



CERTIFIED MIL461

Healthcare Surgical LED Grid / Flange Asymmetrical / Symmetrical 1 to 1.5 in. T Grid

HRA-M-LED

PRODUCT SPECIFICATION

The HRA-M series is designed for dust-free operation in surgical suites where maximum illumination is required in the operating zone.

Mounting

Suitable for installation in recessed 1"–1.5" T-Grid or hard ceiling applications. Hard ceiling (flange) type mounts via swing arm brackets that extend and clamp with a single screw action. Knock-outs for earthquake cable supports provided.

Optical System

Precisely engineered V-Shaped reflector provides *perfect asymmetrical/symmetrical distribution.*

Lens

Optic Plus lens completely hides diode image while providing excellent light transmission.

Housing

18 gauge cold rolled steel die-formed to shape with ends welded and ground smooth.

Door

One-piece 18 gauge cold rolled steel, gasketed and sealed overlapping door. Full length adjustable brackets secure the lens to the door. Aluminum and stainless steel available.

Finish

Antimicrobial white powder-coat applied after phosphate pretreatment for superior adhesion and corrosion resistance. Brushed stainless steel door available.

Hardware

Stainless steel fasteners.

Driver

Tested and Certified MIL461 driver.

Certifications

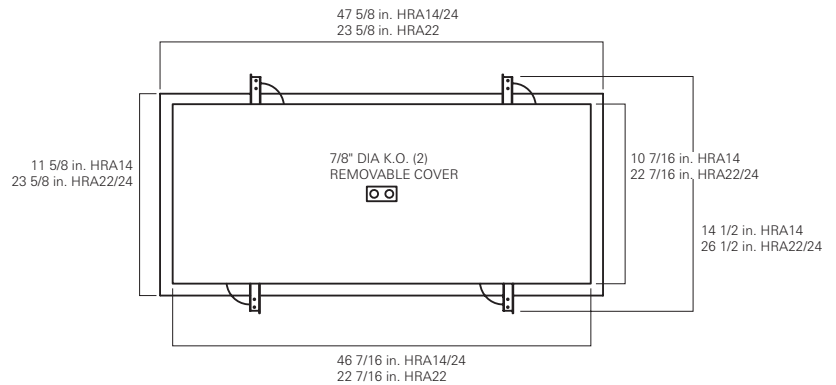
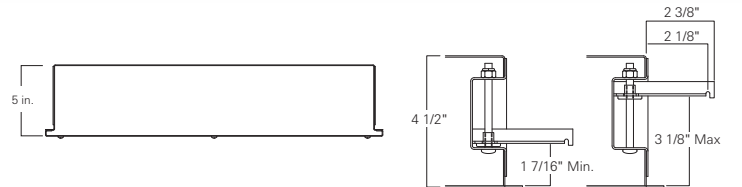
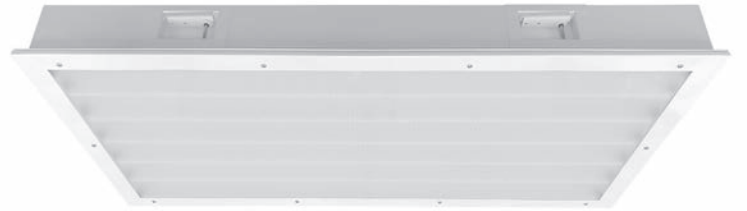
UL Listed wet location and IP65 rated. Suitable for use in ISO-3 cleanrooms (209E Class 1). Certified to MIL-STD-461F: CE101, CE102, CS101, CS106, CS114, CS116, RE101, RE102, RS101, RS103, MIL-STD-1399-300B: 5.3.1 through 5.3.9.

Job Name _____

Fixture Type _____

Catalog No. _____

Approval _____ Date _____



CERTIFIED MIL461



HRA-M - [] - [] / [] - [] [] - [] MIL - 122 / [] - [] eleven

one two three four five six seven eight nine ten eleven

one Luminaire Size

- 14 1 x 4 - two rows
- 22 2 x 2 - six rows
- 24 2 x 4 - six rows

two LED Source

Refer to the LED Source Table on Page 2 for available options.

three Color Temperature

- 40 4000K
- 50 5000K

four CRI

- 80 Min 80 CRI
- 90 Min 90 CRI

five Door Material

- A Aluminum
- C Cold rolled steel, std
- S Stainless steel

six Door Finish

- R Brushed stainless steel
- W White

seven Voltage

- 120 120 V, 60 Hz
- 277 277 V, 60 Hz

eight Driver

- MIL MIL461 Tested and Certified
- refer to HRA Series for Standard dimming applications

nine Internal Lens

- 122 Optic Plus diffusing acrylic lens, std

ten External Lens

- 00 No external lens
- 33 .125 in. clear polycarbonate lens

eleven Options

- CU Canadian UL Listing
- EM Emergency ballast
- FH Fuse and holder

Modifications are available to meet custom requirements.

