



Project: \_\_\_\_\_

Location: \_\_\_\_\_


Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Qty: \_\_\_\_\_

Notes: \_\_\_\_\_

**Day-Brite/CFI FormFlex recessed** is a fully luminous aperture luminaire offering a diffuse, perforated, opaque, or linear prism center channel accent for unique aesthetic flexibility. FormFlex delivers high performing even illumination and high visual comfort. Its architectural style, coupled with controls options, makes FormFlex an ideal choice for applications such as office, institutional, and healthcare, where energy savings and customized effect are desired.

 Now available with AccuRender technology for the highest color quality at the highest efficacy.

Base configurations are indicated in blue. Standard configurations are available with all choices, unless otherwise noted.

#### Ordering guide (standard & wireless controls)

example: 2FFXG38L840-2-DS-UNV-DIM-SWZCS

Series	Ceiling Type	Lumens (nominal delivered)	Efficacy	Color (CRI/CCT)	Length	Center Diffuser	Voltage	Driver	Options
<b>2FFX</b>	<b>G</b>			-	<b>2</b> -	-	-	-	
2FFX 2' FormFlex gen 2	G Grid	<b>Base configs</b>	<b>Blank Standard</b>	<b>830</b> 80 CRI, 3000K	2 2'	<b>DS</b> Diffuse (smooth)	<b>UNV</b> Universal Voltage, 120-277V	<b>DIM<sup>1</sup></b> Dimming	<b>F1</b> 3/8" flex, 18ga. 6'; 3 leads include hot, neutral, ground
		<b>38B</b> 3800	<b>H<sup>5</sup></b> High	<b>835</b> 80 CRI, 3500K		<b>DSPF</b> Diffuse perforated			
		<b>Standard configs</b>		<b>840</b> 80 CRI, 4000K		<b>DSOP</b> Diffuse opaque		<b>LDE</b> Lutron LDE5, 5% dimming	<b>F1/D</b> 3/8" twin flex, 18ga. 6' (for dimmable); Flex 1: 3 leads include hot, neutral, ground Flex 2: 2 leads, Dim+ / Dim-
		<b>30L</b> 3000		<b>850</b> 80 CRI, 5000K		<b>DSLPL</b> Diffuse linear prism		<b>LDEH</b> Lutron LDE1, 1% dimming	<b>F2/5W</b> 3/8" single flex, 18ga. 6' (for dimmable); 5 leads include hot, neutral, ground, Dim+ / Dim-
		<b>38L</b> 3800		<b>AccuRender<sup>8,9</sup></b>				<b>DALI</b> DALI dimming	<b>F2/6W</b> 3/8" single flex, 18ga. 6' (for dim & EM); 6 leads include 2 hot, neutral, ground, Dim+ / Dim-
		<b>45L</b> 4500		<b>930</b> 90 CRI, 3000K					<b>GLR</b> Fusing, fast blow
		Other options may be ordered in increments of 100lm from 3000 to 4500lm		<b>935</b> 90 CRI, 3500K					<b>DSC</b> Quick driver disconnect
				<b>940</b> 90 CRI, 4000K					<b>CHIC<sup>3</sup></b> Chicago Plenum rated

