PHILIPS



Linear

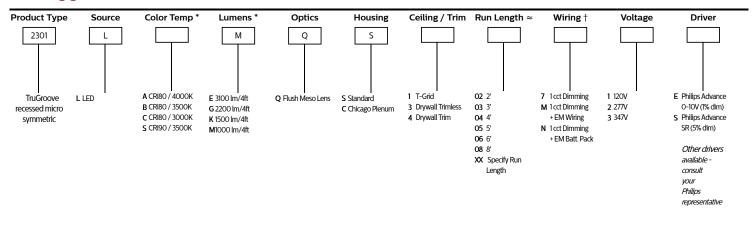
TruGroove recessed micro

performance symmetric 1000 lm/4ft, 3000/3500/4000K

Project:
Spec Type:
Catalog No: 2301LxMQ
Qty
Line Notes:

TruGroove recessed micro delivers the perfect combination of slender aesthetic and lighting control, creating luminous environments with exceptional uniformity and wide row spacing from a 1.75" aperture continuous line-of light. An extended family and refined design are perfect for lighting any professional space.

Ordering guide



* Nominal values within a range. Consult photometry data for CRI, color temp, lumens & distribution of chosen configuration.

† Not all wiring types are available with all configurations. Consult Philips Ledalite for a complete list of available options.

≈ Available in continuous run lengths from 6ft in steps as small as 1/8in for 1000lm/4ft, 1500lm/4ft & 2200lm/4ft symmetric (performance) configurations.

≈ All 3100lm/4ft and asymmetric configurations can be specified in 1ft steps. 2ft standalone modules are not available in asymmetric.





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Optical System

White light emitted from the LED sources is redirected by a precisely formed reflector and exits through the optical lens assembly. This assembly contains an acrylic extrusion profile retaining a layer of MesoOptic film, creating both an uninterrupted continuum of light and an optical batwing or asymmetric distribution from a 1.75" flush aperture.

Finish

Extruded aluminum trim and die-cast endplates coated with electrostatically applied and thermally cured polyester. Powder coat paint finish. White sensors only.

Housing

Die-formed 20 gauge cold-rolled steel. Multiple upper wire entrances available for continuous row mounting of fixtures.

Weight

Maximum 2.8lb/ft.

Electrical

Factory pre-wired to section ends with quick-wire connectors.

QuickShip

Upon request, TruGroove recessed micro can be madeto-order and shipped in 10-working days from receipt of order.

Some configurations excluded. Limit of 500' linear feet per order.

QuickShip details are available in the links below:

QuickShip ColorCoded Guide

QuickShip Order Guide

Standard Drivers

Philips Advance Xitanium 0-10V, 1-100%. Philips Advance Xitanium SR, 5-100% (SpaceWise DT). Class 2 rated output. Consult Philips Ledalite for other available drivers.

Standard Battery Pack

Philips Bodine, 90 min, 10W, Class 2 rated output, Emergency lumen output = 10W x luminaire efficacy x 1.1. Typical output: 1100lm.

Lumen Maintenance

LEDs have been tested by the manufacturer in accordance with IESNA LM-80-08. At an ambient temperature of 25°C in non-insulation contact applications the LED lumen maintenance expectation according to IES TM-21-11-A is: CRI>80:

 L_{90} (10k) >60,000 hrs (**Reported** methodology) L_{80} (10k) 128,000 hrs (**Calculated** methodology). **CR>90**: L_{90} (10k) 59,000 hrs (**Reported** methodology) L_{80} (10k) 118,000 hrs (**Calculated** methodology).

Source Color

LEDs rated for color rendering CRI >80, R9 >0 and fixture to fixture color accuracy within 2 SDCM. Available 90 CRI option is rated for CRI >90, and R9 >60.

Controls

Certain configurations available with: Response Daylight Sensors SpaceWise DT Occupancy & Daylight Sensors w/ advanced grouping & Dwell Time.

*SpaceWise DT commissioning is via a compatible Android phone and Philips Field App. Compatible wireless dimming wall switches are available for dimming. For more information, please refer to www.philips.com/spacewise

Mounting

Mounting brackets on housing sides support T-Grid installation. 1/16" diameter aircraft cable with self-locking, tamper-resistant, miniature cable gripper provides vertical adjustment for drywall. Aircraft cable, crimp and gripper independently tested to meet stringent safety requirements.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Approvals

Certified to UL, CSA and IES standards. Insulation Contact (IC) rated.

