

VDT control with balanced illumination for visual comfort.

VRA1G16LM232
VISION SMART



1' X 4' RECESSED FLUORESCENT
3" DEEP, 16 CELL (2 X 8) PARABOLIC LOUVER
STATIC OR AIR SUPPLY/RETURN
2 LAMP T8 OR T5
IES RP-1 FOR NORMAL VDT USE (PREFERRED)

Vision Smart Parabolics meet the Preferred and Basic Criteria of IES RP-1 and RP-24. This luminaire delivers low to medium light levels with the best performance in terms of efficiency, wide spacing and excellent glare control.

Project: _____
Location: _____
Catalog No: _____
Fixture Type: _____
Mfg: _____ Lamps: _____ Qty: _____
Notes: _____

Ordering Guide

Explanation of Catalog Number Example: **VRA1G16LM232120SO**

Family	Body Style	Fixture Width	Ceiling Type	Number of Cells	Louver Finish*	Reflector	Lamp Quantity	Lamp Length	Voltage	Ballast Type		Options
VR		1		16	L	M	2					
3" Deep Pre-Anodized Aluminum Louver for Normal VDT Use	A = Air Handling S = Static	1 = 1'	G = Grid (Lay-in T-Bar) T = Slot Grid or Two-Directional Concealed T (See Options)	16 = 2 Rows of 8 Cells	L = Low Iridescence Semi-Specular (Standard)	M = Inside Semi-Specular Reflector	2 = 2 Lamps	28 = T5 32 = T8 54 = T5HO (Nominal 48")	UNV = 120/277V 120 = 120V 277 = 277V 347 = 347V	2 Lamp Elec. T5/T5HO Program Start 2 Lamp Elec. T5 Program Start Step-Dim (28W Only) 2 Lamp Elec. T5 Instant Start (28W Only, 0.93 ballast factor) 120V or 277V Only 2 Lamp Elec. T5/T5HO LOL Dimming 2 Lamp Elec. T8 Instant Start 2 Lamp Elec. T8 Program Start 2 Lamp Elec. T8 Program Step-Dim 2 Lamp Elec. T8 Dimming	<10THD PG VY WA PF HI P2 V2 PS	Add Appropriate Suffix to Catalog Number

VRA1G16LM232

VISION SMART

Features

- Meets IES RP-1 luminance criteria, for lighting VDT areas with normal use.
- Efficiency 50.8% (T8).
- 1.1 spacing mounting ratio.
- Semi-specular low iridescence pre-anodized louver.
- Vertical grain on louver eliminates reflected lamp images on cross baffle.
- Louver frame with positive light stop.
- Spring loaded latches (self centering).
- Reversible louver hinging.
- Louver has protective dust guard.
- Only 5 1/4" deep body.
- Black housing exterior for cooler ballast operating temperature.
- Turned-in edges for safe handling.
- Built in earthquake clip.
- UL-Listed twin knockout access plate.
- Air closure strips (optional).

Specifications

Air Handling: (VRA only) Side air passages for air supply or air return. Optional side closure strips. Air return is also provided through the lamp compartment through fixture body ends.

Materials: Chassis parts are die-formed embossed cold rolled steel. Housing is embossed for rigidity with all edges turned-in for safe handling.

Louver: Post-anodized aluminum.

Finish: Louver—semi-specular low iridescence pre-anodized reflector sheet. Cavity—white baked polyester, minimum reflectance 86%. Phosphate undercoating. Chasis exterior—black baked polyester enamel.

Electrical: Thermally protected class "P" ballast C.B.M. approved, non PCB. If K.O. is within 3" of ballast, use wire suitable for at least 90°.

Labels: Listed by I.B.E.W./UL and C-UL.

This product may have a mercury containing lamp. Manage in accord with Disposal Laws. See: www.lamprecycle.org

Options/Accessories

Access Plate: Top wiring access plate is shipped with fixture as standard.

Electrical Wiring Options: Consult your Philips Lighting representative.

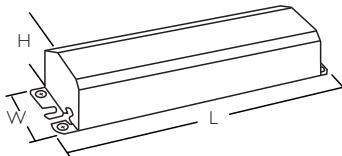
Fusing: Internal fast-blow fusing. Suffix: **A**.

Radio Interference Filter: To order one RIF per fixture: Suffix: **R**.

Air Closure Strips: (Factory installed). Suffix: **ACS4**

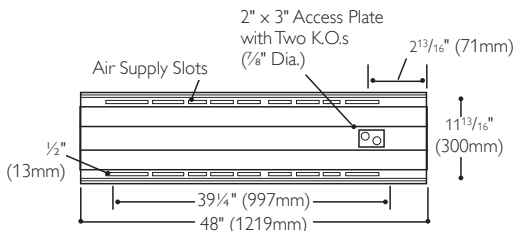
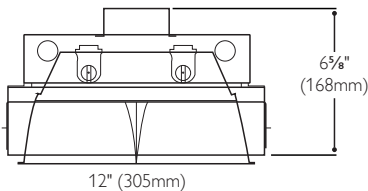
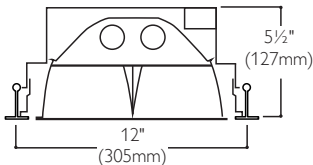
Drywall Kit: Order catalog number: **FK91X4**.

