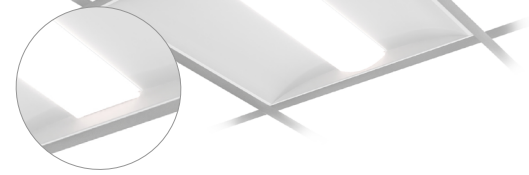# Day-Brite CFI
by Signify

Recessed

FluxGrid gen 2 2x2

2FGX up to 6000 lumens

RS diffuse round smooth

FS diffuse flat smooth

Day-Brite / CFI FluxGrid gen 2 LED recessed offers architectural appeal with "must have" features. Two different lens styles, discrete air return, integral emergency, and access to the boards and driver from below make FluxGrid gen 2 an ideal solution for a wide range of applications.

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Ordering guide – standard & wireless controls

Standard configurations available with all choices, unless otherwise noted. Base configurations selections indicated by blue.

example: 2FGXG38B840-2-RS-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options	
2	**FGX**	**G**				**2**					
2 2'	**FGX** FluxGrid	**G** Grid	**Blank** Static **H** Air return	Base Configurations **38B** 3800 Standard Configurations **15L** 1500 **20L** 2000 **30L** 3000 **38L** 3800 **45L** 4500 **54L** 5400 **60L** 6000 Standard configuration lumen packages may be ordered in increments of 100lms from the lowest to highest lumen package	**830** 80 CRI, 3000K **835** 80 CRI, 3500K **840** 80 CRI, 4000K **850** 80 CRI, 5000K **935**[5] 90 CRI, 3500K **940**[5] 90 CRI, 4000K **950**[5] 90 CRI, 5000K	**2** 2'	**FS** Diffuse flat smooth **RS** Diffuse round smooth	**UNV** Universal voltage 120-277V **347** 347V	**DIM**[1] Dimming **SDIM** Step dimming to 40% input power **XDIM**[9,10] MarkX phase dimming **LDE**[5] Lutron LDE5 5% dimming **DALI** DALI	**F1** 3/8" flex, 3 wire 18 gauge 6' **F2** 3/8" flex, 4 wire 18 gauge 6' **F1/D** 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires **F2/5W** 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires **F2/6W** 3/8" single flex, 6 wire 18 gauge 6' for dimmable and EMLED luminaires **GLR** Fusing, fast blow **BSL10LST**[4] Bodine 10W self-testing battery pack **BSL6LST**[4] Bodine 6W self-testing battery pack **DSC** Quick driver disconnect **CHIC**[3] Chicago Plenum rated **ER100**[6,7] UL924 listed sensor bypass relay, factory installed between driver & sensor **GTD/E**[4,6] UL924 listed Bodine GTD factory installed on driver input **GTD/SNSR**[4,6,7] UL924 listed Bodine GTD factory installed between driver and sensor **SWZCS**[2,8] Interact Pro scalable sensor with integral daylight & occupancy sensing, advanced grouping with dwell time **SWZDT**[2] SpaceWise only sensor, daylighting and occupancy, advanced grouping with dwell time **RADIO**[2] Interact Pro RF sensor, enables wireless connected lighting control **IAOSB**[2,8] Interact Office advanced wireless sensor bundle, integral SC1500 w/IoT capabilities for enterprise scale projects **AG** Antimicrobial finish **BAC**[11] Meets the requirements of the Buy American Act of 1933 (BAA)	

1 Integral controls options dimmable to 5% via wireless wall switch. Non-controls options are 0-10v dimmable to 1% for Standard configurations,and to 10% for Base configurations.
2 Specify only with -DIM driver option.
3 CHIC option not provided with air return functionality.
4 Not available with 347V.
5 Option is qualified as Engineered-to-Order (ETO) ready. Lead times and minimum order quantities may vary, please consult factory.
6 Must be installed in conjunction with a UL1008 device.
7 Must be ordered with an integral sensing option.
8 Must order IRT9015 Interact commissioning remote with each system order.
9 XDIM requires 120V or 277V specification.
10 Only available in lumen package range from 45L-60L
11 Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.
12 Consult Signify to confirm whether specific accessories are BAA-compliant.

