

CATALOG #: _____

Type: _____

PROJECT: _____



FEATURES

- Developed for workplaces, learning centers and healthcare campuses
- Square shape and regressed design complement the MX2 continuous series
- Diffuse lens provides enhanced visual comfort
- Low UGR meets LEED and WELL requirements
- Support human-centric design with adaptive, individualized lighting using tunable white light
- Fully room-side accessible with hinged center panel simplifies maintenance
- Wireless in-fixture control solutions available
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** – Precision die-formed 22-gauge C.R.S.
- SHIELDING** – Diffuse acrylic lens
- FINISH** – 95% reflective 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 >60,000 hours per IES TM-21. 50/60 Hz constant current driver. Tunable White products use LEDs of multiple shade 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. 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.
 - City of Chicago Environmental Air approved when specified with CP option.
 - Build America, Buy America (BABA) and Buy American Act (BAA) compliant. Request certification at hew.com/buy-american
- WARRANTY** – 5-year limited fixture warranty, see hew.com/warranty

ORDERING EXAMPLE: FRM - 22 - L25/835 - DMA - OPTIONS - CONTROL/DIM - UNV

ORDERING INFO

SERIES	WIDTH	LENGTH	LUMENS ⁽¹⁾	CRI	CCT	SHIELDING
FRM	2 2'	2 2'	2x2	8 80	27 2700K	DMA Diffuse matte acrylic lens, .080" thick
			L25 2,500lm	9 90	30 3000K	
		4 4'	L50 5,000lm		35 3500K	
			2x4		40 4000K	
			L25 2,500lm		50 5000K	
			L50 5,000lm		TW Tunable white (3000K-5000K)	
			L78 7,800lm		TW2 Tunable white (2700K-6500K)	

OPTIONS

See page 3 for FLEXIBLE WHIP OPTIONS.

See page 3 for DRYWALL KIT (DFK) DETAILS.

EM/10W	10-watt emergency battery
EQCLIPS	Earthquake clips ⁽²⁾
(L___)	Additional lower lumen packages available ⁽³⁾ Example: 6,000 nominal lumens = FRM-24-L80/835-DMA-(L60)
DFK-2424W	Drywall kit, 24" x 24", white
DFK-2448W	Drywall kit, 24" x 48", white
CP	Chicago Plenum (CCEA)

CONTROL

Click [HERE](#) for control and sensor options.

– None

DRIVER

Static White

See page 3 for ADDITIONAL STATIC WHITE DRIVER OPTIONS.

DIM	Driver with external 0-10V dimming wires
DIM1	1% Driver with external 0-10V dimming wires
DRV	Driver without external dimming wires

Tunable White

DALI	Driver prewired for DALI applications
DIM	Dimming driver with (1) 0-10V signal to control dimming and (1) 0-10V signal to control CCT
DMX	Driver prewired for DMX applications
LD2	Lutron DALI-2 digital driver, 1%

VOLTAGE

120	120V
277	277V
UNV	120-277V
347	347V ⁽⁴⁾

NOTES

¹ Lumens based on DMA Shielding, 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 4 per fixture. Optional for 1" grid installations. Required for 9/16" grid mounting.

³ Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.

⁴ Not available with Tunable White or EM batteries.



FIXTURE PERFORMANCE DATA

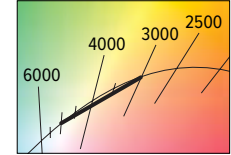
	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	UNIFIED GLARE RATING (UGR) ⁽¹⁾	
					CROSSWISE	ENDWISE
2x2	L25	2467	25.4	97	17.6	17.6
	L50	5047	53.9	94	20.1	20.1
2x4	L25	2453	25.3	97	15.6	14.7
	L50	5022	52.8	95	18.1	17.2
	L78	7866	85.6	92	19.7	18.8

- ¹ UGR reference values based on 4H x 8H room size with 70%, 50%, and 20% reflectance. Actual values vary based on luminaire options and application specifications.
- Photometrics tested in accordance with IESNA LM-79. Results based on DMA, 80 CRI, 3500K for single CCT and 4000K for tunable white, average 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 tables to calculate additional options.

