

DESCRIPTION

The VRGC Series features a nominal 4-1/2" deep para-contoured fixture housing, high reflectivity and optimum lamp to lens spacing. The series produces total uniformity of light in the luminous area and is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The specification luminaire is designed to offer maximum efficiency and performance for today's unique interior specifications. The VRGC is perfect for use in office spaces, schools, hospitals, industrial facilities and commercial areas with high traffic volume.

SPECIFICATION FEATURES

A ... Construction

Nominal 4-1/2" deep, para-contoured housing, die formed code gauge, prime cold rolled steel. Die embossed housing has full length die formed stiffeners for added strength. Deep "V" ballast/wireway cover easily removed without tools. Die formed captive lampholder bracket fully encloses lampholder wiring permitting easy lampholder replacement. Heavy endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. KOs for continuous row wiring.

Endplates have integral Grid-Lock feature for safety and convenience.

B ... Electrical*

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Pressure lock lampholders. UL/CUL listed. Suitable for damp locations.**

C ... Finish

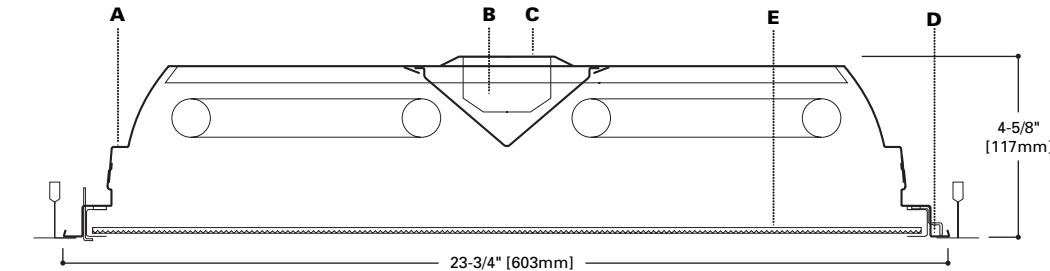
Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibitor. Lighting grade, baked white enamel finish.

D ... Hinging/Latching

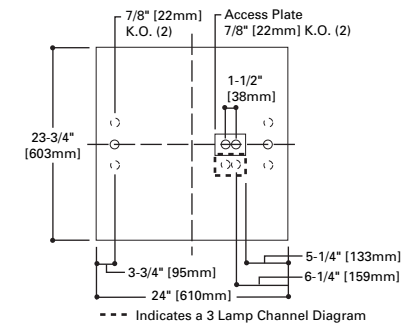
Positive cam action spring loaded steel latches with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side.

E ... Frame/Shielding

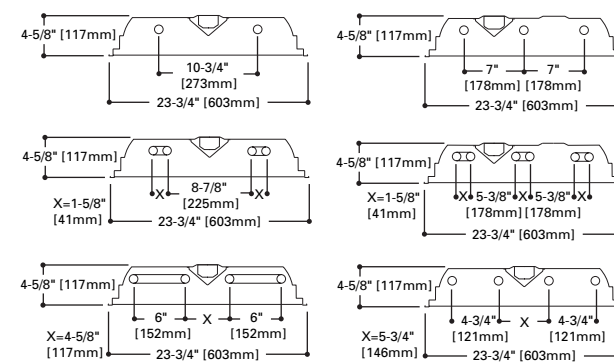
Die formed, heavy gauge, flat steel door with reinforced mitered corners and baked white enamel finish. Positive light seals. Frame and lens are secured to housing with 4 or 6 stainless steel TORX screws.



MOUNTING DATA

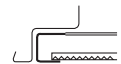


LAMP CONFIGURATIONS

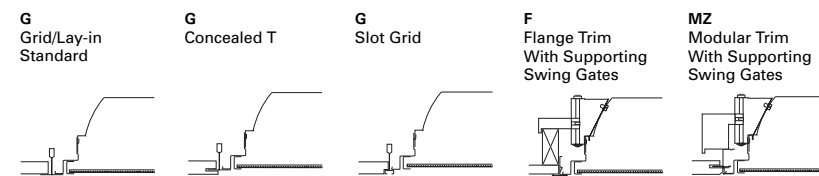


DOOR FRAME

VRGC
Flat, White
Steel



CEILING COMPATIBILITY



Ceiling Type**	Trim Type
Exposed Grid	G
Concealed T	G
Slot Grid	G
Flange	F
Concealed Spline	MZ
Metal Pan	MZ

ENERGY DATA

Input Watts:

EB Ballast & STD Lamps

217 (36), 2U1-5/8 (61), 2U3 (72)

