

Stylus™ Linear Series

Stylus™ LED Suspended Direct Specification Grade Luminaire

Rev. Date: V1 08/01/2019

Product Description

The Stylus Linear Series is a full range linear specification portfolio. Its sleek minimalistic design provides clean uniform lines of light for any application such as: offices, healthcare, education and interior design. Designed with Cree Lighting's TrueWhite® Technology, the Stylus Linear Series offers premium color quality with a CRI > 90 and R9 > 65 ideal for optimally displaying objects like produce, fabric, and artwork. With smooth full-range dimming down to 1%, the Stylus Linear Series allows each space with the appropriate light level needed for any activity. Available in up to 72 feet of continuous rows of seamless light in two foot increments. Specifiable in three colors: white, black and graphite, the Stylus Linear Series is perfect for any application.

Applications: Suspended Direct applications for new construction and upgrade

Performance Summary

Utilizes Cree TrueWhite® Technology

Initial Delivered Lumens: 400-900 lumens per foot

Efficacy: Up to 85 LPW

CRI: 90+ CRI

R9: > 65

CCT: 3000K, 3500K, 4000K

Input Voltage: 120-277 VAC or 347 VAC

L₇₀ Lifetime: > 100,000 hours at 35°C

Limited Warranty*: 10 years on luminaire

Limited Warranty Emergency Back Up (EB) Battery and Generator Transfer Device: 1 Year.
Test regularly in accordance with local codes

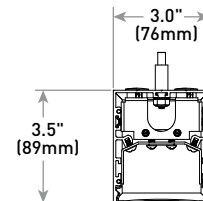
Dimensions with End Caps: H 3.5" (89mm) x W 3.0" (76mm) x L up to 72' (22m)

Weight: 2.6 LB/FT (1.2kg)

Dimming: 0-10V dimming to 1%; DALI dimming to 5%

Assembled in the U.S.A. of U.S. and imported parts

*See <http://creelighting.com/warranty> for warranty terms



Ordering Information

Example: ST3-SD-02-L-30K-L-10V-12-A-WH

ST3	SD					L					
Product	Mount	Length	Downlight Output	CCT	Voltage	Downlight Option	Control	Suspension Length	Ceiling Type	Color	Options
ST3 Stylus 3" Linear	SD Suspended Direct	02 - 2' increments up to 72'	L Low (400 lumens/ft) M Medium (650 lumens/ft) H High (900 lumens/ft)	30K 3000K 35K 3500K 40K 4000K	Blank 120-277 Volt 34 347 Volt	L Lambertian	10V 0-10V dimming to 1% DALI DALI dimming to 5% - Not available with 2' lengths or 347V	04 Up to 4' 08 Up to 8' 12 Up to 12'	A 1" T Bar B 9/16" T Bar C Screw Slot T Bar D Hard Ceiling	WH White BK Black GR Graphite	EB 10W Emergency Battery* Backup - 120-277V only - Standard 1EB/Run; for additional emergency units per run, consult sales - Illuminates first 4' of fixture - Not available in two ft fixtures GT Generator Transfer Device - 120-277V only - Not available in two ft fixtures

*GT and EB cannot be used together



US: creelighting.com (800) 236-6800

Canada: creelighting-canada.com (800) 473-1234

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS

- 6063 marine grade extruded aluminum housing
- Matte acrylic lens
- Bead suspended acrylic lens
- Textured powder coat paint with a matte white, black or graphite finish
- Individual luminaires and continuous rows include non-feed cable kits and power feed/cable kits to support installation
- Non-feed cable kits include a 2" aluminum canopy with 1/16" galvanized 7x7 steel cable
- Feed kits include a 5" aluminum canopy with 1/16" galvanized 7x7 steel cable and SJT power cord(s)
- Included cords: 0-10V and DALI: (1) 18/5 cord; EB Option: (1) 18/2 and (1) 18/4 cord; GT Option: (2) 18/5 cords
- White canopies include white cord(s). Black and graphite canopies include black cord(s)
- End caps are extruded aluminum and come installed on individually mounted luminaires (2'-12')
- One set of end caps is included to accommodate runs from 14'-72'
- Continuous rows include quick connect wiring harnesses for ease of installation. Alignment pins between luminaires create seamless appearance and straighter rows

OPTICAL SYSTEM

- Multiple lumen intensities to provide the correct level of illumination within each space
- High efficiency diffuser designed to minimize glare and provide uniform light distribution