#### Ordering guide - PoE controls

example: 2FFXG38L840-2-DS-LV-POE-IAO

Family	Ceiling Type	Lumens (nom. delivered)	Efficacy	Color	Length	Center Diffuser	Voltage	Driver	Driver	Options
<b>2FFX</b>	<b>G</b>			-	<b>2</b> -	-	<b>LV</b>	<b>POE</b>	-	
2FFX 2' FormFlex gen 2	G Grid	<b>Std. configs</b>	<b>Blank Standard</b>	<b>830</b> 80 CRI, 3000K	2 2'	<b>DS</b> Diffuse (smooth)	<b>LV</b> Low voltage	<b>POE</b> Power over Ethernet	<b>EMPOE</b> 600lm integral emergency driver and battery pack	<b>BSL6LST<sup>4</sup></b> Bodine 6W selftesting battery pack
		<b>30L</b> 3000		<b>835</b> 80 CRI, 3500K		<b>DSPF</b> Diffuse perforated				
		<b>38L</b> 3800		<b>840</b> 80 CRI, 4000K		<b>DSOP</b> Diffuse opaque			<b>ER100<sup>4,6,7</sup></b> UL924 listed sensor bypass relay, factory installed between driver & sensor	
		<b>45L</b> 4500		<b>850</b> 80 CRI, 5000K		<b>DSLPL</b> Diffuse linear prism			<b>GTD/E<sup>4,6</sup></b> UL924 listed Bodine GTD factory installed on driver input	
									<b>GTD/SNSR<sup>4,6,7</sup></b> UL924 listed Bodine GTD factory installed between driver & sensor	
									<b>SWZCS<sup>2,10</sup></b> Interact wireless sensor with integral daylight & occupancy sensing, advanced grouping with dwell time	
									<b>RADIO<sup>2</sup></b> Interact RF sensor for wireless connectivity only, no sensing	
									<b>IAOSB<sup>2,10</sup></b> Interact Pro wireless sensor with occupancy, daylight, and environmental sensing capabilities	
									<b>AG</b> Antimicrobial Finish	
									<b>WL</b> Wet location listed	

#### Footnotes

- 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.
- High efficacy option may only be ordered with Standard lumen configurations.
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral sensing option.
- AccuRender is 90CRI with R<sub>a</sub>>50.
- Option is qualified as Engineered-to-Order (ETO) ready. Lead times and minimum order quantities may vary, please consult factory. (DLC Standard efficacy only)
- Must order IRT9015 Interact commissioning remote with each system order.

#### Accessories (order separately)

- FSF422** - 2'x2' surface mount field installation kit (field assembled)
- FMA22** - 2'x2' "F" mounting frame for NEMA "F" ceiling
- FFXDSPF22L** - 2'x2' FormFlex Gen2 replacement lens w/white perforated channel
- FFXDSOP22L** - 2'x2' FormFlex Gen2 replacement lens w/opaque channel
- FFXDSLPL22L** - 2'x2' FormFlex Gen2 replacement lens w/linear prism channel

#### SWZCS accessories (order separately)

- IRT9015** - handheld remote for grouping and configuration (at least one remote required for any SWZCS installation).

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



# 2FFX FormFlex recessed 2x2

up to 4500 lumens

## Application

- Ideal for modern offices, institutional, retail, and healthcare applications.
- Modern architectural styling to complementary space.
- Full width luminous lens provides smooth brightness and high visual comfort.
- Directs a controlled amount of light to higher angles to eliminate "cave effect" without creating glare.
- Available in standard efficacy and high efficacy (H) configurations up to 130lm/W.
- 80 CRI minimum source provides a balanced spectral power distribution.
- AccuRender 90 CRI source provides preferred color quality.
- Suitable for use with NEMA G (15/16") and NFG (9/16") suspended t-grid ceilings. NEMA F flange ceilings require the FMA24 accessory (ordered separately).
- Lens center channel provides aesthetic options that allow for unique visual elements in the space.

## Environment

- Rated for dry or damp locations in operating ambient temperatures 0–30°C (32–86°F). 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. Not suitable for natatorium environments.

## Construction/Finish

- Robust and durable die-formed embossed steel housing and end caps.
- Molded one-piece acrylic diffuser may be removed without tools for access to LED boards and driver(s).
- Unique spring retainers ensure the diffuser is centered in the housing opening at all times.
- T-bar grid clips are built into luminaire end caps for quick and easy installation, no extra parts.
- Air return functionality is standard for all configurations. See air flow and noise data on page 5.
- Sheet metal components are multi-stage phosphate treated for maximum corrosion resistance and finish coat is high reflectance baked white enamel.
- Integral louvers on housing ends allow air from the heated space to return to a pressurized plenum.