2U6 (72), 2U6T8 (61), 317 (52)

3U1-5/8 (91), 417 (63)

ES Ballast & STD Lamps

217 (45), 220 (58)

2U1-5/8 (71), 2U3 (86)

2U6 (86), 2U6T8 (71), 317 (68)

3U1-5/8 (108), 417 (90), 420 (116)

Luminaire Efficacy Rating

LER = FL-57

Catalog Number: 2VRGC-2U6T8ACTF140

Yearly Cost of 1000 lumens,

3000 hrs at .08 KWH = \$4.21

Luminaire Efficacy Rating

LER = FL-63

Catalog Number: 2VRGC-2U15/8ACTF140

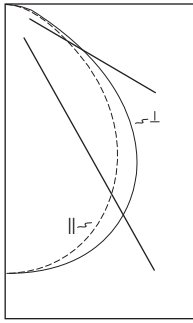
Yearly Cost of 1000 lumens,

3000 hrs at .08 KWH = \$3.81

* Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

** Consult Pre Sales Technical Support.

PHOTOMETRICS



2VRGC-2U6T8A
 Electronic Ballast
 FB31T8/TL41/6
 Lamps
 2600 Lumens
 Spacing criterion:
 (||) 1.2 x mounting
 height, (⊥) 1.3 x
 mounting height
 Efficiency 68.1%
 Test Report
 #126P132
 LER = FL-57
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$4.21

Candela			
Angle	Along	45°	Across ⊥
0	1464	1464	1464
5	1465	1458	1462
10	1446	1446	1456
15	1410	1420	1441
20	1358	1380	1409
25	1290	1323	1355
30	1204	1240	1270
35	1096	1134	1172
40	966	1010	1072
45	816	863	953
50	651	711	797
55	501	550	599
60	383	382	420
65	287	253	304
70	212	169	237
75	160	133	192
80	120	113	145
85	65	64	78
90	0	0	0

Coefficients of Utilization

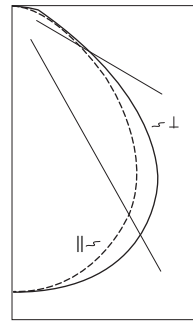
rc	Effective floor cavity reflectance 20%																	
	80%		70%		50%		30%		10%		0%							
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	81	81	81	81	79	79	79	79	76	76	76	72	72	72	69	69	69	68
1	75	72	70	67	73	71	68	66	68	66	64	65	64	62	63	62	60	59
2	69	64	60	57	68	63	60	56	61	58	55	59	56	54	57	55	53	51
3	64	58	53	49	63	57	52	49	55	51	48	53	50	47	51	49	46	45
4	59	52	47	43	58	51	46	42	49	45	42	48	44	41	46	43	41	39
5	54	46	41	37	53	46	40	37	44	40	36	43	39	36	42	38	35	34
6	50	42	36	32	49	41	36	32	40	35	32	39	35	32	38	34	31	30
7	47	38	32	28	45	37	32	28	36	32	28	35	31	28	34	31	28	26
8	43	34	29	25	42	34	28	25	33	28	25	32	28	24	31	27	24	23
9	40	31	25	21	39	30	25	21	29	25	21	29	24	21	28	24	21	20
10	37	28	23	19	36	28	22	19	27	22	19	26	22	19	26	22	19	18

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1150	22.1	32.5
0-40	1859	35.8	52.5
0-60	3020	58.1	85.3
0-90	3541	68.1	100.0
0-180	3541	68.1	100.0

Typical VCP Percentages

Room Size (Ft.)	Height Along		Height Across	
	8.5'	10.0'	8.5'	10.0'
20 x 20	64	69	61	66
30 x 30	57	61	54	58
30 x 60	48	51	43	47
60 x 30	58	63	56	61
60 x 60	48	51	44	48



2VRGC-2U1-5/8A
 Electronic Ballast
 FBO31/35K Lamps
 2725 Lumens
 Spacing criterion:
 (||) 1.2 x mounting
 height, (⊥) 1.3 x
 mounting height
 Efficiency 70.5%
 Test Report
 #LSI14326
 LER = FL-63
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.81

Candela			
Angle	Along	45°	Across ⊥
0	1563	1563	1563
5	1553	1560	1565
10	1528	1549	1560
15	1494	1525	1554
20	1440	1491	1535
25	1368	1438	1497
30	1275	1363	1434
35	1160	1265	1348
40	1016	1135	1225
45	852	970	1057
50	681	790	847
55	528	597	636
60	407	412	449
65	307	271	329
70	230	185	258
75	173	148	212
80	129	126	160
85	67	69	80
90	0	0	0