Consult factory for DLC eligible configurations

Warranty

Five-year luminaire limited warranty including LED boards and driver.

USA: Warranty Support

Canada: Warranty Support

Environment

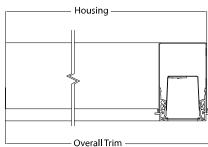
Rated for operation in dry and damp locations in ambient temperatures of 25°C. Many luminaire components, such as reflectors, refractors, lenses, and LEDs are made from materials which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility. Damage caused by sulfur, chlorine, petroleum based solution or other contaminants are not covered under warranty

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.

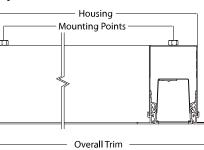
Corner details and dimensions

Flat 90° Lit Corner Units (Side Views)

T-Grid

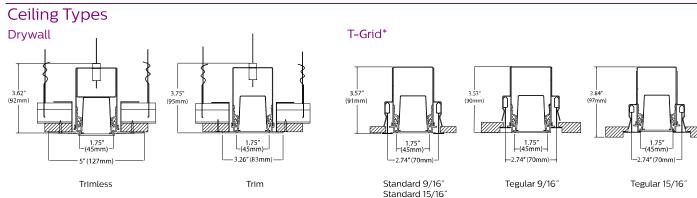


Drywall

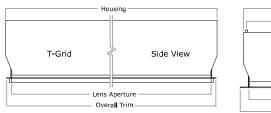


Nominal Length	Housing	Lens	Mounting Points	Trim - T-Grid	Trim - Drywall Trimless	Trim - Drywall Trim
2x2ft Flat	25.1″/637mm	N/A	23.6″/600mm	25.3″/642mm	26.5″/673mm	25.6″/651mm

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Module Details & Dimensions Standalone



23.0~/584mm

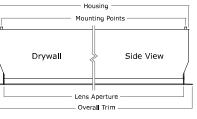
35.0″/889mm

47.0°/1194mm

59.0″/1499mm

71.0"/1803mm

95.0"/2413mm



26.4″/670mm

38.4″/975mm

50.4"/1280mm

62.4″/1585mm

74.4″/1889mm

98.4"/2499mm

24.5°/622mm

36.5″/927mm

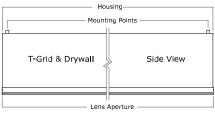
48.5"/1232mm

60.5″/1537mm

72.5″/1841mm

96.5"/2451mm

Mid-Run



Mid-Run					
Nominal	Housing & Lens	Mounting Points			
2ft	24.0″/610mm	23.2"/589mm			
3ft	36.0″/914mm	35.2″/894mm			
4ft	48.0"/1219mm	47.2″/1199mm			
5ft	60.0″/1524mm	59.2″/1504mm			
6ft	72.0″/1829mm	71.2″/1809mm			
8ft	96.0″/2438mm	95.2″/2418mm			
Incremental	L	L-0.8"/20mm			

