

Day-Brite



by Signify

Recessed

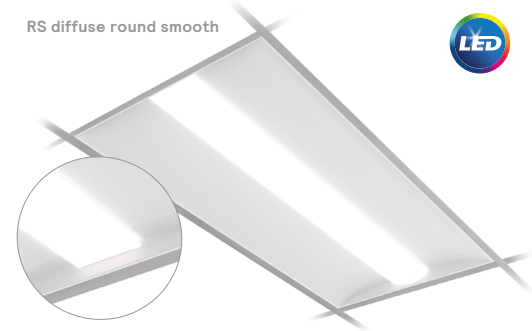
FluxGrid gen 2 2x4

2FGX up to 9000 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: 2FGXG42B840-4-RS-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	FGX	G				4				
2 2'	FGX FluxGrid	G Grid	Blank Static H Air return	Base Configurations 42B 4200 Standard Configurations 20L 2000 38L 3800 43L 4300 48L 4800 54L 5400 74L 7400 85L 8500 90L 9000 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	4 4'	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	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)

- 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.
- Specify only with -DIM driver option.
- CHIC option not provided with air return functionality.
- Not available with 347V.
- Option is qualified as Engineered-to-Order (ETO) ready. Lead times and minimum order quantities may vary, please consult factory.
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral sensing option.
- Must order IRT9015 Interact commissioning remote with each system order.
- XDIM requires 120V or 277V specification
- Only available in lumen package range from 45L-60L
- 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.
- Consult Signify to confirm whether specific accessories are BAA-compliant.

Accessories¹² (order separately)

- **FSF24** - 2'x4' surface mount field installation kit (field assembled)
- **FMA24** - 2'x4' "F" mounting frame for NEMA "F" ceiling
- **FSK24** - 2'x4' surface mount field installation kit (factory welded seams)

SWZCS accessories¹⁰ (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



2FGX FluxGrid gen 2 recessed 2x4

up to 9000 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 FMA24 "F" mounting frame (sold separately).
- Continuous row mounting is possible with a 1" gap between fixtures accommodated by others.

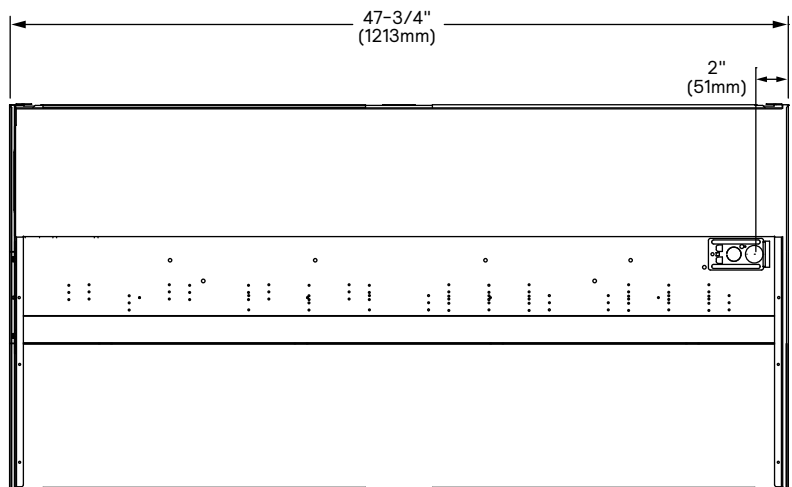
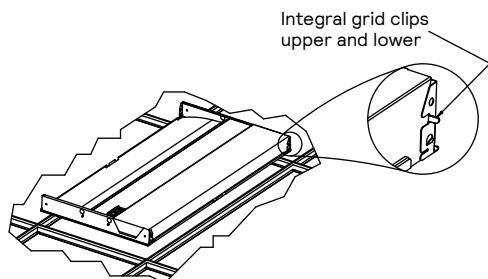
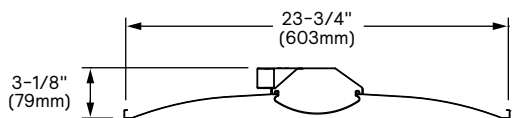
Enclosure

- 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.

Dimensions



- 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.
- 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.

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 146 lumens per watt and are available with multiple lumen packages and 3000, 3500, 4000, and 5000K color temperatures.
- Base configuration provides up to 141 lumens per watt and are available in 4200 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.

