

VDT control with balanced illumination for visual comfort.

VRB SERIES 1' X 4' VISION SMART



1' X 4' SURFACE BOX FLUORESCENT
3" DEEP, 8, 12, 16 OR 24 CELL PARABOLIC LOUVER
1 OR 2 LAMPS, FLUORESCENT T8
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. Suitable for mounting on low-density cellulose fiberboard surfaces.

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

Ordering Guide

Explanation of Catalog Number Example: VRB1S8LS132120SO

Parabaffle Parabolic	Body Style	Fixture Width	Ceiling Type	Number of Cells	Louver Finish	White Reflector	Lamp Quantity	Lamp Length	Voltage	Ballast Type	Options
VR	B	1	S			S		32			
VR 3" Deep Parabolic Surface Luminaire	B = Surface Box	1 = 1'	S = Surface	8 = 1 Row of 8 Cells 12 = 1 Row of 12 Cells 16 = 2 Rows of 8 Cells 24 = 2 Rows of 12 Cells	L = Low Iridescence Semi- Specular (Standard) P = Low Iridescence Specular		1 = 1 Lamp 2 = 2 Lamps	32 = T8 (Nominal 48")	UNV = 120/277V 120 = 120V 277 = 277V 347 = 347V	<20THD SO* <10THD RO** 1 or 2 Lamp Elec. T8 PW — T8 Dimming *Instant Start Standard **Rapid Start Standard	Add Appropriate Suffix to Catalog Number

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Features

- 1 lamp 8 or 12 cell, 2 lamp 16 or 24 cell meet IES RP-1 for lighting VDT areas with normal use.
- Only 5½" deep body.
- Efficiency 66% (1 lamp 8 cell).
- 1.9 spacing mounting ratio.
- Welded 20 gauge steel body.
- 45° mitered corners (body).
- 3" deep cell aluminum parabolic louver.
- Spring-loaded latches.
- Reversible louver hinge.
- Door jamb with integral positive light stop.
- Flush end K.O.s for smooth appearance (at the end of row or individual).
- Matches Vision Smart 1' x 4' recessed.
- Low-iridescence, semi-specular aluminum louver, standard.
- Vertical grain on louver eliminates reflected lamp images on cross baffle.
- Louver has polyethylene dust guard.

Specifications

Performance: In an installation of 2 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 .71 with a spacing to mounting ratio of 1.9 perpendicular to the lamp. To meet IES RP-1 recommended (basic) requirements for VDT areas the VCP (visual comfort probability) shall not be less than 90 either crosswise or lengthwise and the maximum average brightness at 65°, 75° and 85° shall not exceed 592, 109 and 81 candelas per square meter respectively in the 0°, 45° and 90° horizontal planes. Candelas at Nadir (0°) not to exceed 671.

Materials: Chassis parts are die-formed 20 gauge cold rolled steel, 45° mitered corners welded and turned in edges for safe handling.

Louver: Pre-anodized aluminum.

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

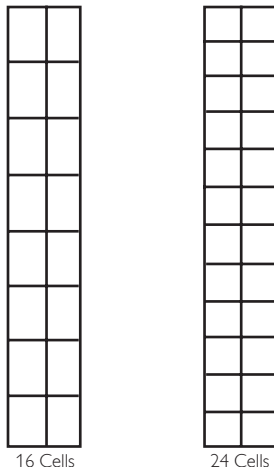
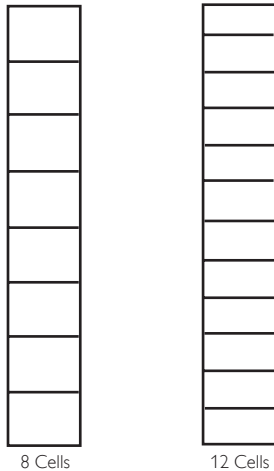
Stem and Canopy Sets: Suspend luminaire 12", 18", 24", 36", or 48" from surface. (Four per luminaire is recommended.) Catalog number: **STKF12** (12"); **STKF18** (18"); **STKF24** (24"); **STKF36** (36"); **STKF48** (48")

