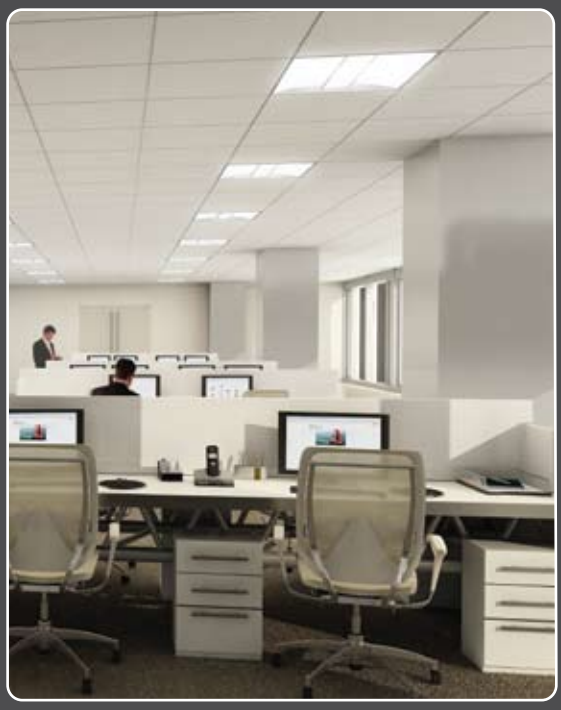
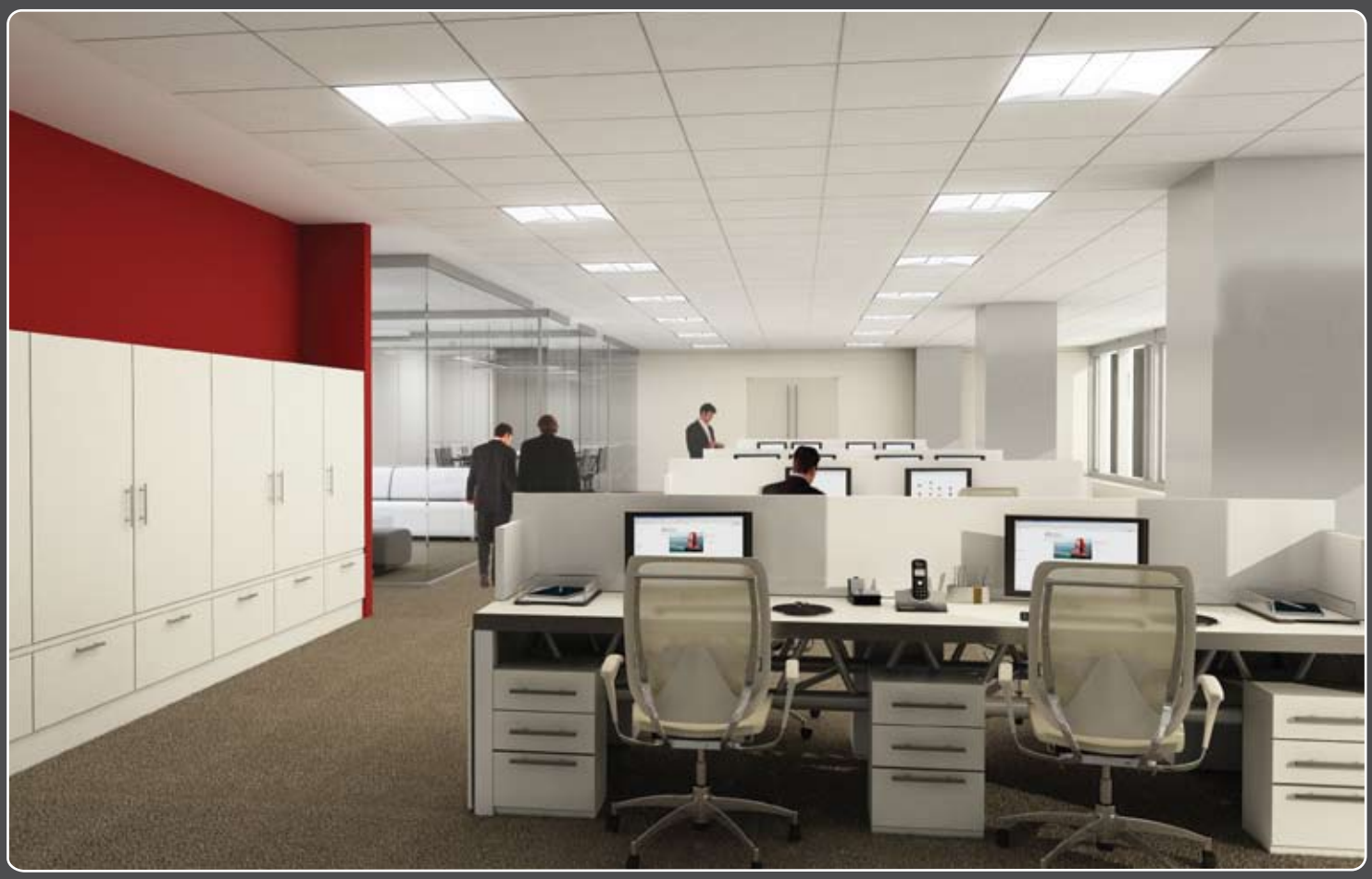
DIA with VL optic™



axis

DIA INTRODUCTION



DIA + VL optic™

Introducing the DIA, a low profile recessed luminaire that provides a uniform soft illumination to enhance office and public spaces both with its aesthetics and high efficiency.

