

Also available with 9 cells

**FEATURES**

- Nominal 3" deep parabolic louver provides excellent glare control and maintenance-free operation
- Optimized for standard T5 lamp technology
- 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.

**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.

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

**ORDERING INFORMATION**

**EXAMPLE EMX22-224G-M523-S-EPU**

EMX	22 - 2	G - M5	2	3 -	-	-	-
<b>MODEL</b> EMX EnergyMax® Energy Saving Parabolic	<b>NO. OF LAMPS</b> 2 Two	<b>CEILING TYPE</b> G Inverted T-Bar (For hard ceilings use flange kit; see Accessories)	<b>NO. CELLS CROSSWISE</b> 2 Two	<b>NO. CELLS LENGTHWISE</b> 3 Three	<b>VOLTAGE</b> U 120V-277V 347 347V	<b>OPTIONS<sup>3</sup></b> 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	
	<b>SIZE</b> 22 2' x 2'	<b>LAMP TYPE</b> 14 2', T5: 14 Watt 24 2', T5HO: 24 Watt	<b>LOUVER FINISH</b> M5 MIRO-5	<b>AIR FUNCTIONS</b> S Static <sup>1</sup> A Air Handling <sup>1</sup> AV Air Handling w/Supply Vanes <sup>1</sup> C Combination Supply/Extract <sup>2</sup> CV Combination Supply Vanes/Extract <sup>2</sup> CD Combination Supply Extract Dampers <sup>2</sup> CVD Combination Supply Vanes Extract Dampers <sup>2</sup> H Heat Extract <sup>2</sup> HD Heat Extract w/Dampers <sup>2</sup>	<b>BALLAST</b> 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)	<b>ACCESSORIES (ORDER SEPARATELY)</b> FK22 2' x 2' Single Flange Kit FKCR Flange Kit Row Adapter Brackets*	

<sup>1</sup>Fixtures supplied with integral T-Bar clips.  
<sup>2</sup>Fixtures supplied with two non-integral, screw-type T-Bar clips.  
<sup>3</sup>EL or other options may increase fixture depth.

For a specific ballast vendor show as option.

PARABOLICS / EMX22-2-T5



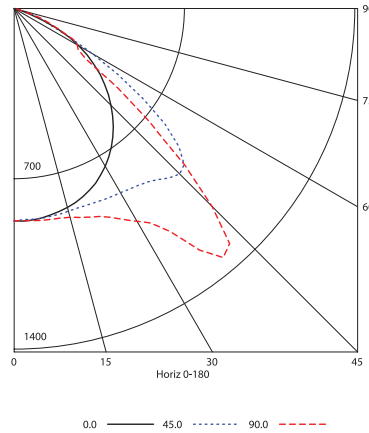
## PHOTOMETRIC DATA

Test LSI22330 Test Date 4/10/07

### LUMINAIRE DATA

Luminaire	EMX22-224G-M523-EP EMX Parabolic 2' x 2' 2-Lamp with 2 x 3 Cell Semi-Specular Louver
Ballast	ICN-2S24
Ballast Factor	1.00
Lamp	F24W/865
Lumens per Lamp	1800
Watts	51
Mounting	Recessed
Shielding Angle	0° = 21 90° = 35
Spacing Criterion	0° = 1.26 90° = 1.95

### INDOOR CANDELA PLOT



### ENERGY DATA

Total Luminaire Efficiency	74.9%
Luminaire Efficacy Rating (LER)	53
ANSI/IESNA RP-1-2004 Compliance	Yes-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$4.53 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	3065	3065	3065	3065	3065
30	3036	3174	3547	3900	4095
40	2909	3262	4207	5506	6125
45	2793	3325	4782	5845	5716
50	2652	3341	4834	4631	3986
55	2451	3260	3965	2886	2181
60	2158	2889	2629	1877	2102
65	1622	2054	1414	1630	1697
70	719	853	976	1130	1223
75	258	258	353	394	353
80	142	142	121	121	142
85	40	81	40	40	81

