

**PHILIPS**



SkyRibbon Essential  
White Linear Direct  
Powercore

LED Luminaire

Date: \_\_\_\_\_

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

Firm Name: \_\_\_\_\_

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



# SkyRibbon Essential White Linear Direct Powercore

220–240 VAC, 3500 K, 305 mm (1 ft)

Recessed linear interior LED fixture for direct-view and general illumination applications with solid white light

SkyRibbon Essential White Linear Direct Powercore is a recessed linear interior LED fixture offering high-quality, dimmable solid white light in four color temperatures, ranging from warm 2700 K to cool 4000 K. Brilliant light output and industry-leading color consistency make fixtures ideal for a variety of general illumination applications. Multiple housing options accommodate a number of installation methods.

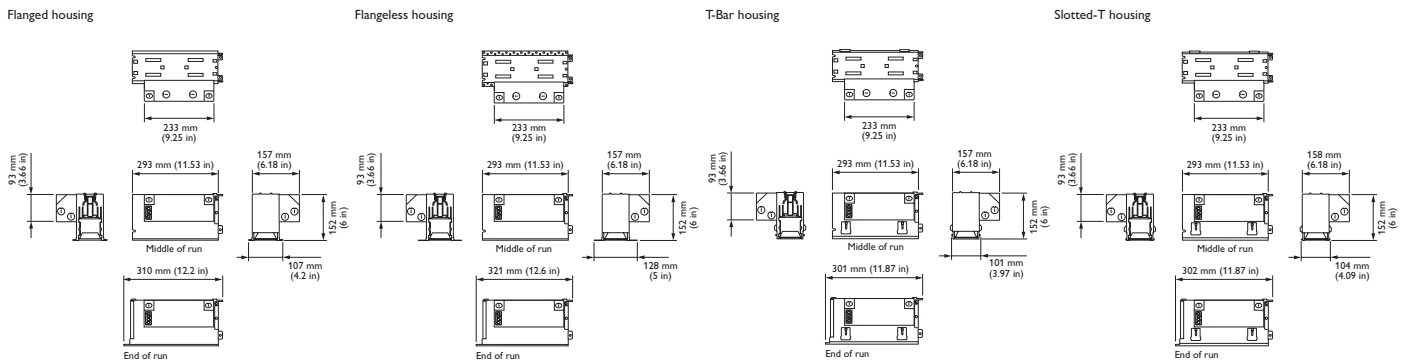
# SkyRibbon Essential White Linear Direct Powercore

## Recessed linear interior LED fixture for direct-view and general illumination applications with solid white light

- Four color temperatures—Solid white light LED modules available in 2700 K, 3000 K, 3500 K, and 4000 K color temperatures, supporting a broad selection of design objectives.
- High lumen output—Fixture produces white light output equivalent to a single T5 linear recessed fixture.
- Multiple housing options for installation and mounting flexibility—T-Bar, Slotted-T, Flanged, and Flangeless housings support numerous installation methods and appearances.
- Flexible configuration—Available in 305 mm (1 ft) and 1219 mm (4 ft) fixture lengths with multiple jumper cable, corner terminal, and connector options to accommodate nearly any layout.
- Integrates patented Powercore technology—Powercore rapidly, efficiently, and accurately controls power output to fixtures directly from line voltage, eliminating the need for an external power supply.
- Dimming capability—Patented DIMand technology offers smooth dimming capability with selected commercially available reverse-phase ELV-type dimmers.
- Optibin advanced binning algorithm—Exceeds the recognized standards for color quality to guarantee uniformity and color consistency across LED sources, fixtures, and manufacturing runs.
- Three voltage options—Available 120 VAC, 220 – 240 VAC, and 277 VAC fixtures ensure consistent operation in a number of major international regions.

For detailed product information, please refer to the SkyRibbon Essential White Linear Direct Powercore Product Guide at [www.philipscolorkinetics.com/ls/ew/skyribbon-lineardirect/](http://www.philipscolorkinetics.com/ls/ew/skyribbon-lineardirect/)

## Dimensions



# Specifications

Due to continuous improvements and innovations, specifications may change without notice.