Paired with our unique highly transparent VL Optic™ diffuser, the DIA achieves enhanced lighting performance (85% efficiency), while still providing a pleasant evenly lit environment. The VL Optic acts as a virtual louver by redirecting the light rays uniformly at high angles while eliminating unsightly glare, highlighting the architectural details of the surroundings without harsh shadows.

The DIA's slender curved optics complement modern interior designs. Other design features, such as a hinged center optic component and ballast covers, contribute to easy and time-saving maintenance.

To help meet today's and tomorrow's sustainable design goals, our luminaire's low profile, minimal waste packaging, and high lighting efficiencies are all desirable characteristics for the discerning designer.

FEATURES & HIGHLIGHTS

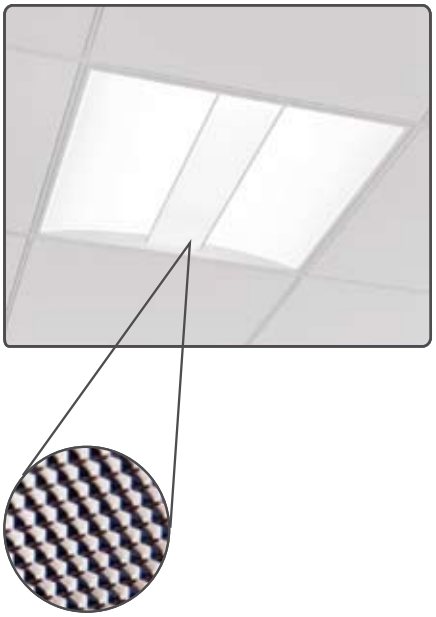
- Title 24 & ASHRAE compliant to fit in sustainable and energy-efficient modern projects
- Shallow (3 7/8" deep) and highly efficient (85%) design
- Low profile and curved optics design without breaking the ceiling plane
- Available in:
  - -1'x4', 2'x4', 2'x2' and 1'x1'
  - -Grid, Drywall and Surface mounting
  - -Air return options (Grid and Drywall)
  - -Integral controls (occupancy, daylight or daylight/occupancy sensors)
- Easy installation and maintenance

DIA

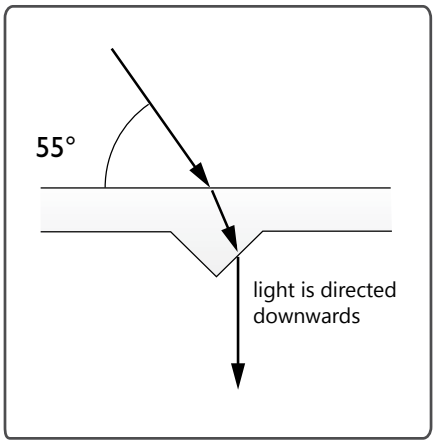
VL optic™

VL Optics provide maximum efficiency through a highly transparent optically engineered diffuser. Such attention to detail results in a working environment without harsh contrasts of glare and shadowing typical with generic recessed lighting. VL Optics also serve to mute lamp images and hot spots while providing a relaxed lighting environment.

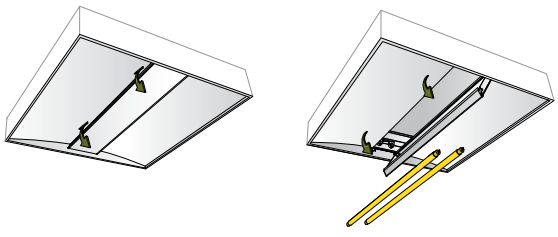
VL Optics are available in our complete family of recessed fluorescent products to meet or exceed the revised interior lighting power density allowances established by ASHRAE Standard 90.1-2007 and the Title 24 energy usage guidelines.



- Transparency is high, like crown glass.
- 92% transmission of light
- Index of refraction: 1.49