Accessories[12] (order separately)
- **FSF22** – 2'x2' surface mount field installation kit (field assembled)
- **FMA22** – 2'x2' "F" mounting frame for NEMA "F" ceiling
- **FSK22** – 2'x2' surface mount field installation kit (factory welded seams)

SWZCS accessories[10] (order separately)
- **IRT9015** – handheld remote for grouping and configuration (at least one remote required for any SWZCS installation).
- **UID8451/10** – Wireless Dimmer Switch Selector
- **UID8461/10** – Wireless Scene Selector

Not all product variations listed on this page are DLC qualified. To ensure that a specific model is qualified, visit www.designlights.org/search

interact ready.

2FGX FluxGrid gen 2 recessed 2x2

up to 6000 lumens

Application

- 3-1/8" deep low profile configuration provides minimal penetration into the plenum space.
- Acrylic diffusers available in round and flat smooth configurations which provides even illumination with comfortable appeal.
- Standard and base configurations available in multiple lumen packages to suit the needs of various applications.
- Lambertian distribution creates uniform horizontal and vertical illuminance on the work plane and reduces scalloping on the walls.
- CRI 80 minimum color rendering with balanced spectrum.
- LEDs coupled with standard dimming provide prolonged lumen maintenance. Optional integral sensors contribute further to LED lumen maintenance.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster requirements can be accommodated by using an FMA22 "F" mounting frame (sold separately).
- Continuous row mounting is possible with a 1" gap between fixtures accommodated by others.

Enclosure

- Opal acrylic diffuser provides visually comfortable lumenance without compromise to luminaire efficacy.
- Diffuser requires no frames or fasteners and can be easily removed from below.

Construction/Finish

- Uncomplicated design is 3-1/8" deep with minimal material overlap creating several benefits:
  - Less material required
  - Less packaging required
  - Reduced weight for ease of handling and transit
  - Less energy required for construction and assembly
  - More luminaires can be shipped per truck to reduce fuel consumption
- Metal side covers are die formed with a conical shape to enhance light distribution and visual aesthetic.
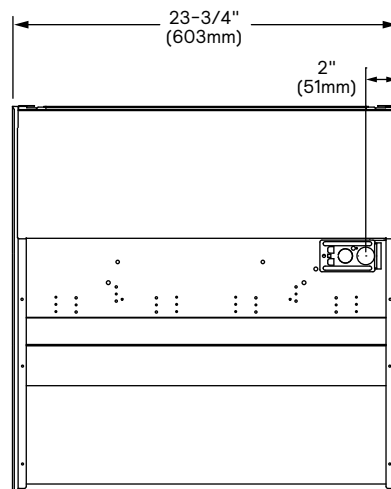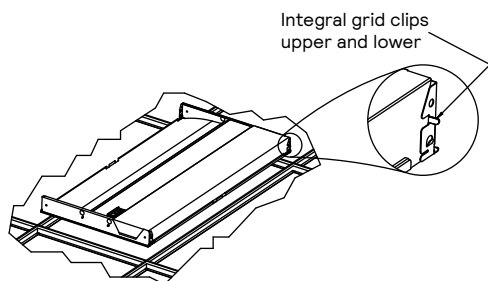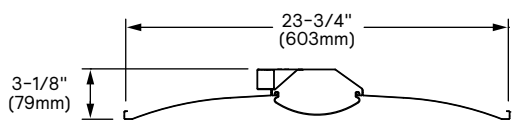
- Luminaire finish is matte white polyester powder coat for high quality, durable finish.
- T-bar grid clips are integral to the body.
- Air return option provides air flow through architectural forms located at each end of the lens. Air passes through these forms and through the end plates of the luminaire. A cover plate is provided to control air flow through the luminaire, or make it static as required.
- Integral controls options include sensor mounted architectural form at one end of the lens.
- Bodine BSL10LST and BSL6LST options require the emergency battery pack be installed with a top side cover. Access from above.
- To estimate lumen output in emergency mode, multiply emergency pack wattage by efficacy, then by 1.10.

