

# RECESSED DIRECT/INDIRECT – AIR RETURN

# DI

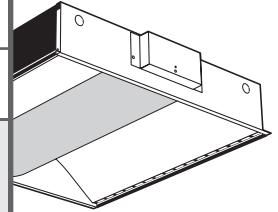
**SUBMITTAL:**

2x2

**JOB:**

**TYPE:**

**VOLTAGE:**



Shown with WPR

EXAMPLE

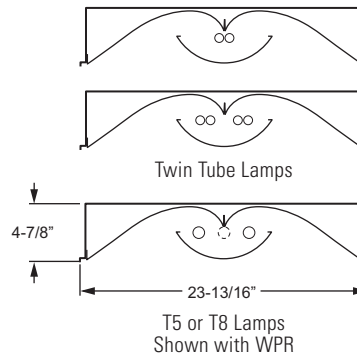
**DI G - AR 2 2 - 2 40TT - AD - OPTIONS - EB2 - UNV**

SERIES CEILING TYPE    FIXTURE STYLE    NOM. W.    NOM. L.    TOTAL LAMPS    WATTAGE/TYPE    SHIELDING    OPTIONS    BALLAST TYPE    VOLTAGE



## FEATURES

- ▶ Acrylic diffuser option provides up to 81% fixture efficiency.
- ▶ Black reveal minimizes appearance of dirt and dust resulting from air return function.
- ▶ Lamps shielded from direct view by diffuser.
- ▶ Matte white overlay and highly reflective non-glare white powder coated reflectors and end plates provide soft, uniform illumination and increased efficiency.
- ▶ Shallow housing depth.
- ▶ Steel lamp retaining clips standard—no plastic clip breakage.
- ▶ Ballast accessible from room side of fixture.
- ▶ Aesthetically pleasing slot grid option available.
- ▶ Ballast secured by two captive bolts and nuts to ensure a tight, reliable fit for maximum heat dissipation.
- ▶ Optional anti-microbial powder coating available to prevent the spread of dangerous micro-organisms and suppress the growth of mold and bacteria.
- ▶ This fixture is proudly made in the USA.



## SPECIFICATIONS

**Housing** – 20-gauge die-formed C.R.S.  
**Reflector** – Precision die-formed C.R.S. with highly reflective non-glare matte white polyester powder coated finish.  
**Shielding** – Die-formed C.R.S., 50% open perforation, white polyester powder coated diffuser with matte white acrylic overlay.  
**Finish** – Highly reflective non-glare matte white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.  
**Electrical** – Electronic ballast standard, rated Class P.

Lamp	Instant Start	Program Start
T5		•
T8	•	
40TT	•	
50TT		•
55TT		•

**Mounting** – NEMA Type “G” standard. NEMA Type “SS” available (earthquake clips included).  
**Labels** – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations.

## ORDERING INFORMATION

### SERIES

**DI** Recessed Direct/Indirect– Air Return

### CEILING TYPE

**G** NEMA Type “G”  
**SG** Screw slot NEMA Type “SS” (earthquake clips included)

### FIXTURE STYLE

**AR** Air return only (through side slots)

### NOMINAL WIDTH

2 2'

### NOMINAL LENGTH

2 2'

### TOTAL LAMPS

1, 2, or 3 (3 lamps in T5 or T8 only)

### LAMP WATTAGE/TYPE

**14T5S** 2', 14-watt T5  
**17** 2', 17-watt T8  
**24T5H** 2', 24-watt T5HO  
**40TT** 2', 40-watt long twin tube (1- or 2-lamp only)  
**50TT** 2', 50-watt long twin tube (1- or 2-lamp only)  
**55TT** 2', 55-watt long twin tube (1- or 2-lamp only)

### SHIELDING

See back for shielding details.

**WPR** White perforated round  
**WP** White perforated flat  
**AD** Acrylic  
**WPRL** White perforated with round louver  
**WPASL** White perforated with aluminum solid louver  
**WPR/SLT/LW** White slot-perforated lengthwise round  
**WPR/SPLIT** White perforated round with split  
**WPR/ACRY/CTR/CLR** White perforated round with center clear acrylic (consult factory for additional colors)

### OPTIONS

For generic EM ballast options (must specify voltage), see Fluorescent Information section.

**AMW** Anti-microbial white finish  
**DUSTCOVER** Dust and debris cover (WPR only)  
**EQCLIPS** Earthquake clips (4 per fixture)

### BALLAST TYPE

**EB1** 1-lamp electronic ballast  
**EB2** 2-lamp electronic ballast  
**EB3** 3-lamp electronic ballast  
**EB2/1** (1) 2-lamp and (1) 1-lamp electronic ballast

### VOLTAGE

**120** 120V  
**277** 277V  
**UNV** 120-277V  
**347** 347V0

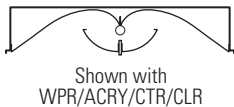
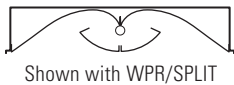
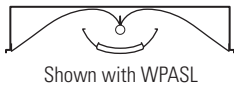
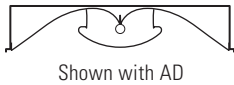
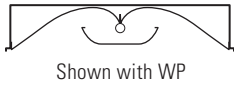


