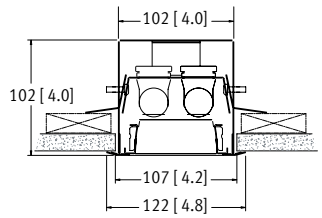
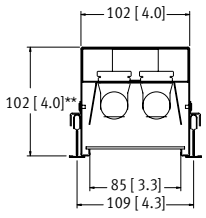
Flex FS4R

Fluorescent . Recessed

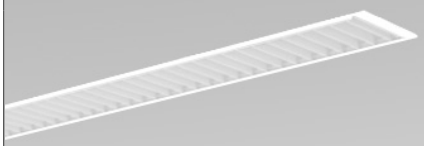
CAT #:	
PREP BY:	
DATE:	
PROJECT:	
TYPE:	
NOTES:	



Drywall



T-Bar



ORDERING LOGIC

Model	# of Lamps	Light Source	Length	Optics Up	Optics Down	Finish	Ballast	Circuitry	Mounting	Voltage	IC
FS4R											

of Lamps

1 = 1 lamp
2 = 2 lamps

Light Source

T8
T5
T5HO

Length

4 = 4 ft
8 = 8 ft
R = Continuous Rows (Consult factory)

Optics Up

_ = None (leave space empty)

Optics Down

SBR = Dropped Solid Cross Blade Baffle
SBRO = Dropped Solid Cross Blade Baffle w/ Opal Overlay
SB = Solid Cross Blade Baffle
SBO = Solid Cross Blade Baffle w/ Opal Overlay
PB = Perforated Cross Blade Baffle
PBO = Perforated Cross Blade Baffle w/ Opal Overlay
SSP = Semi Specular Parabolic Louver
SSPO = Semi Specular Parabolic Louver w/ Opal Overlay
ML = Micro Linear Lens

Optics Down

LO = Opal Lexan Lens
_ = None (leave space empty)
A = Asymmetric Reflector (1 lamp only)

Finish

W = White
C = Custom Finish *Specify RAL#*

Ballast

E = Electronic Instant Start (T8)
R = Programmed Rapid Start
D1 = 0-10 Dimming
D2 = DALI

Circuitry

1 = 1 Circuit *(Standard)*
AS = Alternate Switching
LR = Left/Right Switching *(2 lamps)*
EM = Emergency/Night Light *Consult factory*
B = Battery Pack

Mounting

D = Recessed Drywall
T = Recessed T-Bar

Voltage

1 = 120 V
2 = 277 V
3 = 347 V
4 = UNV (120-277 V)

IC (Integrated Control)

_ = None (leave space empty)
D = Daylight Sensor
O = Occupancy Sensor
DO = Daylight/Occupancy Sensor

SPECIFICATIONS

Due to the Continuous Improvement Policy at Metalumen, we reserve the right to change our specifications without notice.

Housing: All FLEX FS4 housings are precision manufactured of die formed, post painted 20-gauge steel up to 8 feet long.
Finish: White, baked, powder coated polyester finish. Consult factory for custom finishes.
Weight: 1.76 kg/300mm [3.8 lb/ft]
Mounting: Recessed Drywall or T-Bar. Consult factory for continous rows.
Electrical: Fixtures are pre-wired for quick connection of individual sections and continuous runs. Specify integral, slim size, electronic ballast at 120, 277 and 347 volts. For other voltages consult Metalumen.
Ballast: Instant Start (T8), Programmed Rapid Start (T5/T5HO), 0-10V Dimming, DALI
Integrated Controls: Refer to Ordering Logic chart above.
Approvals: Certified to NRTL and IES testing standards. This product is cULus listed.
Environment: Suitable for dry locations.

WARRANTY

Metalumen will warrant a one year parts and labour warranty. Warranty is valid if luminaire is installed and used according to specification. The Ballast will carry a standard 5 year warranty by the manufacturer. If defective, Metalumen will send replacement ballasts or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Metalumen.

