




**Day-Brite/CFI FormFlex LED 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.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

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

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

example: 2FFX43L840-4-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>4</b> -	-	-	-	
2FFX 2' FormFlex gen 2	G Grid	<b>Base configs</b>	<b>Blank Standard</b>	<b>830</b> 80 CRI, 3000K	4 4'	<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>42B</b> 4200	<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); <b>Flex 1:</b> 3 leads include hot, neutral, ground <b>Flex 2:</b> 2 leads, Dim+ / Dim-
		<b>38L</b> 3800		<b>850</b> 80 CRI, 5000K		<b>DLSL</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>43L</b> 4300		<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>48L</b> 4800		<b>930</b> 90 CRI, 3000K					<b>GLR</b> Fusing, fast blow
		<b>54L</b> 5400		<b>935</b> 90 CRI, 3500K					<b>DSC</b> Quick driver disconnect
		<b>74L</b> 7400		<b>940</b> 90 CRI, 4000K					<b>CHIC<sup>3</sup></b> Chicago Plenum rated
		Other options may be ordered in increments of 100lm from 3800 to 7400lm							<b>BSL6LST<sup>4</sup></b> Bodine 6W selftesting battery pack <b>BSL10LST<sup>4</sup></b> Bodine 10W selftesting battery pack

#### Ordering guide - PoE controls

example: 2FFXG48L840-4-D-LV-POE-IAO

Family	Ceiling Type	Lumens (nom. delivered)	Efficacy	Color	Length	Center Diffuser	Voltage	Driver	Driver
<b>2FFX</b>	<b>G</b>			-	<b>4</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	4 4'	<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>38L</b> 3800		<b>835</b> 80 CRI, 3500K		<b>DSPF</b> Diffuse perforated			
		<b>43L</b> 4300		<b>840</b> 80 CRI, 4000K		<b>DSOP</b> Diffuse opaque			<b>IAOSB</b> Interact Office advanced wired sensor bundle, integral SC2000 w/IoT capabilities for enterprise scale projects
		<b>48L</b> 4800		<b>850</b> 80 CRI, 5000K		<b>DLSL</b> Diffuse linear prism			

#### 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)

- FSF424** - 2'x4' surface mount field installation kit (field assembled)
- FMA24** - 2'x4' "F" mounting frame for NEMA "F" ceiling
- FFXDSPF24L** - 2'x4' FormFlex Gen2 replacement lens w/white perforated channel
- FFXDSOP24L** - 2'x4' FormFlex Gen2 replacement lens w/opaque channel
- FFXDLSL24L** - 2'x4' 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 2x4

up to 7400 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 85,000 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
2FFXG42B835	3500K/80	4100	34	121	Standard
2FFXG42B840	4000K/80	4227	34	123	Standard
2FFXG38L835	3500K/80	3774	29	130	Premium
2FFXG38L840	4000K/80	3891	29	135	Premium
2FFXG43L835	3500K/80	4288	33	130	Premium
2FFXG43L840	4000K/80	4421	33	134	Premium
2FFXG48L835	3500K/80	4758	37	129	Premium
2FFXG48L840	4000K/80	4905	37	134	Premium
2FFXG54L835	3500K/80	5327	42	127	Premium
2FFXG54L840	4000K/80	5492	42	131	Premium
2FFXG74L835	3500K/80	7285	58	126	Premium
2FFXG74L840	4000K/80	7510	58	129	Premium

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## 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)
2STXG38L840	4000K/80	3895	30	129
2STXG43L840	4000K/80	4356	34	127
2STXG48L840	4000K/80	4891	39	124

\*DC power supply

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## 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			✓