Coefficients of Utilization

rc	Effective floor cavity reflectance 20%																	
	80%		70%		50%		30%		10%		0%							
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	84	84	84	84	82	82	82	82	78	78	78	75	75	75	72	72	72	71
1	78	75	72	70	76	73	71	69	70	68	67	68	66	65	65	64	63	61
2	72	67	63	59	70	65	62	58	63	60	57	61	58	56	59	57	55	53
3	66	60	55	51	65	59	54	50	57	53	50	55	52	49	53	50	48	46
4	61	54	48	44	60	53	48	44	51	47	43	50	46	43	48	45	42	41
5	56	48	42	38	55	47	42	38	46	41	37	45	40	37	43	40	37	35
6	52	43	38	34	51	43	37	33	42	37	33	40	36	33	39	35	32	31
7	48	39	34	30	47	39	33	29	38	33	29	37	32	29	36	32	29	27
8	45	35	30	26	43	35	29	26	34	29	25	33	29	25	32	28	25	24
9	41	32	26	22	40	31	26	22	31	26	22	30	25	22	29	25	22	21
10	38	29	23	20	37	29	23	20	28	23	20	27	23	19	27	22	19	18

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1239	22.8	32.3
0-40	2022	37.1	52.6
0-60	3278	60.2	85.3
0-90	3843	70.5	100.0
0-180	3843	70.5	100.0

Typical VCP Percentages

Room Size (Ft.)	Height Along		Height Across	
	8.5'	10.0'	8.5'	10.0'
20 x 20	62	67	58	63
30 x 30	54	59	50	55
30 x 60	45	48	40	44
60 x 30	55	60	53	58
60 x 60	45	48	42	45

ORDERING INFORMATION

SAMPLE NUMBER: 2VRGC-2U6T8A

Width	Product Family	Trim Type ¹	Series	Door Type	No. of Lamps	Wattage (Length)	Lens Type	Voltage	Voltage ¹	Ballast Type	Options (order as suffix)
2	VR		C								
2=2'	VR		C		2, 3, or 4 (Not included)	U3=40W (24") U6=40W (24") U6T8=31W (24") 20=20W (24") 17=17W (24") U1-5/8=31W T8 (24") BX40=40W Biax (24")				Standard Magnetic Ballast Leave Blank (Biax Only) LE3=Energy Saving Ballast LEOC8= Energy Saving Ballast (T-8 Lamp Only) EB = Generic Electronic Ballast No. of Ballasts 1 or 2 ² Lamp Size 2=T12 8=T8 (For Specific Electronic Ballast Specify Brand and Catalog Number)	
	G=Grid/Lay-in - Standard G=Concealed T G=Slot Grid F=Flange Trim MZ=Modular Trim EMZ=Modular Trim (Extended Swing Arm)				ACTF140= 140 Thick ACTF187= 187 Thick PA375= .250 polycarbonate with .125 prismatic overlay (standard with 6S option)					PAF=Painted After Fabrication GL=Internal Single Element Fusing GM=Dual Element Fusing LCWE=F40/Cool White Energy Saving Lamps, Installed L8730=F32T8 3000 Kelvin Lamps, Installed L8735=F32T8 3500 Kelvin Lamps, Installed L8741=F32T8 4100 Kelvin Lamps, Installed EL4=Emergency Lighting self-contained ¹ RIF1=Radio Interference Suppressor FR=Suitable for Fire Rated Applications EQ=T-BAR Safety Earthquake Clips ³ RLS=Rotor-Lock Socket (T8 Lamps Only) 6S=Six TORX-head Screws (3 per side) SC=Safety Chain	
	Standard=Flat White Steel Door (Leave Blank)				LTS=Low Trigger Start (20 Watt) HTS=High Trigger Start (20 Watt)						

SHIPPING INFORMATION

Catalog No.	Wt.
2VRGC-217A-LTS	19 lbs.
2VRGC-220A-LTS	19 lbs.
2VRGC-417A-LTS	21 lbs.
2VRGC-420A-LTS	21 lbs.
2VRGC-2U6A	18 lbs.
2VRGC-2U6T8A	18 lbs.
2VRGC-2U1-5/8A	18 lbs.
2VRGC-3U1-5/8A	18 lbs.

120=120V
277=277V
347=347V
UNV=Universal Voltage
120-277V

Notes:
For additional options please consult Cooper Lighting Representative. Specifications and Dimensions subject to change without notice.
1Consult Pre Sales Technical Support. 2Two ballast in 2 or 4 lamp require LAO (less access opening). 3EQ Grid Clip is recommended for all 9/16" ceiling systems.