## Validation

- cETLus listed for use in damp locations
- When ordered with -WL option code, suitable for use in wet locations with covered ceilings
- Rated for direct contact with insulation (IC)
- CCEA Chicago Plenum listed
- FormFlex luminaires are Designlights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers, [www.designlights.org/QPL](http://www.designlights.org/QPL)

## Electrical

- Driver and LED board are accessible from below by easy removal of lens.
- Non-controls Base configurations 0–10V dimmable to 10%.
- Non-controls Standard configurations 0–10V dimmable to 1%.
- Standard configurations with controls options dimmable via wireless switches (see below).
- Predicted L70 lumen maintenance up to 87,000 hours at 25°C ambient for all configurations.
- Emergency battery packs accessible from above. To estimate lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10.
- The GTD/E option is used to bypass wall switches and allow luminaire operation on auxiliary power. Generator transfer requires installation in conjunction with a UL1008 listed device.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Compliance to CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

## Warranty

- 5 year manufacturer's limited warranty. Visit [signify.com/warranties](http://signify.com/warranties) for complete warranty information.

## Energy data

Configuration	Nominal CCT/CRI	Flux (lm)	Input Power (W)	Efficacy (LPW)	DLC
2FFXG38B835	3500K/80	3782	34	111	Standard
2FFXG38B840	4000K/80	3899	34	114	Standard
2FFXG30L835	3500K/80	2950	26	113	Standard
2FFXG30L840	4000K/80	3041	26	117	Standard
2FFXG30LH835	3500K/80	2996	24	125	Standard
2FFXG30LH840	4000K/80	3089	24	131	Premium
2FFXG38L835	3500K/80	3787	34	111	Standard
2FFXG38L840	4000K/80	3904	34	115	Standard
2FFXG38LH835	3500K/80	3780	30	126	Premium
2FFXG38LH840	4000K/80	3897	30	131	Premium
2FFXG45L835	3500K/80	4413	40	110	Standard
2FFXG45L840	4000K/80	4549	40	113	Standard
2FFXG45LH835	3500K/80	4526	36	126	Premium
2FFXG45LH840	4000K/80	4666	36	130	Premium

# 2FFX FormFlex recessed 2x2

up to 4500 lumens

## Wireless controls options

### Interact

- SWZCS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the standalone mode (similar to SpaceWise) when configured without a gateway or in a cloud connected mode if a compatible gateway is used.
- Interact 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 on-site to identify and group devices together.

#### Compatible with:

- SWS200 & UID8465 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
- LCN3110: battery powered IP65 presence sensor, OCC sensor IA CM IP65W
- LCN3120: battery powered IP65 presence & daylight sensor, OCC-DL sensor IA CM IP65 WH
- For more information on Interact visit: [interact-lighting.com/interactproscalablesystem](http://interact-lighting.com/interactproscalablesystem)

### Radio only sensor (RA or RADIO)

- Integral RA or 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 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, identify and group devices together onsite.
- Compatible with SWS200 and UID8465 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).
- For more information on Interact visit: [interact-lighting.com/interactproscalablesystem](http://interact-lighting.com/interactproscalablesystem)

### SofTrace shown with integral sensor



### Sensor bundle (IAOSB or SB)

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with 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.
- IAOSB or SB option in addition to occupancy and daylights sensing supports advanced IoT capabilities, such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit: [interact-lighting.com/interactproscalablesystem](http://interact-lighting.com/interactproscalablesystem)

### 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.

## Interact supported sensor option codes across Genlyte Solutions product lines

	Evokit	Day-Brite	Ledalite	Lightolier
ZigBee + Bluetooth + Sensing	SWZCS	SWZCS	CS	SBA accessory (external)
ZigBee + Bluetooth	RADIO	RADIO	RA	RA
ZigBee + Bluetooth + Sensing + Environmental data	IAOSB	IAOSB	SB	SB
ZigBee + Highbay + Sensing	-	SWZCSH	-	-

