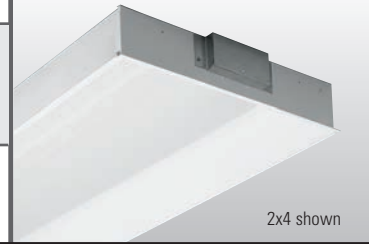


# RECESSED DIRECT/INDIRECT

# DI

CATALOG #:	TYPE:
PROJECT:	NOTES:

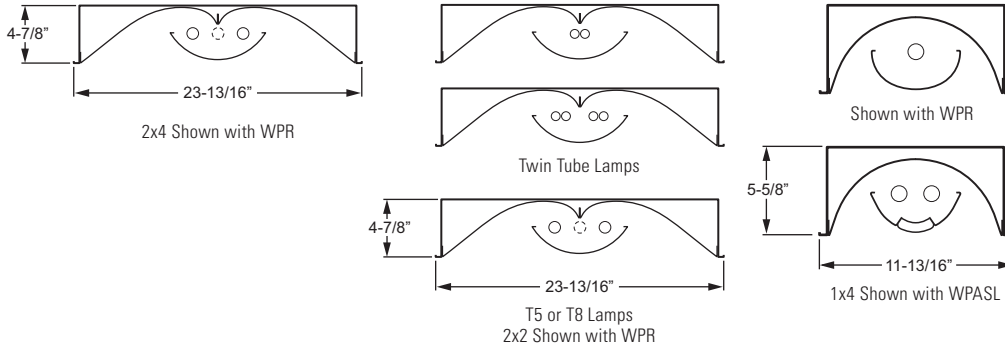
## T5 | T8



**EXAMPLE** **DI G - S 2 4 - 2 32 - AD - OPTIONS - EB2 - UNV**

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

## CROSS SECTIONS



## FEATURES

- ▶ Acrylic diffuser option provides up to 88% (2x4) and 81% (2x2) fixture efficiency.
- ▶ Matte white overlay and highly reflective non-glare white powder coated reflectors and end plates provide soft, uniform illumination and increased efficiency.
- ▶ Lamps shielded from direct view by diffuser.
- ▶ Shallow housing depth (2x2 and 2x4).
- ▶ 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.
- ▶ This fixture is proudly made in the USA.

## ORDERING INFORMATION

**SERIES**  
**DI** Recessed Direct/Indirect

**CEILING TYPE**  
**G** NEMA Type "G"  
**SG** Screw slot NEMA Type "SS" (earthquake clips included)  
 For flange installations use the Drywall Kit (DFK), ordered separately, see [Technical Info](#).

**FIXTURE STYLE**  
**S** Static, no air capability

**NOMINAL WIDTH**

1	1'
2	2'
4	4'

**NOMINAL LENGTH**

2	2' (2' width only)
4	4'

**TOTAL LAMPS**

1 or 2	(1x4)
1, 2, or 3	(2x2 and 2x4; 2x2: 3 lamps in T5 or T8 only)

**LAMP WATTAGE/TYPE**

**2x2 LAMP OPTIONS**

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)

**1x4 or 2x4 LAMP OPTIONS**

28T5S	4', 28-watt T5
32	4', 32-watt T8
54T5H	4', 54-watt T5HO

**SHIELDING**  
 See page 4 for shielding details.

**WPR** White perforated round  
**WP** White perforated flat (2x2 and 2x4 only)  
**AD** Acrylic (2x2 and 2x4 only)  
**WPRL** White perforated with round louver (2x2 and 2x4 only)  
**WPASL** White perforated with aluminum solid louver  
**WPR/SLT/LW** White slot-perforated lengthwise round (2x2 and 2x4 only)  
**WPR/SPLIT** White perforated round with split (2x2 and 2x4 only)  
**WPR/ACRY/CTR/CLR** White perforated round with center clear acrylic (2x2 and 2x4; consult factory for additional colors)  
**WPR/DUSTCOVER** White perforated round with dust and debris cover