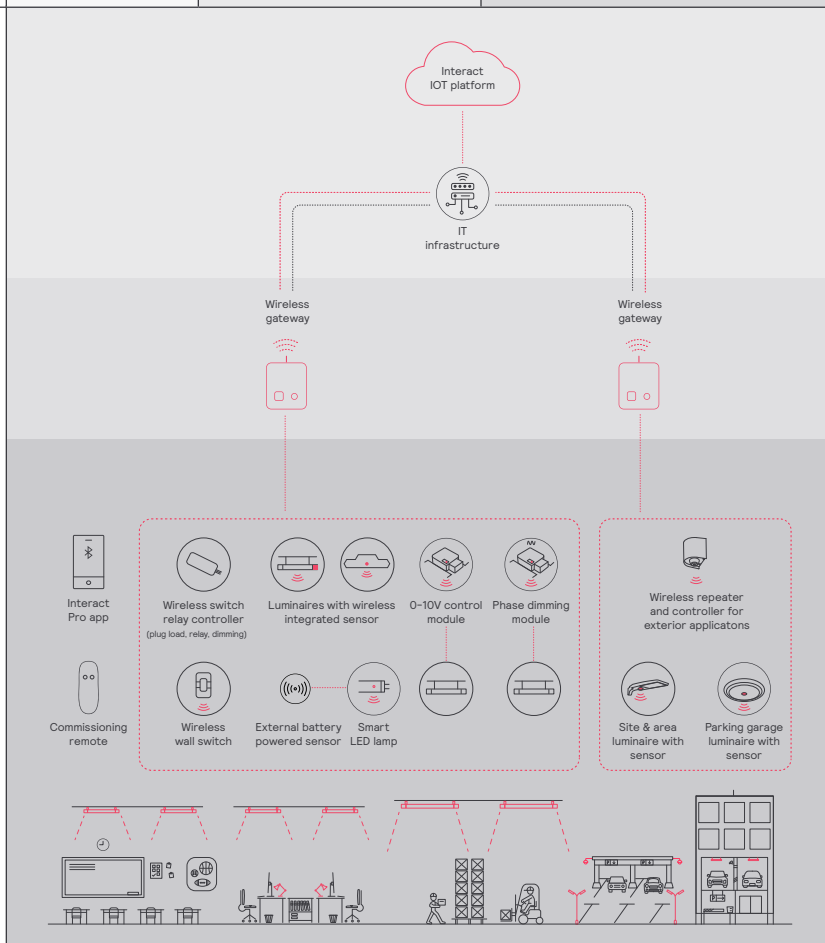
### Currently supported maximum system size

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

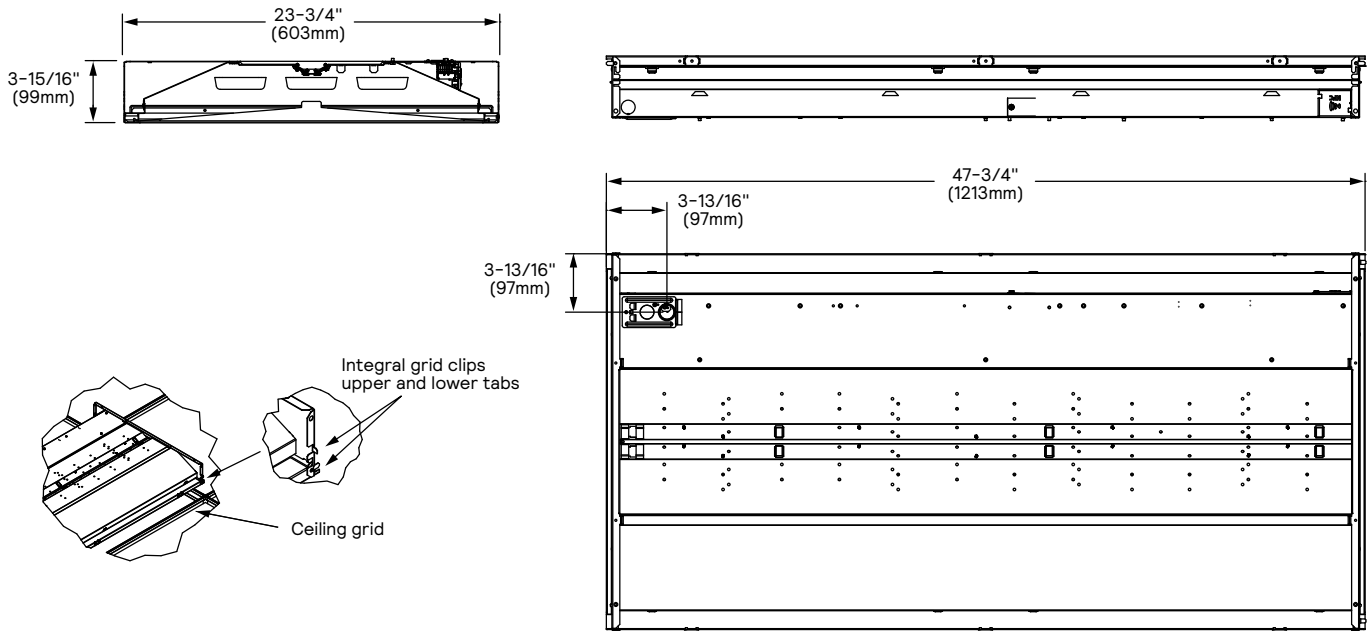
Group level	
Recommended number of lights	40 (maximum 150)
Number of ZGP devices	5
Number of scenes	16



