Day-Brite CFI
by Signify

Linear
FluxStream industrial
FSI 4' and 8'

Control options available

Project:

Location:

Cat.No:

Type:

Lumens: _____ Qty: _____

Notes:

Day-Brite / CFI FluxStream LED industrial is a high performing luminaire delivering smooth diffuse light ideal for light industrial, commercial and residential applications with unparalleled energy efficiency.

Ordering guide

Example: FSI440L840-UNV-DIM

Series	Length (nominal)	Lumens[2] (nominal)		Color temp. (K)		Voltage		Driver		Options	
FSI				—		—		—			
FSI FluxStream industrial	**4** 4' length	**30L** **40L** **55L** **70L**	3000 lumens 4000 lumens 5500 lumens 7000 lumens	**830** **835** **840** **850**	80 CRI, 3000K 80 CRI, 3500K 80 CRI, 4000K 80 CRI, 5000K	**UNV** **120**[3] **277**[3] **347**[4]	Universal voltage 120-277V 120V 277V 347V	**DIM**[9] **SDIM**[5] **XDIM**[3,5] **DALI**[6]	Dimming Step dimming to 40% input power MarkX phase dimming DALI	**EM10**[4,7] **ER100**[11,12] **ER100/HVPS**[11,12] **ER100/HVPI**[11,12] **GTD/E**[11] **GTD/SNSR**[11,12] **SWZCS**[8,13] **RADIO**[8] **SWZCSH**[10,13] **IAOSB**[8,13] **LSXR10** **LSXR10ADC**[8] **PAF** **BK** **ST** **BAC**[14]	Factory wired Bodine BSL10T3 integral emergency pack. Nominal 1100lm UL924 listed bypass sensor relay, factory installed between driver and sensor PS/PI (Interact Pro compatible) UL924 listed sensor bypass relay, factory installed between driver & sensor for 347/480 Power Sense (Interact Pro compatible) UL924 listed sensor bypass relay, factory installed between driver & sensor 347/480 Power Interrupt (Interact Pro compatible) UL924 listed Bodine GTD factory installed on driver input UL924 listed Bodine GTD factory installed between driver & sensor (alternate option to ER100) Interact Pro scalable sensor with integral daylight & occupancy sensing, advanced grouping with dwell time Integral Interact Pro RF sensor, enables wireless connected lighting control Interact Pro scalable high bay sensor with integral daylight & occupancy sensing, advanced grouping with dwell time for high mounting heights Interact Pro wireless sensor with occupancy, daylight, and environmental sensing capabilities 120-347V motion sensor, factory installed on end cap 120-347V motion sensor with photocell and hi/lo trim dimming, factory installed on end cap Paint after fabrication for extra corrosion resistance (white) Matte black paint color Satin aluminum paint color Meets the requirements of the Buy American Act of 1933 (BAA)
	8[1] 8' length	**60L** **80L** **110L** **140L**	6000 lumens 8000 lumens 11000 lumens 14000 lumens								

Other lumen packages may be ordered in increments of 500lm from 3000 to 7000 lumens for 4' unit and increments of 1000lm from 6000 to 14000 lumens for 8' unit

1. 8' is tandem (2) 4' lenses with single piece 8' body.
2. Nominal delivered lumens at 25°C ambient.
3. XDIM option only available with 120V.
4. 347V with EM10 only available in 8' models.
5. Not available in 4' 70L model or 8' 140L model.
6. DALI available up to 80L models only, consult factory for other options.
7. EM10 on 8' models illuminates 4' section in emergency mode.
8. Available with DIM driver option only.
9. Integral controls options dimmable to 5% via wireless wall switch. Non-integral controls configurations are 0–10V dimmable to 1%.
10. High bay motion detector. Motion sensing zone is extremely limited if used below 15' mounting height.
11. Must be installed in conjunction with a UL1008 device.
12. Only ordered with an Interact integral sensing option.
13. Must order IRT9015 Interact commissioning remote with each system order.
14. 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.
15. Consult Signify to confirm whether specific accessories are BAA-compliant.

Accessories[15] (order separately)

· **FSID4L** – 4' Diffuse replacement lens (order two for 8' models)
· **LSXR10** – Low bay PIR motion sensor, 120-277V
· **LSXR10ADC** – Low bay PIR motion sensor with photocell and hi/lo trim dimming, 120-277V
· **FSIWG4** – 4' Wire guard (order two for 8' models)
· **FSTH** – Sliding hanger bracket (set of 2)
· (See last page for details and more options)

SWZCS accessories[15] (order separately)

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

General notes

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.

PAF (Paint after fabrication) option is required for all products that will be used in a damp or humid location, such as under a canopy or covered parking area.

interact ready.

FSI FluxStream LED industrial

4' and 8'

Features

- Compact design for installation in tight spaces.
- Frosted acrylic diffuser provides wide light distribution and superior glare control
- Diffuser and LED plate snap into place allowing tool-free access to LED boards and driver.
- 4' and 8' tandem lengths available to accommodate many field applications
- Up to 100,000 hour predicted L70 LED lumen maintenance provides long service life to reduce maintenance costs.
- Can be surface mounted on ceilings or walls, or suspended via chain, pendants or cables
- Wall mountable – ADA compliant.
- Ideal for cold applications (–20°C)
- Continuous row mounting using standard end caps. No extra parts needed.
- 7/8" knock out provided at each end and on base of luminaire. Note: Center knockout is covered and not useable in 4' version with EMLED option.
- Multiple driver options available with 0-10V as standard.

- Enclosed lens minimizes penetration of dust, insects, and other debris into the LED compartment.
- 8' tandem unit is two 4' optical assemblies with a center mullion on a single full length chassis.
- Integral controls options include sensor mounted in control module extension mounted on fixture end (see dimension drawing).
- Fluxstream luminaires are Designlights Consortium® qualifed. Please see the DLC QPL list for exact catalog numbers www.designlights.org/QPL.
- 5 year manufacturer's limited warranty Visit www.signify.com/warranties for complete warranty information.

Finish

- Baked white acrylic matte high reflectance paint finish.
- PAF (Paint after fabrication) option, which is required for all products that will be used in damp or humid locations, such as a canopy or covered parking area, provides extra corrosion resistance.

Shielding

- Contoured frosted acrylic lens.

Electrical

- LED boards and drivers are RoHS (Restriction of Hazardous Substances) compliant. Total system life rated at 50,000 hours. Predicted L70 lifetime based on LED manufacturer's supplied LM-80 data and in-situ laboratory testing.
- Integral emergency driver with EM10 option. To estimate lumen output in emergency mode, multiply emergency pack wattage by 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.