General notes

- All options are factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Electrical

- Integral sensor options for occupancy sensing and/or daylight harvesting are available for additional energy savings with no reduction of life or increase in installation labor.
- Standard configurations provide up to 142 lumens per watt and are available with multiple lumen packages and 3000, 3500, 4000, and 5000K color temperatures.
- Base configuration provides up to 120 lumens per watt and are available in 3800 lumen flux and 3500K and 4000K color temperatures.
- LED boards are accessible from below by removal of the lens.
- LED driver is accessible from below by removal of the lens and integral wireway cover.

- Other driver options including step dimming (SDIM, 100%/40%), DALI, phase dimming (XDIM), and Lutron are available.
- 5 year manufacturer's limited warranty. Visit signify.com/warranties for complete warranty information.
- TM-21 predicted L70 lumen maintenance up to 85,000 hours.
- cETLus listed to UL and CSA standards, suitable for damp locations.

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x2 Standard	2FGXG15L840-2-RS-UNV	11	141
	2FGXG20L840-2-RS-UNV	14	142
	2FGXG30L840-2-RS-UNV	22	139
	2FGXG38L840-2-RS-UNV	28	136
	2FGXG45L840-2-RS-UNV	34	133
	2FGXG54L840-2-RS-UNV	43	128
	2FGXG60L840-2-RS-UNV	47	125
2x2 Base	2FGXG38B840-2-RS-UNV	36	120

Dimensions

23-3/4"
(603mm)

3-1/8"
(79mm)

Integral grid clips upper and lower

23-3/4"
(603mm)

2"
(51mm)

2FGX FluxGrid gen 2 recessed 2x2

up to 6000 lumens

Wireless Controls Options

SpaceWise DT (SWZDT)

- Standalone daylight and occupancy sensing with advanced grouping, wireless mesh networking and dwell time.

- Commissioning via compatible Android phone and Philips Field App

- Dimming via compatible Zigbee wireless wall switch only (see link below for details)

- Register for the commissioning app at http://registration.componentcloud.philips.com/appregistration/

- Integral sensing options may not be combined

- For more information including recommended switches, refer to the following: –

  SWZDT – www.usa.lighting.philips.com/systems/lighting-systems/spacewise

Emergency Options (ER100)

- Power Sensing (Factory default) – Recommended UL924 option requires unswitched power sense line, absence of voltage on the normal circuit triggers luminaire to 100% output

- Power Interruption Detection (Field option) – Detects AC power interruption >30ms triggers 90 minute emergency mode with luminaire at 100% output

FluxGrid shown with integral sensor

Interact Pro scalable sensor for Foundation, Advanced & Enterprise tiers (SWZCS and an evolution of SpaceWise)

- SWZCS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.

- The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.

- Interact Pro includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.

- Startup is implemented via Interact Pro App (Android or iPhone) & BlueTooth connectivity. The App provides flexibility to choose between a gateway or non gateway mode for setup.

- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.

- Prepare project configuration steps remotely and use IRT9015 remote onsite to identify and group devices together.

  - Compatible with:
    - UID8451/10 wireless dimmer switch
    - SWS200 wireless scene switch
    - Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
    - Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
    - Battery powered IP65 presence sensor OCC sensor IA CM IP65 WH
    - Battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH

- For more information on Interact Pro visit: www.interact-lighting.com/interactproscalablesystem

Radio only sensor (RADIO)

- Integral RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.

- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.

Interact Pro scalable sensor bundles for Enterprise tier

- IAOSB option in addition to occupancy and daylight sensing supports advanced IoT capabilities such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.

- Compatible with UID8451/10 wireless dimmer switch, SWS200 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available.

- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.

- Requires compatible Gateway and internet connectivity for commissioning.