## Wired Controls Options

### Interact Office Wired (PoE)

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- 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.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output. Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or [www.usa.lighting.philips.com/systems/system-areas/offices](http://www.usa.lighting.philips.com/systems/system-areas/offices)

### Energy Data (PoE)

Configuration	Nominal CCT/CRI	Flux (lm)	DC Power (W)*	Efficacy (LPW)
2STXG30L840	4000K/80	3067	24	126
2STXG38L840	4000K/80	3902	32	122
2STXG45L840	4000K/80	4634	39	118

\*DC power supply

# 2FFX FormFlex recessed 2x2

up to 4500 lumens

## interact

	Gateway Connected		
	Standalone	Option 1	Option 2
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	✓	✓	✓
Correlated color temperature (CCT) tuning by switch	New ✓	✓	✓
Support for sensor-based Tunable White luminaires	New ✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

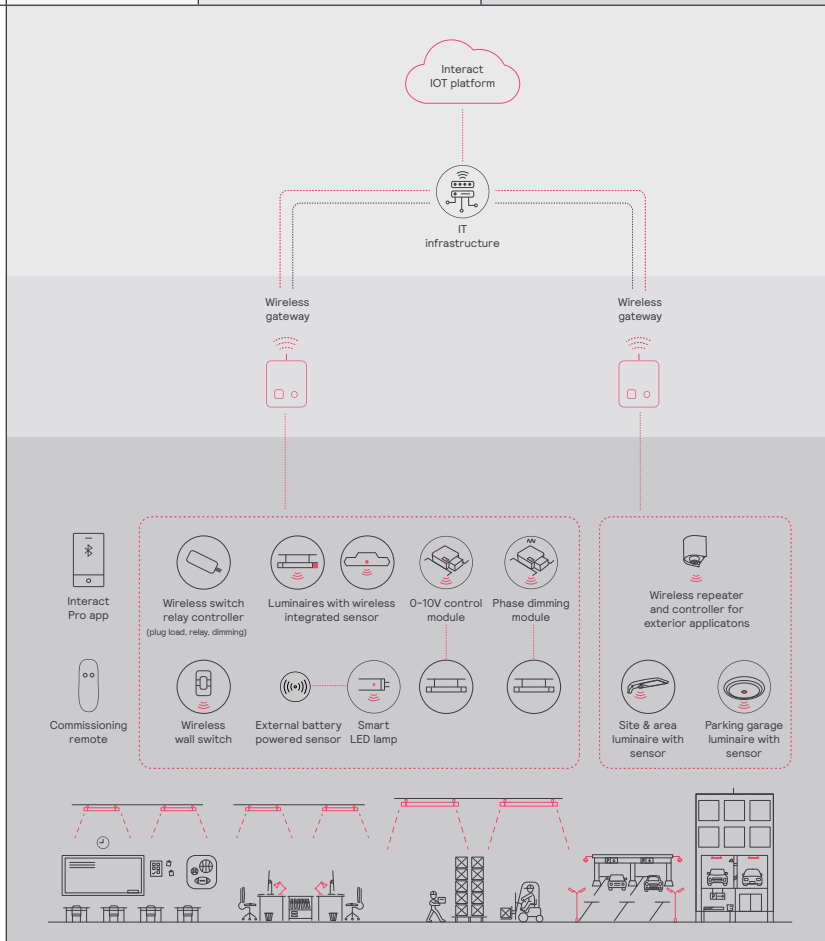
### Currently supported maximum system size

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
• Zones + groups	64
Total number of ZGP devices (sensors and switches)	50
• Sensors	30
• Switches	50