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4 Standard	2FGXG20L840-4-RS-UNV	14	146
	2FGXG38L840-4-RS-UNV	27	141
	2FGXG43L840-4-RS-UNV	31	139
	2FGXG48L840-4-RS-UNV	36	137
	2FGXG54L840-4-RS-UNV	41	134
	2FGXG74L840-4-RS-UNV	60	125
	2FGXG85L840-4-RS-UNV	63	136
2x4 Base	2FGXG90L840-4-RS-UNV	67	135
	2FGXG42B840-4-RS-UNV	30	141

2FGX FluxGrid gen 2 recessed 2x4

up to 9000 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 2x4

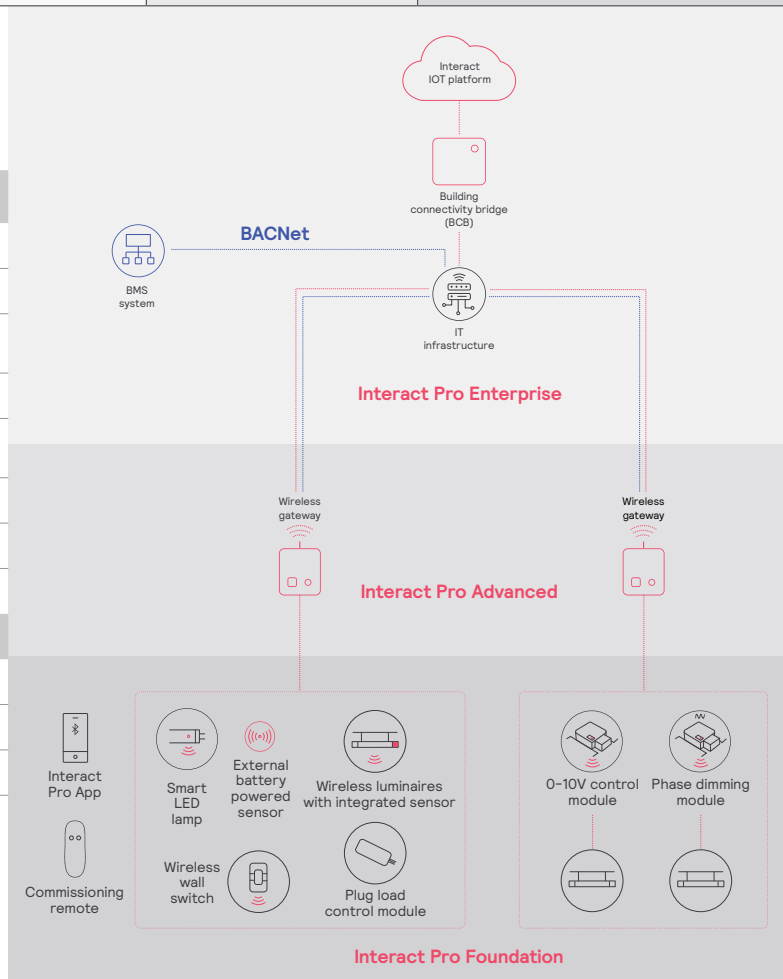
up to 9000 lumens

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.

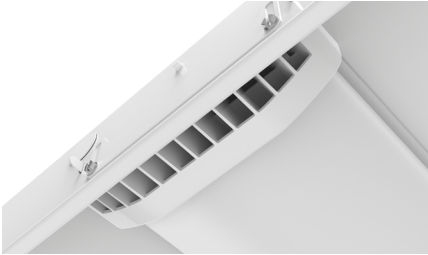
System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
• luminaires with integrated sensors	150
• smart TLEDs	150
Total number of ZGP devices (sensors and switches)	50
• sensors	30
• switches	50
• zones and groups	64
Group level	
Recommended number of lights	40 (recommended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