- For more information, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices
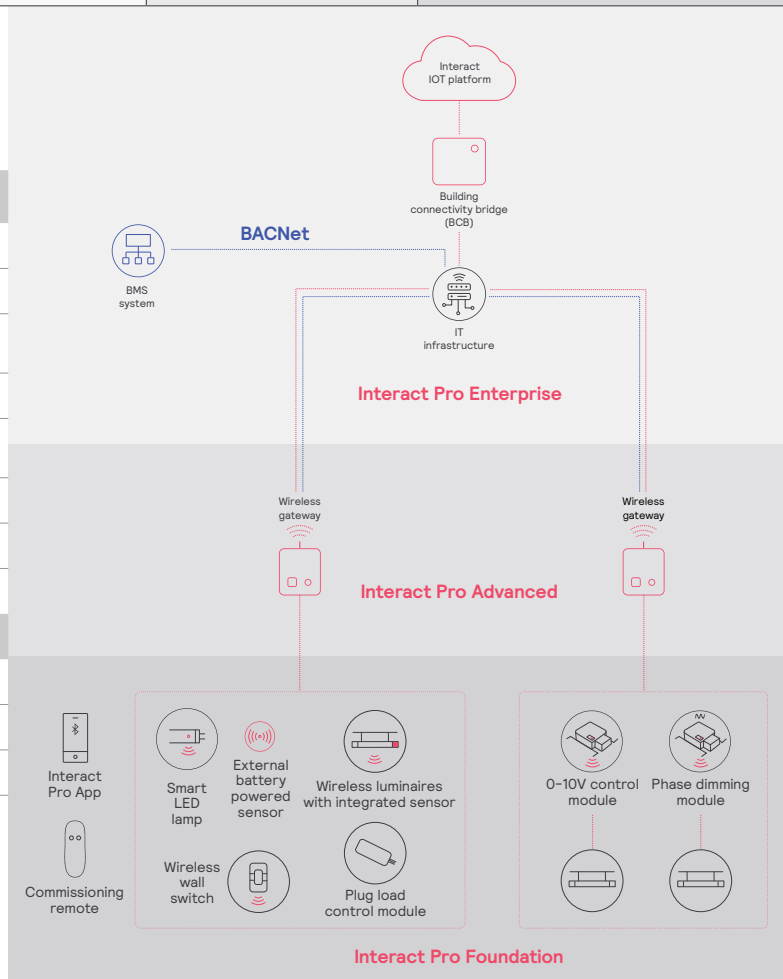
2FGX FluxGrid gen 2 recessed 2x2

up to 6000 lumens

Interact Pro scalable system		
Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0–10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

| System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
· luminaires with integrated sensors	150
· smart TLEDS	150
Total number of ZGP devices (sensors and switches)	50
· sensors	30
· switches	50
· zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16

2FGX   FluxGrid gen 2 recessed 2x2

up to 6000 lumens

Air return option
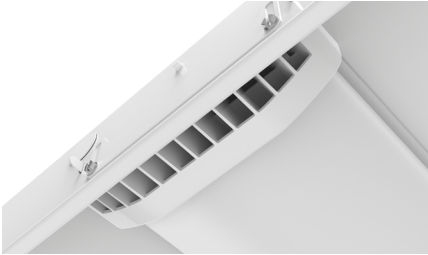
Allows air to flow through vents in the architectural forms located at both ends of the lens. Air blades are provided on each end of the luminaire to control air flow to the plenum.

