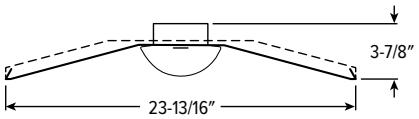
LT LED Troffer

Williams



2x2 | 2x4 Shown

CATALOG #:

TYPE:

PROJECT:

BAA & BABA COMPLIANT · DLC LISTED · IP5X Rated · ISO 5 Class 100 · CCEA Approved · TW

FEATURES

- Low-profile depth for shallow plenum
- Diffuse lens provides smooth illumination
- Air return capability reduces number of unsightly ceiling vents for a cleaner appearance
- Surface mount kit preserves continuity
- HE option delivers superior efficacies up to 176 lm/W
- Rated for direct contact with insulation
- ISO 5-9 and IP5X rated for cleanroom applications
- Available on QuickShip at hew.com/LT_quickship.pdf
- Support human-centric design with adaptive, individualized lighting using tunable white light
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING/REFLECTOR – Precision die-formed 22-gauge C.R.S.
- SHIELDING – Frosted acrylic.
- FINISH – Highly reflective non-glare matte white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL – High-quality mid-power LED boards. L70 > 72,000 hours per IES TM-21. L80 > 102,000 hours with HE option. 50/60 Hz constant current driver. Tunable White products use LEDs of multiple shades of white from single-CCT products at the same CCT. All CCTs are within 3 MacAdam ellipses.
- MOUNTING – NEMA Type “G” 15/16″ or 1″ grid standard. For NEMA Type “NFG” and “SG” 9/16″ grid installations, specify EQCLIPS option. Surface mount and drywall kit accessories available, shipped separately, see options.
- LISTINGS –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - IC-rated for direct contact with insulation.
  - IP5X rated.
  - ISO 5-9 rated.
  - City of Chicago Environmental Air approved when specified with CP option.
  - DesignLights Consortium qualified product. Not all versions of this product may be DLC qualified, see the DLC Qualified Products List at www.designlights.org/QPL
  - Build America, Buy America (BABA) and Buy American Act (BAA) compliant. Request certification at hew.com/buy-american
- WARRANTY – 5-year limited warranty, see hew.com/warranty

ORDERING EXAMPLE: LT - 24 - L52/835 - AF - OPTIONS - CONTROL/DIM - UNV

SERIES
- **LT** Static
- **LT-AR** Air Return [2]

WIDTH
- **1** 1′
- **2** 2′

LENGTH
- **2** 2′
- **4** 4′

LUMENS [1]

1x2
- **L20** 2,000lm
- **L31** 3,100lm
- **L40** 4,000lm [3]

1x4
- **L28** 2,800lm
- **L47** 4,700lm
- **L63** 6,300lm
- **L90** 9,000lm [4]

2x2
- **L27** 2,700lm
- **L39** 3,900lm
- **L49** 4,900lm [5]
- **L61** 6,100lm [6]

2x4
- **L40** 4,000lm
- **L52** 5,200lm
- **L64** 6,400lm
- **L82** 8,200lm
- **L110** 11,000lm [7]

CRI
- **8** 80
- **9** 90

CCT
- **27** 2700K
- **30** 3000K
- **35** 3500K
- **40** 4000K
- **50** 5000K
- **TW** Tunable white (3000K-5000K)
- **TW2** Tunable white (2700K-6500K)

SHIELDING
- **AF** Frosted acrylic

OPTIONS [8]

*See page 2 for **EMERGENCY BATTERY OPTIONS.***
*See page 3 for **FLEXIBLE WHIP OPTIONS.***

- **EQCLIPS** Earthquake clips [10]
- **(L__)** Additional lower lumen packages available [11] Example: 5,800 lumens = LT-24-L64/840-**(L58)**
- **HE** High efficacy lumen package [12]
- **CP** Chicago Plenum (CCEA)
- **LT-14-SMK-W** Surface mount kit, 1′x4′, white
- **LT-22-SMK-W** Surface mount kit, 2′x2′, white
- **LT-24-SMK-W** Surface mount kit, 2′x4′, white
- **DFK-1224W** Drywall kit, 12″ x 24″, white
- **DFK-1248W** Drywall kit, 24″ x 48″, white
- **DFK-2424W** Drywall kit, 24″ x 24″, white
- **DFK-2448W** Drywall kit, 24″ x 48″, white

CONTROL [9]

