

Lumination™ LED Luminaires

LIS Series with Replaceable Light Engine



Project name _____

Date _____

Type _____

Product Description:

GE's Lumination LED fixtures with reveal® TriGain™ technology - LIS Series Suspended Series are designed to offer lighting designers enhanced CRI and R9 without sacrificing efficiency. With R9 greater than 90, these fixtures optimally display objects like produce, fabric, skintones and artwork – all with a remarkably efficient 158 lumens per watt, reducing maintenance and operating costs. Available in 7% and 12% upright versions as well.

Performance Summary:

Distribution Patterns: Medium
Delivered Lumen Output: 4,200-24,000 lm
System Input Power: 34-182 W
Efficacy: Up to 158 LPW
Input Voltage: 120-277V; 347V
Standard Dimming Control: 0-10V
CCT: 3000K, 3500K, 4000K & 5000K
Typical CRI: 83, 90 TriGain™
Color Consistency: 4 Step MacAdam Ellipse
Input Frequency (Hz): 50-60Hz
Power Factor: >0.9* (See details below)
Dimensions: 10 x 49 x 8 inches (258 x 1256 x 191 mm) 4 ft
 10 x 97 x 8 inches (258 x 2473 x 191 mm) 8 ft
Mounting: Suspension (see Accessories Table below)
Weight: <20 lbs
Warranty: 5 Years standard
Rated Life: L70 @ 90,000 hours for Trigain only (CRI code = P)
 L85 @ 75,000 hours (CRI code = 8)
Storage temperature: -40°C to 70°C
Operating temperature: -10° up to 35° C
Removable Light Engine: Available

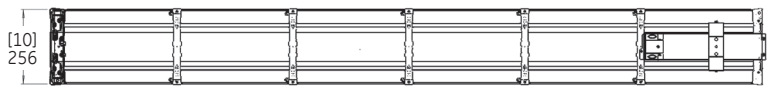
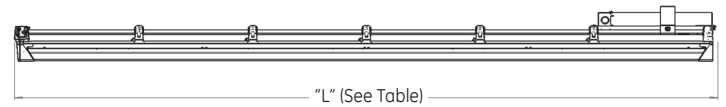
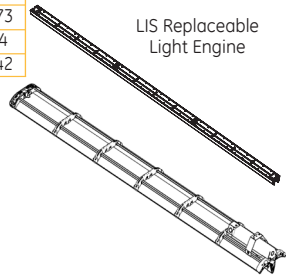
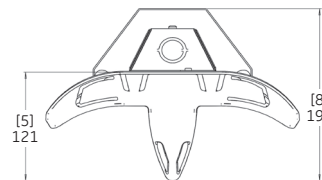


Integrated sensor option

Product Dimensions mm (inches):

CONFIGURATION - INDEPENDENT	4 FT	8 FT
Length "L" (Inches)	49	97
Length "L" (MM)	1256	2473
Length "L" w/SENSOR (Inches)	56	104
Length "L" w/SENSOR (MM)	1432	2642

*Continuous fixtures are exactly 48" and 96" longs



Certified by:



Please refer to the DLC QPL website for the latest and most complete information.
www.designlights.org/QPL

Maximum Run Length per 1 power drop:

Supply Voltage	Lumen Code													
	[42]	[84]	[62]	[A2]	[52]	[A0]	[65]	[85]	[A3]	[A7]	[A1]	[A2]	[B1]	[B4]
120V		192'			160'					80'				60'
277V or 347V		400'			320'					188'				132'

Ordering Information:

