

FEATURES

- Enhanced optics for 89% efficiency
- Nominal 3" deep parabolic louver provides excellent glare control and maintenance-free operation
- Optimized for standard T5 lamp technology; reduces power usage to 64 watts
- Typically qualifies for EAct tax deduction
- 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 in open or closed position 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.

to open fixture. Product ships standard with mylar dust cover to eliminate job site contamination.

ELECTRICAL

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

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.

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.

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.

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.

INSTALLATION

An access plate is furnished with each luminaire for fast wiring access from the plenum. No need

ORDERING INFORMATION

EXAMPLE EMX24-254G-M526-EPU

EMX	24	-	2	G	-	M5	2	6	-	-	-	-
MODEL	NO. OF LAMPS	CEILING TYPE	NO. CELLS CROSSWISE	NO. CELLS LENGTHWISE	VOLTAGE	OPTIONS	SIZE	LAMP TYPE	LOUVER FINISH	AIR FUNCTIONS	BALLAST	
EMX EnergyMax® Energy Saving Parabolic	2 Two	G Inverted T-Bar <small>(For hard ceilings use flange kit; see Accessories)</small>	2 Two	6 Six	U 120V-277V 347 347V (54W only)	GLR Fast Blow Fuse GMF Slow Blow Fuse EL Emergency Battery Pack F5835 T5 Lamp Installed 80 CRI, 3500K C388 3-Wire Flex C488 4-Wire Flex TB4 Four Bulk T-bar Clips NYC NYC Compliant NYCU NYC Compliant, Union Label	24 2' x 4'	28 4', T5: 28 Watt 54 4', T5HO: 54 or 51 Watt	M5 MIRO-5	S Static¹ A Air Handling¹ AV Air Handling w/Supply Vanes¹ C Combination Supply/Extract² CV Combination Supply Vanes/Extract² CD Combination Supply Extract Dampers² CVD Combination Supply Vanes Extract Dampers² H Heat Extract² HD Heat Extract w/Dampers²	EP Electronic, Programmed Start EP95 Electronic T5, 0.95 Ballast Factor, Programmed Start (N/A T5HO, 1-Lamp) ESD95 Electronic T5, 0.95 Ballast Factor, Step Dimming, Programmed Start (N/A T5HO, 1-Lamp) EP115 Electronic T5, 1.15 Ballast Factor, Programmed Start (N/A T5HO, 1-Lamp) ESD115 Electronic T5, 1.15 Ballast Factor, Step Dimming, Programmed Start (N/A T5HO, 1-Lamp) ESD80 Electronic T5HO, 0.80 Ballast Factor, Step Dimming, Programmed Start (2-lamp 54W only)	

ACCESSORIES (ORDER SEPARATELY)
FK24 2' x 4' 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.

For a specific ballast vendor show as option.

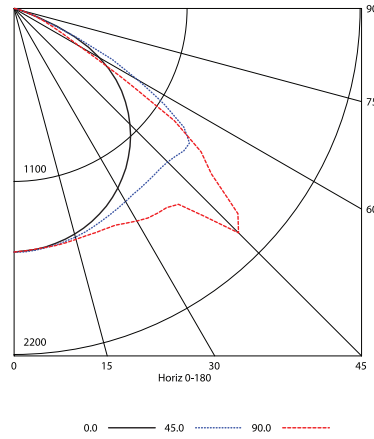
PHOTOMETRIC DATA

Test 14510 Test Date 2/1/07

LUMINAIRE DATA

Luminaire	EMX24-228G-M526-EP EMX Parabolic 2' x 4' 2-Lamp with 2 x 6 Cell Semi-Specular Louver
Ballast	ICN-2S28
Ballast Factor	1.03
Lamp	F28T5
Lumens per Lamp	2600
Watts	64
Mounting	Recessed
Shielding Angle	0° = 21 90° = 32
Spacing Criterion	0° = 1.26 90° = 1.58

INDOOR CANDELA PLOT



ENERGY DATA

Total Luminaire Efficiency	89.9%
Luminaire Efficacy Rating (LER)	75
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.20 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	2560	2560	2560	2560	2560
30	2517	2565	2706	2901	2980
40	2474	2587	2986	3360	3509
45	2435	2618	3228	4150	4718
50	2378	2668	3623	4441	4215
55	2281	2728	3801	3737	3587
60	2071	2630	2994	2031	1575
65	1652	2090	1789	1104	1037
70	750	929	701	667	658
75	198	211	243	300	294
80	114	105	95	114	124
85	38	38	38	57	76