*Click **HERE** for control and sensor options.*

- – None

DRIVER

*See page 4 for **ADDITIONAL DRIVER OPTIONS.***

- **DIM** Driver with external 0-10V dimming wires [14]
- **DIM1** 1% Driver with external 0-10V dimming wires [15]
- **DRV** Driver without external dimming wires [16]

VOLTAGE
- **120** 120V
- **277** 277V
- **UNV** 120-277V
- **347** 347V [13]

NOTES

1. Lumens based on 80 CRI, 3500K for static white and 4000K for tunable white. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options.
2. Air return through side slots. Not available with surface mount or CP option. Not qualified for IP5X, ISO 5-9, or IC ratings.
3. Static white CCT only.
4. Static white CCT only.
5. Static white CCT only when specified with 90 CRI.
6. Static white CCT only.
7. Static white CCT only.
8. See page 4 for SURFACE MOUNT KIT DETAILS. See page 3 for DRYWALL KIT (DFK) OPTIONS.
9. See page 4 for SENSOR & NODE PLACEMENT DETAILS.
10. 4 per fixture. Optional for 1″ grid installations. Required for 9/16″ grid mounting; LT is compatible with Williams earthquake clips only.
11. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
12. Not available with tunable white or 90 CRI or 1x4 L28 lumen package. See page 2 for FIXTURE PERFORMANCE DATA.
13. Not available with tunable white or EM batteries.
14. 0.1% Driver with tunable white.
15. Not available with tunable white.
16. Not available with tunable white.

FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	STANDARD WATTAGE	STANDARD EFFICACY (lm/W)	HE OPTION [1] WATTAGE	HE OPTION [1] EFFICACY (lm/W)
1x2	L20	2011	17.4	116	13.5	149
	L31	2985	23.5	127	20.2	148
	L40	3840	32.9	117	26.8	143
1x4	L28	2814	21.4	131	–	–
	L47	4677	33.7	139	28.5	164
	L63	6261	48.5	129	39.4	159
	L90	9060	66.8	136	56.9	159
2x2	L27	2722	21.3	128	17.2	158
	L39	3934	33.1	119	25.5	154
	L49	4869	38.1	128	32.3	151
	L61	6136	50.9	121	40.4	152
2x4	L40	3972	32.0	124	23.1	172
	L52	5202	37.2	140	29.5	176
	L64	6396	48.5	132	39.4	162
	L82	8214	64.3	128	49.9	165
	L110	11065	81.8	135	67.1	165

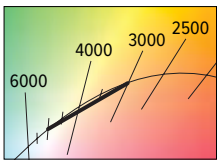
[1] Not available with 90 CRI.

- Photometrics tested in accordance with IESNA LM-79. Results based on 80 CRI, 3500K for single CCT and 4000K for tunable white, wattage for 120V through 277V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier table to calculate additional options.

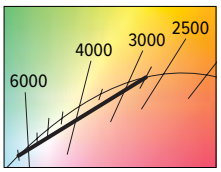
MULTIPLIER TABLE

	CCT	COLOR TEMPERATURE STANDARD	TW	TW2
80 CRI	2700K	0.97	–	0.93
	3000K	0.99	0.95	0.95
	3500K	1.00	0.98	0.98
	4000K	1.03	1.00	1.00
	5000K	1.06	0.96	1.02
	6500K	–	–	1.01
90 CRI	2700K	0.80	–	0.93
	3000K	0.82	0.91	0.95
	3500K	0.83	0.96	0.98
	4000K	0.86	1.00	1.00
	5000K	0.89	1.03	1.03
	6500K	–	–	1.02

TW

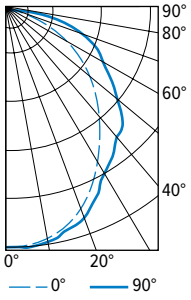


TW2



PHOTOMETRY

LT-24-L52/835-AF-DIM-UNV Total Luminare Output: 5202 lumens; 37 Watts | Efficacy: 140 lm/W | 80 CRI; 3500K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE 0°	45°	90°	ZONAL LUMENS
	0	1851	1851	1851	
	5	1843	1844	1846	175
	15	1745	1761	1779	499
	25	1544	1589	1636	730
	35	1276	1359	1440	848
	45	1055	1193	1315	902
	55	741	902	1044	802
	65	480	667	817	647
	75	241	429	544	438
	85	70	174	159	161
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1404	27
	0 - 40	2252	43
	0 - 60	3955	76
	0 - 90	5202	100
	0 - 180	5202	100

EMERGENCY BATTERY OPTIONS

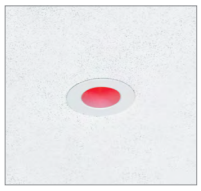
Specify CEC in the option code when California Energy Commission regulations are required.

