



Project: Location: Cat.No Туре: Qty: Lamps Notes:

The Day-Brite / CFI DuaLED surface LED is a highly efficient, visually comfortable, architecturally styled surface LED luminaire designed with a minimalistic strategy to achieve sustainable objectives. Its clean modern design offers a fresh variation on the popular dual chamber theme and provides architectural styling compatible with virtually any area

Ordering guide

Width	Family	Lumen Package	Color	Length	Center Diffuser	Voltage	Driver	Options	
2	SDL		_	4 –	D –	_	_		
2 2'	SDL Surface DuaLED	 43L 4300 nominal delivered lumens 49L 4900 nominal delivered lumens 58L 5800 nominal delivered lumens 73L 7300 nominal delivered lumens 	830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K	4 4'	D Diffuse (opal)	UNV Universal Voltage, 120-277 volt 347 347V	DIM 1 0-10V dimming SDIM 2 Step dimming to 40% input power DALI dimming dimming to 40% input power DALI dimming	AG CC GLR SWZG2 ^{23,4} SWZDT ³ DAYOCC ³	Antimicrobial paint Custom color Fusing, fast blow Integral sensor, daylighting and occupancy, advanced grouping with dwell time and zoning Integral sensor, daylighting and occupancy, advanced grouping with dwell time Integral sensor, daylighting and occupancy, basic grouping Quick driver disconnect

Footnotes

- 1 Integral SWZDT and DAYOCC options dimmable to 5% via wireless wall switch, all other 0-10V wired configurations dimmable to 1%.
- 2 58L and 73L not available with SDIM and SWZG2 options.
- 3 Specify only with -DIM driver option.
- ${\bf 4} \ {\bf Must} \ {\bf order} \ {\bf SWZ\text{-}REMOTE} \ {\bf SpaceWise} \ {\bf handheld} \ {\bf remote} \ {\bf with} \ {\bf each} \ {\bf system} \ {\bf order}.$

SpaceWise (SWZG2) Accessories (order separately)

- SWZ-REMOTE SpaceWise handheld remote for grouping and configuration (at least one remote required for any SpaceWise installation)
- LRM1743 External sensor to increase occupancy coverage area of SpaceWise luminaire groups
- UID8451/10 Wireless Dimmer Switch Selector
- UID8461/10 Wireless Scene Selector

Energy Data

Luminaire	Catalog Number	Input Power	Efficacy
	2SDL43L840	34.1	130
2x4	2SDL49L840	37.7	130
	2SDL58L840	46.3	129
	2SDL73L840	57.3	127



Example: 2SDL43L840-4-D-UNV-DIM



2SDL DuaLED surface LED 2x4

4300, 4900, 5800, or 7300 lumens

Application

- A highly efficient, visually comfortable, architecturally styled recessed LED luminaire designed with a minimalistic strategy to achieve sustainable objectives.
- Low profile configuration is only 3" high with sloped sides for a sleek appearance.
- Clean, modern design offers a fresh variation on the popular dual chamber theme and provides architectural styling compatible with virtually any area.
- Soft opal diffusers with large luminous area minimize apparent brightness and provide high visual comfort perfect for a wide variety of general lighting applications like offices, schools, retail, or healthcare.
- Multiple lumen packages over a wide range to provide significant application flexibility over light levels and/or luminaire spacing.
- A high lumen package can be used in conjunction with wide luminaire spacing to reduce luminaire quantities and overall cost while maintaining good uniformity.
- Directs a controlled amount of light to the higher angles in the room to balance the brightness of the surfaces and eliminate "cave effect" while creating the impression of a larger, brighter space without glare.
- Excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source. Integral or external sensors are available for use.
- Surface mount design requires no plenum space.
- DuaLED luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers. (www.designlights.org/QPL)

Construction/Finish

- Uncomplicated design is well under 3" in depth and only requires a few parts outside of the electrical system and hardware, creating several benefits:
 - Less material required
 - Less packaging required
 - Reduced weight
 - Less energy required for construction and assembly
 - More luminaires can be shipped per truck to reduce fuel use and emissions
- Luminaire is painted after fabrication with a matte white polyester powder coating for a high quality, durable finish with no unfinished edges to create an installation hazard or potential for corrosion.

Electrical

- Total luminaire efficacy as high as 130 LPW (lumens per Watt) significantly reduces energy use compared to conventional 2x4 sources.
- Driver and LED boards are easily accessible from below without tools. Multiple LED boards are individually replaceable if needed via plug-in connectors to ensure long service life.
- 0-10V dimming is standard.
- Five year limited luminaire warranty includes LED boards and driver. Visit www.philips. com/warranties for complete warranty information.
- High efficiency LEDs have a minimum 70,000 hour rated life (L70). Predicted L70 lifetime based on LED manufacturer's LM-80 data and in-situ laboratory testing.
- cETLus listed to UL and CSA standards, suitable for damp locations.