Materials

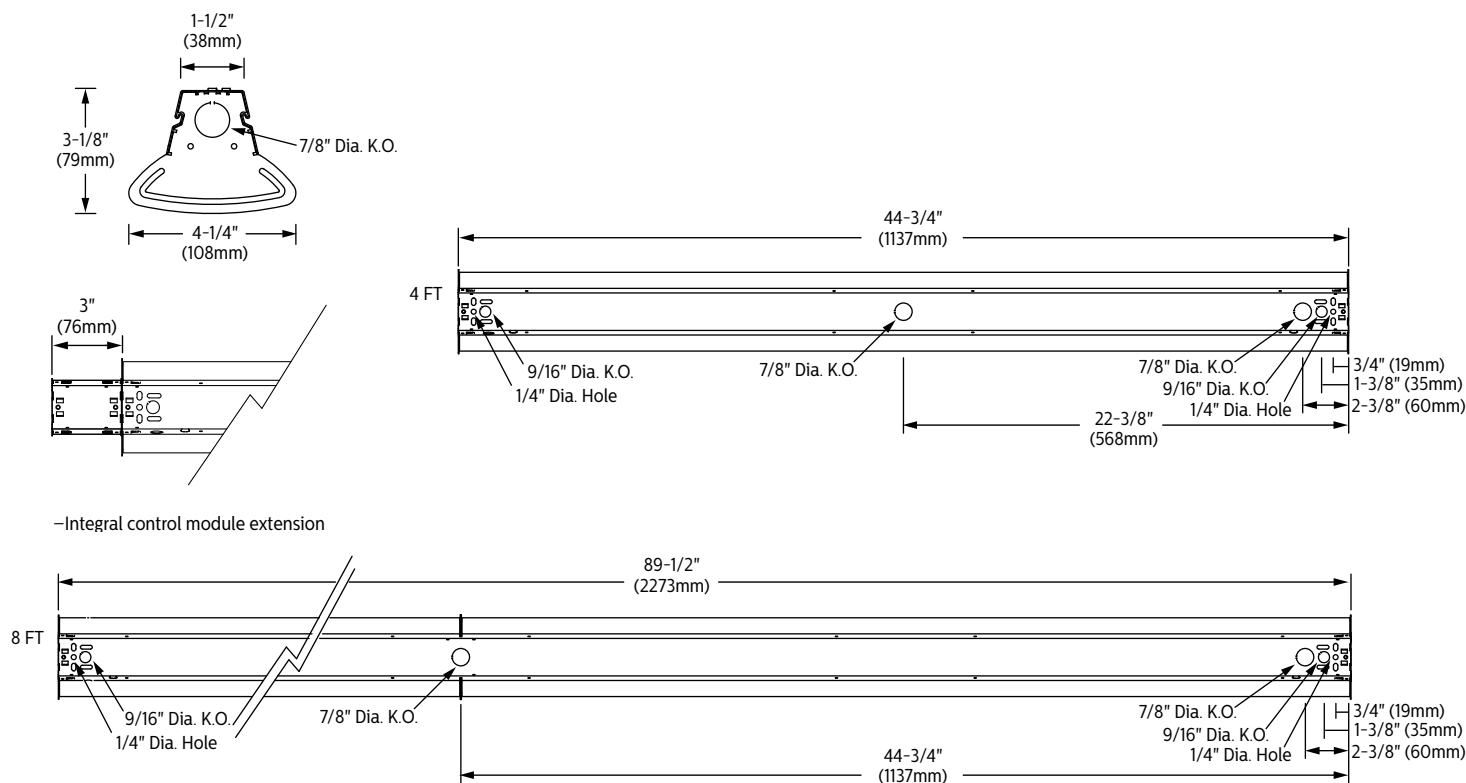- Heavy gauge cold rolled steel housing, LED plate, and end caps

Labels

- cETLus listed
- Suitable for damp locations

Ambient temperature data

Configuration	Ambient
FSI470L	–20°C to 30°C
FSI8110L	–20°C to 35°C
FSI8140L	–20°C to 25°C
EM10 option	Minimum 0°C
All others	–20°C to 40°C

Dimensions

FSI   FluxStream LED industrial

4' and 8'

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

- 347V requires step-down transformer and must be ordered indicating Power Sensing or Power Interruption Detection.

FluxStream industrial shown with integral sensor

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

- SWZCS/SWZCSH 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:
    - 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
    - LCN3110: Battery powered IP65 presence sensor, OCC sensor IA CM IP65WH
    - LCN3120: 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, SWS200 wireless scene switch and Interact Ready wireless battery powered sensors.