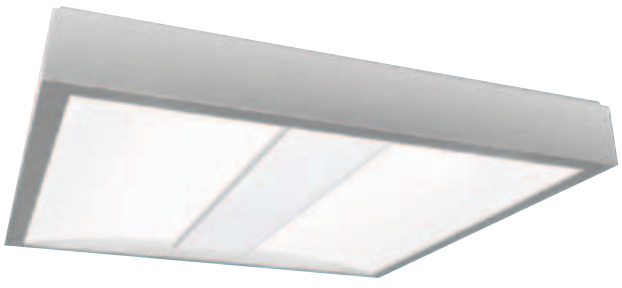


EASY MAINTENANCE



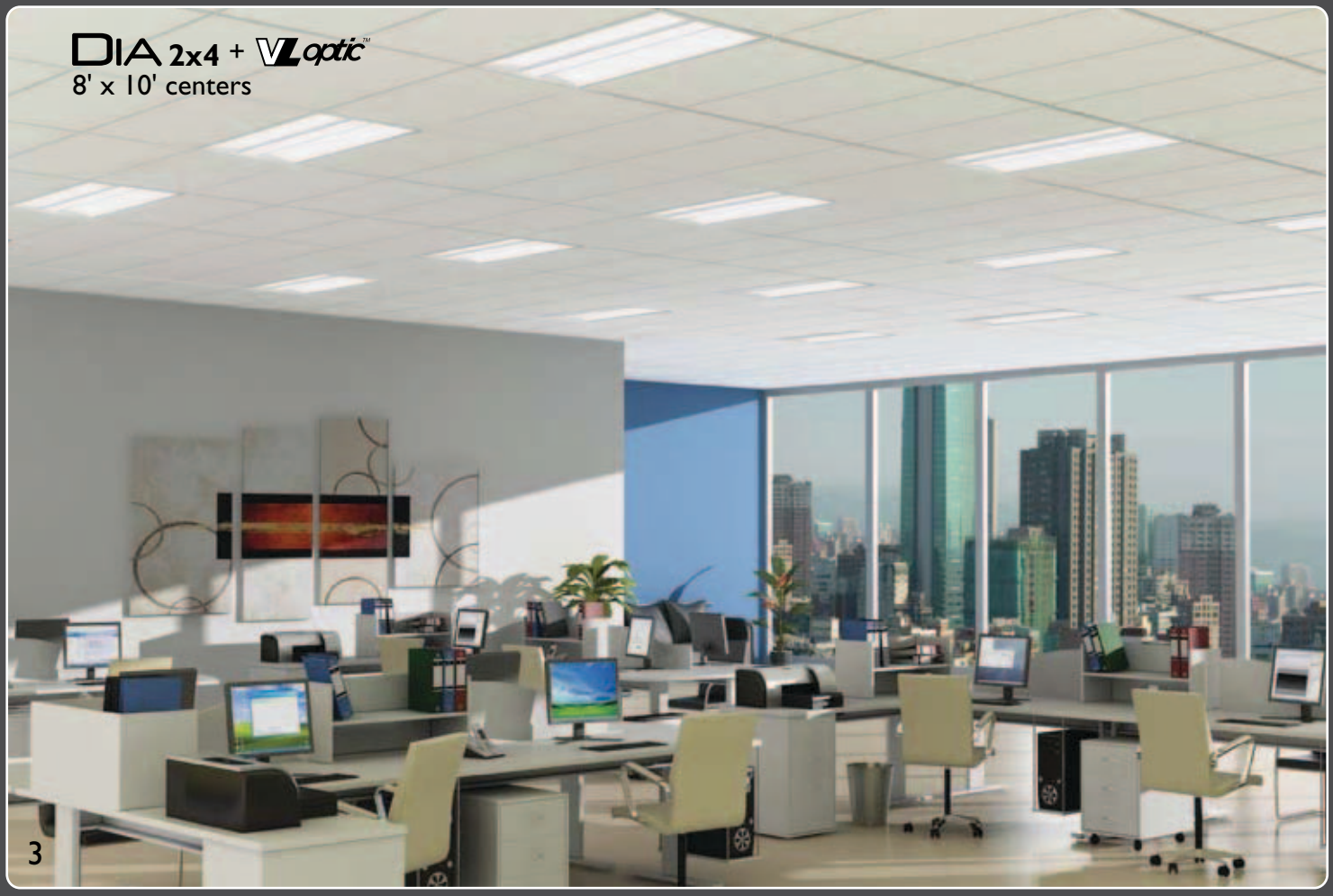
The hinged center optic component provides direct access to the lamp chamber while remaining captive to the fixture. With no exposed fasteners or hardware, changing lamps begins by simply opening the door.

FLEXIBILITY OF MOUNTING



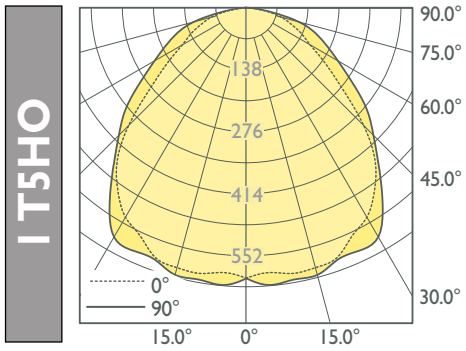
Flexibility is further enhanced by many mounting options. Dia can be adapted to all T-bar ceiling types, in drywall, and surface mounted. The surface mount kit provides a beautiful aesthetic for DIA in conditions where recessed fixtures are not applicable.


DIA 2x2 + VLoptic™
8' x 8' centers


DIA 2x4 + VLoptic™
8' x 10' centers

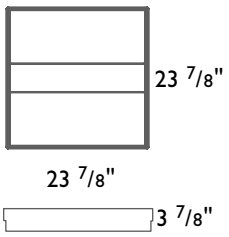
DIA 2x2 + VLoptic™

PERFORMANCE CURVE

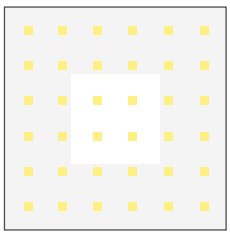


Test Lamp: 1xF24T5HO
Efficiency: 82.7%
Product Code : DIA22-T5HO-1

DIMENSIONS



SAMPLE LAYOUT: 8' x 8' CENTERS



1 F40TT
38.5 fc
0.56 w/sq.ft
L.L. 0.88 - Max/Min 1.10/1

1 T5HO
26.1 fc
0.39 w/sq.ft
L.L. 0.91 - Max/Min 1.10/1

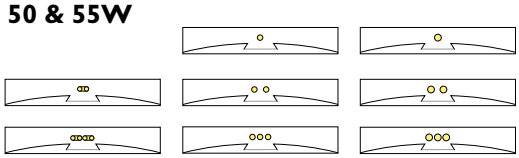
50'x50'x9' room. 80/50/20 reflectance
20'x20' calc grid. 2.5' work plane