ELECTRICAL SYSTEM

- **Power Factor:** > 0.9 at full load
- **Input Power:** Stays constant over life
- **Input Voltage:** 120-277V or 347V, 50/60Hz
- **Operating Temperature Range:** -20°C - +35°C (-4°F - +95°F); minimum operating temperature with EB14 option is 0°C (32°F)
- **Total Harmonic Distortion:** < 20% at full load

CONTROLS

- Continuous dimming to 1% with 0-10V DC control protocol
- **10V Source Current:** 0.30mA maximum up to 12'
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Reference www.creelink.com/exLink.asp?70982140Z58R34126620963 for recommended dimming controls and wiring diagrams
- Luminaires with DALI dim to 5%

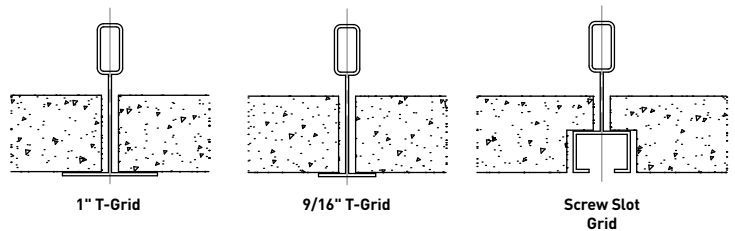
REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus listed
- Suitable for damp locations
- Designed for indoor use only
- Suitable for continuous row mounting
- Not intended for use in environments containing airborne corrosive agents such as chemical solvents, cleaners, or cutting fluids
- UL924 (EB option). Maximum mounting height: 15.0' (4.6m)
- RoHS compliant. Consult factory for additional details
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Meets Buy American requirements within ARRA
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

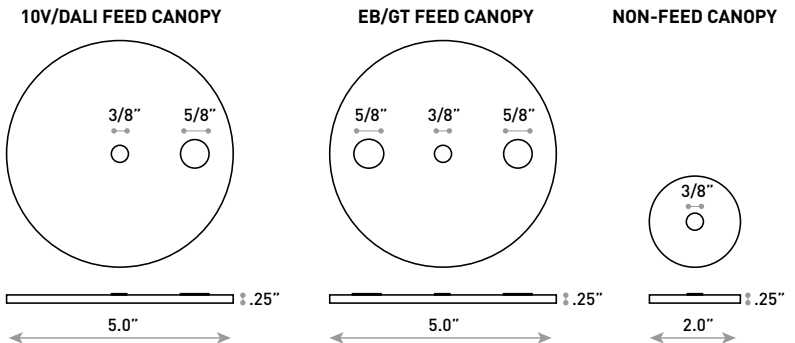
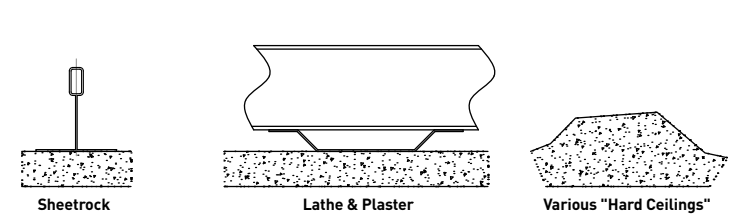
Stylus Linear Series Ambient Adjusted Lumen Maintenance ¹					
Ambient	Initial LMF	25K hr Reported ² LMF	50K hr Estimated ³ LMF	75K hr Estimated ³ LMF	100K hr Estimated ³ LMF
5°C (41°F)	1.03	1.00	0.95	0.91	0.87
15°C (59°F)	1.01	0.98	0.93	0.89	0.85
25°C (77°F)	1.00	0.97	0.92	0.88	0.84
30°C (86°F)	0.99	0.96	0.91	0.87	0.83
35°C (95°F)	0.99	0.96	0.91	0.87	0.83

¹Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors.
²In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED
³Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED

ON-GRID MOUNTING



OFF-GRID MOUNTING



Stylus™ LED Suspended Direct Specification Grade Luminaire

Initial Delivered Lumens (30K/35K/40K)	
Lumen Package	Initial Delivered Lumens / Foot
L	400
M	650
H	900

Electrical Data*							
Length	Lumen Package	System Watts	Total Current (A)				
			120-347V	120V	208V	240V	277V
2'	L	11	0.09	0.05	0.05	0.04	0.03
	M	16	0.13	0.08	0.07	0.06	0.05
	H	22	0.18	0.10	0.09	0.08	0.06
4'	L	19	0.16	0.09	0.08	0.07	0.05
	M	30	0.25	0.14	0.12	0.11	0.09
	H	41	0.35	0.20	0.17	0.15	0.12
6'	L	27	0.23	0.13	0.11	0.10	0.08
	M	44	0.36	0.21	0.18	0.16	0.13
	H	60	0.51	0.29	0.25	0.22	0.17
8'	L	35	0.30	0.17	0.15	0.13	0.10
	M	57	0.48	0.27	0.24	0.21	0.16
	H	80	0.68	0.38	0.33	0.29	0.23
10'	L	44	0.36	0.21	0.18	0.16	0.13
	M	70	0.59	0.34	0.29	0.25	0.20
	H	102	0.86	0.49	0.42	0.37	0.29
12'	L	52	0.44	0.25	0.22	0.19	0.15
	M	87	0.72	0.42	0.36	0.31	0.25
	H	121	1.02	0.58	0.50	0.44	0.34