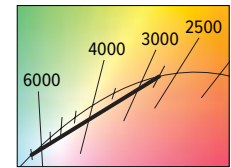
MULTIPLIER TABLE

COLOR TEMPERATURE				
	CCT	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

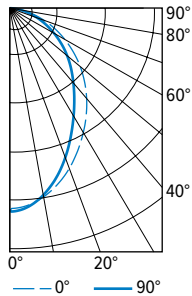


TW2



PHOTOMETRY

FRM-24-L78/835-DMA Total Luminaire Output: 7866 lumens; 85.6 Watts | Efficacy: 91.9 lm/W | 80 CRI; 3500K CCT

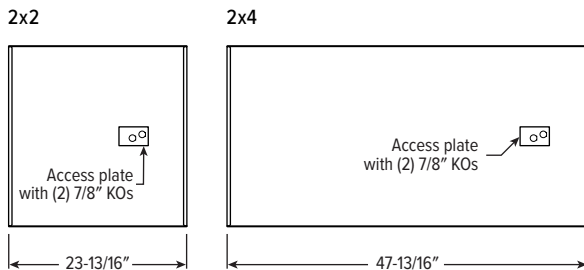


VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	4215	4215	4215	
5	4113	4155	4147	289
15	3744	3664	3601	576
25	3188	2919	2850	705
35	2604	2172	2191	709
45	2029	1566	1665	634
55	1460	1100	1188	501
65	929	695	753	332
75	460	353	384	160
85	114	85	101	29
90	0	0	0	

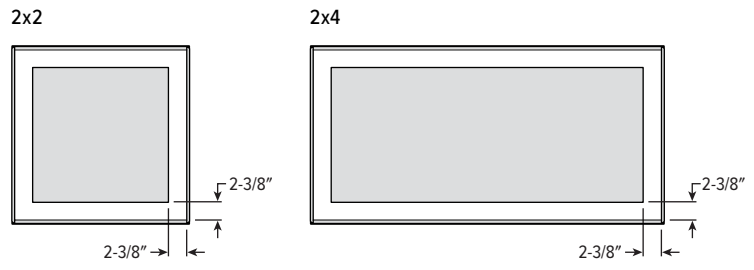
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	4209	54
	0 - 60	6598	84
	0 - 90	7866	100
	0 - 180	7866	100

FIXTURE DETAILS

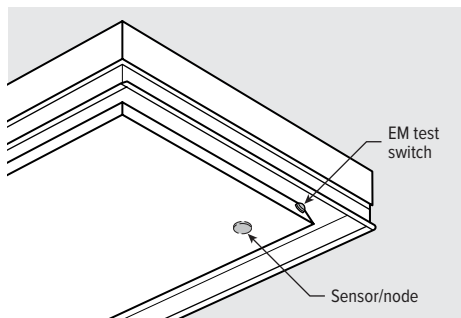
BACK VIEW



BOTTOM VIEW



OPTIONS PLACEMENT



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
F338	6' of 3/8" flex, (3) No. 18 AWG wires with (2) straight connectors	DRV, LTE LINE
F348	6' of 3/8" flex, (4) No. 18 AWG wires with (2) straight connectors	DRV + EM, SD40
F334	6' of 3/8" flex, (3) No. 14 AWG wires with (2) straight connectors	DRV, LTE LINE
F344	6' of 3/8" flex, (4) No. 14 AWG wires with (2) straight connectors	SD40
F358	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) DETAILS

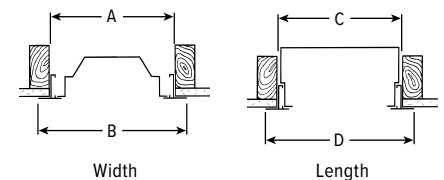
ORDERING INFO

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

INSTALLATION DIMENSIONS

NOMINAL SIZE	ROUGH-IN		FINISH TRIM SIZE	
	WIDTH (A)	LENGTH (C)	WIDTH (B)	LENGTH (D)
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



ADDITIONAL STATIC WHITE DRIVER OPTIONS

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

CATALOG NUMBER	DESCRIPTION
DRV	Driver without external dimming wires prewired for non-dimming applications
DIM	Driver with external dimming wires prewired for 0-10V low voltage applications
DIM1	1% driver with external dimming wires prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
DA	Driver with 12V auxiliary power, without external dimming wires (not available with 347V)
D4I	DALI-2 sensor-ready driver without external dimming wires (not available with 347V)
DSR	Sensor-ready driver without external dimming wires (not available with 347V)
DALI	DALI dimming driver
SD40	40% step-dimming driver
SD50	50% step-dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming driver
PoE PR	Power over Ethernet-ready Note: PoE-ready luminaires are connected to building power systems through network integration and require other components for complete PoE lighting system

TUNABLE WHITE DRIVER DETAILS

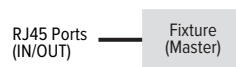
DIM



DALI



DMX



LD2

