



# Linear

Sona suspended (1LC Up)

4500 lm/4ft w/ 50% Down Kit  
3000/3500/4000K



Project: \_\_\_\_\_  
Spec Type: \_\_\_\_\_  
Catalog No: 7705LxCAD  
Qty \_\_\_\_\_  
Line Notes: \_\_\_\_\_

Incredible efficacy & boundless lighting choices mean the re-engineered Sona suspended LED is destined to become a future classic. Flexible up/down distributions and tailored LED optics mean you always have the right light for every task.

## Ordering guide

Product Type	Source	Color Temp *	Lumens *	Lower Optics	Upper Optics	Run Length	Wiring †	Voltage	Driver	Finish
<input type="text" value="7705"/>	<input type="text" value="L"/>	<input type="text"/>	<input type="text" value="C"/>	<input type="text" value="A"/>	<input type="text" value="D"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sona 1LC suspended Indirect/Direct	L LED	A 4000K B 3500K C 3000K	B 6100 lm/4ft C 4500 lm/4ft E 3100 lm/4ft	V White Louver A Curved Acrylic Diffuser	A Acrylic Diffuser (70-75% up) D Diffuser with 50% Down Kit	04 4' 08 8' XX Total run length (4' increments)	7 1 cct Dimming E 2 cct A/B Dimming (Alt. 4ft) M 1 cct Dimming + EM Wiring N 1 cct Dimming + EM Batt. Pack	1 120V 2 277V 3 347V	E Philips Advance 0-10V (1% dim) S Philips Advance Sensor Ready (5% dim)	W Standard White T Titanium Silver B Black C Custom

\* Nominal values within a range. Down kits reduce output & efficacy. Consult photometry data for CRI, color temp, lumens & distribution of chosen configuration.

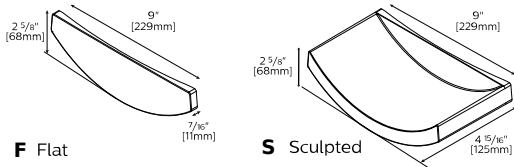
† Not all wiring types are available with all configurations. Consult Philips Ledalite for a complete list of available options.

## Mounting Hardware

**Mount Type**  
Consult separate mounting spec sheet for mount type options:  
**Ledalite Suspended Mounting Options**

**Suspension Length**  
Distance from ceiling to top of luminaire in inches

## Endcaps -



## Integrated Controls Please indicate with check mark.

- Response Daylight Single Zone (DS)
- SpaceWise DT Occupancy & Daylight Sensor (SZ)



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## Optical System

**1 Light Chamber Upper:** Lateral-facing LED arrays deliver light into both the upper and lower hemispheres, giving a highly efficient, native 70% up / 30% down distribution with a wide, homogeneous upper batwing distribution. A fully indirect version with a solid lower housing can be specified, as well as a 50% down-light kit option.

**1 Light Chamber Lower:** A downward-facing LED array aims light into the lower hemisphere, for a highly efficient, fully direct distribution or optional 80% down version.

**2 Light Chambers:** Both lateral-facing and downward-facing LED arrays are combined in separate upper and lower chambers for the ultimate in up/down distribution control.

**Lenses:** On the upper surface an engineered diffuser smooths the light distribution on the ceiling and acts as a dust cover. On the lower surface, two 4" wide optics are available: either a curved, engineered acrylic diffuse lens flush to the housing; or a white louver with regressed diffuser for improved high angle cut-off and visual comfort.

## Endcaps

Diecast aluminum endcaps, either Sculpted (curved) or Flat.

## Finish

High quality powder coated, available in matte white, black or titanium silver. Other custom colors, including pacific aqua, are available on request. White sensors only.

## Housing

Precision formed 18 gauge cold-rolled steel. Cross section size (approx.): 2.6" h x 9" w (suspended) or 7.4" w (wall mount).

## Weight

Maximum: Suspended 4.9lb/ft, Wall 3.4lb/ft

## Electrical

Factory pre-wired to section ends with quick-wire connectors.