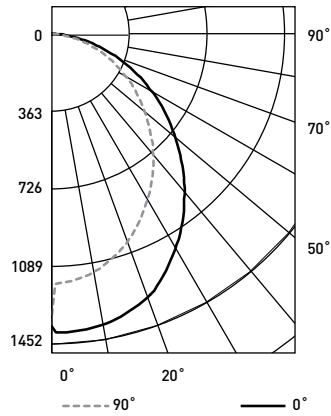
*Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347V +/- 10%. For electrical data for continuous runs to 72', please refer to the Initial Delivered Lumens & Electrical Data chart on pages 6 and 7

Stylus™ LED Suspended Direct Specification Grade Luminaire

Photometry

ST3-SD-04-H-30K-L-10V-04-A-WH BASED ON RESTL REPORT TEST #: PL13873-001A

Luminaire photometry has been conducted in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a luminaire efficiency of 100%.



ST3-**-04-H-30K-L-10V-04-A-****
Initial Delivered Lumens: 3,471

Coefficients Of Utilization – Zonal Cavity Method				
RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	109	104	100	96
2	99	91	85	79
3	91	80	72	66
4	83	71	63	56
5	77	64	55	49
6	71	58	49	43
7	66	52	44	38
8	61	48	40	34
9	57	44	36	30
10	54	41	33	28

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m²)			
Vertical Angle	Horizontal Angle		
	0°	45°	90°
45°	13,310	12,787	10,077
55°	12,402	11,885	9,314
65°	11,384	10,848	8,445
75°	9,881	9,428	7,292
85°	8,477	7,638	5,540

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	1021.47	N/A	29.40%
0-40	1638.56	N/A	47.20%
0-60	2786.18	N/A	80.30%
0-90	3468.05	N/A	99.90%
0-180	3470.63	N/A	100.00%

Reference www.creelighting.com/products/indoor for detailed photometric data

Application Reference

Based on ST3-SD-04-H-30K-L-10V-04-A-WH Luminaire

Open Space				
Linear ft*	Lumen Package	Lumens/ft	Average FC	FC/Linear ft
120	Low	400	24	0.20
	Medium	650	38	0.32
	High	900	53	0.44
100	Low	400	20	0.20
	Medium	650	32	0.32
	High	900	44	0.44
80	Low	400	16	0.20
	Medium	650	26	0.32
	High	900	35	0.44
64	Low	400	13	0.20
	Medium	650	20	0.32
	High	900	28	0.44

10' ceiling; 80/50/20 reflectances; 2.5' workplane, 1.5' suspension length, open room. LLF: 1.0 Initial
Open Space: 50' x 40' x 10'
* Maximum run length is 72'
Fixtures spacing should typically not exceed 1x the mounting height in an open space or .5x the mounting height from a wall when it's the sole source of light.

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Stylus Linear Suspended Configuration Chart									
Length (feet)	Units						Aperture (inches)	End Cap to End Cap (inches)	1/8" End Cap Kits
	2'	4'	6'	8'	10'	12'			
2	1						24	24.25	
4		1					48	48.25	
6			1				72	72.25	
8				1			96	96.25	
10					1		120	120.25	1
12						1	144	144.25	1
14			1	1			168	168.25	1
16				2			192	192.25	1
18		1	1	1			216	216.25	1
20		1		2			240	240.25	1
22			1	2			264	264.25	1
24				3			288	288.25	1
26		1	1	2			312	312.25	1
28		1		3			336	336.25	1
30			1	3			360	360.25	1
32				4			384	384.25	1
34		1	1	3			408	408.25	1
36		1		4			432	432.25	1
38			1	4			456	456.25	1
40				5			480	480.25	1
42		1	1	4			504	504.25	1
44		1		5			528	528.25	1
46			1	5			552	552.25	1
48				6			576	576.25	1
50		1	1	5			600	600.25	1
52		1		6			625	625.25	1
54			1	6			648	648.25	1
56				7			672	672.25	1
58		1	1	6			696	696.25	1
60		1		7			720	720.25	1
62			1	7			744	744.25	1
64				8			768	768.25	1
66		1	1	7			792	792.25	1
68		1		8			816	816.25	1
70			1	8			840	840.25	1
72				9			864	864.25	1