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt.
0-30	730	20.3	27.1
0-40	1297	36.0	48.1
0-60	2449	68.0	90.9
0-90	2695	74.9	100.0
0-180	2695	74.9	100.0

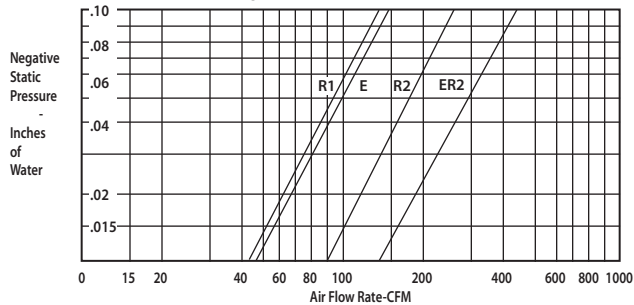
### COEFFICIENTS OF UTILIZATION (%)

RC	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	83	80	77	75	81	78	76	74	75	73	71	66	
2	76	71	66	62	74	69	65	62	67	63	60	56	
3	70	63	57	53	68	61	56	52	59	55	51	48	
4	64	56	50	45	62	55	49	45	53	48	44	41	
5	59	50	43	39	57	49	43	38	47	42	38	36	
6	54	45	38	34	53	44	38	33	43	37	33	31	
7	50	40	34	30	49	40	34	29	39	33	29	27	
8	47	37	30	26	45	36	30	26	35	30	26	24	
9	43	33	27	23	42	33	27	23	32	27	23	22	
10	40	31	25	21	40	30	25	21	30	24	21	19	

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

### EXTRACT AIR DATA Report AL-534-1.1



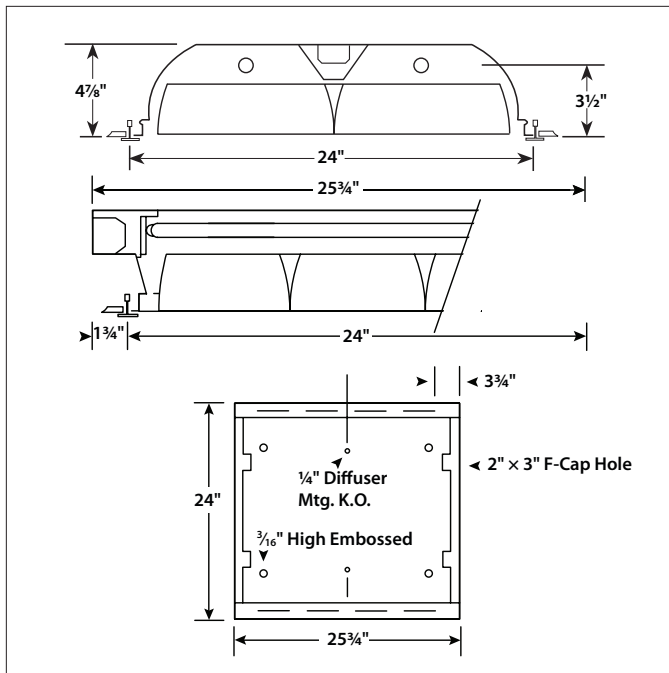
R1 - Air Return thru One Side Passage

R2 - Air Return thru Two Side Passages

E - Heat Extract thru Lamp Compartment

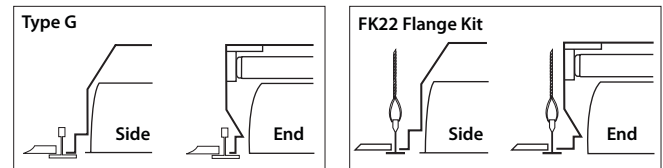
ER2 - Thru Both Sides and Lamp Compartment

### DIMENSIONAL DATA



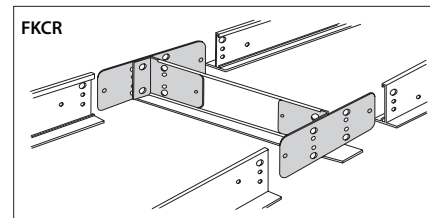
**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

### 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"