

VDT control with balanced illumination for visual comfort.

VRA2G18LP332
VISION SMART



2' X 4' RECESSED FLUORESCENT
4" DEEP, 18 CELL (3 X 6) PARABOLIC LOUVER
STATIC OR AIR SUPPLY/RETURN
IES RP-1 FOR NORMAL VDT USE

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: **VRA2G18LP332120SO**

Family	Body Style	Fixture Width	Ceiling Type	Number of Cells	Louver Finish*	Dual "V" Reflector	Lamp Quantity	Lamp Length	Voltage	Ballast Type		Options
VR		2		18		P	3	32				
4" Deep Pre-Anodized Aluminum Louver for Normal VDT Use	A = Air Handling S = Static	2 = 24"	G = Grid (Lay-in T-Bar) T = Slot Grid or Two-Directional Concealed T (See Options)	18 = 3 Rows of 6 Cells	L = Low Iridescence Semi-Specular (Standard) P = Low Iridescence Specular *See Options and Consult Your Philips Lighting Representative	P = Two Ballast Covers Reflectors Installed	3 = 3 Lamps	32 = T8 (Nominal 48")	UNV = 120/277V 120 = 120V 277 = 277V 347 = 347V	<20THD SO* <10THD RO** O3* R3** PW — *Instant Start Standard **Rapid Start Standard	1 or 2 Lamp Elec. T8 (1) 3 Lamp Elec. T8 T8 Dimming	Add Appropriate Suffix to Catalog Number

Features

- Meets IES RP-1 luminance criteria, for lighting VDT areas with normal use.
- Efficiency 64.5%.
- 1.4 spacing mounting ratio.
- Only 6" deep body.
- One-piece housing.
- Semi-specular low iridescence pre-anodized louver.
- Spring-loaded latches.
- Concealed "T" hinges.
- Louver frame with integral positive light stop.
- Built in hold-down clip
- Louver has protective film dust guard.
- Air closure strips (optional).
- Twin knockout access plate.

Specifications

Performance: In an installation of 3 lamp 32W luminaires in a room cavity ratio of 1, with reflectance of 80% ceiling, 50% wall, 20% floor; the C.U. shall not be less than .70 with a spacing to mounting ratio of 1.4 perpendicular to the lamps. To meet IES RP-1 recommended (basic) requirements for VDT areas the VCP (visual comfort probability) shall not be less than 94 either crosswise or lengthwise and the maximum average brightness at 65°, 75° and 85° shall not exceed 304, 147 and 0 candelas per square meter respectively in the 0°, 45° and 90° horizontal planes.

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 code gauge cold rolled steel. Housing side rails hemmed over and housing ends turned in for safe handling. Louver is pre-anodized aluminum.

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

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: 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

Drywall Kit: For plaster frames, order catalog number: **FK92X4**.

Internal Interference Filter: Consult your Philips Lighting representative.

Radio Interference Filter: 120, 277 or 347 volt, 50 or 60 Hz. Suffix: **R**.

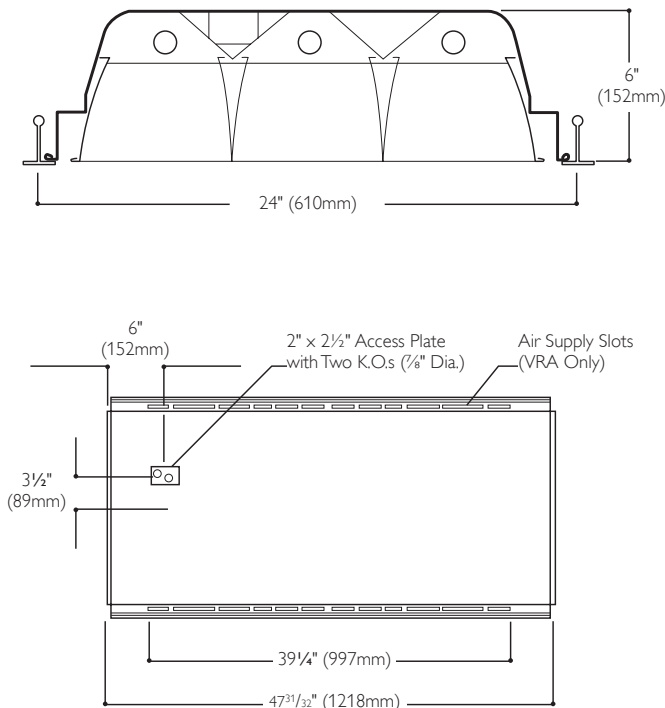
Emergency Lighting System: Emergency battery pack with charger. (90 minutes at 20% of lumens for 1 lamp.) Suffix: **O**.

Louver Finish: Low iridescence semi-specular (standard). For other finishes, consult your Philips Lighting representative.