Return air data
All luminaire sizes

Return air (CFM) vs. Plenum Pressure, Inches W.G.
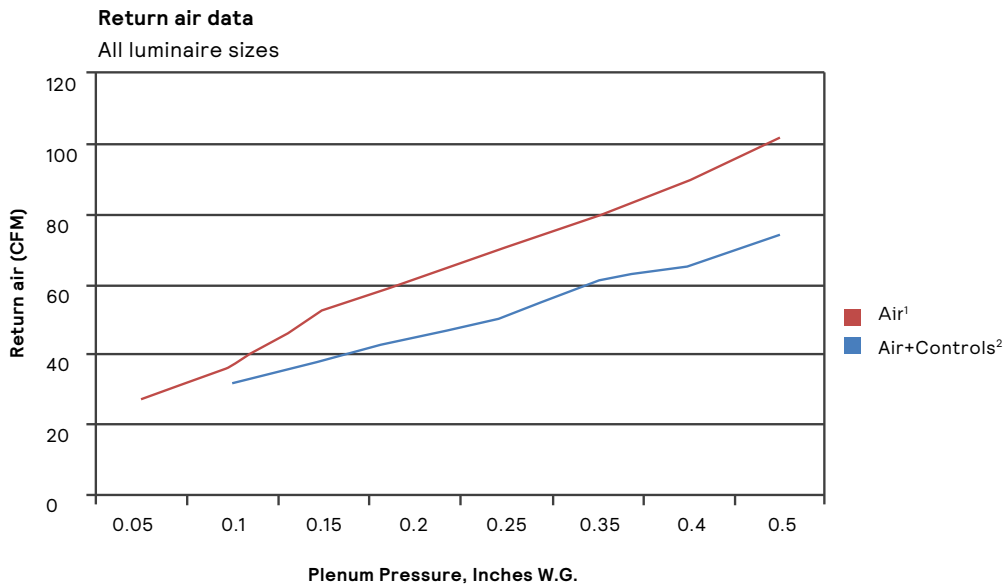
- Air[1]
- Air+Controls[2]

Return air – noise criteria
All luminaire sizes

		CFM							
Mode		27	37	53	62	71	80	90	102
Air[1]	NC (dB)	<15	24	25	29	33	35	38	40

		CFM							
Mode		31	38	45	51	61	65	74	
Air+Controls[2]	NC (dB)	<15	19	21	25	28	30	34	

1. Air-only option includes air return forms and pattern control blades on both ends of luminaire.
2. Air+Controls includes the air return form and pattern control blade on one end of the luminaire.
   Control form on the other with matching width.

up to 6000 lumens

Photometry

2FGXG38B840-2-RS-UNV

Luminaire Lumens	3787
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	31.5
Spacing Criterion (0-180)	1.24

Candela Distribution — Flux

	0	22.5	45	67.5	90	Lumens
0	1361	1361	1361	1361	1361	
5	1345	1346	1354	1361	1363	129
15	1280	1285	1298	1306	1310	365
25	1157	1164	1183	1200	1204	544
35	991	1001	1027	1053	1062	642
45	799	811	844	879	892	652
55	599	613	653	694	710	585
65	396	413	464	512	531	459
75	203	228	291	343	366	304
85	48	72	105	122	127	106
90	2	3	3	3	2	

Zonal Lumen Summary

Zone	Lumens	%Fixture	%Lamp
0-30	1038	27.4%	27.4%
0-40	1680	44.4%	44.4%
0-60	2917	77.0%	77.0%
0-90	3786	100.0%	100.0%
0-180	3787	100.0%	100.0%

Avg. Luminance (cd/m²)

	0	90	180
0	3994	3994	3994
5	3961	3989	4014
15	3887	3943	3980
25	3746	3830	3899
35	3550	3677	3804
45	3315	3504	3700
55	3065	3343	3632
65	2748	3218	3684
75	2301	3299	4148
85	1611	3543	4257

Coefficients of Utilization   %

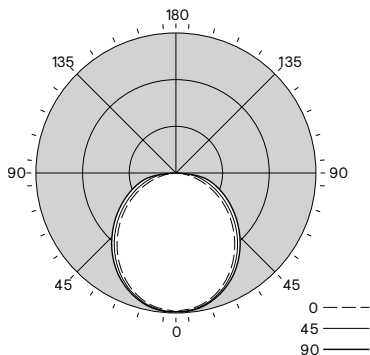| Pc---	80				70			50			0
Pw---	70	50	30	10	70	50	30	50	30	10	0
RCR											
0	119	119	119	119	116	116	116	111	111	111	100
1	108	103	99	95	105	101	97	97	93	90	83
2	98	90	83	77	96	88	81	84	79	74	68
3	89	79	70	64	87	77	69	74	67	62	58
4	82	70	61	54	80	68	60	66	59	53	49
5	75	62	53	46	73	61	53	59	51	46	42
6	70	56	47	41	68	55	47	53	46	40	37
7	65	51	42	36	63	50	42	49	41	35	33
8	60	46	38	32	59	46	38	44	37	32	29
9	56	43	34	29	55	42	34	41	34	29	26
10	53	39	31	26	51	39	31	38	31	26	24