8ft 95.9″/2436mm

Standalone

2ft

3ft 4ft

5ft

6ft

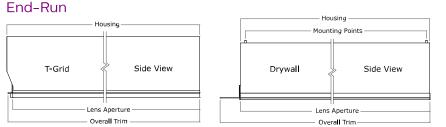
23.9"/607mm

35.9″/912mm

47.9″/1217mm

59.9~/1521mm

71.9~/1826mm



23.4"/594mm

35.4"/899mm

47.4″/1204mm

59.4″/1509mm

71.4″/1814mm

95.4″/2423mm

23.8″/605mm

35.8″/909mm

47.8°/1214mm

59.8″/1519mm

71.8″/1824mm

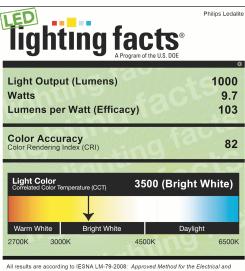
95.8"/2433mm

End-Run						
Nominal	Housing	Lens	Mounting Points	Trim - T- Grid	Trim - Drywell Trimless	Trim - Drywa ll Trim
2ft	24.0″/610mm	23.5″/597mm	23.2"/589mm	23.9″/606mm	25.7″/653mm	24.8″/629mm
3ft	36.0″/914mm	35.5″/901mm	35.2″/894mm	35.9″/910mm	37.7″/957mm	36.7″/933mm
4ft	48.0″/1219mm	47.5″/1206mm	47.2″/1199mm	47.9 °/1215mm	49.7″/1262mm	48.7"/1238mm
5ft	60.0″/1524mm	59.5″/1511mm	59.2″/1504mm	59.9″/1520mm	61.7″/1567mm	60.7″/1543mm
6ft	72.0″/1829mm	71.5″/1816mm	71.2″/1809mm	71.9″/1825mm	73.7″/1872mm	72.8″/1848mm
8ft	96.0″/2438mm	95.5″/2425mm	95.2″/2418mm	95.8″/2434mm	97.7″/2481mm	96.7″/2457mm
Incremental	L	L-0.5″/13mm	L-0.8"/20mm	L-0.1"/3mm	L+1.7"/43mm	L+0.75"/19mm

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Photometry @ CRI>80, 3500K

0% Up / 100% Down



All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: F46Z-IUQOC7 (1/23/2018) Model Number: 23x1LBMQxx04 Type: Luminaire - Linear

Candela Distribution

Vertical	Horizontal Angle					Zonal
Angle	0	22.5	45	67.5	90	Lumens
0	290	290	290	290	290	0
5	282	289	298	307	309	29
15	264	290	340	380	390	95
25	233	285	372	419	426	161
35	198	263	359	375	370	199
45	153	223	295	285	276	196
55	119	155	208	195	183	158
65	81	97	114	106	101	101
75	40	44	48	45	44	48
85	9	9	10	10	9	11
90	0	0	0	0	0	0
95	0	0	0	0	0	0
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

Coefficients of Utilization (%)

Ceiling: 80 70 VCR Wall: 70 50 30 10 70 50 30 50	50 30 10	0
119 119 119 119 116 116 116 111	111 111	100
110 105 101 98 107 103 99 99	96 93	85
100 92 86 80 98 90 84 87	82 78	72
92 81 74 67 89 80 73 77	71 66	61
84 72 64 57 82 71 63 69	62 56	53
77 65 56 49 75 64 55 61	54 49	46
71 58 49 43 69 57 49 56	48 43	40
66 53 44 38 64 52 44 50	43 38	35
61 48 40 34 60 47 39 46	39 34	31
57 44 36 30 56 43 36 42	35 30	28
0 54 41 33 28 52 40 33 39	32 27	25

Avg. Luminance (cd/m2)

-		•	'
Vertical	He	orizontal Ang	gle
Angle	0	45	90
55	3724	6506	5711
65	3442	4830	4299
75	2757	3334	3016
85	1768	1970	1944

Distribution

Hemisphere	0% Up / 100% Down
Glare Control	Meets RP-1-12 recommendations for VDT-Critical spaces
Spacing Along (0°)	1.12
Spacing Across (90°)	1.68

Values per 4ft unit

IESNA LM-79-08 IES files for this and other photometric options can be downloaded online at

Fixture photometry has been

conducted in accordance with

www.lightingproducts.philips.com

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Optical Performance @ 120V

Nominal Spec:	830	835	840	935
Flux (lm)	965	1000	1007	1005
Efficacy (lm/W)	98.5	103.1	103.8	87.4
Power (W)	9.8	9.7	9.7	11.5
CCT (K)	3071	3490	4027	3523
CRI	84	82	84	94
R9	16	11	16	71
x	0.4308	0.4061	0.3798	0.4035
У	0.3998	0.3917	0.3782	0.3887
Duv	0.0009	0.0002	0.0009	0.0005

Electrical Performance @ CRI>80, 3500K

Input Voltage	120V	277V	347V		
Input Power	9.7W	10.1W	10.3W		
Input Current	0.08A	0.04A	0.03A		
Power Factor	0.984	0.902	0.916		
Total Harm. Distortion	14.5%	19.9%	16.7%		
Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.					

With SpaceWise DT, standby power <0.5W (120V) or <0.8W (277V).

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