Stylus™ LED Suspended Direct Specification Grade Luminaire

Delivered Lumens & Electrical Data*								
Length	Lumen Package	System Watts 120-347V	Initial Delivered Lumens**	Total Current (A)				
				120V	208V	240V	277V	347V
2'	L	11	800	0.09	0.05	0.05	0.04	0.03
	M	16	1,300	0.13	0.08	0.07	0.06	0.05
	H	22	1,800	0.18	0.10	0.09	0.08	0.06
4'	L	19	1,600	0.16	0.09	0.08	0.07	0.05
	M	30	2,600	0.25	0.14	0.12	0.11	0.09
	H	41	3,600	0.35	0.20	0.17	0.15	0.12
6'	L	27	2,400	0.23	0.13	0.11	0.10	0.08
	M	44	3,900	0.36	0.21	0.18	0.16	0.13
	H	60	5,400	0.51	0.29	0.25	0.22	0.17
8'	L	35	3,200	0.30	0.17	0.15	0.13	0.10
	M	57	5,200	0.48	0.27	0.24	0.21	0.16
	H	80	7,200	0.68	0.38	0.33	0.29	0.23
10'	L	44	4,000	0.36	0.21	0.18	0.16	0.13
	M	70	6,500	0.59	0.34	0.29	0.25	0.20
	H	102	9,000	0.86	0.49	0.42	0.37	0.29
12'	L	52	4,800	0.44	0.25	0.22	0.19	0.15
	M	87	7,800	0.72	0.42	0.36	0.31	0.25
	H	121	10,800	1.02	0.58	0.50	0.44	0.34
14'	L	62	5,600	0.52	0.30	0.26	0.23	0.18
	M	101	9,100	0.84	0.48	0.42	0.36	0.29
	H	140	12,600	1.18	0.67	0.58	0.51	0.40
16'	L	70	6,400	0.59	0.34	0.29	0.25	0.20
	M	114	10,400	0.95	0.55	0.47	0.41	0.32
	H	160	14,400	1.35	0.77	0.66	0.57	0.46
18'	L	81	7,200	0.68	0.39	0.34	0.29	0.23
	M	131	11,700	1.09	0.63	0.54	0.47	0.38
	H	181	16,200	1.53	0.87	0.76	0.65	0.52
20'	L	89	8,000	0.75	0.43	0.37	0.32	0.25
	M	144	13,000	1.20	0.69	0.60	0.52	0.41
	H	201	18,000	1.70	0.96	0.84	0.72	0.58
22'	L	97	8,800	0.82	0.47	0.41	0.35	0.28
	M	158	14,300	1.31	0.76	0.65	0.57	0.45
	H	220	19,800	1.86	1.06	0.92	0.79	0.63
24'	L	105	9,600	0.89	0.51	0.44	0.38	0.30
	M	171	15,600	1.43	0.82	0.71	0.62	0.48
	H	240	21,600	2.03	1.15	1.00	0.86	0.69
26'	L	116	10,400	0.97	0.56	0.49	0.42	0.33
	M	188	16,900	1.56	0.90	0.78	0.68	0.54
	H	261	23,400	2.20	1.25	1.09	0.94	0.75
28'	L	124	11,200	1.05	0.60	0.52	0.45	0.35
	M	201	18,200	1.67	0.96	0.83	0.72	0.57
	H	281	25,200	2.37	1.35	1.17	1.01	0.81