## Standard Drivers

Philips Advance Xitanium 0-10V, 1-100%.

Philips Advance Xitanium Sensor Ready, 5-100%. Class 2 rated output. Consult Philips Ledalite for other available drivers.

## Standard Battery Pack

Philips Bodine, 90 min, 10W, Class 2 rated output. Emergency lumen output = 10W x luminaire efficacy x 1.1. Typical output: suspended 1400lm, wall 1200lm.

## Lumen Maintenance

LEDs have been tested by the manufacturer in accordance with IESNA LM-80-08. At an ambient temperature of 25°C, the LED lumen maintenance expectation according to IES TM-21-11 is:

L80 (12k) >72,000 hrs (**Reported** methodology)

L80 (12k) 110,000 hrs (**Projected** methodology).

## Source Color

LEDs rated for color rendering CRI >80, R9 >0 and fixture to fixture color accuracy within 3 SDCM.

## Controls

Suspended version (1 light chamber only) available with the following integrated controls:

Response Daylight Sensors

SpaceWise DT Occupancy & Daylight Sensors w/ advanced grouping & Dwell Time.

\*SpaceWise DT commissioning is via a compatible Android phone and Philips Field App. Compatible wireless dimming wall switches are available for dimming. 347V is not available as a standard option. For more information, please refer to [www.philips.com/spacewise](http://www.philips.com/spacewise)

## Mounting

**Suspended:** Rapid installation sling mount at joints and ends. High strength aircraft cable and stainless steel gripper provide unlimited vertical adjustment and are independently tested to stringent safety standards. Variable mounting along the length of the housing is available for certain configurations upon request.

**Wall:** A hidden steel rail and bracket system attaches to the existing structure and supports housings close to the wall. Mount positioning is fully variable along the modules to accommodate site conditions, spaced up to 4½' on center and within 6" of an end or joint.

## Joints

Self-aligning, gasketed joining system with hands-free wiring feature.

## Approvals

Certified to UL, CSA and IES standards. Most suspended versions (except 1 light chamber down with louver) are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers ([www.designlights.org/QPL](http://www.designlights.org/QPL)).

## Warranty

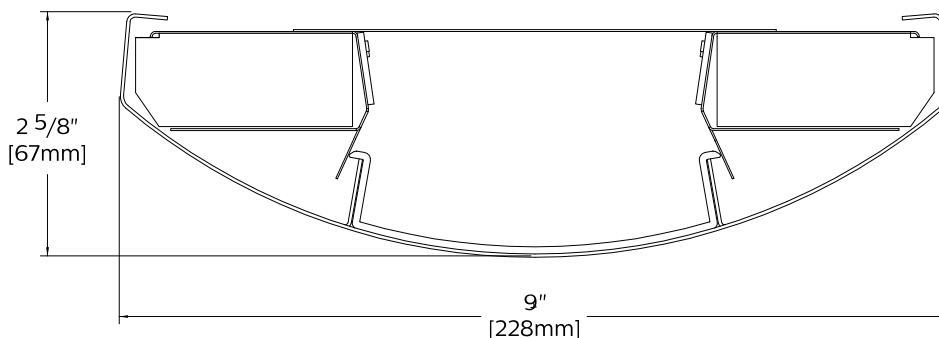
Philips indoor professional luminaires 5 year LED warranty: [www.philips.com/warranties](http://www.philips.com/warranties)

## Environment

Rated for dry or damp locations in operating ambient temperatures 0–40°C (32–104°F). Certain luminaire components may be adversely affected by contaminants. Damage caused by sulfur, chlorine, petroleum based solutions or other contaminants in the area of operation are not covered under warranty. Not suitable for natatorium environments.

Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.