**OPTIONS**  
 For generic EM ballast options (must specify voltage), see [Technical Info](#).

**EQCLIPS** Earthquake clips (4 per fixture)  
**CP** Chicago Plenum (CCEA)

**BALLAST TYPE**  
 Additional ballast options available, see [Technical Info](#).

**EB1** 1-lamp electronic ballast  
**EB2** 2-lamp electronic ballast  
**EB3** 3-lamp electronic ballast

**VOLTAGE**

120	120V
277	277V
UNV	120-277V
347	347V

PHOTOMETRY – 2x4 WPR

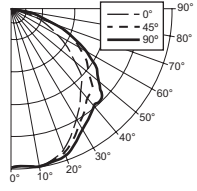
Catalog #: DIG-S24-232-WPR

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, instant start T8 (1x4 and 2x4), program start T5 (1x4 and 2x4), rated Class P.

TEST REPORT INFORMATION

- ▶ Test Report #: 13833.0
- ▶ Date: 12/10/07
- ▶ Lamp Type: F32T8
- ▶ Lamp Quantity: 2



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	1432	1432	1432	
5°	1433	1433	1433	136.8
15°	1412	1425	1439	403.8
25°	1270	1308	1348	605.5
35°	1068	1140	1213	715.9
45°	895	1036	1153	797.9
55°	620	822	933	717.4
65°	378	601	610	545.2
75°	177	256	248	257.5
85°	36	42	44	43.1
90°	4	3	3	

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1146	19.4	27.1
0 - 40	1862	31.6	44.1
0 - 60	3377	57.2	80.0
0 - 90	4223	71.6	100.0
0 - 180	4223	71.6	100.0
<b>Total Luminaire:</b>			
Total Luminaire Optical Efficiency: <b>71.6%</b>			
IES Spacing Criteria: End = 1.2			
Diagonal = 1.3			
Across = 1.3			

ZONAL CAVITY COEFFICIENTS

Room Cavity Ratio	Ceiling			.80			.70			.50		
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10		
0	.85	.85	.85	.83	.83	.83	.80	.80	.80			
1	.79	.76	.73	.77	.74	.71	.71	.69	.67			
2	.72	.67	.62	.70	.65	.61	.63	.59	.56			
3	.66	.59	.53	.64	.58	.53	.56	.51	.48			
4	.61	.52	.46	.59	.51	.46	.50	.45	.41			
5	.55	.46	.40	.54	.45	.39	.44	.39	.35			
6	.51	.41	.35	.49	.41	.35	.39	.34	.30			
7	.47	.37	.31	.45	.36	.30	.35	.30	.26			
8	.43	.33	.27	.42	.33	.27	.32	.26	.22			
9	.39	.30	.24	.38	.29	.23	.28	.23	.19			
10	.37	.27	.21	.36	.26	.21	.26	.21	.17			

Effective Floor Cavity Reflectance = .20

2x2 only		
Lamp	Instant Start	Program Start
T5		•
T8	•	
40TT	•	
50TT		•
55TT		•

**Mounting** – NEMA Type "G" standard. NEMA Type "SS" available (earthquake clips included). For flange installations use the Drywall Kit (DFK), ordered separately, see [Technical Info](#).

Labels –

- UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations.
- City of Chicago Environmental Air approved when specified with CP option.

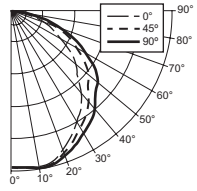
**Warranty** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

PHOTOMETRY – 2x4 AD

Catalog #: DIG-S24-232-AD

TEST REPORT INFORMATION

- ▶ Test Report #: 14225.0
- ▶ Date: 07/25/08
- ▶ Lamp Type: F32T8
- ▶ Lamp Quantity: 2



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	1759	1759	1759	
5°	1771	1766	1763	168.6
15°	1752	1769	1784	501.2
25°	1565	1614	1666	747.8
35°	1339	1439	1527	901.6
45°	1028	1188	1309	912.4
55°	792	986	1124	873.2
65°	510	697	787	670.6
75°	257	364	404	374.1
85°	62	84	82	85.9
90°	0	0	0	

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1418	24.0	27.1
0 - 40	2319	39.3	44.3
0 - 60	4105	69.6	78.4
0 - 90	5235	88.7	100.0
0 - 180	5235	88.7	100.0
<b>Total Luminaire:</b>			
Total Luminaire Optical Efficiency: <b>88.7%</b>			
IES Spacing Criteria: End = 1.2			
Diagonal = 1.3			
Across = 1.3			