LAMPING OPTIONS

1-2 FTT 25, 40, 50 & 55W

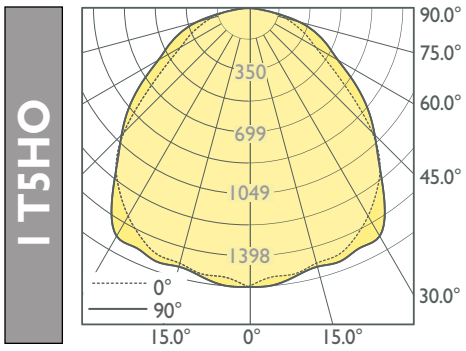
1-2-3 T5,T5HO

1-2-3 T8



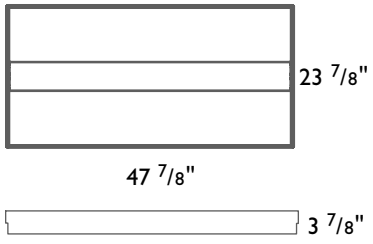
DIA 2x4 + VLoptic™

PERFORMANCE CURVE

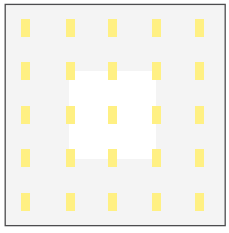


Test Lamp: 1xF54T5HO
Efficiency: 84.8%
Product Code : DIA24-T5HO-1

DIMENSIONS



SAMPLE LAYOUT: 10' x 10' CENTERS



2 T8
38.1 fc
0.56 w/sq.ft
L.L. 0.74 - Max/Min 1.50/1

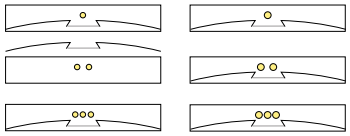
1 T5HO
40.6 fc
0.62 w/sq.ft
L.L. 0.86 - Max/Min 1.60/1

50'x50'x9' room. 80/50/20 reflectance
20'x20' calc grid. 2.5' work plane

LAMPING OPTIONS

1-2-3 T5,T5HO

1-2-3 T8

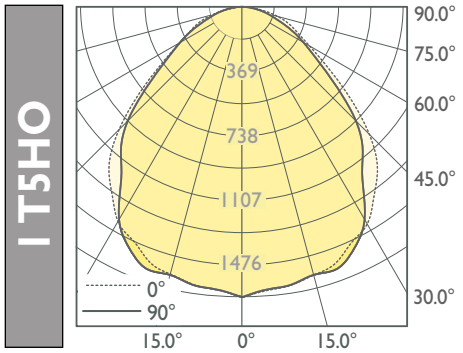



DIA 1x4 + VLoptic™
continuous end to end mounting


DIA 1x1 + VLoptic™
3' x 4' centers
14-36

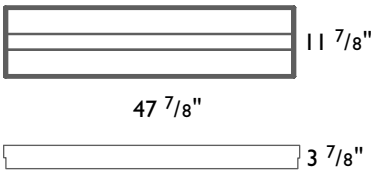
DIA 1x4 + VLoptic™

PERFORMANCE CURVE

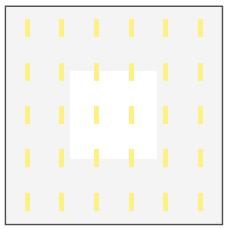


Test Lamp: 1xF54T5HO
Efficiency: 79.1%
Product Code : DIA14-T5HO-1

DIMENSIONS



SAMPLE LAYOUT: 8' x 10' CENTERS



1 T5: 28.8 fc, 0.33 w/sq.ft
L.L. 0. 88 - Max/Min 1.30/1

1 T5HO: 47.5 fc, 0.74 w/sq.ft
L.L. 0.86 - Max/Min 1.40/1

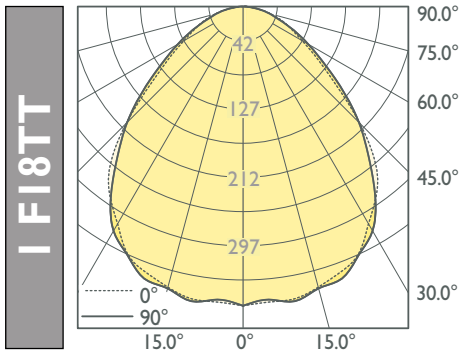
50'x50'x9' room. 80/50/20 reflectance
20'x20' calc grid. 2.5' work plane