# 2FFX FormFlex recessed 2x4

up to 7400 lumens

## Dimensions

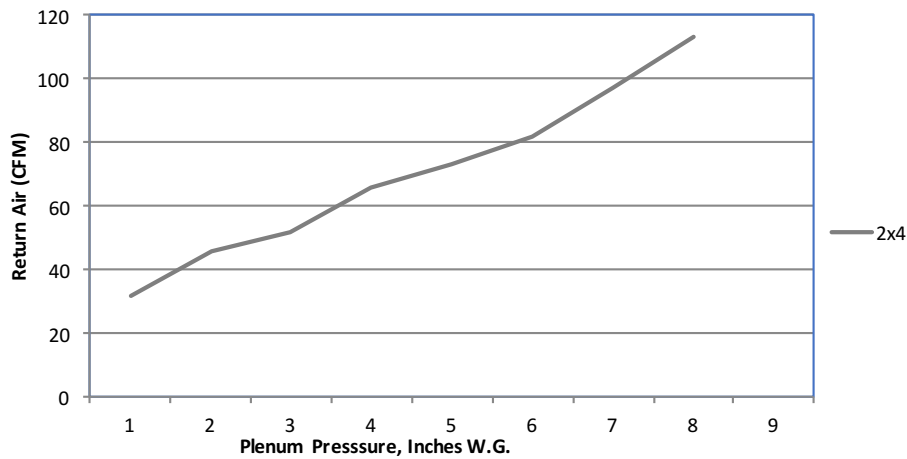


## Air return



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

## Return Air Data



2x4 Return Air - noise criteria								
CFM	27	37	53	62	71	80	90	102
NC (dB)	<15	24	25	29	33	35	38	40

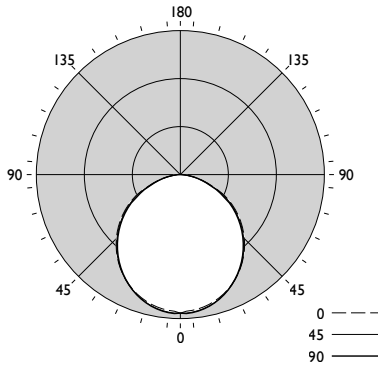
# 2FFX FormFlex recessed 2x4

up to 7400 lumens

## Photometry

### 2FFXG42B840-4-DS-UNV-DIM

Luminaire Lumens 4228  
 Luminaire Efficacy Rating (LER) 123  
 Total Luminaire Watts 34.5  
 Spacing Criterion (0-180) 1.24



Candela Distribution						Flux
	0	45	90	135	180	Lumens
0	1539	1539	1539	1539	1539	
5	1514	1524	1534	1540	1539	146
15	1457	1465	1472	1476	1475	415
25	1349	1354	1354	1354	1351	623
35	1197	1198	1192	1187	1184	745
45	1006	1004	995	986	982	767
55	784	780	767	756	752	686
65	537	532	520	493	491	505
75	261	257	249	246	247	268
85	54	56	62	61	67	73
90	4	3	6	11	19	

Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1184	28.00%	28.00%
0-40	1929	45.60%	45.60%
0-60	3382	80.00%	80.00%
0-90	4227	100.00%	100.00%
90-180	4228	100.00%	100.00%
0-180	23000	100.0%	100.0%

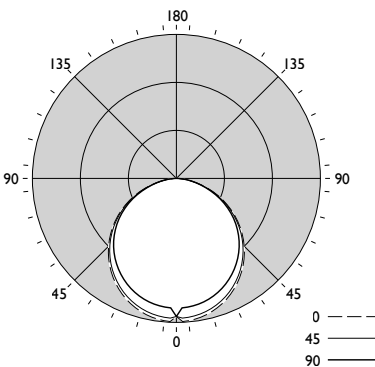
Avg. Luminance (cd/m <sup>2</sup> )			
	0	90	180
0	2335	2335	2335
5	2305	2336	2343
15	2288	2312	2315
25	2258	2266	2261
35	2216	2208	2192
45	2158	2133	2105
55	2074	2028	1988
65	1928	1865	1762
75	1532	1457	1448
85	941	1075	1173

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	95	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	63	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	39	32	38	31	27	25

\* Based on a floor reflectance of 0.2

### 2FFXG43L840-4-DS-UNV-DIM

Luminaire Lumens 4422  
 Luminaire Efficacy Rating (LER) 134  
 Total Luminaire Watts 32.9  
 Spacing Criterion (0-180) 1.30