2x2

## PHOTOMETRY – DI WITH WPR OPTION

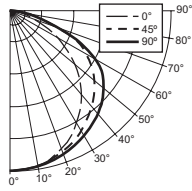
Catalog #: **DIG-AR22-240TT-WPR**

### SHIELDING OPTIONS



### TEST REPORT INFORMATION

- ▶ Test Report #: 15246.0
- ▶ Date: 12/12/07
- ▶ Lamp Type: F40TT/2G11
- ▶ Lamp Quantity: 2



### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1060.	16.8	26.3
0 - 40	1756.	27.9	43.5
0 - 60	3218.	51.1	79.8
0 - 90	4035.	64.1	100.0
<b>Total Luminaire:</b>			
0 - 180	4035.	64.1	100.0

Total Luminaire Optical Efficiency: **64.1%**  
IES Spacing Criteria: End = 1.2, Diagonal = 1.3, Across = 1.4

### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0	1344.	1344.	1344.	
5	1344.	1337.	1338.	127.7
15	1287.	1298.	1312.	367.9
25	1175.	1224.	1258.	564.2
35	1012.	1118.	1181.	696.0
45	808.	987.	1085.	749.8
55	574.	826.	936.	712.8
65	334.	613.	636.	548.7
75	141.	235.	253.	236.4
85	24.	29.	37.	31.8
90	0	0	0	

### ZONAL CAVITY COEFFICIENTS

Room Cavity Ratio	Ceiling			Wall			Floor		
	.80	.70	.50	.80	.70	.50	.80	.70	.50
0	.76	.76	.76	.74	.74	.74	.71	.71	.71
1	.70	.68	.65	.69	.66	.64	.64	.62	.60
2	.64	.60	.55	.63	.58	.55	.56	.53	.50
3	.59	.53	.48	.58	.52	.47	.50	.46	.43
4	.54	.47	.41	.53	.46	.41	.44	.40	.36
5	.49	.41	.35	.48	.40	.35	.39	.34	.31
6	.45	.37	.31	.44	.36	.31	.35	.30	.26
7	.41	.33	.27	.40	.32	.27	.31	.26	.23
8	.38	.29	.24	.37	.29	.24	.28	.23	.20
9	.35	.26	.21	.34	.26	.21	.25	.20	.17
10	.32	.24	.19	.32	.23	.18	.23	.18	.15

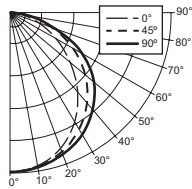
Effective Floor Cavity Reflectance = .20

## PHOTOMETRY – DI WITH AD OPTION

Catalog #: **DIG-AR22-240TT-AD**

### TEST REPORT INFORMATION

- ▶ Test Report #: 15247.0
- ▶ Date: 08/05/08
- ▶ Lamp Type: F40TT/2G11
- ▶ Lamp Quantity: 2



### LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1422.	22.6	27.6
0 - 40	2333.	37.0	45.4
0 - 60	4128.	65.5	80.3
0 - 90	5143.	81.6	100.0
<b>Total Luminaire:</b>			
0 - 180	5143.	81.6	100.0

Total Luminaire Optical Efficiency: **81.6%**  
IES Spacing Criteria: End = 1.2, Diagonal = 1.3, Across = 1.3

### CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0	1813.	1813.	1813.	
5	1809.	1804.	1803.	172.3
15	1727.	1746.	1761.	494.9
25	1567.	1635.	1682.	754.5
35	1333.	1463.	1548.	911.8
45	1040.	1237.	1355.	944.1
55	733.	968.	1102.	850.2
65	466.	660.	757.	634.7
75	218.	327.	360.	327.4
85	35.	52.	55.	52.9
90	0.	0.	0.	

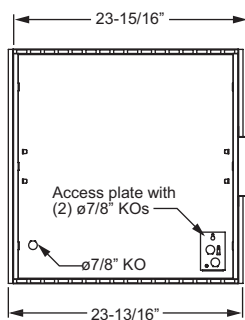
### ZONAL CAVITY COEFFICIENTS

Room Cavity Ratio	Ceiling			Wall			Floor		
	.80	.70	.50	.80	.70	.50	.80	.70	.50
0	.97	.97	.97	.95	.95	.95	.91	.91	.91
1	.90	.86	.83	.88	.84	.81	.81	.79	.76
2	.82	.76	.71	.80	.74	.70	.72	.68	.64
3	.75	.67	.61	.73	.66	.60	.64	.59	.55
4	.69	.60	.53	.67	.59	.52	.57	.51	.47
5	.63	.53	.46	.61	.52	.45	.50	.44	.40
6	.58	.47	.40	.56	.47	.40	.45	.39	.35
7	.53	.42	.35	.52	.42	.35	.41	.34	.30
8	.49	.38	.31	.48	.37	.31	.36	.30	.26
9	.45	.34	.27	.44	.34	.27	.33	.27	.22
10	.42	.31	.24	.41	.30	.24	.30	.24	.20

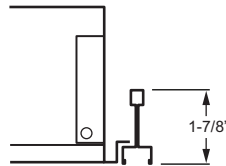
Effective Floor Cavity Reflectance = .20

## FIXTURE DETAILS

### BACKVIEW

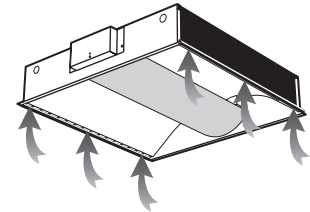


### SLOT GRID (Williams' SG)



Screw Slot NEMA Type "SS"

### AIR RETURN



### DUSTCOVER OPTION