LAMPING OPTIONS

1-2 T5,T5HO	1-2 T8

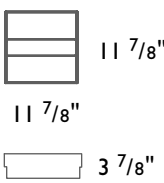
DIA 1x1 + VLoptic™

PERFORMANCE CURVE

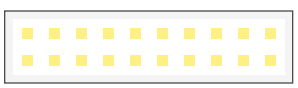


Test Lamps: 1xF18BX
Efficiency: 71.7%
Product Code : DIA11-F18BX-1

DIMENSIONS



SAMPLE LAYOUT: 3' x 4' CENTERS



1 F18TT: 20.0 fc, 1.04 w/sq.ft
L.L. 0.85 - Max/Min 1.8/1

10' x 40'x 12' elevator bay. 80/50/20 reflectance
35'x6' calc. grid. floor plane

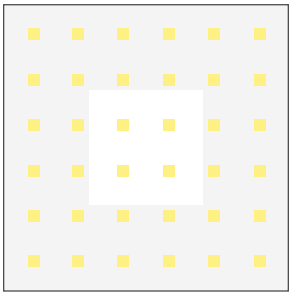
LAMPING OPTIONS

1-2 FTT 18W

DIA 2x2 + VLoptic™

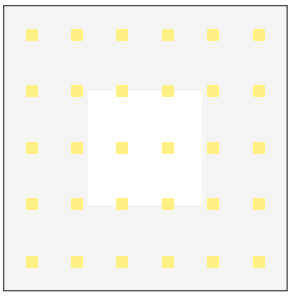
50' x 50'x 9' room

80/50/20 reflectance



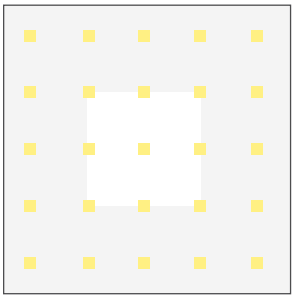
8' BY 8' CENTERS

1 F40TT	38.5 fc 0.56 w/sq.ft L.L. 0.88 - Max/Min 1.10/1	1 F50TT	48.9 fc 0.78 w/sq.ft L.L. 0.88 - Max/Min 1.10/1	1 F55TT	57.1 fc 0.73 w/sq.ft L.L. 0.85 - Max/Min 1.10/1
2 T5	35.8 fc 0.49 w/sq.ft L.L. 0.94 - Max/Min 1.10/1	1 T5HO	26.1 fc 0.39 w/sq.ft L.L. 0.91 - Max/Min 1.10/1	2 T8	29.5 fc 0.63 w/sq.ft L.L. 0.80 - Max/Min 1.10/1



8' BY 10' CENTERS

1 F55TT	46.6 fc 0.61 w/sq.ft L.L. 0.85 - Max/Min 1.30/1	1 F50TT	39.9 fc 0.65 w/sq.ft L.L. 0.88 - Max/Min 1.30/1	1 F40TT	31.4 fc 0.47 w/sq.ft L.L. 0.88 - Max/Min 1.30/1
2 T5	29.2 fc 0.41 w/sq.ft L.L. 0.94 - Max/Min 1.20/1	2 T5HO	40.9 fc 0.62 w/sq.ft L.L. 0.89 - Max/Min 1.20/1	2 T8	24.0 fc 0.53 w/sq.ft L.L. 0.80 - Max/Min 1.20/1



10' BY 10' CENTERS

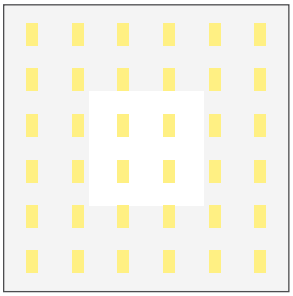
1 F55TT	37.9 fc 0.51 w/sq.ft L.L. 0.85 - Max/Min 1.40/1	1 F50TT	32.5 fc 0.54 w/sq.ft L.L. 0.88 - Max/Min 1.50/1	2 T5TT	33.3 fc 0.52 w/sq.ft L.L. 0.89 - Max/Min 1.40/1

20'x20' calculation grid
2.5' work plane

DIA 2x4 + VLoptic™

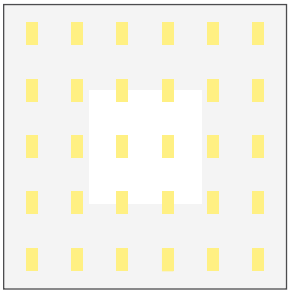
50' x 50'x 9' room

80/50/20 reflectance



8' BY 8' CENTERS

1 T5	36.0 fc 0.48 w/sq.ft L.L. 0.88 - Max/Min 1.20/1	1 T8	31.3 fc 0.40 w/sq.ft L.L. 0.74 - Max/Min 1.10/1	1 T5HO	64.2 fc 0.89 w/sq.ft L.L. 0.86 - Max/Min 1.20/1
2 T5	73.3 fc 0.91 w/sq.ft L.L. 0.87 - Max/Min 1.10/1	2 T8	57.0 fc 0.80 w/sq.ft L.L. 0.74 - Max/Min 1.20/1		



8' BY 10' CENTERS

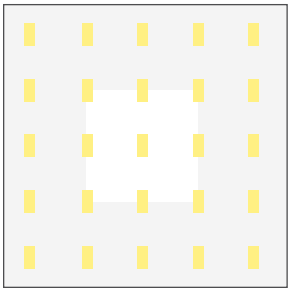
1 T5	29.6 fc 0.40 w/sq.ft L.L. 0.88 - Max/Min 1.40/1	1 T8	25.5 fc 0.34 w/sq.ft L.L. 0.74 - Max/Min 1.20/1	1 T5HO	49.8 fc 0.74 w/sq.ft L.L. 0.86 - Max/Min 1.40/1
2 T5	59.7 fc 0.76 w/sq.ft L.L. 0.87 - Max/Min 1.40/1	2 T8	46.7 fc 0.67 w/sq.ft L.L. 0.74 - Max/Min 1.40/1	3 T8	69.8 fc 0.97 w/sq.ft L.L. 0.74 - Max/Min 1.20/1

For more detailed information on DIA including :
IES Files, lighting applications, and specification sheets,
please visit **www.axislighting.com** .