APPROVALS **Signature** _____ **Date** _____

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Metalumen

FEATURES

COMMERCIAL // Commercial Lighting - With over 30 years of successful architectural lighting, providing unique concept and installation solutions has become second nature. Metalumen's Start to End Development Process results in unique performance, design and architectural requirements from concept through implementation. Metalumen's Lighting Solutions have been applied to customer projects requiring: high profile architectural installations; improved energy efficiency; retrofit installations; unique installations. Metalumen can provide top-quality innovative fixtures when and where they are needed and, at the same time, allow the customer to determine their level of involvement in Metalumen's Start to End Development Process.

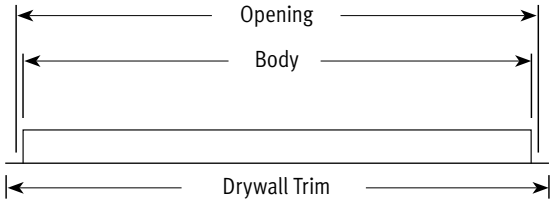
EDULUMEN // Educational Lighting Edulumen is a collection of premium luminaires that maximize both the functionality and performance of any educational facility. Based on maximum efficiency, integration of controls and exceptional design, Edulumen will earn high marks for meeting your requirements. Students challenge themselves throughout the day to achieve, and Metalumen is dedicated to this by creating sustainable environments that foster enhanced educational experiences.

MetaICE META ICE is a smooth Continuum Optical System with a 91% transmission rate that creates smooth subdued lighting with no source imagery. Meta Ice is a premium lensing optic unique to Metalumen but coupled with a high performance side kicking specular reflector to maximize the lumens from the source creating an unparalleled lumen delivery.

MOUNTING INFORMATION

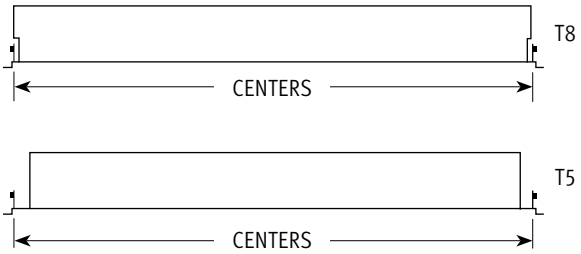
Recessed Drywall

Nominal Length	BODY		OPENING		DRYWALL TRIM	
	T8	T5	T8	T5	T8	T5
4'	1219 [48.0]	1171 [46.1]	1224 [48.2]	1176 [46.3]	1257 [49.5]	1209 [47.6]
8'	2438 [96.0]	2348 [92.4]	2443 [96.2]	2353 [92.6]	2476 [97.5]	2386 [93.9]



Recessed T-Bar

Nominal Length	CENTERS
	T8 / T5
4'	1219 [48.0]
8'	2438 [96.0]



NOTES:
- T5 fixtures come with End Fillers
- 4" standalone T8 fixture is 133 [5.2] high

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PHOTOMETRIC DATA

2 T8 LAMPS

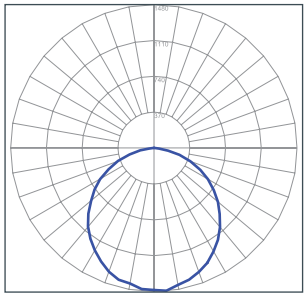
File Name: FS4R-2T8-4-SB
Luminaire Lumens: 3442
Efficiency: 59 %
Efficacy: 44 lms/W
Total Watts: 78
Optics Up: None
Optics Down: Solid cross blade baffle

