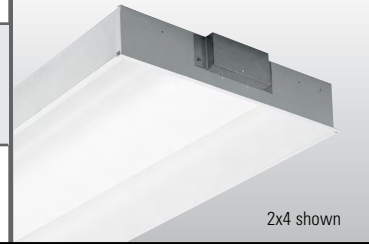


RECESSED DIRECT/INDIRECT

DI

CATALOG #:	TYPE:
PROJECT:	NOTES:

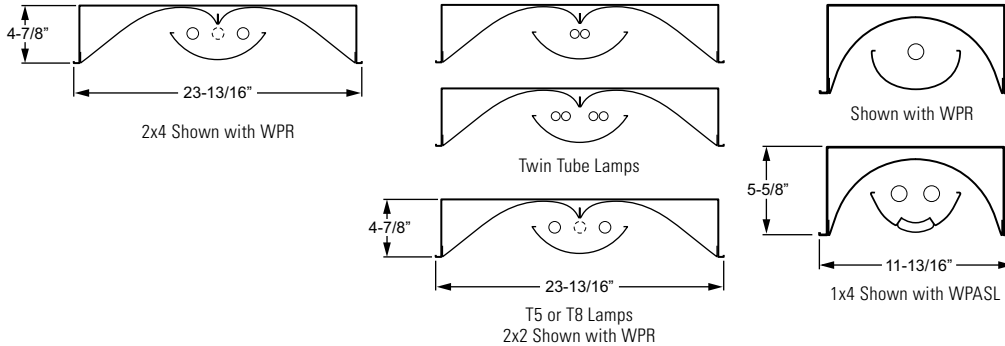
T5 | T8



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.
- ▶ Made Right Here® 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)
Flange installation available, shipped separately; see page 4 for DRYWALL KIT (DFK) OPTIONS.

FIXTURE STYLE
S Static, no air capability

NOMINAL WIDTH
1 1'
2 2'

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
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

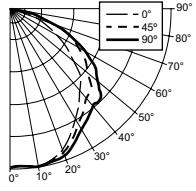
Catalog #: DIG-S24-232-WPR

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 - 60	1862	31.6	44.1
0 - 60	3377	57.2	80.0
0 - 90	4223	71.6	100.0
Total Luminaire:			
0 - 180	4223	71.6	100.0
Total Luminaire Optical Efficiency: 71.6%			
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

PHOTOMETRY – 2x4 AD

Catalog #: DIG-S24-232-AD

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

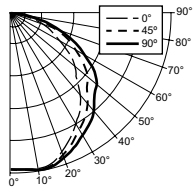
Mounting – NEMA Type "G" standard. NEMA Type "SS" available (earthquake clips included). Flange installation available, shipped separately: see page 4 for DRYWALL KIT (DFK) OPTIONS.

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.

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 - 60	2319	39.3	44.3
0 - 60	4105	69.6	78.4
0 - 90	5235	88.7	100.0
Total Luminaire:			
0 - 180	5235	88.7	100.0
Total Luminaire Optical Efficiency: 88.7%			
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			

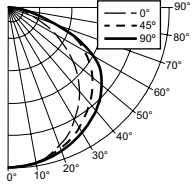
Effective Floor Cavity Reflectance = .20

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
Total Luminaire:			
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			

ZONAL CAVITY COEFFICIENTS

	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

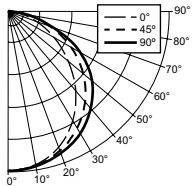
Effective Floor Cavity Reflectance = .20

PHOTOMETRY – 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
Total Luminaire:			
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			

ZONAL CAVITY COEFFICIENTS

	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

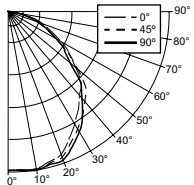
Effective Floor Cavity Reflectance = .20

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
Total Luminaire:			
0 - 180	3902.	66.1	100.0
Total Luminaire Optical Efficiency: 66.1%			
IES Spacing Criteria: End = 1.2			
Diagonal = 1.3			
Across = 1.3			

