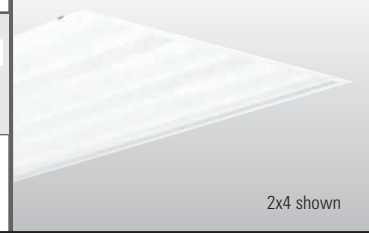


# MEDICAL/SURGICAL TROFFER – WIDE GRID

# MDS

T5 | T8

CATALOG #:	TYPE:
PROJECT:	NOTES:



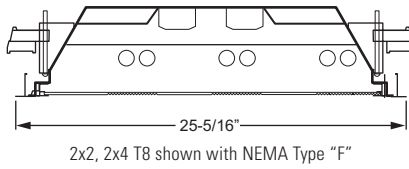
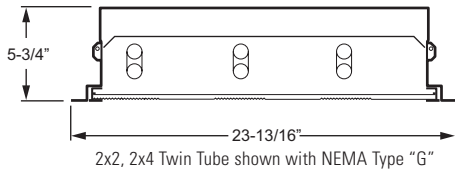
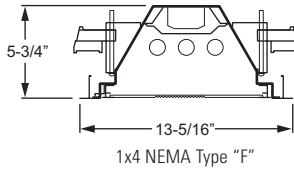
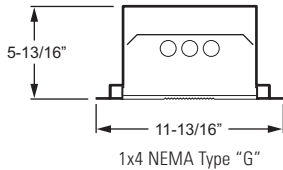
2x4 shown

EXAMPLE

**MDS G - S 2 4 - 6 32 - F KSH-34RF - OPTIONS - EB3/3 - UNV**

SERIES	CEILING TYPE	FIX. NOM. STYLE W. L.	TOTAL WATTAGE/ LAMPS TYPE	DOOR FRAME	SHIELDING	OPTIONS	BALLAST TYPE	VOLTAGE
MDS	G	S	2 4 - 6 32	F	KSH-34RF	OPTIONS	EB3/3	UNV

## CROSS SECTIONS



## FEATURES

- ▶ Grid fixture designed exclusively for hospitals and medical facilities utilizing 15/16", 1-1/2", and 2" face T-bars.
- ▶ Anti-microbial white finish standard.
- ▶ Endplate is designed to clear a 2" tall T-bar.
- ▶ Provides auxiliary illumination from the perimeter of the surgery or exam area.
- ▶ Reduces intense contrast between surgery and work area lighting.
- ▶ Supplies uniform ambient illumination for the remainder of the surgery room.
- ▶ Optional triple gasket to protect against contaminants.
- ▶ This fixture is proudly made in the USA.

## ORDERING INFORMATION

**SERIES**  
MDS Medical/Surgical Troffer – Wide Grid

**CEILING TYPE**  
G NEMA Type "G"  
F NEMA Type "F"

**FIXTURE STYLE**  
S Static

**NOMINAL WIDTH**  
1 1'  
2 2'

**NOMINAL LENGTH**  
2 2' (2" width only)  
4 4'

**TOTAL LAMPS**  
2 or 3 (1x4 only)  
3 or 6 (2x2, 2x4 only)

**LAMP WATTAGE/TYPE**

**1x4 LAMP OPTIONS**  
32 4', 32-watt T8

**2x2 LAMP OPTIONS**  
17 2', 17-watt T8  
40TTU 2', 40-watt long twin tube, over-under (3-lamp cross-section)

**2x4 LAMP OPTIONS**  
32 4', 32-watt T8

**DOOR FRAME**  
F White flat aluminum

**SHIELDING**  
ASYIRF125 Clear acrylic asymmetric lens with radio suppression grid (1x4 only)  
KSH-34RF One-piece clear acrylic directional lens, .150" thick with radio suppression grid (2x2, 2x4 only)

**OPTIONS**  
For generic EM ballast options (must specify voltage), see [Technical Info](#).  
For flexible whip and wiring options, see [Technical Info](#).  
TG Triple gasket (field installed)  
F338 6', 3/8" flex, 3-conductor, No. 18 AWG  
CP Chicago Plenum (CCEA)

**BALLAST TYPE**  
Additional ballast options available, see [Technical Info](#).  
EB2 2-lamp electronic ballast  
EB3 3-lamp electronic ballast  
EB3/3 (2) 3-lamp electronic ballasts