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

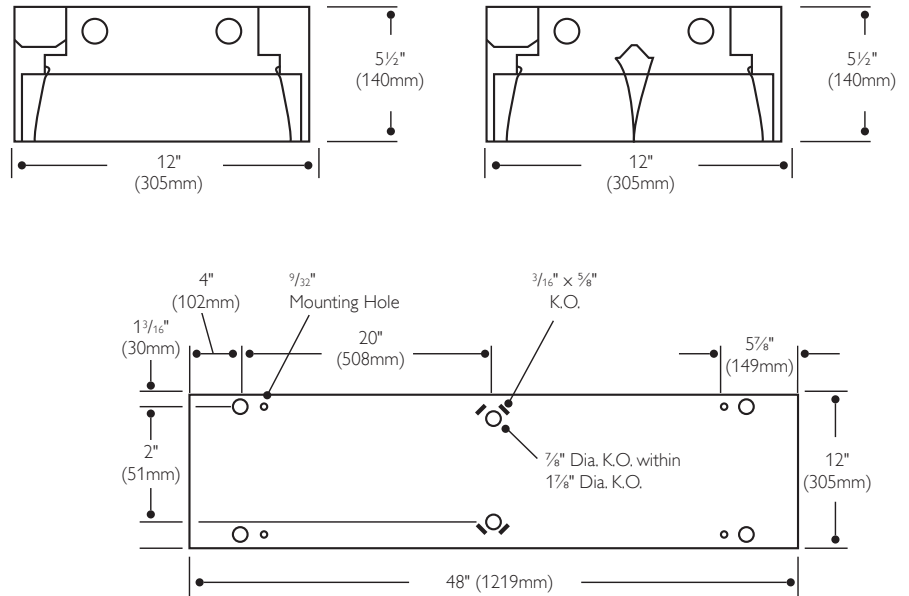
Ballast Options: For other ballast options, consult your Philips Lighting representative.

Louver Finish: low iridescence semi-specular. For other finishes consult your Philips Lighting representative.

Louver Configuration



Dimensions



VRB SERIES 1' X 4'

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Model No. VRB1S8LS132120SO

Report Number: G98014

Catalog Number: VRB1S8LS132120SO

Lamp: (1) F432T8/CW

Lumens per Lamp: 2850

Luminaire: 1' x 4' surface box, 8 cell
semi-specular louver

Ballast: Advance REL1P32-RH-TP

CIE Type: Direct

Total Efficiency: 66.0%

Plane: 0-Deg 90-Deg

Spacing Criteria: 1.2 1.9

Shielding Angles: 65 65

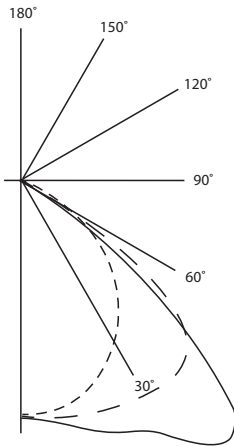
Luminous Length: 46.250 9.500

Candela Distribution

Angle	0.0	22.5	45.0	67.5	Across	Output Lumens
0	671	671	671	671	671	65
5	665	672	675	680	683	195
15	635	657	689	720	732	321
25	576	621	704	767	787	443
35	492	575	702	846	914	492
45	385	506	680	803	828	288
55	238	346	409	277	245	67
65	25	52	71	65	56	8
75	7	8	8	7	6	2
85	2	2	2	1	1	0
90	0	0	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	73	71	69	67	65	64	64	63
	2	68	64	60	60	57	55	58	56
	3	63	57	52	54	50	47	52	49
	4	58	51	46	48	44	41	47	43
	5	53	46	40	44	39	36	42	39
	6	49	41	36	40	35	32	38	34
	7	46	37	32	36	31	28	35	31
	8	42	34	29	33	28	25	32	28
	9	40	31	26	30	26	22	29	25
	10	37	29	24	28	23	20	27	23



Luminance Data in Candela/Sq. Meter

Average in Deg.	Average 0 Deg.	Average 45 Deg.	Average 90 Deg.
45	1920.	3391.	4129.
55	1463.	2515.	1506.
65	209.	592.	467.
75	95.	109.	82.
85	81.	81.	40.

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	580	20.4	30.9
0-40	1023	35.9	54.4
0-60	1804	63.3	95.9
0-90	1881	66.0	100.0
90-180	0	0.0	0.0
0-180	1881	66.0	100.0

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	87	82	86	88	85	80	78
20	30	91	89	86	84	90	87	82	78
20	40	92	90	88	86	90	88	85	80
20	60	93	91	89	88	90	88	86	83
30	20	91	89	84	84	88	88	82	79
30	30	92	91	87	82	90	90	84	78
30	40	93	92	89	84	90	90	86	80
30	60	94	93	90	86	90	90	87	83
30	80	94	93	90	86	90	90	87	83
40	20	91	89	85	85	88	88	84	80
40	30	93	91	88	83	90	90	86	80
40	40	94	92	80	85	90	90	88	82
40	60	94	93	91	87	90	90	88	84
40	80	94	92	91	87	90	90	88	84
40	100	94	92	91	87	90	90	88	84
60	30	93	91	88	85	90	90	86	81
60	40	93	92	90	87	90	90	88	83
60	60	94	93	91	88	90	90	88	85
60	80	94	93	91	88	91	90	88	85
60	100	94	93	91	88	91	90	88	85
100	40	93	92	90	87	90	90	88	83
100	60	94	93	91	88	91	90	88	85
100	80	94	93	91	89	91	90	88	85
100	100	94	93	91	89	91	90	88	86



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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