## SkyRibbon Essential White Linear Direct Powercore

220–240 VAC, 3500 K, 305 mm (1 ft)

### Output

Color Temperature*	3500 K
Beam Angle	100° x 100°
Lumens†	656
Efficacy (lm/W)	49.1
CRI	87

### Electrical

Input Voltage	220-240 VAC, 50/60 Hz
Power Consumption <i>(Maximum at full output, steady state)</i>	14 W
Power Factor	0.99 @ 120 VAC

### Control

Dimmer‡	Compatible with selected commercially available reverse-phase ELV-type dimmers
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### Lumen Maintenance

Threshold§	Ambient Temperature	Reported¶	Calculated¶
L <sub>90</sub>	25° C	90,000	>100,000
	40° C	>72,000	>72,000
L <sub>80</sub>	25° C	90,000	>100,000
	40° C	90,000	>100,000
L <sub>70</sub>	25° C	90,000	>100,000
	40° C	90,000	>100,000
L <sub>50</sub>	25° C	90,000	>100,000
	40° C	90,000	>100,000

\* Correlated color temperature (CCT) complies with ANSI C78.377-2008 for the chromaticity of solid state lighting products.

† Lumen output measurements comply with IES LM-79-08 testing procedures.

‡ Refer to [www.philipscolorkinetics.com/support/appnotes/](http://www.philipscolorkinetics.com/support/appnotes/) for more information.

§ L<sub>xx</sub> = xx% lumen maintenance (when light output drops below xx% of initial output). All values are given at B10, or the median value where 90% of the LED population is better than the reported or calculated lumen maintenance measurement.

¶ Lumen maintenance figures are based on lifetime prediction graphs supplied by LED source manufacturers. Whenever possible, figures use measurements that comply with IES LM-80-08 testing procedures. In accordance with TM-21-11, Reported values represent the interpolated value based on six times the LM-80-08 total test duration (in hours). Calculated values represent time durations that exceed six times the total test duration.

\*\* Includes fixture housing and LED module.

Date: \_\_\_\_\_

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### Physical

Dimensions	152 x 294 x 158 mm (6 x 11.6 x 6.3 in) <i>Flanged Housing</i>
	152 x 294 x 158 mm (6 x 11.6 x 6.3 in) <i>Flangeless Housing</i>
	152 x 294 x 158 mm (6 x 11.6 x 6.3 in) <i>T-Bar Housing</i>
	152 x 294 x 158 mm (6 x 11.6 x 6.3 in) <i>Slotted-T Housing</i>

*(Height x Width x Depth)*

Weight**	2.5 kg (5.5 lb) <i>Flanged Housing</i>
	2.5 kg (5.5 lb) <i>Flangeless Housing</i>
	2.5 kg (5.5 lb) <i>T-Bar Housing</i>
	2.5 kg (5.5 lb) <i>Slotted-T Housing</i>

Housing Material	Steel, white powder-coated finish
Lens	Polycarbonate
Fixture Connections	Wieland integral male/female connectors

Temperature Ranges	-20° – 40° C (-4° – 104° F) Operating
	-20° – 40° C (-4° – 104° F) Startup
	-40° – 80° C (-40° – 176° F) Storage

Humidity	0 – 95%, non-condensing
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Fixture Run Lengths To calculate fixture run lengths and total power consumption for your specific installation, download the Configuration Calculator from [www.philipscolorkinetics.com/support/install\\_tool/](http://www.philipscolorkinetics.com/support/install_tool/)

### Certification and Safety

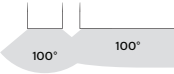
Approbation	CE
Environment	IP20



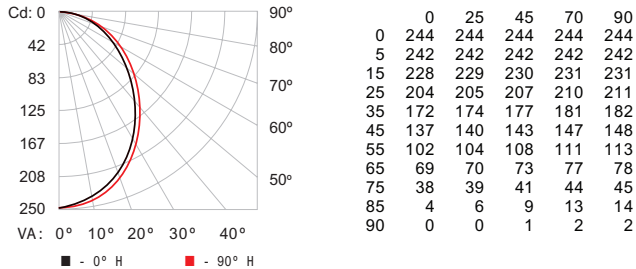
# SkyRibbon Essential White Linear Direct Powercore Photometrics 3500 K, 305 mm (1 ft)

Photometric data is based on test results from an independent NIST traceable testing lab. IES data is available at [www.philipscolorkinetics.com/support/ies](http://www.philipscolorkinetics.com/support/ies).