2FGXG30L840-2-RS-UNV

Luminaire Lumens	3040
Luminaire Efficacy Rating (LER)	139
Total Luminaire Watts	21.8
Spacing Criterion (0-180)	1.24

Candela Distribution — Flux

	0	22.5	45	67.5	90	Lumens
0	1090	1090	1090	1090	1090	
5	1076	1079	1086	1091	1091	103
15	1028	1031	1041	1049	1050	293
25	930	935	950	963	966	437
35	795	803	825	845	851	515
45	640	651	678	703	711	522
55	479	491	522	554	565	467
65	316	332	371	409	424	367
75	163	184	234	277	295	244
85	38	60	88	104	110	89
90	2	3	5	7	8	

Zonal Lumen Summary

Zone	Lumens	%Fixture	%Lamp
0-30	834	27.4%	27.4%
0-40	1349	44.4%	44.4%
0-60	2339	76.9%	76.9%
0-90	3039	100.0%	100.0%
0-180	3040	100.0%	100.0%

Avg. Luminance (cd/m²)

	0	90	180
0	3199	3199	3199
5	3169	3199	3213
15	3123	3163	3188
25	3010	3076	3129
35	2848	2955	3047
45	2656	2813	2951
55	2451	2671	2891
65	2196	2572	2944
75	1851	2648	3343
85	1261	2960	3698

Coefficients of Utilization   %

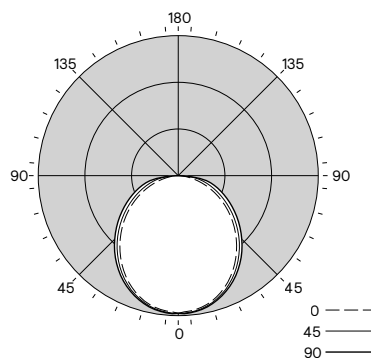| Pc---	80				70			50			0
Pw---	70	50	30	10	70	50	30	50	30	10	0
RCR											
0	119	119	119	119	116	116	116	111	111	111	100
1	108	103	99	95	105	101	97	97	93	90	83
2	98	90	83	77	96	88	81	84	79	74	68
3	89	79	70	64	87	77	69	74	67	62	57
4	82	70	61	54	80	68	60	66	58	53	49
5	75	62	53	46	73	61	53	59	51	46	42
6	70	56	47	41	68	55	47	53	46	40	37
7	65	51	42	36	63	50	42	49	41	35	33
8	60	46	38	32	59	46	38	44	37	32	29
9	56	43	34	29	55	42	34	41	34	29	26
10	53	39	31	26	51	39	31	38	31	26	24

2FGX FluxGrid gen 2 recessed 2x2

up to 6000 lumens

2FGXG38L840-2-RS-UNV

Luminaire Lumens	3839
Luminaire Efficacy Rating (LER)	136
Total Luminaire Watts	28.2
Spacing Criterion (0-180)	1.24

Candela Distribution / Flux

	0	22.5	45	67.5	90	Lumens
0	1377	1377	1377	1377	1377	
5	1359	1362	1371	1378	1377	130
15	1299	1302	1314	1324	1325	370
25	1174	1180	1199	1216	1221	552
35	1003	1015	1042	1066	1074	651
45	809	823	856	887	898	660
55	605	621	659	699	714	590
65	400	419	468	517	536	464
75	204	233	295	350	372	309
85	47	76	111	131	138	113
90	3	5	8	12	13	