- 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
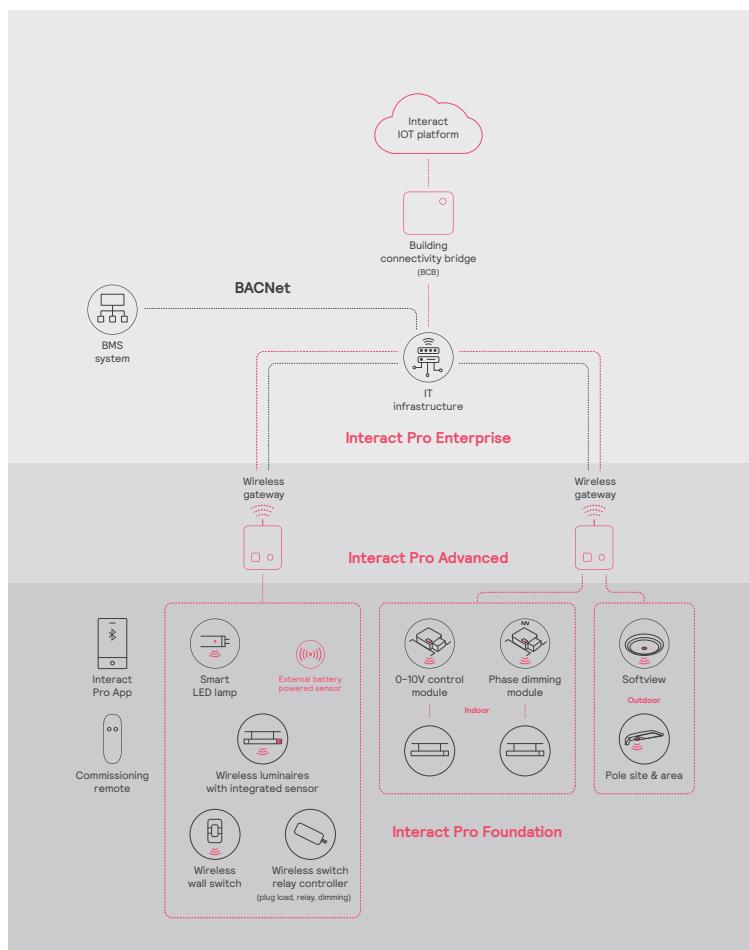
FSI FluxStream LED industrial

4' and 8'

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

FSI FluxStream LED industrial

4' and 8'

Photometry Test List

Catalog No.	Delivered Lumens	Input Watts	Efficacy
FSI430L830-UNV-DIM	2915	20.9	139
FSI440L830-UNV-DIM	3926	29.3	134
FSI455L830-UNV-DIM	5246	40.3	130
FSI470L830-UNV-DIM	6580	52.6	125
FSI860L830-UNV-DIM	5822	41.9	139
FSI880L830-UNV-DIM	7841	58.8	133
FSI8110L830-UNV-DIM	10477	80.8	130
FSI8140L830-UNV-DIM	13141	105.5	125

Catalog No.	Delivered Lumens	Input Watts	Efficacy
FSI430L835-UNV-DIM	3034	20.9	145
FSI440L835-UNV-DIM	4086	29.3	139
FSI455L835-UNV-DIM	5460	40.3	135
FSI470L835-UNV-DIM	6848	52.6	130
FSI860L835-UNV-DIM	6059	41.9	145
FSI880L835-UNV-DIM	8160	58.8	139
FSI8110L835-UNV-DIM	10903	80.8	135
FSI8140L835-UNV-DIM	13675	105.5	130

Catalog No.	Delivered Lumens	Input Watts	Efficacy
FSI430L840-UNV-DIM	3118	20.9	149
FSI440L840-UNV-DIM	4199	29.3	143
FSI455L840-UNV-DIM	5611	40.3	139
FSI470L840-UNV-DIM	7038	52.6	134
FSI860L840-UNV-DIM	6227	41.9	149
FSI880L840-UNV-DIM	8385	58.8	143
FSI8110L840-UNV-DIM	11205	80.8	139
FSI8140L840-UNV-DIM	14054	105.5	133