Beam Angle	100° x 100°
LED	3500 K
Lumens	656
Efficacy (lm/W)	49.1



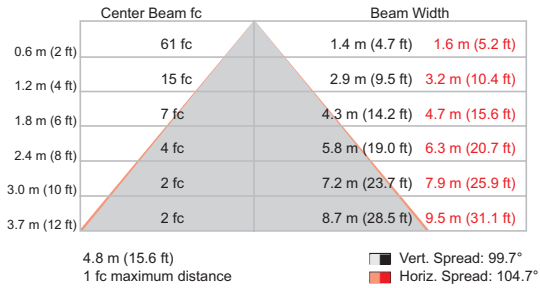
## Polar Candela Distribution



## Zonal Lumen

Zone	Lumens	% Fixture
0 - 60	501.3	78.8 %
60 - 90	131.9	20.7 %
0 - 90	633.2	99.5 %

## Illuminance at Distance



## Coefficients Of Utilization - Zonal Cavity Method

RCC %:	Effective Floor Cavity Reflectance: 20%																				
	80				70				50				30				10				0
RW %:	20	50	30	0	70	50	30	0	50	30	20	0	50	30	20	0	50	30	20	0	0
RCR: 0	119	119	119	119	116	116	116	100	111	111	111	106	106	106	106	102	102	102	102	100	100
1	109	104	100	96	106	101	98	84	97	94	91	88	93	91	88	89	87	85	83	83	83
2	99	91	84	78	96	89	82	71	85	80	75	73	82	77	73	79	75	72	70	70	70
3	90	80	72	65	88	78	71	60	75	69	63	62	72	67	62	70	65	61	59	59	59
4	83	71	62	55	80	69	61	52	67	60	54	64	58	53	53	62	57	53	50	50	50
5	76	63	54	48	74	62	54	46	60	53	47	58	52	46	46	56	50	46	44	44	44
6	70	57	48	42	68	56	48	40	54	47	41	53	46	41	41	51	45	40	38	38	38
7	65	52	43	37	64	51	43	36	50	42	37	48	41	36	36	47	41	36	34	34	34
8	61	47	39	33	59	47	39	32	45	38	33	44	37	33	33	43	37	32	30	30	30
9	57	44	35	30	56	43	35	29	42	35	30	41	34	30	30	40	34	29	27	27	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	27	37	31	27	25	25	25

For lux multiply fc by 10.7

## Fixture and Accessories

Use Item Number when ordering in North America.

Fixture	Item Number	Philips 12NC
SkyRibbon Essential White Linear Direct Powercore 220-240 VAC, 3500 K, 305 mm (1 ft) <i>Housing sold separately.</i>	523-000074-04	910503702664
<b>Associated Parts</b>		
Flanged Housing, 220-240 VAC, 305 mm (1 ft)	172-000074-37	910503705034
Flangeless Housing, 220-240 VAC, 305 mm (1 ft)	172-000074-33	910503705030
T-Bar, 220-240 VAC, 305 mm (1 ft)	172-000074-26	910503704350
Slotted-T, 220-240 VAC, 305 mm (1 ft)	172-000074-27	910503704351
End of Run Kit, Flanged	120-000174-05	910503705026
End of Run Kit, Flangeless	120-000174-04	910503705025
End of Run Kit, T-Bar/Slotted-T	120-000174-06	910503705027
Stand-Alone Kit, Flanged	120-000174-09	912400130311
Stand-Alone Kit, Flangeless	120-000174-08	912400130310
Stand-Alone Kit, T-Bar/Slotted-T	120-000174-10	912400130312
<b>Accessories</b>		
Leader Cable, 220 - 240 VAC, 3 m	108-000072-13	910503705047
Jumper Cable, 220 - 240 VAC, 0.9 m	108-000072-15	910503705049
Jumper Cable, 220 - 240 VAC, 1.4 m	108-000072-16	910503705050
Jumper Cable, 220 - 240 VAC, 1.7 m	108-000072-17	910503705051

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