Zonal Lumen Summary

Zone	Lumens	%Fixture	%Lamp
0-30	1052	27.4%	27.4%
0-40	1703	44.4%	44.4%
0-60	2953	76.9%	76.9%
0-90	3838	100.0%	100.0%
0-180	3839	100.0%	100.0%

Avg. Luminance (cd/m²)

	0	90	180
0	4039	4039	4039
5	4002	4037	4056
15	3946	3992	4025
25	3801	3883	3951
35	3594	3731	3847
45	3357	3551	3727
55	3096	3370	3654
65	2777	3246	3721
75	2318	3347	4222
85	1596	3726	4628

Coefficients of Utilization %

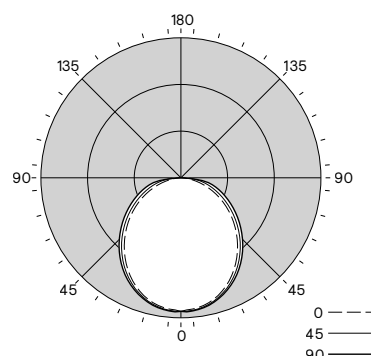| Pc---	80				70			50			0
Pw---	70	50	30	10	70	50	30	50	30	10	0
RCR											
0	119	119	119	119	116	116	116	111	111	111	100
1	108	103	99	95	105	101	97	97	93	90	83
2	98	90	83	77	95	88	81	84	79	74	68
3	89	79	70	64	87	77	69	74	67	62	57
4	82	70	61	54	80	68	60	66	58	53	49
5	75	62	53	46	73	61	53	59	51	46	42
6	70	56	47	41	68	55	47	53	46	40	37
7	65	51	42	36	63	50	42	49	41	35	33
8	60	46	38	32	59	46	38	44	37	32	29
9	56	43	34	29	55	42	34	41	34	29	26
10	53	39	31	26	51	39	31	38	31	26	24

2FGXG45L840-2-RS-UNV

Luminaire Lumens	4522
Luminaire Efficacy Rating (LER)	133
Total Luminaire Watts	34.1
Spacing Criterion (0-180)	1.24

Candela Distribution / Flux

	0	22.5	45	67.5	90	Lumens
0	1622	1622	1622	1622	1622	
5	1600	1605	1616	1624	1623	153
15	1529	1534	1549	1560	1562	436
25	1383	1390	1414	1433	1438	650
35	1183	1194	1228	1257	1265	767
45	953	968	1009	1047	1058	777
55	713	731	777	824	841	696
65	471	494	552	609	631	547
75	241	274	348	414	439	364
85	56	89	132	156	160	132
90	2	3	4	6	6	

Zonal Lumen Summary

Zone	Lumens	%Fixture	%Lamp
0-30	1240	27.4%	27.4%
0-40	2007	44.4%	44.4%
0-60	3479	76.9%	76.9%
0-90	4522	100.0%	100.0%
0-180	4522	100.0%	100.0%

Avg. Luminance (cd/m²)

	0	90	180
0	4759	4759	4759
5	4713	4758	4781
15	4645	4705	4744
25	4478	4577	4654
35	4236	4398	4532
45	3954	4187	4390
55	3646	3976	4301
65	3273	3830	4379
75	2733	3949	4971
85	1885	4426	5392

Coefficients of Utilization %

Pc---	80				70			50			0
Pw---	70	50	30	10	70	50	30	50	30	10	0
RCR											
0	119	119	119	119	116	116	116	111	111	111	100
1	108	103	99	95	105	101	97	97	93	90	83
2	98	90	83	77	96	88	81	84	79	74	68
3	89	79	70	64	87	77	69	74	67	62	57
4	82	70	61	54	80	68	60	66	58	53	49
5	75	62	53	46	73	61	53	59	51	46	42
6	70	56	47	41	68	55	47	53	46	40	37
7	65	51	42	36	63	50	42	49	41	35	33
8	60	46	38	32	59	46	38	44	37	32	29
9	56	43	34	29	55	42	34	41	34	29	26
10	53	39	31	26	51	39	31	38	31	26	24

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