20'x20' calculation grid
2.5' work plane

DIA 2x4 + VLoptic™ 50' x 50'x 9' room

80/50/20 reflectance



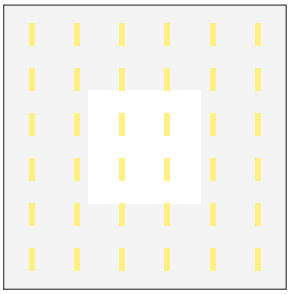
10' BY 10' CENTERS

1 T5	24.1 fc 0.33 w/sq.ft L.L. 0.88 - Max/Min 1.60/1	2 T8	38.1 fc 0.56 w/sq.ft L.L. 0.74 - Max/Min 1.50/1
1 T5HO	40.6 fc 0.62 w/sq.ft L.L. 0.86 - Max/Min 1.60/1		
3 T5	71.1 fc 0.97 w/sq.ft L.L. 0.88 - Max/Min 1.30/1	3 T8	56.8 fc 0.81 w/sq.ft L.L. 0.74 - Max/Min 1.30/1

20'x20' calculation grid
2.5' work plane

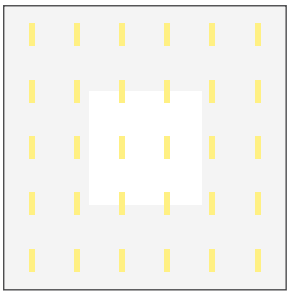
DIA 1x4 + VLoptic™ 50' x 50'x 9' room

80/50/20 reflectance



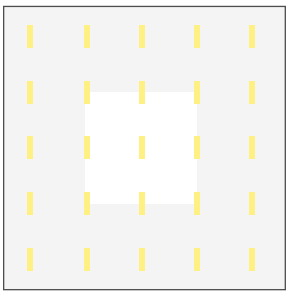
8' BY 8' CENTERS

1 T5	35.3 fc 0.48 w/sq.ft L.L. 0. 88 - Max/Min 1.10/1	1 T8	29.1 fc 0.40 w/sq.ft L.L. 0..74 - Max/Min 1.10/1
1 T5HO	57.8 fc 0.89 w/sq.ft L.L. 0.86 - Max/Min 1.20/1		



8' BY 10' CENTERS

1 T5	28.8 fc 0.33 w/sq.ft L.L. 0. 88 - Max/Min 1.30/1	1 T8	23.8 fc 0.34 w/sq.ft L.L. 0..74 - Max/Min 1.30/1
1 T5HO	47.5 fc 0.74 w/sq.ft L.L. 0.86 - Max/Min 1.40/1		
2 T5	53.9 fc 0.76 w/sq.ft L.L. 0.87 - Max/Min 1.40/1	2 T8	45.0 fc 0.67 w/sq.ft L.L. 0..74 - Max/Min 1.30/1



10' BY 10' CENTERS

2 T5	44.0 fc 0.64 w/sq.ft L.L. 0.87 - Max/Min 1.60/1	2 T8	36.7 fc 0.40 w/sq.ft L.L. 0.74 - Max/Min 1.50/1
1 T5HO	38.8 fc 0.62 w/sq.ft L.L. 0.86 - Max/Min 1.60/1		

20'x20' calculation grid
2.5' work plane

DIA 1x1 + VLoptic™ 10' x 40'x 12' elevator bay

80/50/20 reflectance

35'x6' calculation grid
floor plane

3' BY 4' CENTERS

1 F18TT	20.0 fc 1.04 w/sq.ft L.L. 0.85 - Max/Min 1.8/1		

8' x 26'x 9' hallway

80/50/20 reflectance

23'x4' calculation grid
floor plane

4' CENTERS

1 F18TT	13.9 fc 0.66 w/sq.ft L.L. 0.89 - Max/Min 1.6/1		

For more detailed information on DIA including :
IES Files, lighting applications, and specification sheets,
please visit **www.axislighting.com** .

DIA SPECIFICATIONS

SPECIFICATION

CONSTRUCTION

Housing	Die formed cold rolled sheet steel (20 gauge)
Central Lens Housing	Extruded aluminum (0.060" nominal)
Reflectors	Die formed cold rolled sheet steel (22 gauge)
Interior Brackets	Die formed cold rolled sheet steel (20 gauge)
Drywall Flange Kit	Extruded aluminum (0.060" nominal)
Surface Mount Kit	Extruded aluminum (0.070" nominal)

OPTICS

VLoptic™ - 92 percent transmission that cuts off glare above 55 degrees. The result is a well illuminated space with no glare or intrusive shadows.