ZONAL CAVITY COEFFICIENTS

Room Cavity Ratio	Ceiling			.80			.70			.50		
	Wall	.70	.50	.30	.70	.50	.30	.50	.30	.10		
0	1.06	1.06	1.06	1.03	1.03	1.03	.99	.99	.99			
1	.97	.93	.90	.95	.91	.88	.87	.85	.82			
2	.89	.82	.76	.87	.80	.75	.77	.73	.69			
3	.81	.72	.66	.79	.71	.65	.68	.63	.58			
4	.75	.64	.57	.73	.63	.56	.61	.55	.50			
5	.68	.57	.49	.66	.56	.48	.54	.47	.42			
6	.62	.51	.43	.61	.50	.42	.48	.42	.37			
7	.58	.46	.38	.56	.45	.37	.43	.37	.32			
8	.53	.41	.33	.52	.40	.33	.39	.32	.28			
9	.49	.37	.29	.47	.36	.29	.35	.28	.24			
10	.45	.33	.26	.44	.33	.26	.32	.25	.21			

Effective Floor Cavity Reflectance = .20

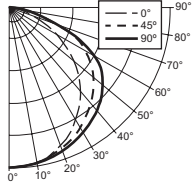


PHOTOMETRY – 2x2 WPR

Catalog #: **DIG-S22-240TT-WPR**

TEST REPORT INFORMATION

- ▶ Test Report #: 13831.0
- ▶ Date: 12/12/07
- ▶ Lamp Type: F40TT/2G11
- ▶ Lamp Quantity: 2



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.			

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: <b>64.1%</b>			
IES Spacing Criteria: End = 1.2			
Diagonal = 1.3			
Across = 1.4			

ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor		
	.80	.70	.50	.80	.70	.50	.30	.20	.10
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

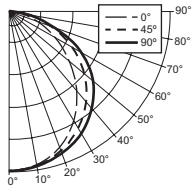
Effective Floor Cavity Reflectance = .20

PHOTOMETRY – 2x2 AD

Catalog #: **DIG-22-240TT-AD**

TEST REPORT INFORMATION

- ▶ Test Report #: 14229.0
- ▶ Date: 08/05/08
- ▶ Lamp Type: F40TT/2G11
- ▶ Lamp Quantity: 2



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.			

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: <b>81.6%</b>			
IES Spacing Criteria: End = 1.2			
Diagonal = 1.3			
Across = 1.3			

ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor		
	.80	.70	.50	.80	.70	.50	.30	.20	.10
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

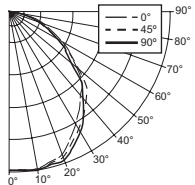
Effective Floor Cavity Reflectance = .20

PHOTOMETRY – 1x4

Catalog #: **DIG-S14-232-WPR**

TEST REPORT INFORMATION

- ▶ Test Report #: 13829.0
- ▶ Date: 12/07/07
- ▶ Lamp Type: F32T8
- ▶ Lamp Quantity: 2



CANDLEPOWER DISTRIBUTION

Vertical Angle	Horizontal Angle			Zonal Lumens
	0°	45°	90°	
0°	1473.1473.1473.			
5°	1476.1479.1481.		141.2	
15°	1441.1455.1470.		412.5	
25°	1312.1352.1386.		625.1	
35°	1118.1186.1191.		734.6	
45°	952.1009.937.		755.6	
55°	686.662.625.		596.1	
65°	445.381.395.		405.2	
75°	227.178.180.		191.9	
85°	37.37.37.		40.4	
90°	0.0.0.			

LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixture
0 - 30	1179.	20.0	30.2
0 - 40	1913.	32.4	49.0
0 - 60	3265.	55.3	83.7
0 - 90	3902.	66.1	100.0
<b>Total Luminaire:</b>			
0 - 180	3902.	66.1	100.0
Total Luminaire Optical Efficiency: <b>66.1%</b>			
IES Spacing Criteria: End = 1.2			
Diagonal = 1.3			
Across = 1.3			

ZONAL CAVITY COEFFICIENTS

	Ceiling			Wall			Floor		
	.80	.70	.50	.80	.70	.50	.30	.20	.10
0	.79	.79	.79	.77	.77	.77	.73	.73	.73
1	.73	.70	.68	.71	.69	.67	.66	.64	.63
2	.67	.62	.58	.66	.61	.58	.59	.56	.53
3	.62	.56	.51	.60	.55	.50	.53	.49	.46
4	.57	.50	.44	.56	.49	.44	.47	.43	.40
5	.52	.44	.39	.51	.44	.38	.42	.38	.34
6	.48	.40	.34	.47	.39	.34	.38	.33	.30
7	.44	.36	.30	.43	.35	.30	.34	.29	.26
8	.41	.32	.27	.40	.32	.26	.31	.26	.23
9	.38	.29	.23	.37	.28	.23	.28	.23	.20
10	.35	.26	.21	.34	.26	.21	.25	.20	.17

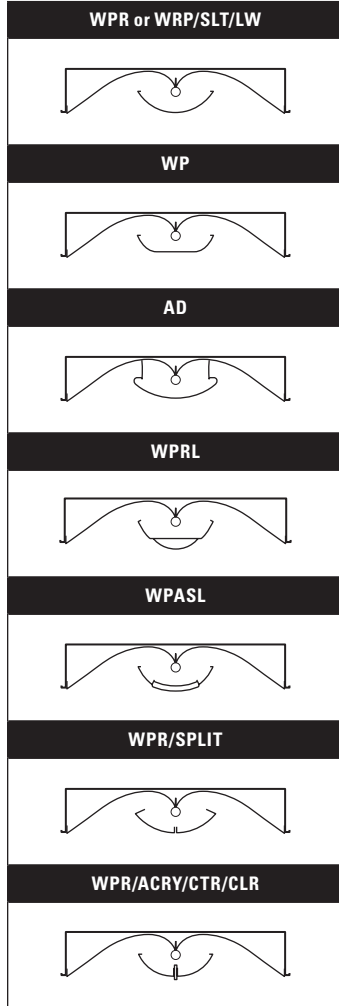
Effective Floor Cavity Reflectance = .20



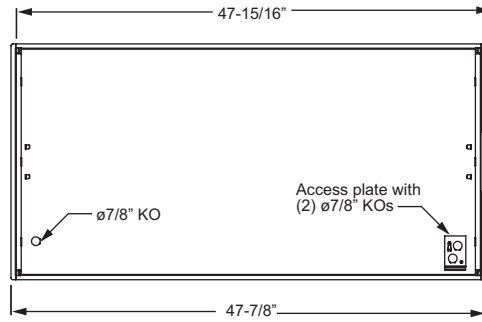
### FIXTURE DETAILS

### SHIELDING OPTIONS

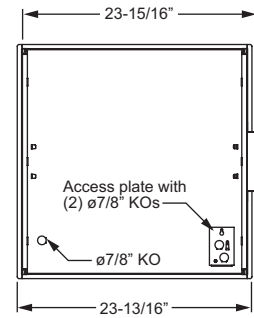
Seven (7) shielding options available.  
1x4 available with WPR and WPASL only.



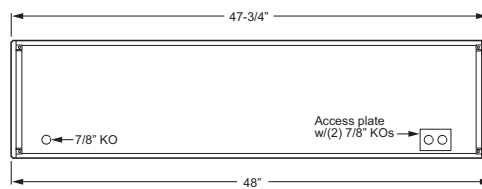
#### 2x4 BACK VIEW



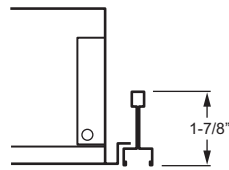
#### 2x2 BACK VIEW



#### 1x4 BACK VIEW

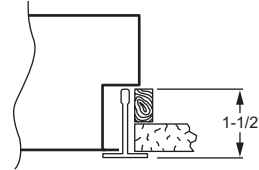


#### SLOT GRID (WILLIAMS' SG)



Screw Slot NEMA Type "SS"

#### DRYWALL KIT (DFK)



When using the DFK with Williams DI fixture, the structure surrounding the DFK at each end of fixture is to extend no more than 1-1/2" from the bottom of the "T" as shown.

#### DUSTCOVER OPTION