Enclosure

- Diffuser has large surface area for brightness control.
- Opal diffuser provides soft, comfortable lighting while maintaining high efficiency.
- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

General Notes

- All options factory installed.
- · All accessories are field installed.
- This luminaire is not suitable for continuous row mounting.
- 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.

SpaceWise (SWZG2)

- Commissioning via SWZ-REMOTE handheld remote, must order a minimum of one per installation
- Integral sensing options (DAYOCC, SWZG2, SWZDT) may not be combined
- For more information on the sensor, please refer to www.lightingproducts.philips.com/ documents/webdb2/DayBrite/pdf/SWZG2_ sensor.pdf
- Visit www.philips.com/spacewise for more information about SpaceWise Technology (SWZG2)

DAYOCC & SpaceWise DT (SWZDT)

- Commissioning via compatible Android phone and Philips Field App
- Dimming via compatible wireless wall switch only (see below)
- Register for the commissioning app at http:// registration.componentcloud.philips.com/ appregistration/
- Integral sensing options (DAYOCC, SWZG2, SWZDT) may not be combined
- For more information including recommended switches, refer to the following –

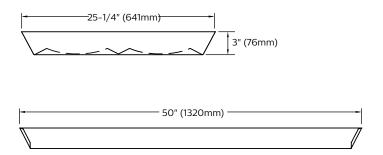
DAYOCC – www.lightingproducts.philips.com/documents/webdb2/DayBrite/pdf/DAYOCC_sensor.pdf

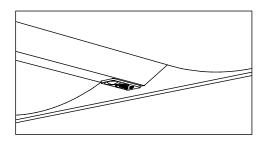
SWZDT – www.lightingproducts.philips.com/documents/webdb2/DayBrite/pdf/SWZDT_sensor.pdf

2SDL DuaLED surface LED 2x4

4300, 4900, 5800, or 7300 lumens

Dimensions





SpaceWise (SWZ) automated wireless technology is available for integrated occupancy and daylight harvesting. Individual options for dimming, occupancy detection, and daylight harvesting are also available if SpaceWise option is not selected.

Photometry

2x4 DuaLED, 4300 nominal delivered lumens

Catalog No.	2SDL43L840-4-D
Test No.	36164
S/MH	1.3
Lamp Type	LED
Lumens/Lamp	4445
Input Watts	34.1

Comparative yearly lighting energy cost per 1000 lumens - \$1.85 based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

LER - 130

Vertical		Horizon	tal Angle	
Angle	0°	45°	90°	-45°
0	1530	1530	1530	1530
5	1524	1524	1528	1524
15	1471	1476	1481	1476
25	1365	1372	1379	1372
35	1210	1220	1232	1220
45	1016	1032	1044	1032
55	790	811	820	811
65	548	568	566	568
75	307	310	302	310
85	91	75	71	75

Candela distribution

Candela distribution

1692

1686

1338

1123

873

604

339

629

343

908

626

334

79

896

629

343

Vertical

Angle

0

15 1628

25 1512

35

45

55

65

75

85 101

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1193	26.8
0-40	1956	44.0
0-60	3472	78.1
0- 90	4445	100.0

Average Luminance

End	45°	Cross
2679	2721	2752
2569	2636	2666
2418	2508	2497
2213	2235	2176
1945	1609	1523
	2679 2569 2418 2213	2679 2721 2569 2636 2418 2508 2213 2235

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%		50	0%
Wall (pw)	70	50	30	70	50	30	50	30
RCR	Z	onal cav	ity metho	od - Effec	d - Effective floor reflectance = 20%			
Room Cavity Ratio	118 109 98 90 81 75 69 65 59 56	118 104 90 79 69 61 56 51 46 42 39	118 98 82 70 60 53 46 41 38 34 30	115 106 95 86 80 72 68 63 57 55	115 101 88 77 68 60 55 50 46 41 39	115 96 81 69 59 53 46 41 36 34	111 96 84 73 66 58 53 47 44 40 38	111 93 79 68 58 52 46 40 36 34 30

2x4 DuaLED, 4900 nominal delivered lumens

Catalog No.	2SDL49L840-4-D
Test No.	36166
C /MILI	1.2

S/MH 1.3 Lamp Type LED Lumens/Lamp 4919 Input Watts

Comparative yearly lighting energy cost per 1000 lumens - \$1.85 based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

LER - 130

Light Distribution

			_		
Horizont	al Angle		Degrees	Lumens	% Luminaire
45°	90°	-45°	0-30	1320	26.8
1692	1692	1692	0- 40 0- 60	2165 3842	44.0 78.1
1687	1691	1687	0-80	3842 4919	100.0
1633	1639	1633			
1517	1526	1517			
1351	1362	1351	Cooffic	ionts o	f I Itilizatio
11.//1	1155	11./11	Coeilic	ients o	f Utilizatio

