

DESCRIPTION

The Fail-Safe FRS vandal resistant fluorescent three-lamp luminaire is available in two lengths with stem mounting capability and wraparound polycarbonate diffuser. UL/cUL listed for damp locations. The FRS is ideal for use in schools, corridors, dormitories and commercial high traffic areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Housing is 20 gauge cold rolled steel. Removable reflector/wireway cover 20 gauge cold rolled steel. Endcaps are 18 gauge cold rolled steel with knockouts on each end.

Finish

High gloss, electrostatically applied, white powder coat finish, average minimum reflectance 92%.

Fasteners

Two philips head screws secure lens in fixture. Optional tamperproof TORX®-head T-20 screws prevent unauthorized access. (TRC option)

Lens

Prismatic polycarbonate 0.125 refractor provides high efficiency while maintaining low surface brightness. Wraparound design ensures superior strength and resistance to vandalism and the elements.

Electrical

Electronic Class P, CBM/ETL ballast

Labels

UL/cUL listed for damp locations.



FRS

3 LAMPS

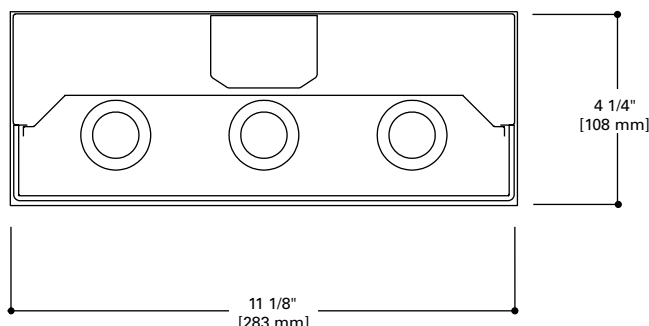
2' and 4' Length

T5

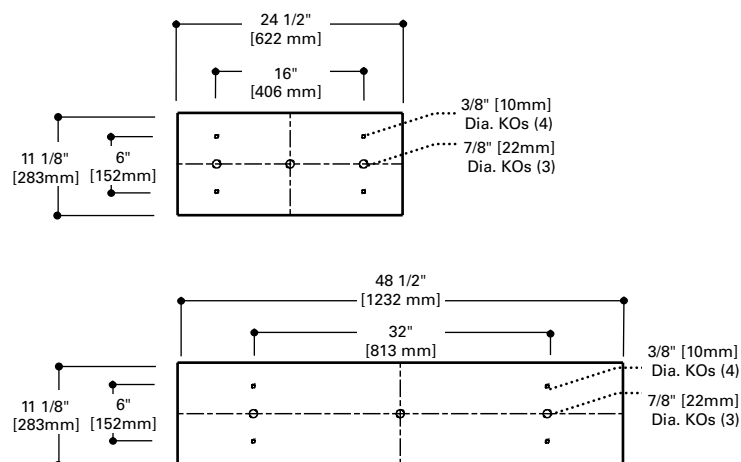
T8

Vandal Resistant

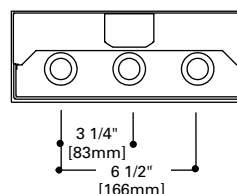
SURFACE



MOUNTING DATA



LAMP CONFIGURATIONS



ENERGY DATA

ES Ballasts & STD Lamps

317 (68 Watts)

332 (108 Watts)

Electronic Ballasts:

Consult Factory.

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ORDERING INFORMATION

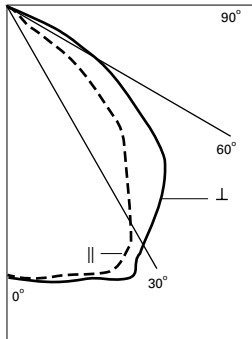
SAMPLE NUMBER: FRS-354-UNV-EB51-GLR

Product Family	Lamp Type	Voltage	Ballast	Options
FRS				
FRS=Fluorescent Rough Service	2' ¹ 314= (3) 14W T5 Lamps 324= (3) 24W T5 Lamps 317= (3) 17W T8 Lamps 340BX = (3) 40W Biaxial Lamps 4' 328= (3) 28W T5 Lamps 354= (3) 54W T5 Lamps 332= (3) 32WT8 Lamps	120= 120V 277= 277V 347= 347V UNV= 120-277V	Electronic Ballast EB51= (1) Ballast for use with T5 Lamps EB52= (2) Ballasts for use with T5 Lamps EB81= (1) Ballast for use with T8 Lamps EB82= (2) Ballasts for use with T8 Lamps EBX1= (1) Ballast for use with Biaxial Lamps EBX2= (2) Ballasts for use with Biaxial Lamps	GLR = Single Fuse TRC = Tamper Resistant TORX® T-20 EL4= EM Pack, T8, Biax EL5= EM Pack, T5, T5HO FNL= Fluorescent Light (5, 7, 9W) VRSD= T20 Center-pin tamper-proof TORX®-head screwdriver

NOTES:

¹ 2' unit not available with EM and with (2) T5 or T5HO ballasts, or (2) BX ballasts.

PHOTOMETRICS



Coefficients of Utilization

Effective floor cavity reflectance										20%											
rc	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			
RCR																					
0	66	66	66	66	64	64	64	64	61	61	61	58	58	58	55	55	55	54			
1	61	58	56	54	59	57	55	53	54	52	51	52	50	49	49	48	47	46			
2	56	52	48	45	54	50	47	44	48	45	43	46	44	42	44	42	41	39			
3	52	46	42	39	50	45	41	38	43	40	37	41	39	36	40	37	35	34			
4	47	41	37	33	46	40	36	33	39	35	32	37	34	31	36	33	31	30			
5	43	37	32	28	42	36	31	28	34	31	28	33	30	27	32	29	27	25			
6	40	33	28	25	39	32	28	25	31	27	24	30	26	24	29	26	23	22			
7	37	30	25	22	36	29	25	21	28	24	21	27	23	21	26	23	20	19			
8	34	26	22	19	33	26	22	18	25	21	18	24	21	18	23	20	18	17			
9	31	24	19	16	30	23	19	16	22	18	16	22	18	15	21	18	15	14			
10	29	21	17	14	28	21	17	14	20	16	14	20	16	14	19	16	13	12			

Candlepower

Angle	Along	45°	Across ⊥
0	1625	1625	1625
10	1607	1621	1647
20	1568	1618	1679
30	1346	1467	1563
40	1114	1307	1446
50	789	1034	1191
60	346	536	673
70	136	319	489
80	43	201	325
90	0	116	170
100	0	62	87
110	0	39	63
120	0	28	48
130	0	20	32
140	0	17	22
150	0	16	18
160	0	14	16
170	0	13	13
180	0	0	0

FRS-332-120
Energy Saving Ballast(3) F32T8/735/RS Lamps
2850 Lumens each

Efficiency: 56%

Plane: 0° 90°
Spacing Criteria: 1.2 1.4

Report # 8062.0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0- 30	1313	25.4	27.4
0- 40	2181	25.5	45.5
0- 60	3789	44.3	79.0
0- 90	4592	53.7	95.8
90-180	203	2.4	4.2
0-180	4795	56.1	100.0