Central Lens: VLoptic™	PMMA, precision formed microconical structure (0.12" nominal)
Central Lens: Satin	PMMA, satin blend (0.12" nominal)
Side Lenses	PMMA, satin blend (0.08" nominal)

ELECTRICAL

Ballast Options	Electronic, Rapid Start, Dimming
Emergency	Emergency battery pack or Circuit
Voltage	120, 277, 347, UNV

APPROVALS Certified to UL and CUL standards. Chicago plenum certified (CCEA). Meets NYC requirements.

FINISH **Highly reflective, matte powder coat white paint.**

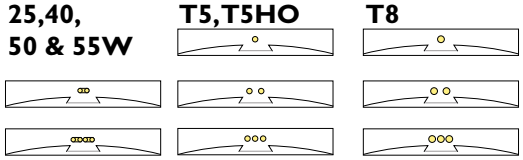
The finish is highly reflective for high efficiency yet has a matte texture to diffuse glare and lamp image on the surfaces within the optical chamber. Custom finishes are also available (exterior only).

WEIGHT	**DIA 2x2**	**DIA 2x4**	**DIA 1x4**	**DIA 1x1**
Standard	19 lbs / 8.6 kg	34 lbs / 15.4 kg	20 lbs / 9.0 kg	8 lbs / 3.6 kg
Drywall w. kit	21 lbs / 9.6 kg	38 lbs / 17.4 kg	22 lbs / 10.0 kg	9 lbs / 4.1 kg
Surface mount	24 lbs / 10.9 kg	42 lbs / 18.9 kg	26 lbs / 11.8 kg	11 lbs / 5.0 kg

LAMPING

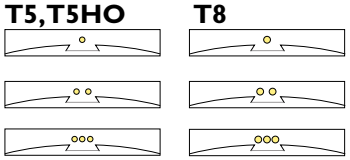
DIA 2x2:

1-2 FTT 25,40, 50 & 55W | **1-2-3 T5,T5HO** | **1-2-3 T8**



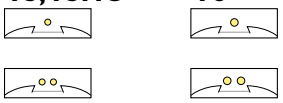
DIA 2x4

1-2-3 T5,T5HO | **1-2-3 T8**



DIA 1x4

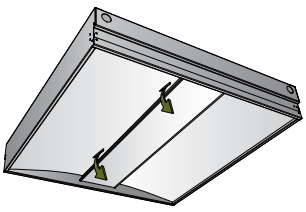
1-2 T5,T5HO | **1-2 T8**



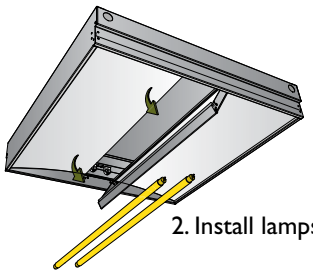
DIA 1x1

1 -2 FTT 18W

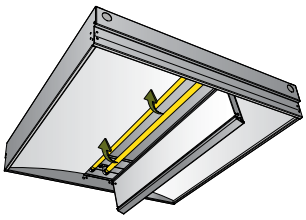
LAMP INSTALLATION



1. Pull down on center optic to open compartment.

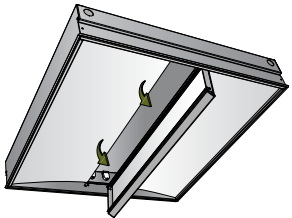


2. Install lamps.

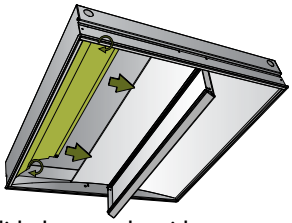


3. Close center optic by snapping it back into place.

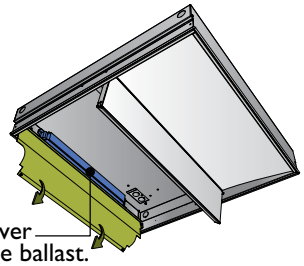
BALLAST REPLACEMENT



1. Open center optic and insure that all lamps are removed.



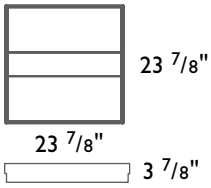
2. Slide lens to the side and unscrew ballast cover.



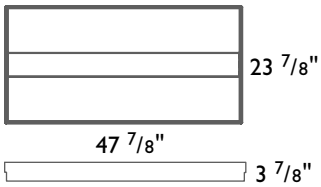
3. Swing ballast cover open and replace ballast.

DIMENSIONS

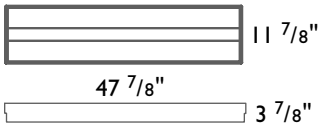
DIA 2x2:



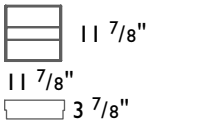
DIA 2x4:



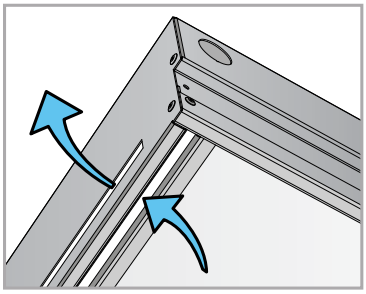
DIA 1x4:



DIA 1x1:

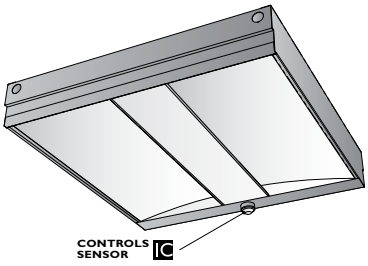


AIR RETURN



Not available for DIA11.