Delivered Lumens & Electrical Data*								
Length	Lumen Package	System Watts 120-347V	Initial Delivered Lumens**	Total Current (A)				
				120V	208V	240V	277V	347V
30'	L	132	12,000	1.12	0.64	0.56	0.48	0.38
	M	215	19,500	1.79	1.03	0.89	0.77	0.61
	H	300	27,000	2.53	1.44	1.25	1.08	0.86
32'	L	140	12,800	1.19	0.68	0.59	0.51	0.40
	M	228	20,800	1.90	1.09	0.95	0.82	0.64
	H	320	28,800	2.70	1.53	1.33	1.15	0.92
34'	L	151	13,600	1.27	0.73	0.63	0.55	0.43
	M	245	22,100	2.04	1.17	1.02	0.88	0.70
	H	341	30,600	2.88	1.64	1.42	1.23	0.98
36'	L	159	14,400	1.34	0.77	0.67	0.58	0.45
	M	258	23,400	2.15	1.24	1.07	0.93	0.73
	H	361	32,400	3.05	1.73	1.50	1.30	1.04
38'	L	167	15,200	1.41	0.81	0.70	0.61	0.48
	M	272	24,700	2.26	1.30	1.13	0.98	0.77
	H	380	34,200	3.21	1.82	1.58	1.37	1.09
40'	L	175	16,000	1.48	0.85	0.74	0.64	0.50
	M	285	26,000	2.38	1.37	1.18	1.03	0.80
	H	400	36,000	3.38	1.91	1.66	1.44	1.15
42'	L	186	16,800	1.57	0.90	0.78	0.68	0.53
	M	302	27,300	2.51	1.45	1.25	1.09	0.86
	H	421	37,800	3.55	2.02	1.75	1.52	1.21
44'	L	194	17,600	1.64	0.94	0.81	0.70	0.55
	M	315	28,600	2.62	1.51	1.31	1.13	0.89
	H	441	39,600	3.72	2.11	1.83	1.59	1.27
46'	L	202	18,400	1.71	0.98	0.85	0.74	0.58
	M	329	29,900	2.74	1.57	1.36	1.18	0.93
	H	460	41,400	3.88	2.20	1.91	1.65	1.32
48'	L	210	19,200	1.78	1.02	0.88	0.76	0.60
	M	342	31,200	2.85	1.64	1.42	1.23	0.96
	H	480	43,200	4.05	2.30	1.99	1.72	1.38
50'	L	221	20,000	1.86	1.07	0.93	0.80	0.63
	M	359	32,500	2.99	1.72	1.49	1.29	1.02
	H	501	45,000	4.23	2.40	2.08	1.80	1.44
52'	L	229	20,800	1.94	1.11	0.96	0.83	0.65
	M	372	33,800	3.10	1.78	1.54	1.34	1.05
	H	521	46,800	4.40	2.49	2.16	1.87	1.50
54'	L	237	21,600	2.01	1.15	1.00	0.86	0.68
	M	386	35,100	3.21	1.85	1.60	1.39	1.09
	H	540	48,600	4.56	2.59	2.24	1.94	1.55
56'	L	245	22,400	2.08	1.19	1.03	0.89	0.70
	M	399	36,400	3.33	1.91	1.66	1.44	1.12
	H	560	50,400	4.73	2.68	2.32	2.01	1.61

* Electrical data at 25°C [77°F]. Actual wattage may differ by +/- 10% when operating between 120-277V or 347V +/- 10%
 ** Initial delivered lumens at 25°C [77°F]. Actual production yield may vary between -10 and +10% of initial delivered lumens

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Delivered Lumens & Electrical Data*								
Length	Lumen Package	System Watts	Initial Delivered Lumens**	Total Current (A)				
		120-347V		120V	208V	240V	277V	347V
58'	L	256	23,200	2.16	1.24	1.07	0.93	0.73
	M	416	37,700	3.46	1.99	1.73	1.50	1.18
	H	581	52,200	4.90	2.78	2.41	2.09	1.67
60'	L	264	24,000	2.23	1.28	1.11	0.96	0.75
	M	429	39,000	3.57	2.06	1.78	1.54	1.21
	H	601	54,000	5.07	2.88	2.49	2.16	1.73
62'	L	272	24,800	2.30	1.32	1.14	0.99	0.78
	M	443	40,300	3.69	2.12	1.84	1.59	1.25
	H	620	55,800	5.23	2.97	2.57	2.23	1.78
64'	L	280	25,600	2.37	1.36	1.18	1.02	0.80
	M	456	41,600	3.80	2.18	1.89	1.64	1.28
	H	640	57,600	5.40	3.06	2.65	2.30	1.84
66'	L	291	26,400	2.46	1.41	1.22	1.06	0.83
	M	473	42,900	3.94	2.26	1.96	1.70	1.34
	H	661	59,400	5.58	3.17	2.75	2.38	1.90
68'	L	299	27,200	2.53	1.45	1.25	1.09	0.85
	M	486	44,200	4.05	2.33	2.02	1.75	1.37
	H	681	61,200	5.75	3.26	2.83	2.45	1.96
70'	L	307	28,000	2.60	1.49	1.29	1.12	0.88
	M	500	45,500	4.16	2.39	2.07	1.80	1.41
	H	700	63,000	5.91	3.35	2.91	2.52	2.01
72'	L	315	28,800	2.67	1.53	1.32	1.15	0.90
	M	513	46,800	4.28	2.46	2.13	1.85	1.44
	H	720	64,800	6.08	3.44	2.99	2.59	2.07

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347V +/- 10%
 ** Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens