

VDT control with balanced illumination for visual comfort.

VRA2G9LS26U
VISION SMART



2' X 2' RECESSED FLUORESCENT
4" DEEP, 9 CELL (3 X 3) PARABOLIC LOUVER
AIR SUPPLY/RETURN/HEAT EXTRACTION
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: **VRA2G9LS26U120SO**

Family	Body Style	Fixture Width	Ceiling Type	Number of Cells	Louver Finish*	Single "V" Reflector	Lamp Quantity	Lamp Length	Voltage	Ballast Type	Options
VR		2		9		S	2	6U			
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)	9 = 3 Rows of 3 Cells	L = Low Iridescence Semi-Specular (Standard) P = Low Iridescence Specular *See Options and Consult Your Philips Lighting Representative	S = One Ballast Cover Reflector Installed	2 = 2 Lamps	6U = U Lamp T8 (Nominal 24")	UNV = 120/277V 120 = 120V 277 = 277V 347 = 347V	<20THD SO* <10THD RO** 1 or 2 Lamp Elec. 31W T8 T8 Dimming *Instant Start Standard **Rapid Start Standard	Add Appropriate Suffix to Catalog Number

Features

- Meets IES RP-1 luminance criteria, for lighting VDT areas with normal use.
- Efficiency 57.1%.
- 1.3 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).
- Air flow pattern dampers (optional).
- Twin knockout access plate.

Specifications

Performance: In an installation of 2 lamp 31W 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 .62 with a spacing to mounting ratio of 1.3 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 93 either crosswise or lengthwise and the maximum average brightness at 65°, 75° and 85° shall not exceed 357, 130 and 38 candelas per square meter respectively in the 0°, 45° and 90° horizontal planes. Candelas at Nadir (0°) not to exceed 1521.

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: **FK92X2**.

Internal Interference Filter: Consult your Philips Lighting representative.

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

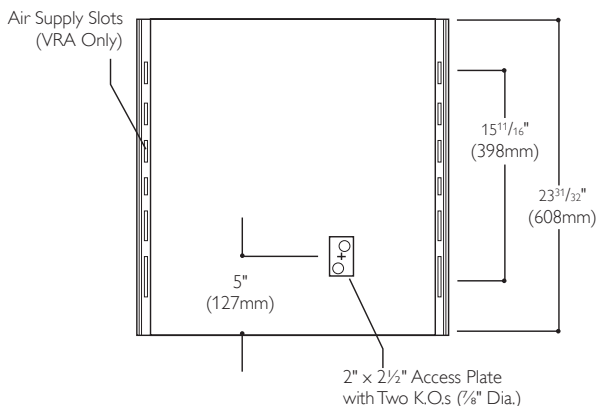
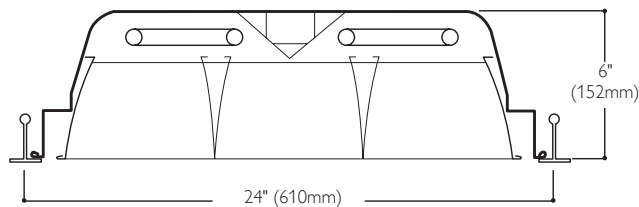
Emergency Lighting System: Emergency battery pack with charger. (90 minutes at 20% of lumens for 1 lamp). Suffix: **O**.

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

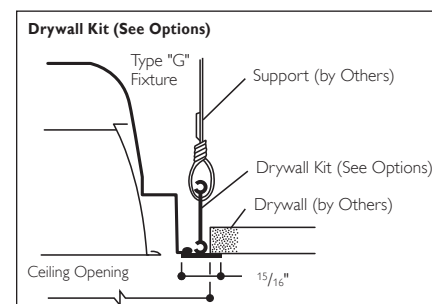
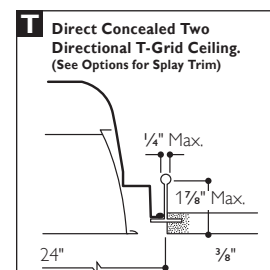
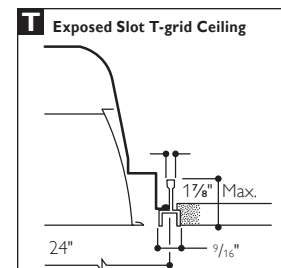
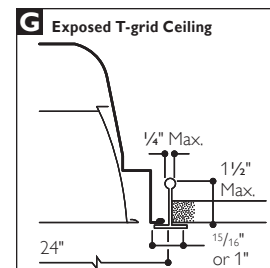
Air Pattern Control and Air Slot Closure: For horizontal and vertical air supply and to balance return. Suffix: **S**.