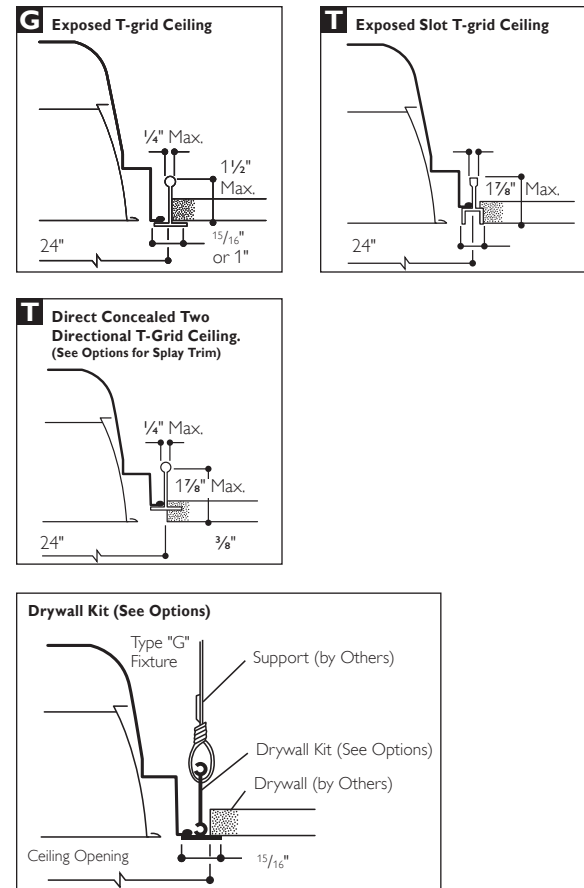
Air Pattern Control and Air Slot Closure: For horizontal and vertical air supply and to balance return. Suffix: **S**.

Ballast Options: For other ballast options, consult your Philips Lighting representative.

Dimensions



Mounting Methods

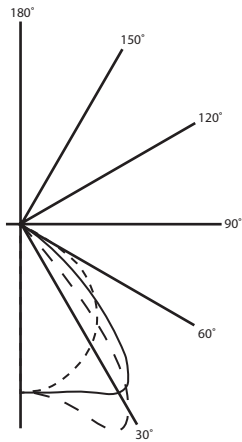


VRA2G18LP332

VISION SMART

Model No. VRA2G18LP332120O3

Report Number: ITL42563
Catalog Number: VRA2G18LP332120O3
Lamp: (3) F32T8/TL70
Lumens per Lamp: 2850
Luminaire: 2 x 4VDT troffer with 18 cell semi-specular louver
Ballast: Motorola M3-RN-T8-ILL-120
CIE Type: Direct.
Total Efficiency: 64.5%
Plane: 0-Deg 90-Deg
 Spacing Criteria: 1.2 1.4
 Shielding Angles: 28 45
 Luminous Length: 45.500 21.500



Candela Distribution

Angle	0.0	22.5	45.0	67.5	Across	Output Lumens
0	2532	2532	2532	2532	2532	
5	2533	2537	2549	2553	2557	244
15	2420	2485	2618	2740	2808	745
25	2218	2392	2816	3282	3432	1301
35	1950	2258	2816	2707	2363	1525
45	1594	1975	1534	923	801	1073
55	971	1080	409	239	456	522
65	81	85	32	16	16	82
75	24	16	16	16	8	11
85	0	0	0	0	0	13
90	0	0	0	0	0	

Luminance Data in Candela/Sq. Meter

Average in Deg.	Average 0 Deg.	Average 45 Deg.	Average 90 Deg.
45	3570.	3436.	1794.
55	2681.	1129.	403.
65	304.	120.	60.
75	147	98.	49.
85	0.	0.	0.

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	2289	26.8	41.5
0-40	3814	44.6	69.2
0-60	5410	63.3	98.1
0-90	5515	64.5	100.0
90-180	0	0.0	0.0
0-180	5515	64.5	100.0

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	72	70	68	66	65	63	64	62
	2	67	64	60	60	58	56	58	56
	3	63	58	54	55	52	49	53	51
	4	58	52	48	50	46	44	49	46
	5	54	48	43	46	42	39	45	41
	6	51	44	39	42	38	35	41	37
	7	47	40	35	38	34	31	38	34
	8	44	37	32	35	31	28	35	31
	9	42	34	29	33	29	26	32	28
	10	39	31	27	30	26	24	30	26

Visual Comfort Probability (VCP average 100fc; reflectances 80/50/20)

Room Size		Ceiling Height				Ceiling Height			
W	L	8.5	10.0	13.0	16.0	8.5	10.0	13.0	16.0
		Luminaires Lengthwise				Luminaires Crosswise			
20	20	90	86	79	79	98	96	97	93
20	30	92	88	83	78	98	97	97	94
20	40	92	89	86	81	98	97	97	94
20	60	93	90	87	83	98	97	97	94
30	20	90	86	84	82	98	97	97	92
30	30	92	89	86	81	98	97	97	94
30	40	93	90	88	83	98	97	97	94
30	60	93	91	89	85	98	97	97	94
30	80	93	91	90	86	98	97	97	94
40	20	90	86	84	85	98	97	97	92
40	30	93	90	86	84	98	97	97	93
40	40	93	91	88	84	98	97	97	93
40	60	94	91	90	86	98	97	97	94
40	80	94	91	90	87	98	97	97	94
40	100	94	91	90	88	98	97	97	94
60	30	93	90	86	83	98	97	97	93
60	40	93	91	89	84	98	97	97	93
60	60	94	92	90	87	98	97	97	94
60	80	94	92	90	88	98	97	97	94
60	100	94	92	91	88	98	97	97	94
100	40	93	91	89	84	98	97	97	94
100	60	94	92	90	87	98	97	97	94
100	80	94	92	91	88	98	97	97	95
100	100	93	92	91	89	97	97	97	95



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 Specifications are subject to change without notice.
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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