

Also available with 9 cells

FEATURES

- Nominal 3" deep parabolic louver provides excellent glare control and maintenance-free operation
- Optimized for standard T8 lamp technology, tuned ballast reduces power usage to 67 watts
- Custom MIRO® 5 formulation louver developed by Alanod for Columbia Lighting
- Proper lamp position provides maximum efficiency with controlled widespread distribution
- Shallow 4 7/8" housing height allows installation in restricted ceiling areas
- Lightweight and contractor friendly, for ease of installation
- Full black reveal provides floating louver appearance and full air handling capability

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Luminaire housing and end caps are die formed code gauge cold rolled steel. Louver is formed from MIRO 5 anodized aluminum and secured by die formed spring steel hinges. Louver hinges from either side. Mechanical light trap prevents light leaks. Latches are finger-tip actuated, positive feed type, and completely concealed in the black reveal.

BALLASTS

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant.

FINISH

Parts are treated with a five stage phosphate bonding process and finished with a high temperature baked white enamel. Regressed slots are flat black. Reflectors painted after fabrication with high reflectivity white polyester enamel.

ELECTRICAL

Standard class "P", thermally protected, autoresetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

AIR HANDLING

All supply/return and air extract functions are available as a specified option. Directional control vanes and/or extract damper features available. Air extract slots are located out of sight in end caps. See air removal data on reverse.

CEILING COMPATIBILITY

Luminaire is available to fit most standard ceiling types. NEC-compliant T-bar clips supplied with all grid trim fixtures. See ceiling details on reverse. For hard ceilings order G trim and FK flange accessory. Contact your Columbia representative for compatibility information for specific ceiling types.

INSTALLATION

An access plate is furnished with each luminaire for fast wiring access from the plenum. No need to open fixture. Product ships standard with mylar dust cover to eliminate job site contamination.

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924.

ORDERING INFORMATION

EXAMPLE EMX22-217G-M523-S-E104U

EMX	22 - 2	G - M5	2	3 -	-	U -	
MODEL	NO. OF LAMPS	CEILING TYPE	NO. CELLS CROSSWISE	NO. CELLS LENGTHWISE	BALLAST	OPTIONS ³	
EMX EnergyMax® Energy Saving Parabolic	2 Two	G Inverted T-Bar (For hard ceilings use flange kit; see Accessories)	2 Two	3 Three	E104 Electronic T8, 1.04 Ballast Factor, Instant Start ² (N/A 1-Lamp) ESD104 Electronic T8, 1.04 Ballast Factor, Step Dimming, Programmed Start ² EP104 Electronic T8, 1.04 Ballast Factor, Programmed Start ² E Electronic T8, 0.88 Ballast Factor Instant Start ESD Electronic T8, 0.88 Ballast Factor, Step Dimming, Programmed Start ELW Electronic T8, 0.77 Ballast Factor, Low Wattage, Instant Start EHL Electronic T8, 1.18 Ballast Factor, High Wattage, Instant Start	GLR Fast Blow Fuse GMF Slow Blow Fuse EL Emergency Battery Pack F0830 T8 Lamp Installed 80 CRI, 3000K F0835 T8 Lamp Installed 80 CRI, 3500K F0841 T8 Lamp Installed 80 CRI, 4100K C388 3-Wire Flex C488 4-Wire Flex TB4 Four Bulk T-bar Clips NYC NYC Compliant NYCU NYC Compliant, Union Made	
SIZE	LAMP TYPE	LOUVER FINISH	AIR FUNCTIONS	For a specific ballast vendor show as option.			VOLTAGE
22 2' x 2'	17 2', T8: 17 Watt 31U1 U-Bent, 1 5/8" Leg Spacing T8: 31 Watt 32U6 U-Bent, 6" Leg Spacing T8: 32 Watt	M5 MIRO-5	S Static ¹ A Air Handling ¹ AV Air Handling w/Supply Vanes ¹ C Combination Supply/Extract ² CV Combination Supply Vanes/Extract ² CD Combination Supply Extract Dampers ² CVD Combination Supply Vanes Extract Dampers ² H Heat Extract ² HD Heat Extract w/Dampers ²				U 120V-277V
ACCESSORIES (ORDER SEPARATELY)							
FK22 2' x 2' Single Flange Kit							
FKCR Flange Kit Row Adapter Brackets*							
*See next page for details.							

¹Fixtures supplied with integral T-Bar clips.

²Fixtures supplied with two non-integral, screw-type T-Bar clips.

³EL or other options may increase fixture depth.

⁴Not compatible with T8 25, 28, or 30 watt energy savings lamps.

⁵For EnergyMax™ Plus, order "-PlusXX" lamps under "Options."

Protected by US Patent 6,582,098.

Specifications subject to change without notice.



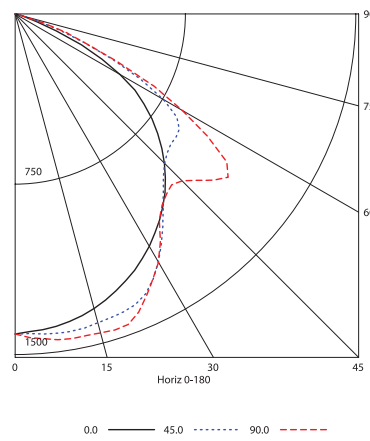
PHOTOMETRIC DATA

Test LSI22331 Test Date 4/10/07

LUMINAIRE DATA

Luminaire	EMX22-232U6G-M523-E104
	EMX Parabolic
	2' x 2' 2-Lamp with
	2 x 3 Cell Semi-Specular
	Louwer
Ballast	B232IU104-A
Ballast Factor	1.04
Lamp	FB32T816
Lumens per Lamp	2650
Watts	64
Mounting	Recessed
Shielding Angle	0° = 21 90° = 14
Spacing Criterion	0° = 1.26 90° = 1.58