Dimensions

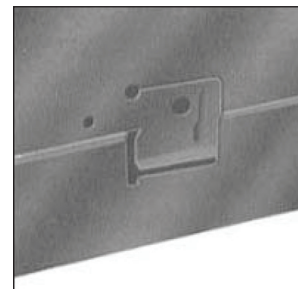
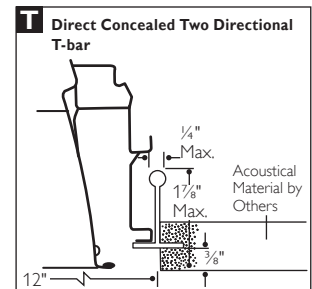
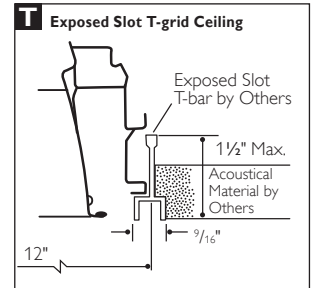
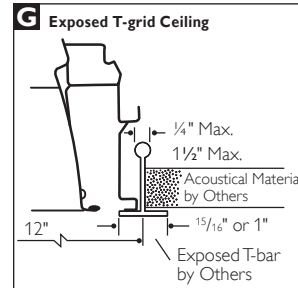


Length (L)	Width (W)	Height (H)
9 1/2"	2 3/8"	1 1/2"
241mm	50mm	38mm

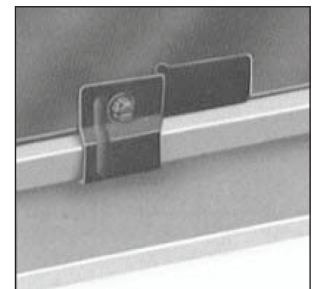
Note: Depth of fixture varies. Maximum depth of fixture will be 6 3/8" if a ballast can size of Fig. A is utilized. Please consult a Philips Lighting representative to verify fixture depth should plenum restrictions be a factor.



Mounting Methods



Earthquake clip before installation



Earthquake clip installed

VRA1G16LM232

VISION SMART

Performance

Model No. VRA1G16LM232120SO

LER = FP-44.0 IW-38.0 BF-0.92
Comparative yearly lighting energy cost per
1000 lumens = \$5.45

Report Number: LSC B436

Catalog Number: VRA1G16LM232120SO

Lamp: F17T8 FF32T8/TL841

Luminaire: VRA 1' x 4' recessed air
handling and 16 cell low iridescence
semi-specular louver

Ballast: REL-2P32-SC
Report is based on 2950 Lumens per lamp

Efficiency: 50.8%

CIE Type: Direct-Indirect

Plane: 0-Deg 90-Deg

Spacing Criteria: 1.2 1.8

Shielding Angles: 90 90

Plane: 0-Deg 90-Deg

Luminous Length: 46.200 9.480

Candela Distribution

Angle	0.0	45.0	90.0	FLUX
0	1502	1502	1502	
5	1500	1475	1450	142
15	1430	1382	1349	392
25	1287	1320	1625	643
35	1085	1405	1444	808
45	800	1013	689	647
55	465	369	98	312
65	38	43	2	52
75	1	0	0	0
85	0	0	0	0
90	0	0	0	

Luminance Data in Candela/Sq. Meter

Average in Deg.	Average 0-Deg.	Average 45-Deg.	Average 90-Deg.
45	4033.	5128.	3485.
55	2887.	2299.	613.
65	317.	365.	14.
75	18.	0.	0.
85	0.	0.	0.

Coefficients of Utilization

Ceiling	80%			50%			30%		
Wall	70	50	30	50	30	10	50	30	10
RCR	Zonal Cavity Method— Effective Floor Cavity Reflectance = 0.20								
Room Cavity Ratio	1	57	55	54	52	51	50	50	49
	2	54	51	48	48	46	45	47	45
	3	50	46	43	44	42	40	43	41
	4	47	42	39	40	38	36	39	37
	5	44	38	35	37	34	32	36	33
	6	41	35	31	34	31	28	33	30
	7	37	32	28	31	27	25	30	27
	8	35	29	25	28	24	22	27	24
	9	32	26	22	25	22	19	24	21
	10	30	23	20	23	19	17	22	19

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixt
0-30	65.3	22.9	35.9
0-40	1124.	39.4	61.9
0-60	1775	62.3	97.7
0-90	1816	63.7	100.0
90-180	0	0.0	0.0
0-180	1816	63.7	100.0



© 2013 Koninklijke Philips N.V. All rights reserved.
Specifications are subject to change without notice.
www.philips.com/luminaires

Philips Lighting Company
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216

Philips Lighting Company
281 Hillmount Road
Markham ON, Canada L6C 2S3
Phone: 800-668-9008