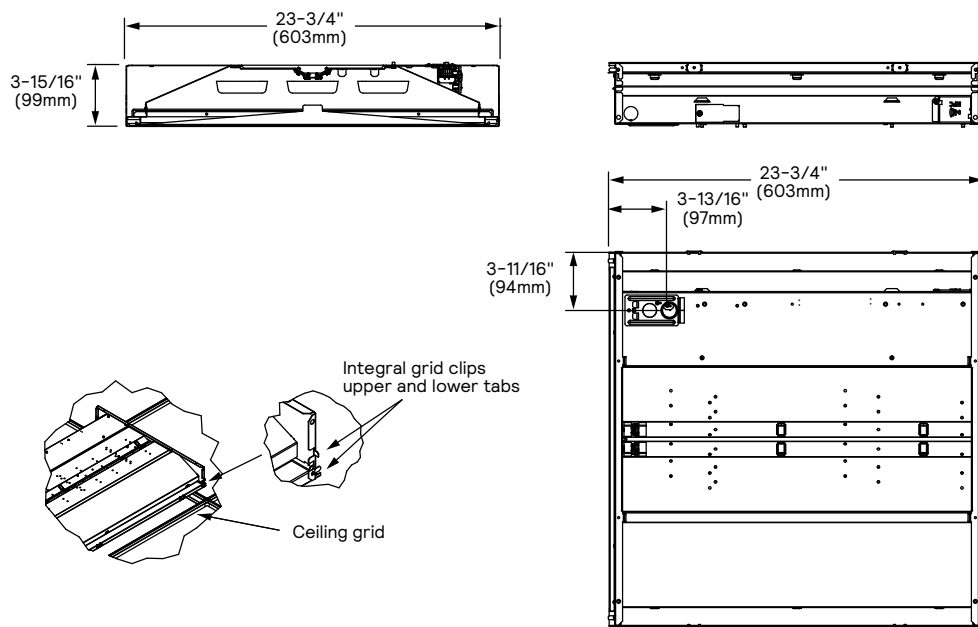
Group level	
Recommended number of lights	40 (maximum 150)
Number of ZGP devices	5
Number of scenes	16



# 2FFX FormFlex recessed 2x2

up to 4500 lumens

## Dimensions

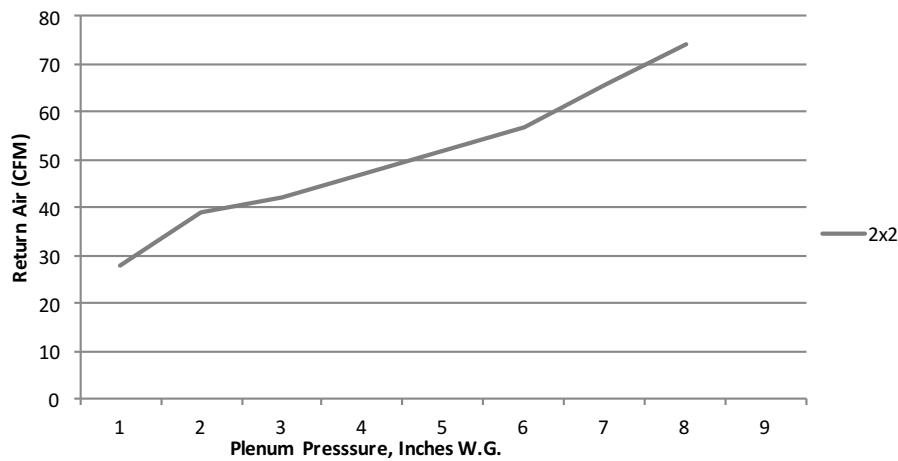


## Air return



Integral louvers on housing ends allow air from the heated space to return to a pressurized plenum.

## Return Air Data



2x2 Return Air - noise criteria								
CFM	28	39	42	47	52	57	65.5	74
NC (dB)	<15	26	31	33	38	42	44	46

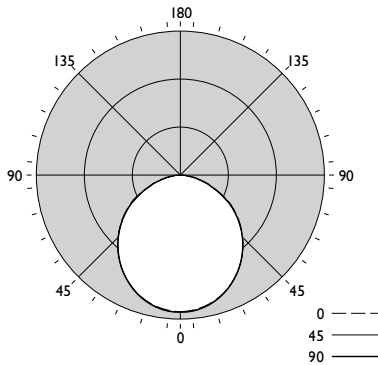
# 2FFX FormFlex recessed 2x2

up to 4500 lumens

## Photometry

### 2FFXG38B840-2-DS-UNV-DIM

Luminaire Lumens 3900  
 Luminaire Efficacy Rating (LER) 114  
 Total Luminaire Watts 34.3  
 Spacing Criterion (0-180) 1.23