CATALOG NUMBER	DESCRIPTION
EM/10W	10-watt emergency battery [1]
EM/10WRM	Remote mount 10-watt emergency battery [2]
EM/10W/ST	10-watt self-diagnostic emergency battery [1]
EM/10WRM/RTS	Remote mount 10-watt emergency battery with regressed test switch [2]
EM/12W	12-watt emergency battery [1] [3]
EM/12WRM	Remote mount 12-watt emergency battery [2] [3]

1 Not available with 1x2 L40 or 2x2 L61 lumen packages.
2 Large remote box provided.
3 Not available when CEC regulations are required.

REMOTE MOUNT BATTERY DETAILS

EM/10WRM/RTS

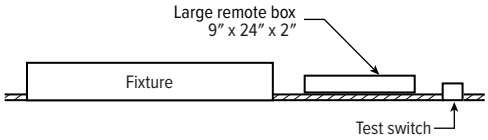


Regressed test switch
ø1-3/4"

EM/10WRM | EM/12WRM

Standard test switch
2-3/4" x 4-1/2"

Max remote distance is 50', connection by others.



CROSS SECTIONS

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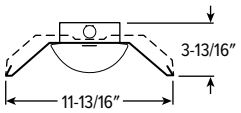

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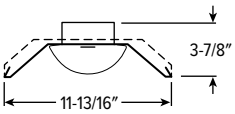
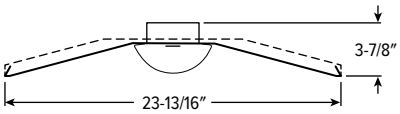


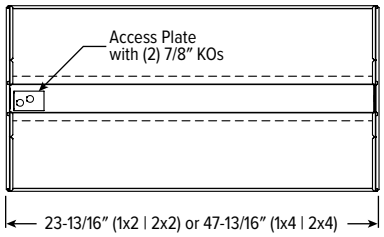
2x2 | 2x4



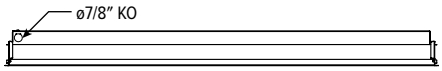
FIXTURE DETAILS

See hew.com/power-entry for power entry details.

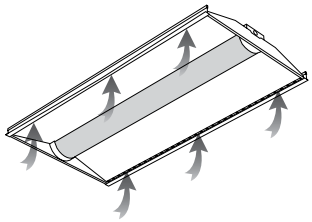
BACK VIEW



SIDE VIEW



AIR RETURN



Total Air Return Space:
12-1/2″ sq. (1x2 and 2x2)
25-1/2″ sq. (1x4 and 2x4)

FLEXIBLE WHIP OPTIONS

All Williams recessed troffers are available with a flexible metallic wiring harness, factory-attached and hard-wired to the luminaire.

Straight connectors are a snap-in type. Consult factory for wiring harness utilizing connectors secured by lock nuts, optional flex size, lengths, and other wire sizes or circuitry. Three-wire flex utilizes black, white, and green wire. Four-wire flex utilizes black, white, red, and green wire. Adding an emergency option requires an additional wire.

Williams fixtures are UL listed to provide factory-installation of several manufacturers' modular wiring devices, consult factory for availability and ordering information.

DESIGNATION	DESCRIPTION	DRIVER
F338B	6′ of 3/8″ flex, (3) No. 18 AWG wires with (2) straight connectors	DRV, LTE LINE
F348D	6′ of 3/8″ flex, (4) No. 18 AWG wires with (2) straight connectors	DRV + EM, SD40
F334B	6′ of 3/8″ flex, (3) No. 14 AWG wires with (2) straight connectors	DRV, LTE LINE
F344D	6′ of 3/8″ flex, (4) No. 14 AWG wires with (2) straight connectors	SD40
F354AB	6′ of 3/8″ flex, (5) No. 14 AWG wires with (2) straight connectors	DIM, DALI
F358AB	6′ of 3/8″ flex, (5) No. 18 AWG wires with (2) straight connectors	DIM, DALI
F368Y	6′ of 3/8″ flex, (6) No. 18 AWG wires with (2) straight connectors	DIM, DIM + EM, DALI