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

Dimensions



Mounting Methods



VRA2G9LS26U

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Model No. VRA2G9LS26U120SO

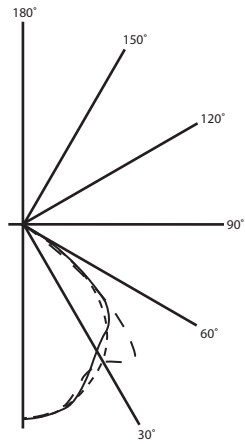
Report Number: ITL42446
Catalog Number: VRA2G9LS26U120SO
Lamp: (2) FB31T8/TL/41/6 U Lamp
Lumens per Lamp: 2650
Luminaire: 2x2 VDT troffer with 3x3 cell semi-specular louver
Ballast: Magnetek Triad B232112BB
CIE Type: Direct
Total Efficiency: 57.1%
Plane: 0-Deg 90-Deg
 Spacing Criteria: 1.2 1.3
 Shielding Angles: 30 33
 Luminous Length: 21.500 21.500

Candela Distribution

Angle	0.0	22.5	45.0	67.5	Across	Output Lumens
0	1521	1521	1521	1521	1521	
5	1516	1518	1517	1515	1514	144
15	1446	1447	1448	1435	1422	406
25	1320	1310	1258	1238	1245	589
35	1142	1103	1088	1224	1315	729
45	911	874	981	1097	1108	750
55	560	506	457	248	182	359
65	45	48	31	17	17	42
75	10	9	6	4	4	6
85	1	0	0	0	0	0
90	0	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	64	62	60	58	57	56	56	55	54
	2	59	56	53	53	51	49	51	49	48
	3	55	50	47	48	45	43	47	44	42
	4	51	46	42	44	40	38	42	40	37
	5	48	41	37	40	36	33	39	36	33
	6	44	38	33	36	33	30	35	32	30
	7	42	34	30	33	29	27	32	29	27
	8	38	32	27	30	27	24	30	26	24
	9	36	29	25	28	24	22	28	24	22
	10	34	27	23	26	22	20	26	22	20



Luminance Data in Candela/Sq. Meter

Average in Deg.	Average 0 Deg.	Average 45 Deg.	Average 90 Deg.
45	4318.	4650.	5252.
55	3272.	2729.	1064.
65	357.	246.	135.
75	130.	78.	52.
85	38.	0.	0.

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	1139	21.5	37.7
0-40	1869	35.3	61.8
0-60	2977	56.2	98.4
0-90	3025	57.1	100.0
90-180	0	0.0	0.0
0-180	3025	57.1	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	91	85	77	77	92	90	85	76
20	30	92	87	81	77	92	90	88	81
20	40	92	89	84	80	92	90	88	84
20	60	92	89	86	82	92	91	88	84
30	20	91	85	81	78	92	91	87	77
30	30	92	88	84	78	92	91	89	81
30	40	92	89	87	81	92	91	89	83
30	60	92	89	88	83	92	91	89	84
30	80	93	90	88	83	92	90	89	84
40	20	91	85	81	81	92	91	87	79
40	30	92	88	84	81	92	91	89	83
40	40	92	89	87	83	92	91	89	85
40	60	93	90	88	85	93	90	89	84
40	80	93	90	88	85	93	90	89	84
40	100	93	90	88	85	93	90	89	84
60	30	92	83	84	81	92	91	89	83
60	40	93	90	87	83	92	90	89	84
60	60	93	90	88	85	93	90	89	84
60	80	93	90	88	85	93	90	89	83
60	100	93	90	88	85	93	90	89	83
100	40	93	90	87	83	93	90	89	84
100	60	93	90	88	85	93	90	89	83
100	80	93	90	88	85	93	90	89	84
100	100	93	90	88	85	93	90	89	84



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