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC	80				70				50		
RW	70	50	30	10	70	50	30	10	50	30	10
RCR											
0	71	71	71	71	69	69	69	69	66	66	66
1	65	62	60	58	63	61	59	57	58	57	55
2	59	55	51	48	58	54	50	47	51	48	46
3	54	48	44	40	53	47	43	40	46	42	39
4	50	43	38	34	49	42	38	34	41	37	34
5	46	39	34	30	45	38	33	30	37	33	29
6	43	35	30	26	42	34	30	26	33	29	26
7	40	32	27	23	39	31	27	23	30	26	23
8	37	29	24	21	36	29	24	21	28	24	21
9	35	27	22	19	34	26	22	19	26	22	19
10	32	25	20	17	32	24	20	17	24	20	17

PHOTOMETRIC CURVE



LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	9916	5006	3771
55	9310	3584	2415
65	8423	2111	1435
75	6347	1216	1094
85	2621	455	356

CANDLE DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	1466	1466	1466	1466	1466
5	1480	1445	1416	1435	1461
15	1406	1312	1271	1319	1406
25	1309	1171	1113	1173	1292
35	1157	1010	947	1004	1144
45	963	793	677	791	956
55	757	546	427	539	748
65	531	299	242	297	517
75	272	154	170	149	260
85	56	49	49	48	52
90	4	4	4	4	4
95	0	0	0	0	0
105	0	0	0	0	0
115	0	0	0	0	0
125	0	0	0	0	0
135	0	0	0	0	0
145	0	0	0	0	0
155	0	0	1	1	0
165	0	1	0	1	0
175	1	0	1	0	0
180	1	1	1	1	1

2 T5 LAMPS

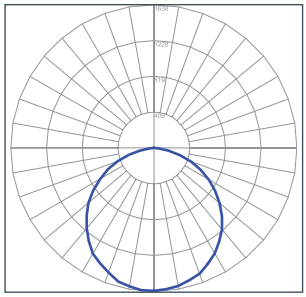
File Name: FS4R-2T5-4
Luminaire Lumens: 4104
Efficiency: 71 %
Efficacy: 62 lms/W
Total Watts: 66
Optics Up: None
Optics Down: None

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC	80				70				50		
RW	70	50	30	10	70	50	30	10	50	30	10
RCR											
0	84	84	84	84	82	82	82	82	79	79	79
1	77	74	71	69	75	72	70	67	69	67	65
2	71	65	60	56	69	64	59	56	61	57	54
3	65	57	52	47	63	56	51	47	54	50	46
4	59	51	45	40	58	50	44	40	48	43	39
5	55	46	39	35	53	45	39	35	43	38	34
6	50	41	35	31	49	41	35	30	39	34	30
7	47	37	31	27	46	37	31	27	36	31	27
8	44	34	28	24	43	34	28	24	33	28	24
9	41	32	26	22	40	31	26	22	30	25	22
10	38	29	24	20	37	29	23	20	28	23	20

PHOTOMETRIC CURVE



LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	11363	5988	5052
55	10503	4665	3309
65	9394	2873	1898
75	7154	1541	1322
85	2911	530	400

CANDLE DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	1632.69	1632.69	1632.69	1632.69	1632.69
5	1620.27	1612.79	1612.83	1631.13	1632.76
15	1566.4	1525.7	1515.51	1523.97	1579.69
25	1462.14	1373.2	1320.68	1378.78	1455.98
35	1302.53	1174.93	1088.15	1174.17	1299.4
45	1103.45	948.56	907.05	942.38	1086.55
55	853.99	710.68	585.01	705.15	847.62
65	592.17	406.94	320.17	398	577.8
75	306.56	195.15	205.45	191.31	297.24
85	62.18	57.14	55.01	56.43	59.28
90	4.44	3.48	2.49	3.22	3.92
95	.01	.01	.02	.03	.04
105	.07	.01	.09	.04	.04
115	.07	.04	.09	.14	.04
125	.1	.15	.1	.11	.1
135	.23	.14	.31	.18	.2
145	.19	.13	.45	.13	.19
155	.24	.37	.51	.27	.13
165	.21	.55	.52	.15	.32
175	.14	.58	.71	.82	.15
180	.97	.97	.97	.97	.97

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