**VOLTAGE**  
120 120V  
277 277V  
UNV 120-277V  
347 347V



### PHOTOMETRY – 1x4 AMBIENT ONLY

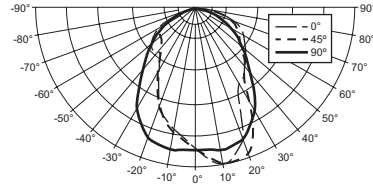
Catalog #: MDS-S14-232-FASYIRF125

### SPECIFICATIONS

**Housing** – 20-gauge die-formed C.R.S.  
**Door Frame** – .050" extruded aluminum, flat with mitered corners. Fully enclosed spring-loaded cam latches and T-type hinges. Door frame and lens are grounded to the fixture housing.  
**Shielding** – Clear acrylic asymmetric lens with radio suppression grid (1x4). One-piece clear acrylic directional lens with radio suppression grid (KSH@-34 RF), nominal .150" thick (2x2, 2x4).  
**Finish** – 92% minimum average reflective white anti-microbial powder coating bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.  
**Electrical** – Electronic ballast standard, instant start T8, rated Class P.  
**Mounting** – NEMA Type "G" for 15/16", 1-1/2", and 2" grid ceiling systems. NEMA Type "F" available.  
**Labels** – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations. City of Chicago Environmental Air approved when specified with CP option.

#### TEST REPORT INFORMATION

- ▶ Test Report #: 12644.0
- ▶ Date: 03/31/05
- ▶ Lamp Type: F32T8/835
- ▶ Lamp Quantity: 2



#### ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor			
	.80	.50	.30	.70	.50	.30	.50	.30	.10	
Room Cavity Ratio	0	.89	.89	.89	.87	.87	.87	.83	.83	.83
	1	.82	.79	.76	.80	.77	.74	.74	.72	.70
	2	.75	.69	.65	.73	.68	.64	.65	.62	.59
	3	.69	.62	.56	.67	.61	.56	.59	.54	.50
	4	.64	.55	.49	.62	.54	.49	.53	.48	.44
	5	.58	.49	.43	.57	.48	.43	.47	.42	.38
	6	.54	.45	.38	.53	.44	.38	.43	.37	.33
	7	.50	.40	.34	.49	.40	.34	.39	.33	.29
	8	.46	.36	.30	.45	.36	.30	.35	.30	.26
	9	.43	.33	.27	.42	.33	.27	.32	.26	.23
	10	.40	.30	.24	.39	.30	.24	.29	.24	.20

Effective Floor Cavity Reflectance = .20

#### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle					Zonal Lumens
	0°	45°	90°	135°	180°	
0°	1972.	1972.	1972.	1972.	1972.	188.2
5°	2123.	2090.	1974.	1853.	1823.	539.4
15°	2106.	2184.	1972.	1631.	1607.	719.5
25°	1381.	1880.	1786.	1269.	1228.	720.2
35°	1156.	1152.	1408.	893.	886.	709.6
45°	983.	934.	987.	680.	845.	616.8
55°	823.	738.	697.	625.	738.	503.0
65°	685.	610.	411.	465.	513.	312.6
75°	433.	413.	168.	230.	245.	86.2
85°	92.	140.	30.	58.	58.	0.
90°	0.	0.	0.	0.	0.	0.

#### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1447.	24.5	32.9
0 - 40	2167.	36.7	49.3
0 - 60	3494.	59.2	79.5
0 - 90	4396.	74.5	100.0
<b>Total Luminaire:</b>			
0 - 180	4396.	74.5	100.0

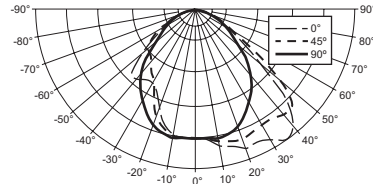
Total Luminaire Optical Efficiency: **74.5%**  
 IES Spacing Criteria: End = 1.2, Diagonal = 0.6, Across = 0.4

### PHOTOMETRY – 2x4

Catalog #: MDS-S24-632-FKSH-34RF

#### TEST REPORT INFORMATION

- ▶ Test Report #: 12645.0
- ▶ Date: 03/31/05
- ▶ Lamp Type: F32T8/835
- ▶ Lamp Quantity: 6



#### ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor			
	.80	.50	.30	.70	.50	.30	.50	.30	.10	
Room Cavity Ratio	0	.94	.94	.94	.92	.92	.92	.88	.88	.88
	1	.87	.84	.81	.85	.82	.80	.79	.77	.75
	2	.81	.75	.70	.79	.74	.69	.71	.67	.64
	3	.74	.67	.61	.73	.66	.61	.64	.59	.55
	4	.68	.60	.54	.67	.59	.53	.57	.52	.48
	5	.63	.53	.47	.61	.53	.46	.51	.45	.41
	6	.58	.48	.41	.56	.47	.41	.46	.40	.36
	7	.53	.43	.36	.52	.42	.36	.41	.36	.31
	8	.49	.39	.32	.48	.38	.32	.37	.31	.27
	9	.45	.34	.28	.44	.34	.28	.33	.27	.23
	10	.42	.31	.25	.41	.31	.25	.30	.24	.21

Effective Floor Cavity Reflectance = .20

#### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle					Zonal Lumens
	0°	45°	90°	135°	180°	
0°	5242.	5242.	5242.	5242.	5242.	499.6
5°	5292.	5261.	5215.	5204.	5200.	1478.4
15°	5720.	5491.	5162.	4948.	4856.	2181.5
25°	5888.	5422.	4661.	4035.	3733.	2714.0
35°	6377.	5353.	3905.	3106.	3473.	3040.5
45°	5135.	5483.	2896.	2617.	3702.	2078.0
55°	2178.	2800.	1704.	2227.	2155.	1216.9
65°	970.	1165.	1123.	1348.	1280.	607.8
75°	527.	496.	470.	661.	714.	166.4
85°	171.	156.	87.	168.	194.	0.
90°	0.	0.	0.	0.	0.	0.