IC CONTROLS



DIA fixtures allow for the installation of integrated controls, saving on operating costs and reducing energy consumption by up to 20%.

Occupancy sensors (OS)
When a room is vacated, occupancy sensors ensure lights will be turned off after a programmed delay while ensuring that light stays on while the room is occupied.

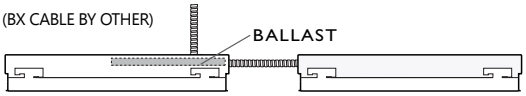
Daylight sensors (DS)
With daylight sensors, maximum lamp output is reduced according to the available amount of natural light.

Occupancy and Daylight sensors in one (DOS)
An integration of both Occupancy and Daylight sensors.

Not available for DIA11.

MASTER / SATELLITE CONFIGURATION

Master / Satellite configuration allows the satellite fixture to share a ballast and power supply with the master fixture.



Not available for DIA11.

END MOUNT POWER FEED

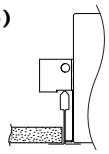
Knockouts for BX cable connection are provided both on the top and on the ends of the fixture. This allows for an end mount power feed solution if it is required.

Not available for DIA11.

MOUNTING OPTIONS

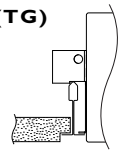
T-BAR STYLE MOUNTING

(TB)



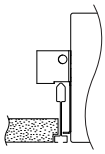
9/16" OR 15/16" T-BAR

(TG)



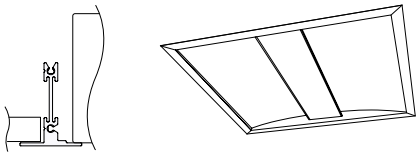
TEGULAR

(ST)

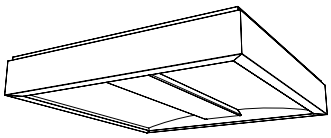


SCREW SLOT T-BAR

DRYWALL WITH FLANGE KIT (DF)



SURFACE MOUNT WITH KIT (SM)



DIA ORDERING CODE

**PLEASE CONFIRM VOLT

**PLEASE CONFIRM CIRC

product id	center optic	lamp	config	finish	voltage	ballast	circuit	mounting	other	IC controls	custom
DIA 14	VL	T8	1	W	XXX	E	XXX	ST			

product id
- **DIA22** 2'x2'
- **DIA24** 2'x4'
- **DIA14** 1'x4'
- **DIA11** 1'x1'

lamp
- **T5**
- **T5HO**
- **T8**
- * **F18TT**
- * **F25TT**
- * **F40TT**
- * **F50TT**
- * **F55TT**

finish
- **W** white
- **C** custom (description)

ballast
- **E** electronic
- **ERS** rapid start
- **D** dimming (specify detail)
- **T** step dimming
- **M+** master
- **S+** satellite

mounting
- **TB** T-bar
- **TG** tegular
- **ST** screw slot T-bar
- **DF** drywall flanged
- **SM** surface mount

IC controls
- **DOS** daylight / occ. sensor
- **OS** occ. sensor
- **DS** daylight sensor

center optic
- **VL** VL optic
- **S** satin

config
- **1** one lamp
- * **2** two lamps
- * 3 three lamps

voltage
- **UNV**
- **120**
- **277**
- **347**

circuit
- **1** one circuit
- 2 two circuits
- +E em. circuit

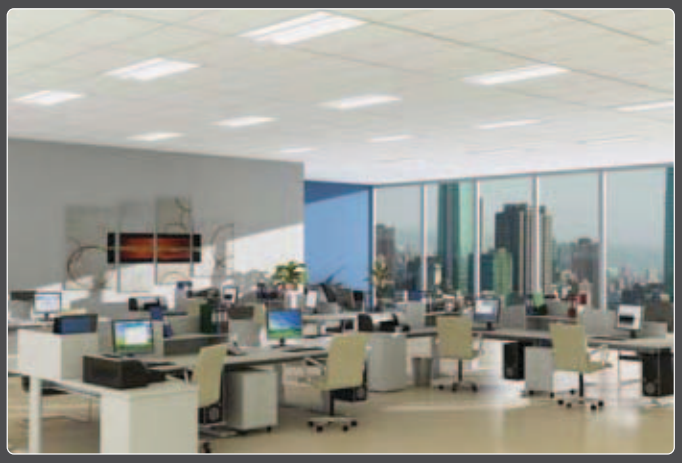
other
- **B#** batt. pack (specify)
- **F** fuse (one per ballast)
- **CP** Chicago plenum
- **AR** air return
- **FW6** flex whip 6'
- **FW12** flex whip 12'

custom
- **C** custom (description)

* Please refer to lamping diagrams on p.9 as these options do not apply to all configurations.

For more detailed information on DIA including : IES Files, lighting applications, and specification sheets, please visit **www.axislighting.com** .

CBRE 1500 Broadway 16th Fl
Type: D
DIA14-VL-T8-1-W-X-E-X-ST



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www.axislighting.com

designed for disassembly

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