Candela Distribution						Flux
	0	45	90	135	180	Lumens
0	1427	1427	1427	1427	1427	
5	1413	1417	1421	1423	1423	135
15	1357	1360	1363	1365	1365	384
25	1250	1251	1252	1252	1252	577
35	1101	1101	1100	1100	1100	688
45	919	918	915	915	914	706
55	714	709	704	703	702	631
65	473	486	464	460	459	461
75	237	236	232	229	230	248
85	52	53	60	61	63	69
90	6	4	7	12	20	

Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1096	28.10%	28.10%
0-40	1784	45.70%	45.70%
0-60	3121	80.00%	80.00%
0-90	3899	100.00%	100.00%
90-180	3900	100.00%	100.00%
0-180	23000	100.0%	100.0%

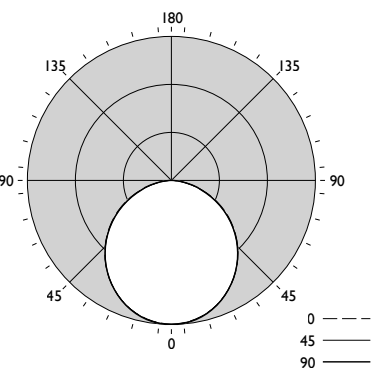
Avg. Luminance (cd/m <sup>2</sup> )			
	0	90	180
0	4686	4686	4686
5	4660	4684	4692
15	4615	4633	4640
25	4529	4536	4539
35	4415	4412	4409
45	4266	4250	4244
55	4087	4030	4018
65	3678	3602	3565
75	3001	2944	2919
85	1971	2254	2370

Coefficients of Utilization % (Based on a floor reflectance of 0.2)												
Pc---		80				70			50			0
Pw---		70	50	30	10	70	50	30	50	30	10	0
RCP	0	119	119	119	119	116	116	116	111	111	111	100
	1	109	104	100	96	106	102	98	98	94	92	84
	2	99	91	84	79	97	89	83	86	80	76	70
	3	90	80	72	65	88	78	71	75	69	64	59
	4	83	71	62	55	81	70	61	67	60	54	51
	5	76	63	54	48	74	62	54	60	53	47	44
	6	70	57	48	42	68	56	48	54	47	41	38
	7	65	52	43	37	64	51	43	49	42	36	34
	8	61	47	39	33	59	47	38	45	38	33	30
	9	57	43	35	30	55	43	35	42	34	29	27
	10	53	40	32	27	52	40	32	39	32	27	25

\* Based on a floor reflectance of 0.2

### 2FFXG38L840-2-DS-UNV-DIM

Luminaire Lumens 3905  
 Luminaire Efficacy Rating (LER) 115  
 Total Luminaire Watts 33.9  
 Spacing Criterion (0-180) 1.24



Candela Distribution						Flux
	0	45	90	135	180	Lumens
0	1399	1399	1399	1399	1399	
5	1389	1389	1391	1394	1395	132
15	1335	1335	1336	1339	1340	377
25	1231	1230	1231	1232	1232	567
35	1088	1086	1086	1086	1085	679
45	912	910	908	908	907	701
55	711	706	703	702	701	629
65	490	485	479	476	474	475
75	256	256	251	247	263	268
85	58	59	67	66	64	75
90	7	11	9	8	6	

Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1077	27.60%	27.60%
0-40	1756	45.00%	45.00%
0-60	3086	79.00%	79.00%
0-90	3904	100.00%	100.00%
90-180	3905	100.00%	100.00%
0-180	23000	100.0%	100.0%

