
MIR
FEATURES

- Recessed indirect coffer light provides the appearance of a handcrafted cove at a fraction of the cost
- Customized appearance available with optional trim colors
- Aesthetic variety provided by wood or painted steel trim
- Available for type G lay-in ceilings, type F plaster ceilings, or sheet rock ceilings

PROJECT INFORMATION

Project Name	Type
Catalog No.	Date

CONSTRUCTION

Recessed 9" deep housing is formed of code gauge steel and welded in a one-piece assembly for installation in a 4' x 4' ceiling system. Exposed chamfered "skirt" assembly shields electrical system with concealed lamp source. "Skirt" assembly is of one-piece welded steel construction and held in place by positive drawn heavy duty torsion springs on type "F" version.

FINISH

Finish of interior coffer is a textured baked enamel surface. Color is a neutral cream that efficiently reflects fluorescent source output and provides a warm ambient illumination for most room color schemes. Standard finish of exposed "skirt" is baked, powder coat, matte white enamel. A variety of applied trim options to integrate with interior furnishings and designs are available upon request. For custom colors and trims, consult your Alera representative.

INSTALLATION

Modular Indirect Recessed units are designed for quick installation in 4' x 4' ceiling systems. Final wiring and inspection will ordinarily require access from an adjacent ceiling module or through internal electrical wireway.

CEILING COMPATIBILITY

Fixture is designed to fit NEMA type G (lay-in) and type F (overlapping flange) ceiling systems. Luminaires for type F ceilings are provided with necessary adjustable wing hangers for leveling and support of unit.

LABELS AND ELECTRICAL

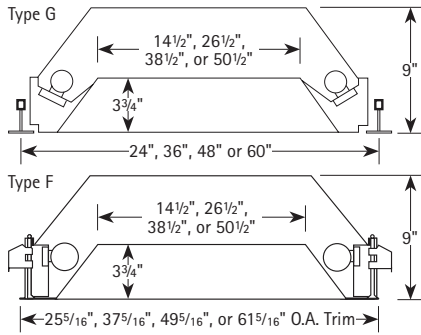
All fixtures bear UL recessed fixture label. Fixtures are designed for use with four lamps. Dimming systems are subject to ballast compatibility and must be quoted. CSA approval available. Use suffix "CSA".

Name:	MIR44-439-EP
Test #:	13446
Efficiency:	49.8%
LER:	34

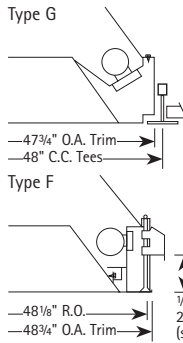
ORDERING INFORMATION
EXAMPLE: MIR44-4T5-G-EU-MW-CZIG-GLR

MIR		- 4				- MW				
MODEL	SIZE	NO. OF LAMPS	CEILING COMPATIBILITY	VOLTAGE	SKIRT COLOR	CUSTOM TRIM (OPTIONAL)				
MIR Modular Indirect Recessed	22 2' x 2' (36W TT only)	4 Four	G Grid Trim (For 1" inverted T-Bar)	U 120V-277V	MW Matte White (Std.)	Blank Solid Trim (Std.)				
	33 3' x 3'		F Overlap Flange Trim (For hard ceilings)	120 120V	See MTX-1 for other color selections.	CZIG Classical Ziggurat				
	44 4' x 4'		G cannot be converted to F and F cannot be converted to G.	277 277V		DZIG Deco Ziggurat				
	55 5' x 5'			347 347V		PERF Perforated Skirt				
						WOOD Hardwood (Specify oak, walnut or cherry)				
LAMP TYPE			BALLAST			OPTIONS				
TT	Twin Tube Compact Fluorescent (2' x 2' only)		E	Electronic, Instant Start, (Std. for T8)		EFC	Extended Flange Hanger (Minimum 2 1/2", maximum 4" depth adjustment)			
T5	T5		EP	Electronic, Programmed Start (Std. for T5 & T5HO, optional for T8)		GLR	Fast Blow Fuse			
T5HO	T5HO		ED	Electronic, Dimming (Must specify)		GMF	Slow Blow Fuse			
T8	T8		ETT	Electronic Twin Tube		CSA	UL listed or CSA certified for Canada			
				Unless specified, Alera will use fewest ballasts possible.		DL	Damp Label (Available on most models)			

CROSS SECTION



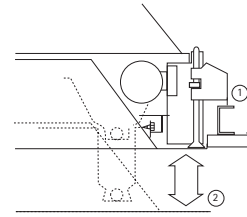
CEILING COMPATIBILITY



NEMA Type G luminaire for lay-in installation in inverted exposed grid tee ceilings. Maximum tee width is 1".

NEMA Type F luminaire has exposed flanges which finish edges of ceiling opening. Concealed suspension by adjustable wing hangers.

FLANGE DETAIL



The flanged AC is installed by drawing the upper housing (1) into the ceiling by vertically adjustable wing hangers. The lower decorative skirt assembly (2) is then attached and drawn tight against the finished ceiling without the use of tools. Relamping may be done by reaching over the skirt assembly.