INDOOR CANDELA PLOT



ENERGY DATA

Total Luminaire Efficiency	73.5%
Luminaire Efficacy Rating (LER)	63
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.81 based on 3000 hrs. and \$0.08 per KWH

AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	4952	4952	4952	4952	4952
30	4793	5061	5114	5102	5122
40	4707	4909	4657	4694	4753
45	4618	4742	4628	4956	5164
50	4478	4566	4888	5851	6223
55	4240	4443	5405	6673	6967
60	3747	4105	5293	5827	5975
65	2678	3077	3942	4117	4117
70	1048	1408	2127	2281	2477
75	421	421	516	530	489
80	202	202	182	182	202
85	81	81	81	81	81

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt.
0-30	1145	21.6	29.4
0-40	1857	35.0	47.7
0-60	3394	64.0	87.1
0-90	3896	73.5	100.0
0-180	3896	73.5	100.0

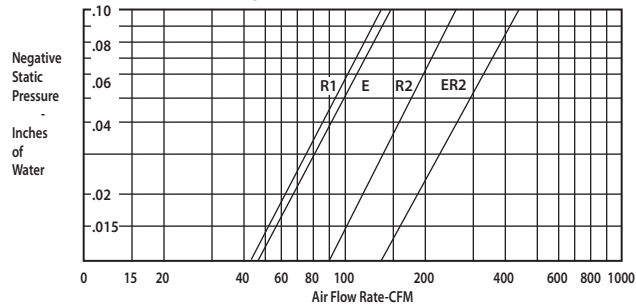
COEFFICIENTS OF UTILIZATION (%)

RCR	RC	80				70				50				0				
		RW	70	50	30	10	70	50	30	10	50	30	10	0	50	30	10	0
1	81	78	75	73	79	76	74	72	73	71	70	64						
2	74	69	64	60	72	67	63	60	65	61	58	54						
3	68	61	55	51	66	60	54	50	57	53	49	46						
4	62	54	48	43	61	53	47	43	51	46	42	40						
5	57	48	42	37	56	47	41	37	46	41	36	34						
6	53	43	37	32	51	43	37	32	41	36	32	30						
7	49	39	33	28	48	39	33	28	37	32	28	26						
8	45	36	30	25	44	35	29	25	34	29	25	23						
9	42	33	27	23	41	32	27	23	31	26	23	21						
10	40	30	24	21	39	30	24	21	29	24	20	19						

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

EXTRACT AIR DATA Report AL-534-1.1



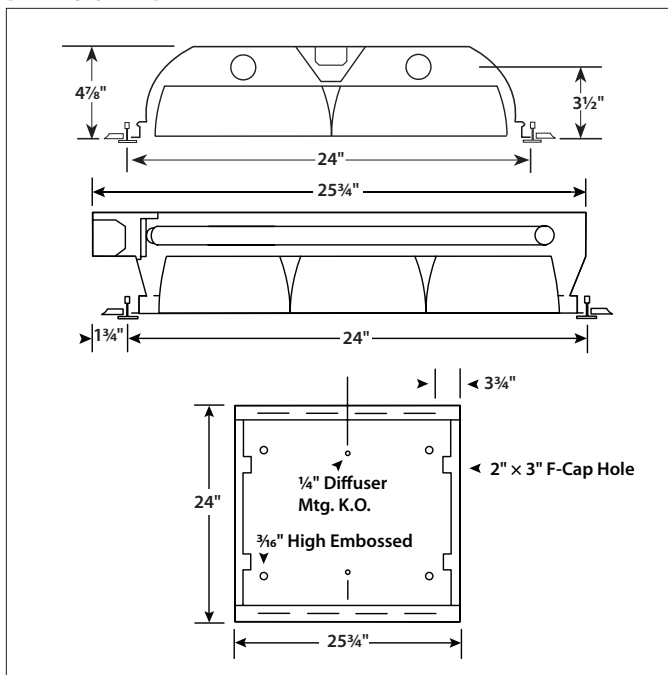
R1 - Air Return thru One Side Passage

R2 - Air Return thru Two Side Passages

E - Heat Extract thru Lamp Compartment

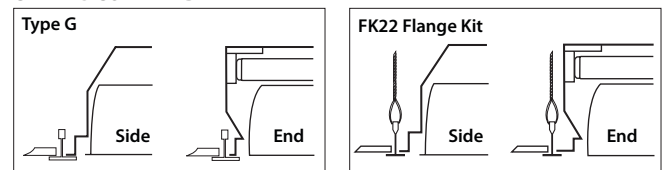
ER2 - Thru Both Sides and Lamp Compartment

DIMENSIONAL DATA



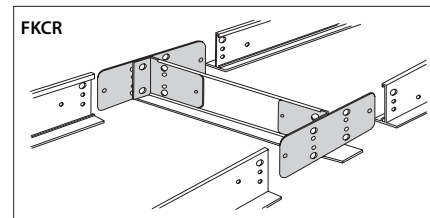
NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

CEILING COMPATIBILITY



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.

For hard ceiling applications order FK22 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.



For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK22 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK22 & (1) FKCR)

Row cut out dimensions using FK22s & FKCR adapters: Width 24 3/8", Length [24" x (# in row)] + 3/8". Example: (24" x 2) + 3/8" = 48 3/8"

Flange kit rough in dimensions for single unit only: 24 3/8" x 24 3/8"