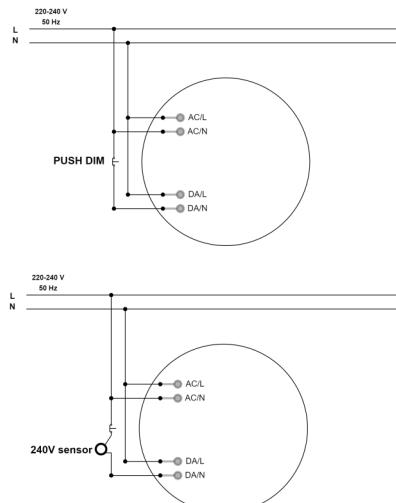
* Detailed colour performance specification sheets are available — request a copy if additional information is required.

LIGHT LOSS FACTOR GUIDE:

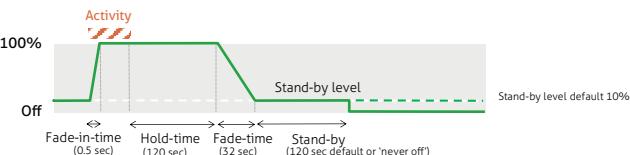
	Service Life (hrs)	5,000	10,000	15,000	20,000	25,000	30,000	35,000	40,000	45,000	50,000	55,000	60,000	65,000	70,000	75,000	80,000
Based on...	LLMF	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.84	0.83	0.82
LSF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
L80 @ 90,000 hrs	LaMF _{Combined}	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.84	0.83	0.82

* 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.

PUSH DIM AND CORRIDOR MODE WIRING:



CORRIDOR MODE OPERATION:



Action	Action duration	Function
Short push	<0.5 s	Turn on/off
Short push; twice	<0.5 s	If light on: Save current brightness level If light off: Delete saved level and turn on at 100% brightness
Short push; five times	<3 s	Quit Corridor mode
Long push	0.5 - 14 sec	Dimming up or down
Long push	15 sec - 2mins	Sync all fittings to 100% brightness
Long push	>2mins	Enter Corridor mode (requires sensor) - 100% brightness for 2 min. Then brightness will reduce to 10% (or selected other value) within 32 sec if no activity for 2 min

* Up to 30 fittings can utilise the one Push dim control signal

FOS

FOS Lighting Limited
2 Jarden Mtn
Ngauranga, Wellington 6035
PO Box 12646
Thorndon, Wellington 6144

P: +64 4 499 3636
E: info@foslightingnz.co.nz
W: www.foslightingnz.co.nz

All performance specifications presented here — electrical, photometric and colourimetric — are 'typical' and normal tolerances of up to ± 10% may apply.
Due to our commitment to ongoing

technical development, we reserve the right to change specifications without notice.

© FOS Lighting Limited, 28/05/2024

(O) ecopoint