2FGX FluxGrid gen 2 recessed 2x4

up to 9000 lumens

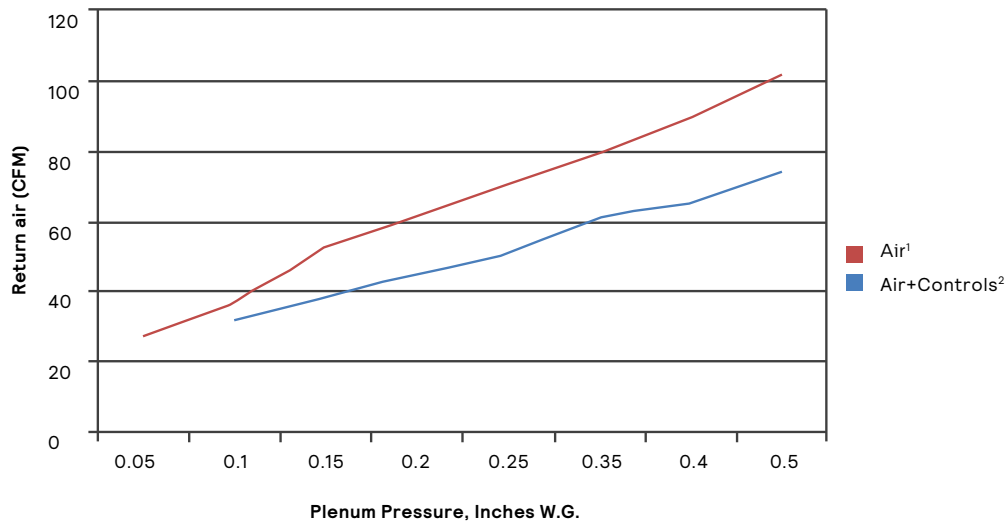
Air return option



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 - 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.

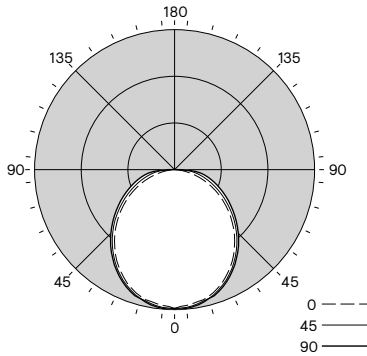
2FGX FluxGrid gen 2 recessed 2x4

up to 9000 lumens

Photometry

2FGXG42B840-4-RS-UNV

Luminaire Lumens	4223
Luminaire Efficacy Rating (LER)	141
Total Luminaire Watts	30.0
Spacing Criterion (0-180)	1.24



	Candela Distribution					Flux
	0	22.5	45	67.5	90	Lumens
0	1487	1487	1487	1487	1487	
5	1461	1475	1482	1487	1492	141
15	1406	1420	1428	1427	1428	401
25	1280	1296	1307	1318	1323	601
35	1105	1117	1135	1150	1156	709
45	895	910	935	955	966	720
55	670	686	720	753	763	643
65	444	465	514	558	573	507
75	225	260	330	385	404	342
85	47	93	161	208	227	156
90	3	8	34	53	60	

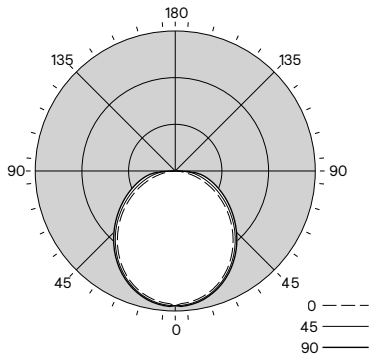
Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1143	27.1%	27.1%
0-40	1852	43.8%	43.8%
0-60	3215	76.1%	76.1%
0-90	4219	99.9%	99.9%
0-180	4223	100.0%	100.0%

Avg. Luminance (cd/m ²)			
	0	90	180
0	2126	2126	2126
5	2096	2126	2142
15	2081	2114	2114
25	2020	2062	2086
35	1928	1982	2018
45	1810	1890	1952
55	1669	1796	1902
65	1501	1737	1938
75	1245	1821	2230
85	765	2645	3725

Coefficients of Utilization %													
Pc---	80				70				50				0
Pw---	70	50	30	10	70	50	30	50	30	10	0	0	
RCR													
0	119	119	119	119	116	116	116	111	111	111	100		
1	108	103	98	94	105	100	96	96	93	89	82		
2	98	89	82	76	95	87	81	84	78	73	68		
3	89	78	70	63	87	77	69	74	67	61	57		
4	82	69	60	53	79	68	59	65	58	52	49		
5	75	62	53	46	73	61	52	59	51	45	42		
6	69	56	47	40	67	55	46	53	45	40	37		
7	64	51	42	35	63	50	41	48	41	35	32		
8	60	46	38	32	58	45	37	44	37	31	29		
9	56	42	34	29	55	42	34	41	33	28	26		
10	53	39	31	26	51	39	31	38	31	26	24		

2FGXG43L840-4-RS-UNV

Luminaire Lumens	4341
Luminaire Efficacy Rating (LER)	139
Total Luminaire Watts	31.3
Spacing Criterion (0-180)	1.24



