



PRODUCT SPECIFICATION

The HRA 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

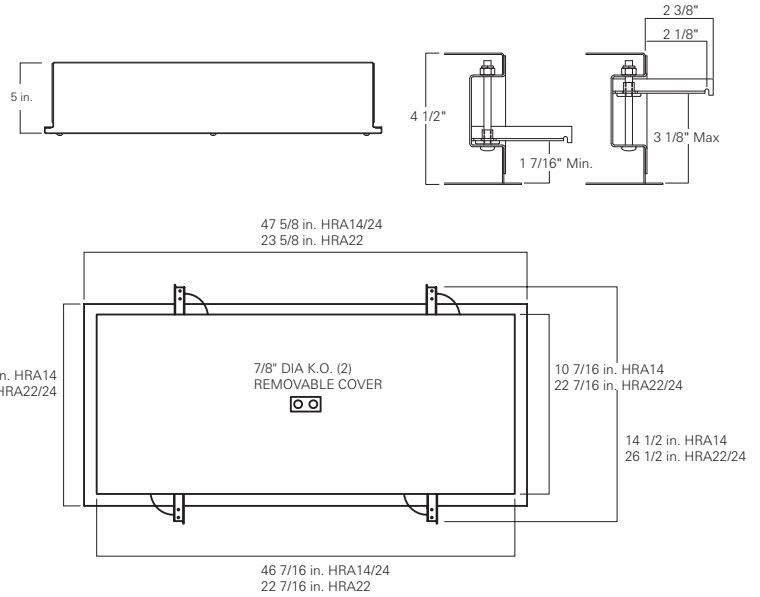
Stainless steel fasteners.

Driver

0-10Vdc dimming, Range 1%-100%
-40°C Min. starting temperature, >0.9 PF, <20% THD

Certifications

UL Listed wet location and IP65 rated.
Suitable for use in ISO-3 cleanrooms (209E Class 1).



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

- VAR Variable, 120-277 V, 50/60Hz

eight Driver

- DM 0-10VDC 1% Dimming, std
refer to HRAM Series for MIL461 applications

nine Internal Lens

- 122 Optic Plus diffusing acrylic lens, std
- 122R Optic Plus with RF grid
Must be used with RF filter

ten External Lens

- 00 None
- 33 .125 in. clear polycarbonate lens

eleven Options

- CU Canadian UL Listing
- EM Emergency ballast
- FH Fuse and holder
- RF Radio interference filter, one per circuit

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									
2W60	7536	126	6244	104	7751	129	6433	107	60
2W85	10309	126	8542	104	10604	129	8801	107	82
2W110	13215	121	10949	100	13592	125	11281	103	109
2' x 2' Fixture									
6W60	7717	148	6394	123	7937	153	6588	127	52
6W90	10370	140	8592	116	10666	144	8853	120	74
6W100	13000	141	10771	117	13371	145	11098	121	92
2' x 4' Fixture									
6W115	13833	149	11461	123	14228	153	11809	127	93
6W155	18093	145	14991	120	18610	149	15446	124	125
6W200	22850	143	18933	118	23503	147	19507	122	160
6W250	30095	139	24936	115	30955	143	25693	119	216
6W290	34813	135	28845	112	35807	139	29720	115	258
6W330	38900	133	32232	110	40012	137	33210	113	293

Specified Output Option

LC Doane programmable drivers allows us to deliver a specific lumen output. If none of the options in the chart above fit your application, let us know the desired lumen output and we will do the rest. See the example for a 2x4 on how this will be specified:

Example Model:

HRA24-**XX**¹SO-40/80-CW-VARDM-122/00-(**XX**²/LUMENS)

LUMENS = You provide the lumens.

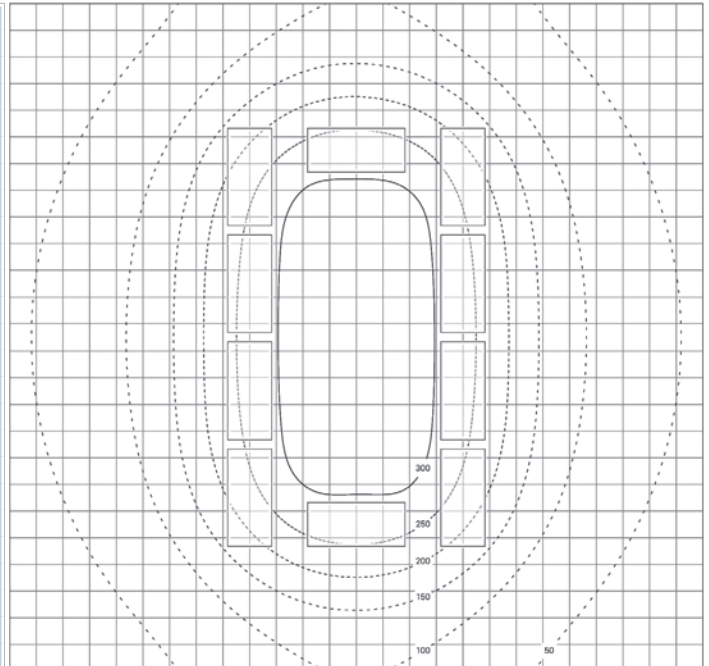
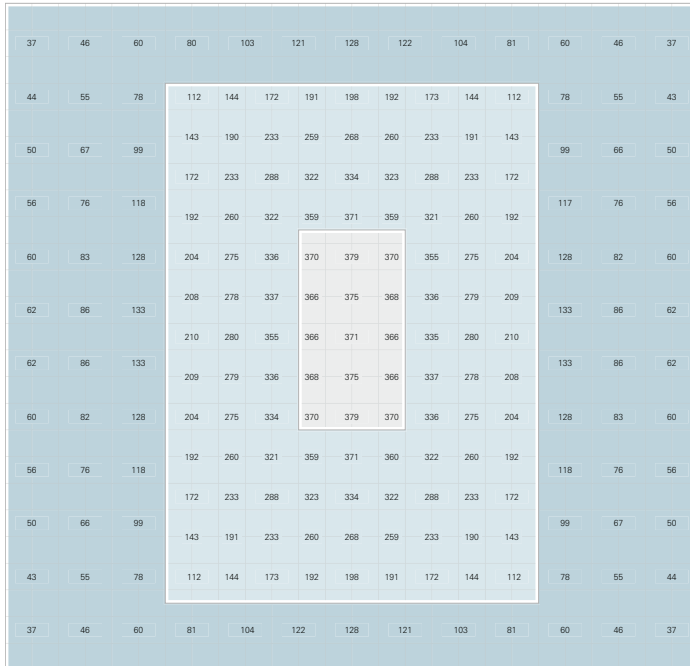
XX¹ = We will determine the number of rows.

XX² = We will provide the wattage information.

Photometric Data with 122 lens

33 lens multiplier	.88
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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