Catalog No.	Delivered Lumens	Input Watts	Efficacy
FSI430L850-UNV-DIM	3134	20.9	150
FSI440L850-UNV-DIM	4220	29.3	144
FSI455L850-UNV-DIM	5639	40.3	140
FSI470L850-UNV-DIM	7073	52.6	134
FSI860L850-UNV-DIM	6258	41.9	149
FSI880L850-UNV-DIM	8427	58.8	143
FSI8110L850-UNV-DIM	11261	80.8	139
FSI8140L850-UNV-DIM	14124	105.5	134

Photometry

FSI440L840-UNV-DIM

Luminaire Lumens	4199
Luminaire Efficacy Rating (LER)	143
Total Luminaire Watts	29.3
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.28
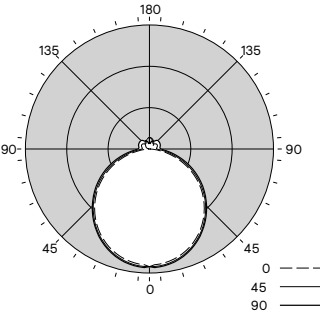
Candela Distribution

	0	22.5	45	67.5	90	Lumens
0	1234	1234	1234	1234	1234	
5	1211	1224	1229	1234	1239	117
15	1168	1181	1187	1192	1198	335
25	1084	1095	1103	1109	1114	508
35	963	972	982	989	994	613
45	810	820	832	841	846	641
55	634	644	659	675	682	589
65	435	446	471	494	503	465
75	228	242	280	309	320	293
85	45	73	120	155	167	130
90	2	35	80	112	124	
95	6	36	74	102	112	76
105	21	49	84	108	117	82
115	35	54	92	115	124	84
125	46	49	90	119	126	77
135	59	56	75	111	125	65
145	79	75	67	83	105	50
155	97	94	79	69	89	39
165	112	110	102	83	81	27
175	120	121	118	102	59	10
180	110	110	110	110	110	

Zonal Lumen Summary

Zone	Lumens	%Fixture	%Lamp
0-30	959	22.8%	22.8%
0-40	1572	37.4%	37.4%
0-60	2801	66.7%	66.7%
0-90	3690	87.9%	87.9%
90-130	318	7.6%	7.6%
90-150	433	10.3%	10.3%
90-180	509	12.1%	12.1%
0-180	4199	100.0%	100.0%

Avg. Luminance (cd/m²)

	0	45	90
45	9138	7901	7628
55	8723	7158	6918
65	7985	6197	6047
75	6563	4854	4908
85	3210	3207	3690

Coefficients of Utilization %

Pc---	80				70			50			0
Pw---	70	50	30	10	70	50	30	50	30	10	0
RCR											
0	116	116	116	116	112	112	112	104	104	104	88
1	105	100	96	92	101	97	93	90	87	84	72
2	95	87	80	74	92	84	78	79	73	69	59
3	87	76	68	61	83	74	66	69	63	57	50
4	79	67	58	52	76	65	57	61	54	49	42
5	73	60	51	44	70	58	50	55	47	42	36
6	67	54	45	38	64	52	44	49	42	37	32
7	62	49	40	34	60	47	39	45	37	32	28
8	58	44	36	30	56	43	35	41	34	29	25
9	54	41	32	27	52	40	32	38	31	26	22
10	51	37	30	24	49	36	29	35	28	23	20

FSI FluxStream LED industrial

4' and 8'

Photometry

FSI880L840-UNV-DIM

Luminaire Lumens	8385
Luminaire Efficacy Rating (LER)	143
Total Luminaire Watts	58.8
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.28
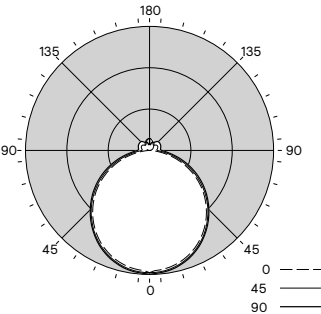
Candela Distribution