Average Luminance

Angle	End	45°	Cross
45	2962	3010	3045
55	2838	2913	2953
65	2666	2777	2763
75	2444	2474	2403
85	2155	1804	1692

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EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%		50)%
Nall (pw)	70	50	30	70	50	30	50	30
RCR	Z	onal cav	ity metho	od - Effec	tive floo	r reflecta	nce = 20%	6
Room Cavity Ratio 6 8 4 9 9 5 7 8 6 0 0	118 109 98 90 81 75 69 65 59 56	118 104 90 79 69 61 56 51 46 42 39	118 98 82 70 60 53 46 41 38 34 30	115 106 95 86 80 72 68 63 57 55	115 101 88 77 68 60 55 50 46 41 39	115 96 81 69 59 53 46 41 36 34	111 96 84 73 66 58 53 47 44 40 38	111 93 79 68 58 52 46 40 36 34 30

2SDL DuaLED surface LED 2x4

4300, 4900, 5800, or 7300 lumens

2x4 DuaLED, 5800 nominal delivered lumens

LER - 129

Catalog No.	2SDL58L840-4-D
Test No.	36167
S/MH	1.3
Lamp Type	LED
Lumens/Lamp	6007
Input Watts	46.3

Comparative yearly lighting energy cost per 1000 lumens – **\$1.85** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

arracta distribution							
rtical	Horizontal Angle						
Angle	0°	45°	90°	-45°			
0	2067	2067	2067	2067			
5	2059	2060	2066	2060			
15	1989	1994	2001	1994			
25	1845	1853	1864	1853			
35	1636	1648	1666	1648			
45	1372	1393	1411	1393			
55	1068	1096	1109	1096			
65	741	769	765	769			
75	416	419	407	419			
85	123	102	95	102			

Candela distribution

Degrees Lumens % Luminaire 0-30 1612 26.8 0-40 2644 44.0 0-60 4692 78.1 0-90 6007 100.0

Average Luminance							
Angle	End	45°	Cross				
45	3618	3675	3721				
55	3471	3562	3604				
65	3269	3392	3376				
75	2994	3021	2934				
85	2640	2187	2039				

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%		50)%	
Wall (pw)	70	50	30	70	50	30	50	30	
RCR	2	Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio 6 8 2 9 5 7 8 2 0	118 109 98 90 81 75 69 65 59 56	118 104 90 79 69 61 56 51 46 42 39	118 98 82 70 60 53 46 41 38 34 30	115 106 95 86 80 72 68 63 57 55	115 101 88 77 68 60 55 50 46 41	115 96 81 69 59 53 46 41 36 34	111 96 84 73 66 58 53 47 44 40 38	111 93 79 68 58 52 46 40 36 34 30	

2x4 DuaLED, 7300 nominal delivered lumens

2SDL73L840-4-D

36170

WLED

7307

57.3

1.3

Catalog No.

Lamp Type

Input Watts

Lumens/Lamp

Test No.

S/MH

Candela distribution

Vertical	Horizontal Angle							
Angle	0°	45°	90°	-45°				
0	2514	2514	2514	2514				
5	2504	2506	2513	2506				
15	2419	2427	2434	2427				
25	2246	2256	2266	2256				
35	1989	2006	2026	2006				
45	1669	1695	1716	1695				
55	1299	1331	1348	1331				
65	900	933	931	933				
75	505	510	496	510				

124

117

124

85 150

 Light Distribution

 Degrees
 Lumens
 % Luminaire

 0-30
 1961
 26.8

 0-40
 3216
 44.0

 0-60
 5707
 78.1

 0-90
 7308
 100.0

LER - 127

Average Luminance 45° Angle End Cross 4402 4470 4525 45 55 65 4222 3973 4329 4108 4117 75 85 3216 2495

Comparative yearly lighting energy cost per 1000 lumens – \$1.88 based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

Ceiling (pcc)		80%			70%		50)%	
Wall (pw)	70	50	30	70	50	30	50	30	
RCR	Z	Zonal cavity method - Effective floor reflectance = 20%							
Room Cavity Ratio 0 6 8 4 9 9 5 7 8 7 1 0	118 109 98 90 81 75 69 65 59 56	118 104 90 79 69 61 56 51 46 42 39	118 98 82 70 60 53 46 41 38 34 30	115 106 95 86 80 72 68 63 57 55	115 101 88 77 68 60 55 50 46 41 39	115 96 81 69 59 53 46 41 36 34	111 96 84 73 66 58 53 47 44 40 38	111 93 79 68 58 52 46 40 36 34	