## Dimensions - Cross Section



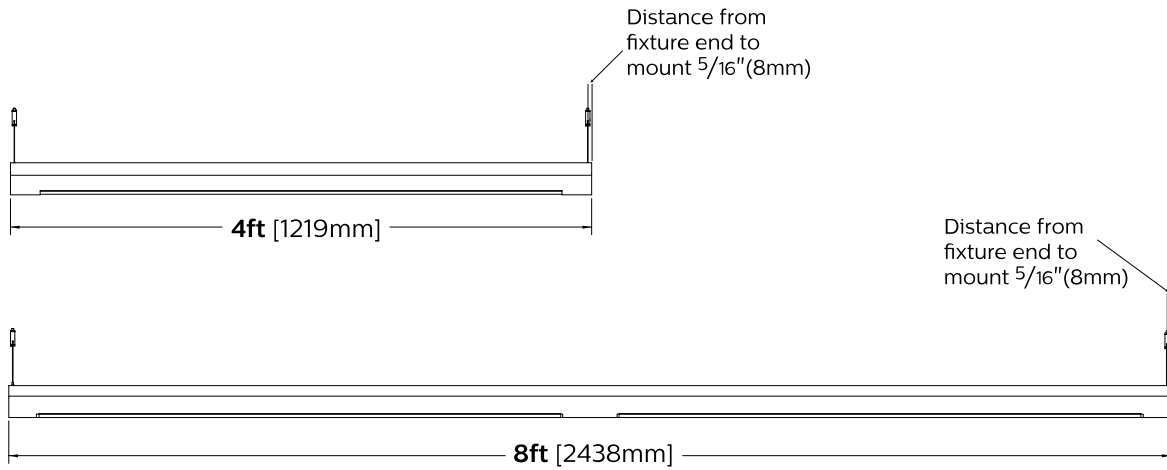
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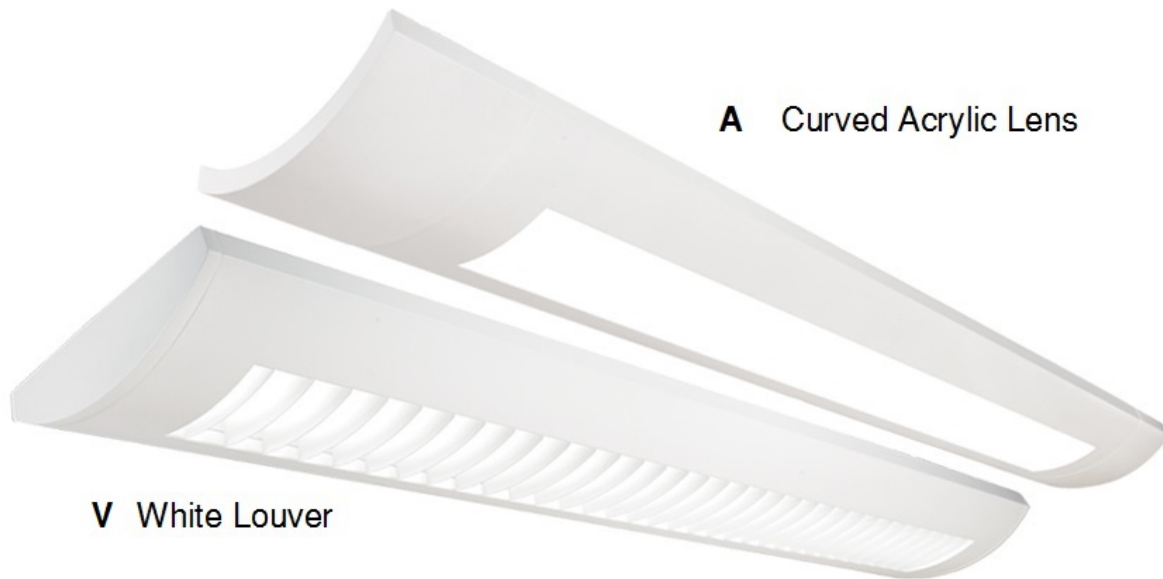
3000/3500/4000K