LED Life
>100,000

LED Source (Box 2)	4000K 80 CRI		4000K 90 CRI		5000K 80 CRI		5000K 90 CRI		Input Watts
	Delivered Lumens	L/W	Delivered Lumens	L/W	Delivered Lumens	L/W	Delivered Lumens	L/W	
1' x 4' Fixture									
2W75	8647	125	7165	104	8892	129	7380	107	69
2W110	13032	127	10798	105	13401	130	11122	108	103
2' x 2' Fixture									
6W75	8927	139	7397	116	9180	143	7619	119	64
6W110	13228	138	10960	114	13602	142	11289	118	96
2' x 4' Fixture									
6W150	17855	139	14794	116	18360	143	15238	119	128
6W220	26455	138	21920	114	27204	142	22578	118	192

Photometric Data with 122 lens

33 lens multiplier	.88
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MIL461 LED Driver

The LC Doane MIL461 driver is tested and certified to MIL461-F and all RE and CE requirements

- The tests encompass Radiated Emissions, Radiated Susceptibility, Conducted Emissions and Conducted Susceptibility
- L.C Doane is the only Lighting Manufacturer to utilize a driver that does not produce radiated and conducted emissions

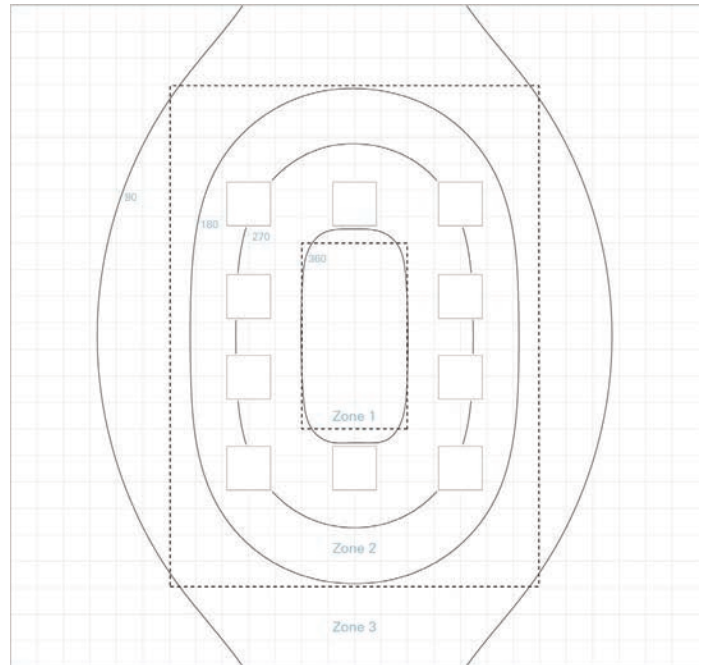
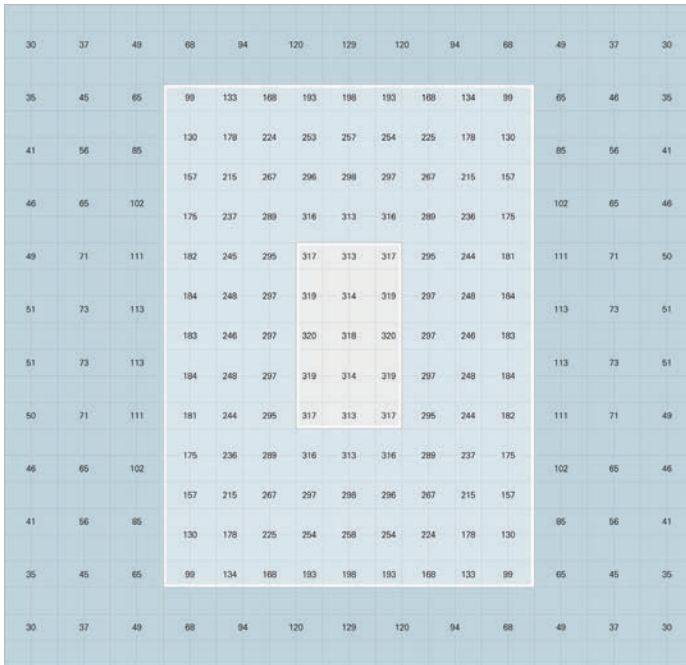
MIL461 driver:

- No RF Grid lens or RF Filtering required as the MIL461 is accomplished at the driver level
- This solution assures the end user that ALL MIL461 requirements are met
- Dimming option not available. Use multiple drivers to achieve light levels

MIL-461 Certifications

- CE101
- CE102
- CS101
- CS106
- CS114
- CS116
- RE101
- RE102
- RS101
- RS103
- MIL-STD-1399-300B: 5.3.1-5.3.9

Zone Values



luminaire	Zone 1		Zone 2		Zone 3	
	(10) HRA	average	371 fc	average	244 fc	average
max		379 fc	max	371 fc	max	133 fc
min		366 fc	min	112 fc	min	37 fc
average / min		1.01	average / min	2.18	average / min	2.14
max / min		1.03	max / min	3.31	max / min	3.59