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1244	23.9	26.6
0-40	2126	40.9	45.5
0-60	4204	80.8	89.9
0-90	4675	89.9	100.0
0-180	4675	89.9	100.0

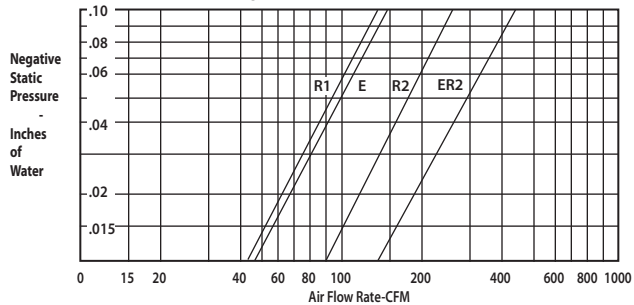
COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	99	96	92	89	97	94	91	88	90	87	85	78	
2	91	84	79	74	89	83	78	73	80	75	72	67	
3	83	74	68	62	81	73	67	62	70	65	61	57	
4	76	66	58	53	74	65	58	52	63	56	52	48	
5	70	59	51	45	68	58	50	45	56	49	44	42	
6	64	53	45	39	63	52	44	39	50	44	39	36	
7	59	48	40	34	58	47	39	34	45	39	34	32	
8	55	43	36	30	54	43	35	30	41	35	30	28	
9	51	39	32	27	50	39	32	27	38	31	27	25	
10	48	36	29	24	47	36	29	24	35	29	24	22	

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

EXTRACT AIR DATA Report AL-534-1.1



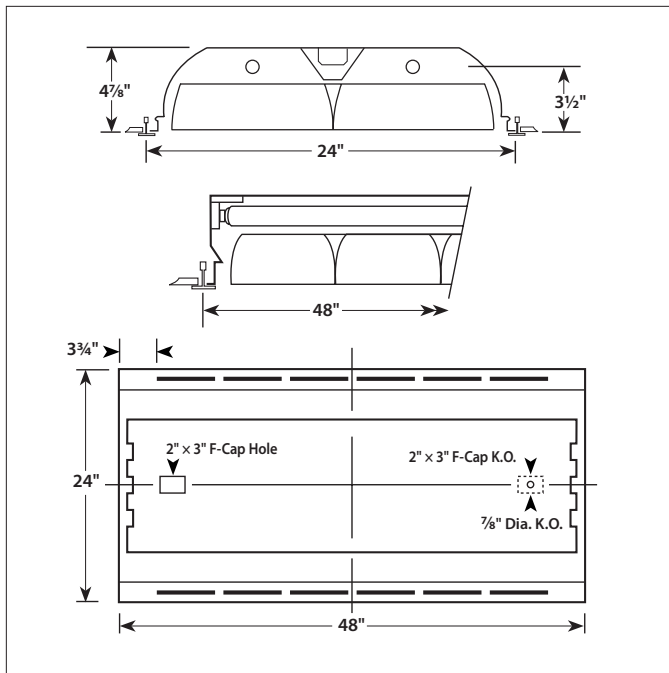
R1 - Air Return thru One Side Passage

R2 - Air Return thru Two Side Passages

E - Heat Extract thru Lamp Compartment

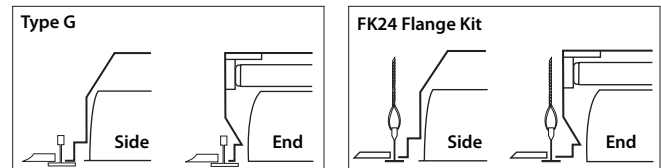
ER2 - Thru Both Sides and Lamp Compartment

DIMENSIONAL DATA



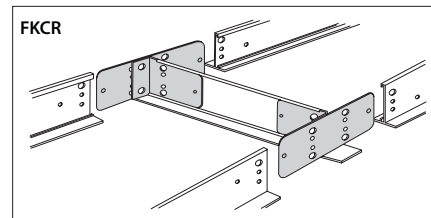
NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

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 FK24 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 FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:
Width 24 3/8", Length [48" x (# in row)] + 3/8". Example: (48" x 2) + 3/8" = 96 3/8"

Flange kit rough in dimensions for single unit only: 24 3/8" x 48 3/8"