DRYWALL KIT (DFK) OPTIONS

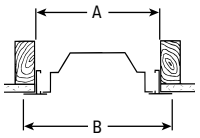
ORDERING INFO

EXAMPLE: DFK - 24 48 W			
SERIES	WIDTH	LENGTH	FINISH
DFK Drywall kit	**12** 1′	**24** 2′	**W** White
	12 1′	**48** 4′	**AMW** Anti-microbial white
	24 2′	**24** 2′	
	24 2′	**48** 4′	

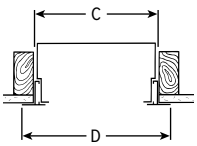
INSTALLATION DIMENSIONS

NOMINAL SIZE	ROUGH-IN		FINISH TRIM SIZE	
	WIDTH (A)	LENGTH (C)	WIDTH (B)	LENGTH (D)
1′ x 2′	12-3/8″	24-3/8″	13-5/16″	49-5/16″
1′ x 4′	12-3/8″	48-3/8″	13-5/16″	49-5/16″
2′ x 2′	24-3/8″	24-3/8″	25-5/16″	25-5/16″
2′ x 4′	24-3/8″	48-3/8″	25-5/16″	49-5/16″

TYPICAL INSTALLATION



Width



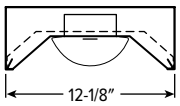
Length

SEE NEXT PAGE FOR SURFACE MOUNT KIT DETAILS

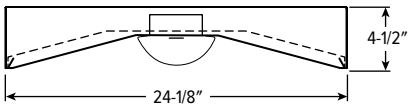
SURFACE MOUNT KIT DETAILS

CROSS SECTIONS

1x4

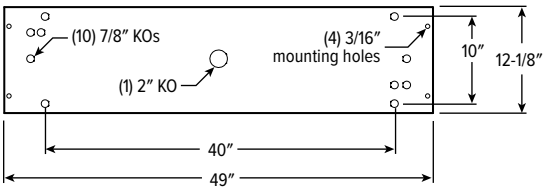


2x2 | 2x4

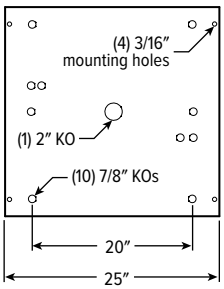


BACK VIEWS

1x4



2x2



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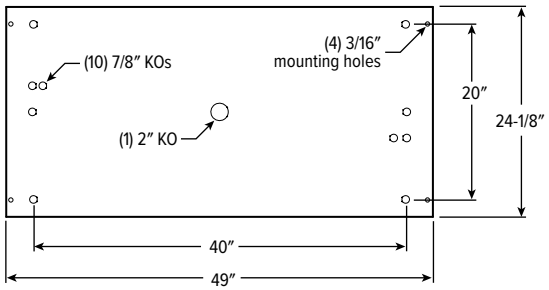
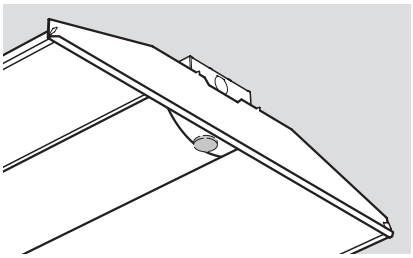


SENSOR & NODE PLACEMENT DETAILS



ADDITIONAL DRIVER OPTIONS

Note: Restrictions may apply, consult product builder at hew.com/product-builder

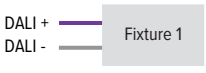
CATALOG NUMBER	DESCRIPTION
DRV [1]	Driver without external dimming wires prewired for non-dimming applications
DIM	Driver with external dimming wires prewired for 0-10V low voltage applications (tunable white: (1) 0-10V signal controls 0.1% dimming and (1) 0-10V signal controls CCT)
DIM1 [1]	1% driver with external dimming wires prewired for 0-10V low voltage applications
DIM LINE [1]	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC [1]	Line voltage dimming driver (TRIAC compatible, 120V only)
DA	Driver with 12V auxiliary power, without external dimming wires (not available with 347V)
DSR	DALI-2 sensor-ready driver without external dimming wires (Not available with 347V. Static CCTs use D4i DALI-2 driver)
DALI	DALI dimming driver
DMX	Driver prewired for DMX applications
SD40 [1]	40% step-dimming driver
SD50 [1]	50% step-dimming driver
LDE1 [1]	Lutron Hi-lume 1% EcoSystem dimming driver
LD2	Lutron DALI-2 digital driver, 1%
DCC	Remote UL Class 2 DC constant current supply, UL- or CSA-listed, by others

1 Single CCT only.

TUNABLE WHITE DRIVER DETAILS

DIM

DALI



DMX

LD2