	0	22.5	45	67.5	90	Lumens
0	2463	2463	2463	2463	2463	
5	2418	2444	2455	2465	2475	233
15	2332	2358	2370	2381	2392	668
25	2165	2186	2202	2214	2225	1014
35	1922	1941	1962	1974	1984	1225
45	1617	1637	1662	1680	1690	1279
55	1266	1285	1316	1347	1362	1176
65	870	891	941	987	1005	929
75	455	484	559	618	640	585
85	89	146	240	309	334	260
90	4	70	159	224	247	
95	11	73	148	203	223	151
105	42	97	167	216	234	163
115	70	107	184	230	247	168
125	92	97	179	238	252	154
135	118	112	151	222	249	129
145	157	149	134	165	210	100
155	193	188	159	138	178	78
165	223	220	205	166	163	55
175	240	242	237	204	118	20
180	220	220	220	220	220	

Zonal Lumen Summary

Zone	Lumens	%Fixture	%Lamp
0-30	1915	22.8%	22.8%
0-40	3140	37.4%	37.4%
0-60	5595	66.7%	66.7%
0-90	7368	87.9%	87.9%
90-130	636	7.6%	7.6%
90-150	864	10.3%	10.3%
90-180	1017	12.1%	12.1%
0-180	8385	100.0%	100.0%

Avg. Luminance (cd/m²)

	0	45	90
45	9244	7950	7616
55	8873	7221	6908
65	8195	6274	6038
75	6864	4942	4901
85	3629	3303	3684

Coefficients of Utilization   %

Pc---	80				70			50			0
Pw---	70	50	30	10	70	50	30	50	30	10	0
RCR											
0	116	116	116	116	112	112	112	104	104	104	88
1	105	100	96	92	101	97	93	90	87	84	72
2	95	87	80	74	92	84	78	79	73	69	59
3	87	76	68	61	83	74	66	69	63	57	50
4	79	67	58	52	76	65	57	61	54	49	42
5	73	60	51	44	70	58	50	55	47	42	36
6	67	54	45	38	64	52	44	49	42	37	32
7	62	49	40	34	60	47	39	45	37	32	28
8	58	44	36	30	56	43	35	41	34	29	25
9	54	41	32	27	52	40	32	38	31	26	22
10	51	37	30	24	49	36	29	35	28	23	20

Accessories[15]

Bracket · Stem · Chain · Cable · Sensor · LSXR · Wire guard

Accessory Catalog Code	Description	
FSTH	Sliding hanger bracket (pair)	
SV5F12	12" Stem and canopy kit	White stem and canopy kit, 1/4" trade size (1/2" O.D.) locknuts included. Works with 9/16" k.O. on base of housing.
SV5F18	18" Stem and canopy kit	
SV5F24	24" Stem and canopy kit	
SV5F36	36" Stem and canopy kit	
SV5F48	48" Stem and canopy kit	
FKR-126	Chain hanger set (pair)	Includes two 54" heavy duty link chains with "V" hooks. Attaches to base of housing.
DACHxx	Adjustable cable hanger kit (single)	Works with 1/4" hole on base of housing or FSTH hanger bracket. **xx**=cable length in inches, enter 48" to 180" lengths in 12" increments
DACHxx-1-SC	Adjustable cable hanger kit with white straight 18/3 cord (single)	
DACHxx-1-CC	Adjustable cable hanger kit with white coiled 18/3 cord (single)	
DACHxx-2-SC	Adjustable cable hanger kit with white straight 18/4 cord (single)	
DACHxx-2-CC	Adjustable cable hanger kit with white coiled 18/4 cord (single)	
DACHxx-1D-SC	Adjustable cable hanger kit with white straight 18/5 cord with dimming leads (single)	
LSXR10	Low bay pir motion sensor (120-277v)	
LSXR10ADC	Low bay pir motion sensor with photocell and hi/lo trim dimming (120-277v)	
FSIWG4	4' Wire Guard (Order two for 8' models)	
FSID4L	4' Diffuse Replacement Lens (Order two for 8' models)	

15 Consult Signify to confirm whether specific accessories are BAA-compliant.