PHOTOMETRIC DATA

LUMINAIRE DATA Test 8447

Luminaire	MIR44-4T8G-OCT MIR Architectural Recessed 4' x 4' 4-LAMP INDIRECT LIGHTING MODULE WITH
Ballast	731-L-TC-P
Ballast Factor	1.00
Lamp	F025/31K
Lumens per Lamp	2150
Watts	116
Shielding Angle	0° = 0 90° = 0
Spacing Criterion	0° = 1.30 90° = 1.29
Luminous Opening in Feet	Length: 3.71 Width: 3.71 Height: 0.00

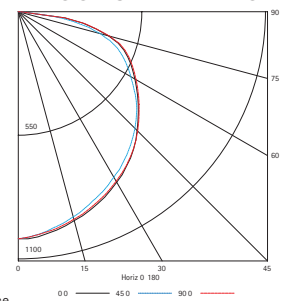
AVG. LUMINANCE (Candela/Sq. M.)

Angle	0.0	22.5	45.0	67.5	90.0
0	790	790	790	790	790
30	791	774	768	774	787
40	815	797	792	798	814
45	826	813	812	815	831
50	848	831	837	837	853
55	884	866	864	871	890
60	937	918	904	926	946
65	1023	997	973	1010	1033
70	1143	1109	1068	1130	1159
75	1257	1230	1148	1257	1272
80	1315	1207	1117	1266	1329
85	215	395	359	359	287

COEFFICIENTS OF UTILIZATION (%)

RCR	80					70					50					0
	RW	70	50	30	10	70	50	30	10	50	30	10	0			
1	43	41	39	37	42	40	38	37	39	37	36	33	0			
2	39	35	32	29	38	34	32	29	33	30	28	26	0			
3	35	30	27	24	34	30	26	24	29	26	23	21	0			
4	32	27	23	20	31	26	23	20	25	22	19	18	0			
5	29	24	20	17	28	23	20	17	22	19	17	15	0			
6	27	21	17	15	26	21	17	14	20	17	14	13	0			
7	25	19	15	13	24	19	15	13	18	15	13	11	0			
8	23	17	14	11	23	17	14	11	17	13	11	10	0			
9	22	16	12	10	21	16	12	10	15	12	10	9	0			
10	20	15	11	9	20	14	11	9	14	11	9	8	0			

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	776	9.0	22.2
0-40	1292	15.0	37.0
0-60	2436	28.3	69.8
0-90	3490	40.3	100.0
0-180	3490	40.6	100.0

ENERGY DATA

Total Luminaire Efficiency	40.6%
Luminaire Efficacy Rating (LER)	N/A
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$N/A based on 3000 hrs. and \$0.08 per KWH

Test Date 10/24/07

PHOTOMETRIC DATA

LUMINAIRE DATA Test 8448

Luminaire	MIR44-4T12G-LE MIR Architectural Recessed 4' x 4' 4-Lamp Indirect Lighting Module
Ballast	RM-2SP30
Ballast Factor	1.00
Lamp	F30T12/WW/RS
Lumens per Lamp	2360
Watts	162
Shielding Angle	0° = 0 90° = 0
Spacing Criterion	0° = 1.29 90° = 1.29
Luminous Opening in Feet	Length: 3.71 Width: 3.71 Height: 0.00

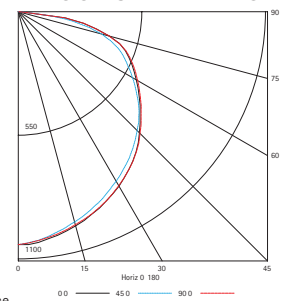
AVG. LUMINANCE (Candela/Sq. M.)

Angle	0.0	22.5	45.0	67.5	90.0
0	810	810	810	810	810
30	809	791	787	795	807
40	832	815	810	818	833
45	843	831	827	833	847
50	860	848	853	852	867
55	894	879	878	885	904
60	948	932	917	940	959
65	1033	1007	983	1023	1044
70	1159	1118	1077	1141	1166
75	1269	1236	1160	1260	1269
80	1324	1202	1121	1270	1320
85	233	395	368	359	314

COEFFICIENTS OF UTILIZATION (%)

RCR	80					70					50					0
	RW	70	50	30	10	70	50	30	10	50	30	10	0			
1	40	38	36	35	39	37	36	34	36	34	33	30	0			
2	36	33	30	27	35	32	29	27	31	28	26	24	0			
3	33	28	25	22	32	28	25	22	27	24	22	20	0			
4	30	25	21	18	29	24	21	18	23	20	18	17	0			
5	27	22	18	16	26	22	18	16	21	18	15	14	0			
6	25	20	16	14	24	19	16	13	19	16	13	12	0			
7	23	18	14	12	23	17	14	12	17	14	12	11	0			
8	22	16	13	10	21	16	13	10	15	12	10	9	0			
9	20	15	12	9	20	15	11	9	14	11	9	8	0			
10	19	14	11	8	18	13	10	8	13	10	8	8	0			

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	795	8.4	22.4
0-40	1323	14.0	37.3
0-60	2489	26.4	70.1
0-90	3551	37.6	100.0
0-180	3551	37.6	100.0

ENERGY DATA

Total Luminaire Efficiency	37.6%
Luminaire Efficacy Rating (LER)	N/A
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$N/A based on 3000 hrs. and \$0.08 per KWH

Test Date 10/24/07