Candela Distribution						Flux
	0	45	90	135	180	Lumens
0	1534	1534	1534	1534	1534	
5	1587	1585	1549	1466	1436	145
15	1531	1529	1497	1420	1389	417
25	1422	1420	1392	1325	1295	633
35	1264	1261	1239	1187	1159	766
45	1066	1062	1045	1009	986	799
55	833	829	815	792	777	723
65	573	568	557	542	535	549
75	299	296	288	283	280	307
85	63	65	74	74	75	83
90	4	5	5	5	6	

Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1195	27.00%	27.00%
0-40	1961	44.40%	44.40%
0-60	3483	78.80%	78.80%
0-90	4421	100.00%	100.00%
90-180	4422	100.00%	100.00%
0-180	23000	100.0%	100.0%

Avg. Luminance (cd/m <sup>2</sup> )			
	0	90	180
0	2327	2327	2327
5	2415	2358	2185
15	2403	2350	2181
25	2379	2329	2167
35	2340	2295	2145
45	2285	2241	2114
55	2203	2154	2054
65	2057	1997	1918
75	1749	1687	1639
85	1104	1294	1301

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	90	84	78	96	89	82	85	80	75	69
	3	90	79	71	65	87	78	70	75	68	63	58
	4	82	70	61	55	80	69	61	66	59	53	50
	5	76	63	54	47	73	62	53	59	52	46	43
	6	70	56	47	41	68	55	47	54	46	40	37
	7	65	51	42	36	63	50	42	49	41	36	33
	8	60	47	38	32	59	46	38	45	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

\* Based on a floor reflectance of 0.2

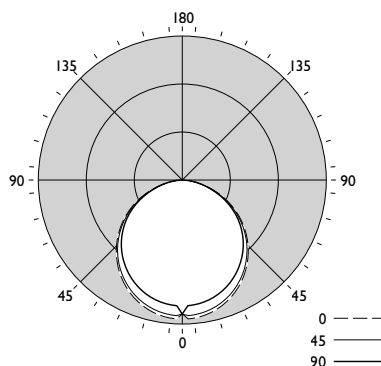
# 2FFX FormFlex recessed 2x4

up to 7400 lumens

## Photometry

2FFXG74L840-4-DS-UNV-DIM

Luminaire Lumens 7512  
 Luminaire Efficacy Rating (LER) 130  
 Total Luminaire Watts 58.3  
 Spacing Criterion (0-180) 1.30



Candela Distribution						Flux
	0	45	90	135	180	Lumens
0	1336	1336	1336	1336	1336	
5	1366	1375	1358	1278	1249	126
15	1320	1327	1310	1234	1205	362
25	1229	1231	1215	1146	1116	549
35	1096	1094	1078	1020	990	662
45	927	922	903	860	835	687
55	733	719	697	668	649	620
65	506	498	474	457	448	472
75	266	260	258	255	252	273
85	58	65	61	59	58	74
90	3	5	6	7	7	

Zonal Lumen Summary			
Zone	Lumens	%Fixture	%Lamp
0-30	1037	27.10%	27.10%
0-40	1700	44.40%	44.40%
0-60	3007	78.60%	78.60%
0-90	3825	100.00%	100.00%
90-180	3826	100.00%	100.00%
0-180	23000	100.0%	100.0%

Avg. Luminance (cd/m <sup>2</sup> )			
	0	90	180
0	5003	5003	5003
5	5137	5105	4696
15	5118	5081	4671
25	5079	5021	4612
35	5014	4928	4528
45	4911	4784	4420
55	4784	4553	4239
65	4483	4202	3971
75	3842	3735	3646
85	2479	2637	2504

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	0	
	1	109	104	100	96	106	102	98	97	94	91	84	84	
	2	99	90	84	78	96	89	82	85	80	75	69	69	
	3	90	79	71	64	87	78	70	75	68	63	58	58	
	4	82	70	61	55	80	69	61	66	59	53	50	50	
	5	76	63	54	47	73	62	53	59	52	46	43	43	
	6	70	56	47	41	68	55	47	54	46	40	37	37	
	7	65	51	42	36	63	50	42	49	41	36	33	33	
	8	60	47	38	32	59	46	38	45	37	32	29	29	
	9	56	43	34	29	55	42	34	41	34	29	26	26	
	10	53	39	31	26	51	39	31	38	31	26	24	24	

\* Based on a floor reflectance of 0.2