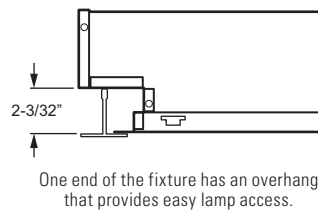
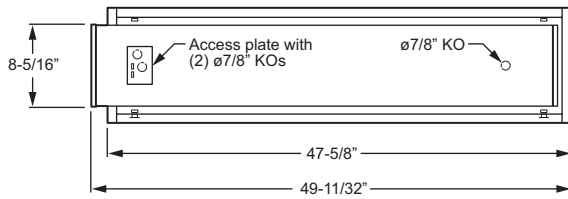
#### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	4159.	23.5	29.7
0 - 40	6873.	38.8	49.2
0 - 60	11992.	67.8	85.8
0 - 90	13983.	79.0	100.0
<b>Total Luminaire:</b>			
0 - 180	13983.	79.0	100.0

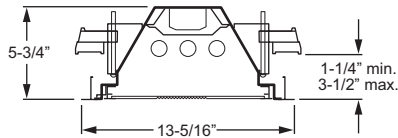
Total Luminaire Optical Efficiency: **79.0%**  
 IES Spacing Criteria: End = 1.2, Diagonal = 0.6, Across = 0.4

### FIXTURE DETAILS

#### 1x4 BACK VIEW

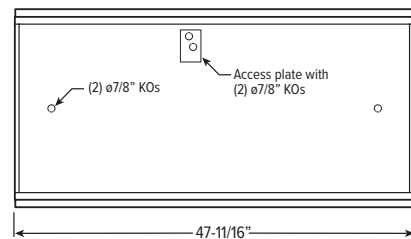


#### 1x4 NEMA TYPE "F" INSTALLATION

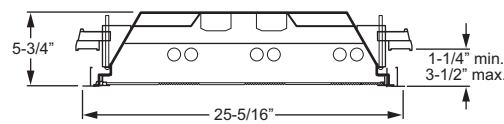


**MAXIMUM RECOMMENDED CEILING OPENING:** 12-3/8" X 48-3/8".  
For continuous row mounting, add 49-5/16" for each additional fixture to obtain ceiling opening. 1-5/16" between end plates.

#### 2x2 | 2x4 BACK VIEW

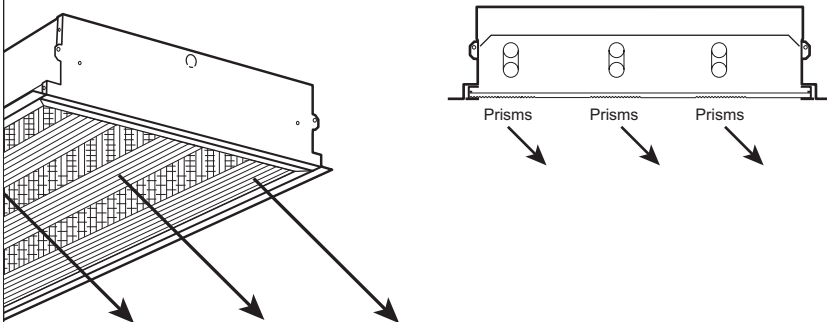


#### 2x2 | 2x4 NEMA TYPE "F" INSTALLATION

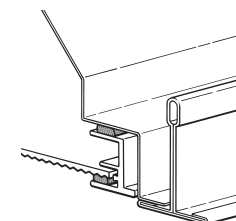


**MAXIMUM RECOMMENDED CEILING OPENING:**  
**2x4:** 24-3/8" x 48-3/8" **2x2:** 24-3/8" x 24-3/8"  
For continuous row mounting, add 49-5/16" for each additional fixture to obtain ceiling opening. 1-5/16" between end plates.

#### 2x2 | 2x4 LAMPS ARE TO BE DIRECTLY OVER PRISMS

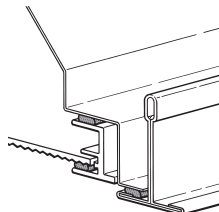


#### DOUBLE GASKETING (STANDARD)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens.

#### TRIPLE GASKETING (TG)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens. Gasketing between bottom perimeter of unit (adjacent to T-bar or hardpan ceiling) is provided by factory and field installed.