

## DESCRIPTION

The GR5 is a T5-dedicated lensed troffer designed to offer premium performance in a low profile housing. The GR5's shallow, low profile housing is compatible with even highly restrictive plenums. Luminaires are compatible with today's popular ceiling systems.

The GR5 offers great performance and great quality. The series is an excellent choice for commercial offices, schools, hospitals, retail merchandising and many other applications.

<b>Catalog #</b>		<b>Type</b>	
<b>Project</b>			
<b>Comments</b>		<b>Date</b>	
<b>Prepared by</b>			

## SPECIFICATION FEATURES

### Construction

Unitized low profile recessed housing is die formed of code gauge prime cold rolled steel with full length stiffeners and mechanical endplate attachment for added strength. Ballast cover is easily removed without tools. Die formed captive lampholder bracket fully encloses lampholder wiring for easy lampholder replacement. Ample KOs are provided for continuous row wiring. Built-in grid-lock feature for safety and convenience.

### Electrical\*\*

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

### Finish

Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition. Lighting grade baked white enamel finish with premium reflectance for high efficiency.

### Hinging/Latching

Positive spring loaded cam action steel latches and safety lock T-hinges provide secure, high quality door fit and allow hinging and latching from either side.

### Frame/Shielding

Heavy gauge flat steel door is die formed with reinforced mitered corners. Housing and door frame assemblies incorporate full width mechanical light traps. Light stabilized, acrylic prismatic lens.

### Controls

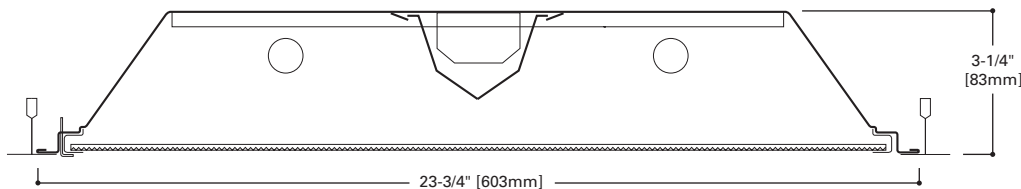
Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Lighting Solutions ([www.cooperlighting.com](http://www.cooperlighting.com)) to maximize energy savings.



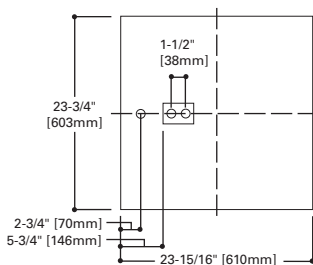
**2GR5**  
**214T5**  
**224T5**

**2' X 2' TROFFER**  
**2 LAMP T5**

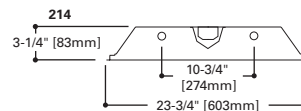
General Purpose  
T5 Commercial Troffer



## MOUNTING DATA



## LAMP CONFIGURATIONS

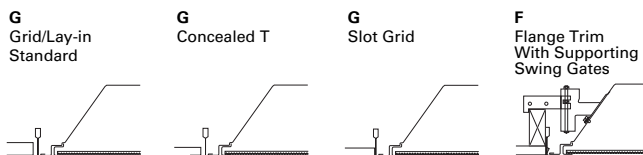


## DOOR FRAMES

2GR5  
Flat, White  
Steel (White  
Latches)



## CEILING COMPATIBILITY



Ceiling Type	Trim Type
Exposed Grid	G
Concealed T	G
Slot Grid	G
Flange	G***

## ENERGY DATA

Input Watts:  
**EB Ballast & STD Lamps**  
214T5 (32), 224T5 (53)

**Luminaire Efficacy Rating**  
LER = FL-60  
**Catalog Number:** 2GR5-214T5  
**Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$4.00**

\*Standard G (Grid) Type Fixtures can be field converted by adding trim kits. See Compatibility Section or Consult Factory.

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

\*\*\*When ordering Flange Kit for installation in drywall ceilings, see options and accessories compatibility section and ordering logic.

**LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS**

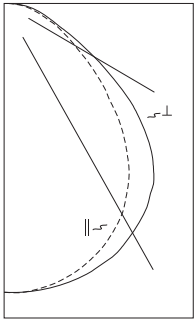
**LINEAR DISCONNECT**

Safe and convenient means of disconnecting power.



ADF110890  
October 16, 2019 8:22 AM

PHOTOMETRICS



**2GR5-214T5A**  
 Electronic Ballast  
 (2) 14W T5 lamps  
 1300 lumens  
 Spacing criterion:  
 (H) 1.2 x mounting  
 height, (L) 1.3 x  
 mounting height  
 Efficiency 76.1%  
 Test Report:  
 2GR5-214T5A.IES  
 LER = FL-60  
 Yearly Cost of 1000  
 lumens, 3000 hrs at  
 .08 KWH = \$4.00

**Coefficients of Utilization**

rc	Effective floor cavity reflectance																				
	80%				70%				20%				0%								
	rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
<b>RCR</b>	<b>0</b>	91	91	91	91	88	88	88	88	85	85	85	85	81	81	81	81	78	78	78	76
	<b>1</b>	83	80	77	74	81	78	75	73	75	73	71	72	70	68	69	68	66	66	66	65
	<b>2</b>	76	70	66	61	74	69	65	61	66	63	59	64	61	58	62	59	57	57	57	55
	<b>3</b>	70	62	57	52	68	61	56	51	59	54	51	57	53	50	55	52	49	49	49	47
	<b>4</b>	64	56	49	45	63	55	49	44	53	48	44	51	47	43	49	46	42	42	42	41
	<b>5</b>	59	50	44	39	58	49	43	38	48	42	38	46	41	38	45	41	37	37	37	36
	<b>6</b>	55	45	39	34	54	45	38	34	43	38	34	42	37	33	41	36	33	33	33	31
	<b>7</b>	51	41	35	30	50	41	34	30	39	34	30	38	33	30	37	33	29	29	29	28
	<b>8</b>	48	38	31	27	46	37	31	27	36	31	27	35	30	27	34	30	26	26	26	25
	<b>9</b>	45	35	29	24	43	34	28	24	33	28	24	32	28	24	32	27	24	24	24	23
	<b>10</b>	42	32	26	22	41	32	26	22	31	26	22	30	25	22	29	25	22	22	22	21

**Zonal Lumen Summary**

Zone	Lumens	%Lamp	%Fixture
<b>0-30</b>	612	23.5	30.9
<b>0-40</b>	1003	38.6	50.7
<b>0-60</b>	1672	64.3	84.5
<b>0-90</b>	1979	76.1	100.0
<b>0-180</b>	1979	76.1	100.0

**Luminance Data**

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
<b>45</b>	2096	2713	2159
<b>55</b>	1651	2190	1645
<b>65</b>	1356	1567	1307
<b>75</b>	1220	1432	1114
<b>85</b>	1496	1850	1299

**Candela**

Angle	Along H	45°	Across L
<b>0</b>	775	775	775
<b>5</b>	775	773	776
<b>10</b>	764	766	772
<b>15</b>	745	753	764
<b>20</b>	718	732	749
<b>25</b>	683	705	731
<b>30</b>	640	672	701
<b>35</b>	583	626	668
<b>40</b>	511	564	625
<b>45</b>	432	486	559
<b>50</b>	351	407	471
<b>55</b>	276	331	366
<b>60</b>	214	239	269
<b>65</b>	167	167	193
<b>70</b>	124	108	140
<b>75</b>	92	76	108
<b>80</b>	66	59	80
<b>85</b>	38	35	47
<b>90</b>	0	0	0

ORDER INFORMATION

SAMPLE NUMBER: 2GR5-214T5A-UNV-EBT1-U

<p><b>Rating<sup>(5)</sup></b>                  Blank=Standard                  ATW-SW4=Chicago Rated</p> <p><b>Width</b>                  2=2' Width</p> <p><b>Trim Type</b>                  G=Grid/Lay-in (Standard)</p> <p><b>Series</b>                  R5=General Purpose T5 Commercial Troffer<sup>(1)</sup></p>	<p><b>Number of Lamps</b>                  2=2 Lamps (Not included)</p> <p><b>Wattage</b>                  14T5=14W T5 (24")                  24T5=24W T5HO (24")</p> <p><b>Shielding</b>                  A=#12 Acrylic Pattern                  A125=#12 Pattern Acrylic (.125" Thick)                  A19/156=#19 Pattern Acrylic (.156" Thick)</p>	<p><b>Voltage<sup>(2)</sup></b>                  347V=347 Volt                  UNV=Universal Voltage 120-277<sup>(3)</sup></p> <p><b>Options</b>                  GL=Single Element Fuse                  GM=Double Element Fuse                  Lamps=Lamps Installed                  Flex=Flex Installed                  EL=Emergency Installed<sup>(13)</sup></p>	<p><b>Ballast Type</b>                  EBT__=T5 or T5HO Electronic Program Rapid Start. Total Harmonic Distortion &lt; 10%. Standard Ballast Factor=1.0</p> <p><b>Ballast/FactorType</b>                  EBT_N=T5 Electronic Program Rapid Start. Total Harmonic Distortion &lt; 10%. Normal Ballast Factor=.90<sup>(4)</sup>                  EBT_H=T5 Electronic Program Rapid Start. Total Harmonic Distortion &lt; 10%. High Ballast Factor=1.15<sup>(6)</sup>                  EBT_NDIM=T5 Electronic Program Rapid Start. Total Harmonic Distortion &lt; 10%. Step Dimming, Normal Ballast Factor=.95-1.0<sup>(7)</sup>                  EBT_HDIM=T5 Electronic Program Rapid Start. Total Harmonic Distortion &lt; 10%. Step Dimming, High Ballast Factor=1.15</p> <p><b>0-10V Dimming Ballasts<sup>(8)</sup></b>                  5LT5__=T5 0-10V Program Rapid Start. Total Harmonic Distortion &lt; 10%. Ballast Factor 1.0                  5LTVS5__=T5 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion &lt; 10%. Ballast Factor 1.0<sup>(10),(11)</sup>                  5LTV5H__=T5HO 0-10V Program Rapid Start. Total Harmonic Distortion &lt; 10%. Ballast Factor 1.0<sup>(12)</sup>                  5LTV5SH__=T5HO 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion &lt; 10%. Ballast Factor 1.0<sup>(10),(11)</sup></p> <p><b>Fifth Light DALI Ballasts<sup>(8)</sup></b>                  5LT5__=T5 DALI Program Rapid Start. Total Harmonic Distortion &lt; 10%. Ballast Factor 1.0                  5LTV5H__=T5HO DALI Program Rapid Start. Total Harmonic Distortion &lt; 10%. Ballast Factor 1.0</p>	<p><b>Number of Ballasts</b>                  1=1 Ballast                  2=2 Ballasts                  3=3 Ballasts</p> <p><b>Options</b>                  FR=Fire Label</p> <p><b>Packaging</b>                  U=Unit Pack</p>
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**ACCESSORIES**  
 EQ-CLIP-U=T-BAR Safety Earthquake Clips<sup>(11)</sup>  
 FCTKA-22W-U=Field Installed Flange Kit

**FCTK A - 24 R W - U**

Trim Kit  
 Field Convertible  
 Aluminum

22=2' x 2'  
 24=2' x 4'

N=Natural  
 W=White

Blank=Single  
 R=In Row  
 E=End Row

U=Unit Pack

**SHIPPING DATA**

Catalog No.	Wt.
2GR5-214T5A	15 lbs.
2GR5-224T5A	15 lbs.

NOTES: <sup>(1)</sup>An EQ Grid Clip is recommended for all 9/16" ceiling systems. <sup>(2)</sup>Products also available in non-US voltages and frequencies for international markets. <sup>(3)</sup>Not available when specifying emergencies, voltage must be specific. <sup>(4)</sup>.90 ballast factor available for 2 or 3 14W T5 or 28W T5 lamps only. <sup>(5)</sup>For NYC rated product, see separate specification sheets. <sup>(6)</sup>1-Lamp ballast in a High Ballast factor not available. <sup>(7)</sup>1-Lamp step dimming ballast in a Normal Ballast factor not available. 2-Lamp ballast will not operate 1-Lamp. <sup>(8)</sup>For a complete listing of Fifthlight Technology products and other solutions from Cooper Lighting Solutions, visit www.cooperlighting.com. <sup>(9)</sup>0-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system <sup>(10)</sup>Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. <sup>(11)</sup>Specification Grade 0-10V ballast not available for 24W T5HO lamps. <sup>(12)</sup>Standard 0-10V ballast not available for 24W T5HO lamps. <sup>(13)</sup>Please specify required voltage, 120V or 277V.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Solutions Representative for availability and ordering information.