## Dimensions - Modules

Suspended - Side view, no end caps



## Optics and Styles

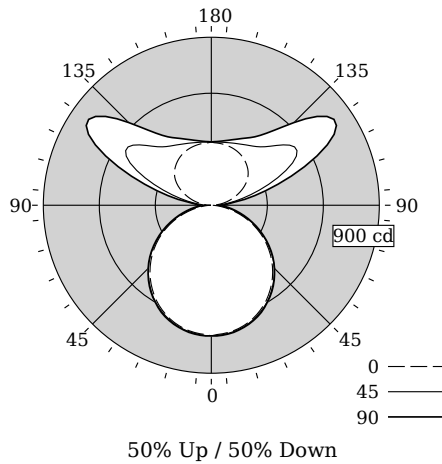


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## Photometry @ CRI>80, 3500K



## Candela Distribution

Vertical Angle	Horizontal Angle				Zonal Lumens
	0	22.5	45	67.5	
0	700	700	700	700	0
5	691	697	696	698	66
15	668	673	674	676	190
25	620	625	628	632	289
35	551	557	561	564	350
45	463	469	476	477	365
55	361	368	373	374	332
65	248	254	259	262	255
75	130	136	146	154	154
85	31	41	58	70	64
90	2	16	34	48	0
95	31	44	63	81	76
105	101	141	218	281	226
115	171	257	441	584	411
125	234	325	545	742	468
135	276	329	447	575	352
145	303	331	387	436	243
155	321	335	362	387	167
165	331	338	347	357	99
175	335	339	340	342	33
180	339	339	339	339	0

Values per 4ft unit

Fixture photometry has been conducted in accordance with IESNA LM-79-08

IES files for this and other photometric options can be downloaded online at [www.lightingproducts.philips.com](http://www.lightingproducts.philips.com)

## Coefficients of Utilization (%)

RCR	Ceiling		80		70		50		0	
	Wall	70	50	30	10	70	50	30	10	0
0	107	107	107	107	99	99	99	83	83	50
1	97	93	89	85	90	86	82	72	70	41
2	88	81	74	69	81	75	69	63	59	34
3	81	71	63	57	74	65	59	55	50	29
4	74	62	54	48	67	58	51	49	44	24
5	67	56	47	41	62	52	44	44	38	21
6	62	50	42	36	57	46	39	39	34	18
7	57	45	37	31	53	42	34	36	30	16
8	53	41	33	27	49	38	31	32	27	14
9	49	37	29	24	46	35	28	30	24	13
10	46	34	27	22	43	32	25	27	22	12

## Avg. Luminance (cd/m2)

Vertical Angle	Horizontal Angle		
	0	45	90
55	5656	5514	5482
65	5244	5042	5035
75	4442	4347	4506
85	3001	3946	4552

## Distribution

Hemisphere	50% Up / 50% Down
Spacing Along (0°)	1.25
Spacing Across (90°)	1.28

Philips Ledalite

**LED lighting facts**  
A Program of the U.S. DOE

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**Light Output (Lumens)** **4139**

**Watts** **33.3**

**Lumens per Watt (Efficacy)** **124.29**

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**Color Accuracy**  
Color Rendering Index (CRI) **83**

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**Light Color**  
Correlated Color Temperature (CCT) **3378 (Bright White)**

2700K    3000K    4500K    6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: F46Z-YGDC14 (5/5/2017)  
Model Number: 7705LBCAD  
Type: Luminaire - Linear

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## Optical Performance @ 120V

Nominal Spec:	3000K	3500K	4000K
Flux (lm)	3976	4139	4228
Efficacy (lm/W)	119.4	124.3	126.2
Power (W)	33.3	33.3	33.5
CCT (K)	3020	3378	3958
CRI	84	83	84
R9	11	9	11
x	0.4361	0.4138	0.3835
y	0.4048	0.3976	0.3820
Duv	0.0003	0.0012	0.0016

## Electrical Performance @ CRI>80, 3500K

Input Voltage	120V	277V	347V
Input Power	33.3W	33.1W	33.6W
Input Current	0.28A	0.12A	0.10A
Power Factor	0.996	0.966	0.964
Total Harm. Distortion	6.3%	9.6%	9.0%

Tested values – contact technical support for rated values. Off-state power zero unless certain controls are specified.

With SpaceWise DT, standby power <0.5W (120V) or <0.8W (277V).