Avg. Luminance (cd/m <sup>2</sup> )			
	0	90	180
0	4495	4495	4495
5	4480	4487	4501
15	4442	4445	4457
25	4365	4364	4368
35	4266	4260	4257
45	4146	4124	4120
55	3984	3936	3927
65	3722	3643	3605
75	3174	3113	3268
85	2135	2452	2348

Coefficients of Utilization % (Based on a floor reflectance of 0.2)												
Pc---		80				70			50			0
Pw---		70	50	30	10	70	50	30	50	30	10	0
RCP	0	119	119	119	119	116	116	116	111	111	111	100
	1	109	104	100	96	106	102	98	97	94	91	84
	2	99	91	84	78	96	89	82	85	80	75	70
	3	90	80	71	65	88	78	70	75	68	63	59
	4	82	70	62	55	80	69	61	67	59	54	50
	5	76	63	54	47	74	62	53	60	52	46	43
	6	70	57	48	41	68	56	47	54	46	41	38
	7	65	51	43	36	63	51	42	49	41	36	33
	8	60	47	38	32	59	46	38	45	37	32	30
	9	56	43	35	29	55	42	35	41	34	29	27
	10	53	40	32	26	52	39	32	38	31	26	24

\* Based on a floor reflectance of 0.2

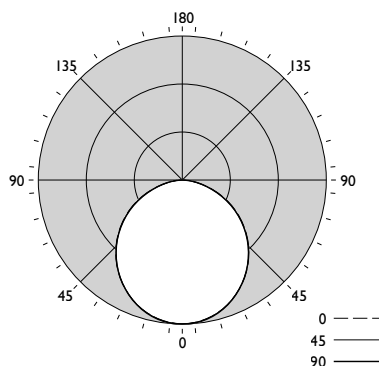
# 2FFX FormFlex recessed 2x2

up to 4500 lumens

## Photometry

### 2FFXG38LH840-2-DS-UNV-DIM

Luminaire Lumens 131  
 Luminaire Efficacy Rating (LER) 29.8  
 Total Luminaire Watts 1.24  
 Spacing Criterion (0-180) 1.30



Candela Distribution						Flux
	0	45	90	135	180	Lumens
0	1399	1399	1399	1399	1399	
5	1390	1389	1391	1394	1396	132
15	1335	1335	1336	1339	1339	377
25	1231	1229	1229	1230	1231	567
35	1087	1085	1084	1085	1084	679
45	912	909	907	907	906	700
55	710	707	703	701	700	629
65	489	485	479	476	474	475
75	254	253	248	247	245	265
85	57	60	66	66	63	74
90	6	7	10	8	5	

Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1076	27.60%	27.60%
0-40	1754	45.00%	45.00%
0-60	3083	79.10%	79.10%
0-90	3897	100.00%	100.00%
90-180	3898	100.00%	100.00%
0-180	23000	100.0%	100.0%

Avg. Luminance (cd/m <sup>2</sup> )				
	0	90	180	
0	4496	4496	4496	
5	4482	4488	4501	
15	4441	4443	4455	
25	4363	4359	4364	
35	4266	4253	4253	
45	4145	4121	4115	
55	3976	3937	3924	
65	3719	3642	3607	
75	3154	3074	3046	
85	2095	2418	2311	

Coefficients of Utilization % (Based on a floor reflectance of 0.2)														
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	109	104	100	96	106	102	98	97	94	91	84		
	2	99	91	84	78	96	89	82	85	80	75	70		
	3	90	80	71	65	88	78	70	75	68	63	59		
	4	82	70	62	55	80	69	61	67	59	54	50		
	5	76	63	54	47	74	62	53	60	52	46	43		
	6	70	57	48	41	68	56	47	54	46	41	38		
	7	65	51	43	36	63	51	42	49	41	36	33		
	8	60	47	38	32	59	46	38	45	37	32	30		
	9	56	43	35	29	55	42	35	41	34	29	27		
	10	53	40	32	27	52	39	32	38	31	26	24		

\* Based on a floor reflectance of 0.2