ZONAL CAVITY COEFFICIENTS

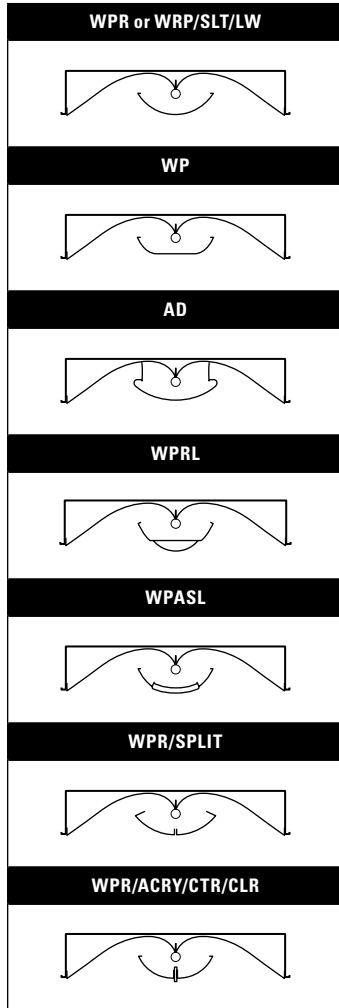
	Ceiling			Wall			Floor		
	.80	.70	.50	.80	.70	.50	.80	.70	.50
0	.79	.79	.79	.77	.77	.77	.73	.73	.73
1	.73	.70	.68	.71	.69	.67	.66	.64	.63
2	.67	.62	.58	.66	.61	.58	.59	.56	.53
3	.62	.56	.51	.60	.55	.50	.53	.49	.46
4	.57	.50	.44	.56	.49	.44	.47	.43	.40
5	.52	.44	.39	.51	.44	.38	.42	.38	.34
6	.48	.40	.34	.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



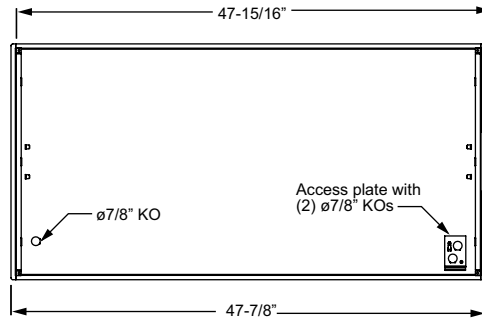
SHIELDING OPTIONS

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

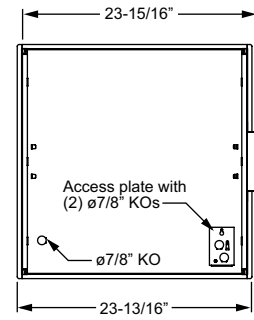


FIXTURE DETAILS

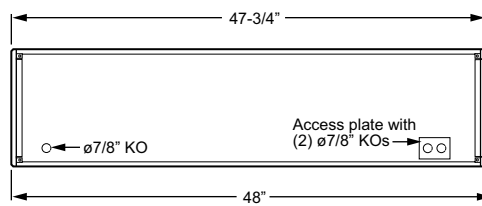
2x4 BACK VIEW



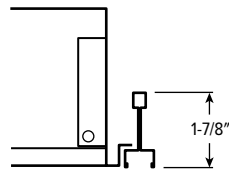
2x2 BACK VIEW



1x4 BACK VIEW

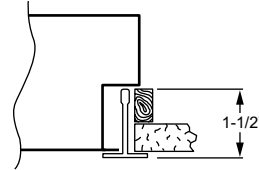


SLOT GRID (WILLIAMS' SG)



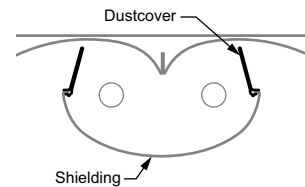
Screw Slot NEMA Type "SS"

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



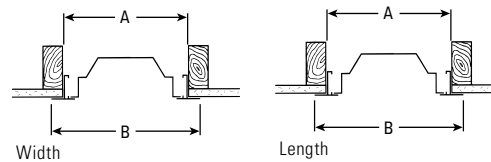
DRYWALL KIT (DFK) OPTIONS

ORDERING EXAMPLE: DFK - 24 24 W

SERIES	WIDTH	LENGTH	FINISH
DFK Drywall Kit	See table below	See table below	W White AMW Anti-microbial white

TYPICAL INSTALLATION

Refer to table for dimensions.



SERIES	WIDTH	ROUGH-IN		FINISH TRIM SIZE	
		WIDTH (A)	LENGTH (C)	WIDTH (B)	LENGTH (D)
DFK-1248	1' x 4'	12-3/8"	48-3/8"	13-5/16"	49-5/16"
DFK-2424	2' x 2'	24-3/8"	24-3/8"	25-5/16"	25-5/16"
DFK-2448	2' x 4'	24-3/8"	48-3/8"	25-5/16"	49-5/16"