	Candela Distribution					Flux
	0	22.5	45	67.5	90	Lumens
0	1539	1539	1539	1539	1539	
5	1512	1526	1532	1539	1544	145
15	1446	1460	1468	1476	1481	414
25	1316	1330	1341	1353	1358	617
35	1134	1148	1167	1183	1190	728
45	918	934	961	983	990	739
55	688	706	739	772	783	661
65	456	478	527	573	588	521
75	232	267	338	396	415	351
85	48	96	166	216	234	161
90	2	8	35	57	63	

Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1176	27.1%	27.1%
0-40	1905	43.9%	43.9%
0-60	3304	76.1%	76.1%
0-90	4337	99.9%	99.9%
0-180	4341	100.0%	100.0%

Avg. Luminance (cd/m ²)			
	0	90	180
0	2201	2201	2201
5	2169	2199	2215
15	2139	2173	2192
25	2076	2116	2143
35	1979	2036	2076
45	1857	1942	2002
55	1715	1843	1952
65	1543	1782	1989
75	1280	1867	2292
85	793	2728	3841

Coefficients of Utilization %													
Pc---	80				70				50				0
Pw---	70	50	30	10	70	50	30	50	30	10	0	0	
RCR													
0	119	119	119	119	116	116	116	111	111	111	100		
1	108	103	98	94	105	100	96	96	93	89	82		
2	98	89	82	76	95	87	81	84	78	73	68		
3	89	78	70	63	87	77	69	74	67	61	57		
4	82	69	60	53	79	68	59	65	58	52	49		
5	75	62	53	46	73	61	52	59	51	45	42		
6	69	56	47	40	67	55	46	53	45	40	37		
7	64	51	42	36	63	50	41	48	41	35	33		
8	60	46	38	32	58	46	37	44	37	31	29		
9	56	42	34	29	55	42	34	41	33	28	26		
10	53	39	31	26	51	39	31	38	31	26	24		

2FGX FluxGrid gen 2 recessed 2x4

up to 9000 lumens

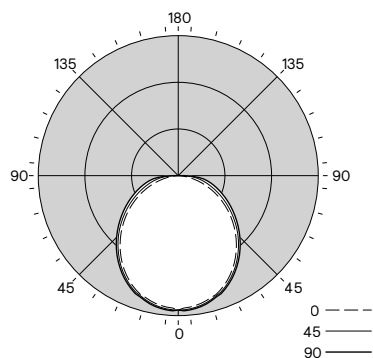
2FGXG54L840-4-RS-UNV

Luminaire Lumens	5450
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	40.6
Spacing Criterion (0-180)	1.24

	Candela Distribution					Flux
	0	22.5	45	67.5	90	Lumens
0	1920	1920	1920	1920	1920	
5	1885	1903	1911	1919	1926	181
15	1803	1821	1830	1841	1847	517
25	1654	1670	1685	1699	1707	775
35	1425	1442	1465	1485	1495	915
45	1154	1174	1207	1233	1245	928
55	865	888	929	969	985	830
65	574	601	662	720	740	654
75	291	335	426	498	522	441
85	60	119	208	270	295	202
90	3	10	44	71	80	

Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1473	27.0%	27.0%
0-40	2388	43.8%	43.8%
0-60	4147	76.1%	76.1%
0-90	5444	99.9%	99.9%
0-180	5450	100.0%	100.0%

Avg. Luminance (cd/m²)			
	0	90	180
0	2745	2745	2745
5	2705	2742	2764
15	2668	2709	2734
25	2609	2658	2693
35	2486	2557	2609
45	2334	2440	2518
55	2155	2316	2456
65	1940	2240	2504
75	1609	2353	2884
85	983	3414	4833



Coefficients of Utilization %													
Pc---	80				70				50				0
Pw---	70	50	30	10	70	50	30	50	30	10	10	0	
RCR													
0	119	119	119	119	116	116	116	111	111	111	111	100	
1	108	103	98	94	105	100	96	96	93	89	89	82	
2	98	89	82	76	95	87	81	84	78	73	68	68	
3	89	78	70	63	87	77	69	74	67	61	57	57	
4	82	69	60	53	79	68	59	65	58	52	48	48	
5	75	62	53	46	73	61	52	59	51	45	42	42	
6	69	56	47	40	67	55	46	53	45	40	37	37	
7	64	51	42	35	63	50	41	48	41	35	32	32	
8	60	46	38	32	58	45	37	44	37	31	29	29	
9	56	42	34	29	55	42	34	41	33	28	26	26	
10	52	39	31	26	51	39	31	38	31	26	24	24	



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