LIS

CS WHITE

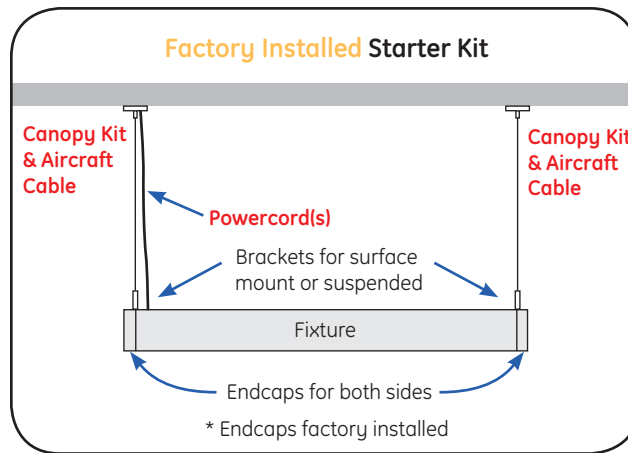
FAMILY	FIXTURE TYPE	GENERATION	VOLTAGE	NOMINAL LUMENS	DISTRIBUTION	CRI	CCT	CONTROLS	MOUNTING	FINISH	OPTIONS
LIS	C4* = Continuous 4ft C8* = Continuous 8ft I4 = Independent 4ft I8 = Independent 8ft <small>*Starter kit required (see accessory page below)</small>	B = Replaceable light engine ¹ C = Replaceable light engine <small>NOTE: Specify generation 'C' for 83 CRI. Specify generation 'B' for 90 CRI. ¹Generation 'B' is not available in lumen [62]</small>	0 = 120-277 VAC D = 347 VAC	4 FT Only 42 = 4200 52 = 5200 62 = 6250 65 = 6500 85 = 8500 A1 = 10500 A2 = 12000 8 FT Only 84 = 8400 A0 = 10400 A2 = 12500 A3 = 13000 A7 = 17000 B1 = 21000* B4 = 24000*	D1 = 100% Direct D8 = 12% Uplight D9 = 7% Uplight	P = 90CRI 8 = 83CRI	30 = 3000K 35 = 3500K 40 = 4000K 50 = 5000K <small>*Note: 90 CRI available with the below lumen levels: 4ft-(42 & 52 only) 8ft -[84 & A0 only] in the 3500K and 4000K CCT only.</small>	VQ = 0-10V VT = 0-10V, Daintree Networks S1 = on/off occ. sensor S2 = 0-10V, on/off occ. & daylight harvesting sensor* <small>*Note: Order programming remote (197634) ¹S1&S2 controls only available with 120V/277V input voltage</small>	CS = (See accessories page below for further accessory/mounting options which have to be ordered separately*) <small>*2 mounting brackets come included with each fixture</small>	WHITE = White	Blank if no options A = Branch Circuit ¹ EL = Emergency Light ² BP = Bulk Pack BC = Black End Cap GC = Grey End Cap RC = Red End Cap HE = High Efficiency Fixture ⁴ P10 = 10 ft (14AWG 5cond) Power Cord White ⁵ P20 = 20 ft (14AWG 5cond) Power Cord White ⁵ R10 = RELOC 277V 10 ft 3C ³ R10 = RELOC 277V 10 ft 3C ³ SPL = Sample with 6 ft cord and 120Vac wall plug ⁵ WP = White Painted <small>¹ A option not available for '4' & '8' fixture type ² EL option is only available with the below lumen levels: 4ft-(42, 52, 62, 65 & 85 only) 8ft-[84, A0, A2, A3 & A7 only]. ³ EL option not available with 347V ⁴ EL option VQ Controls only ⁵ RC, BC, GC options only available with I4 & I8 fixture type ⁶ HE only available with -120/277V input voltage, -83CRI, -Lumen codes (42 or 52) for 4ft, or (84 or A0) for 8ft. ⁷ Only 1 cord option (SPL, R10, P10 or P20 per SKU) ⁸ Cord options (SPL, R10, P10, P20) not available with EL or A options ⁹ Cord options (SPL, R10, P10, P20) not available with -EL & A options, -347V input voltage, -C4 & C8 fixture type</small>

*Starter Kit:

Kit SKUs	Kit Quantity	Kit includes (per continuous row)
93018007-White	1	1 x starter power harness 1 x starter dimming harness
93022791-White	10	2 x end caps for both sides of row

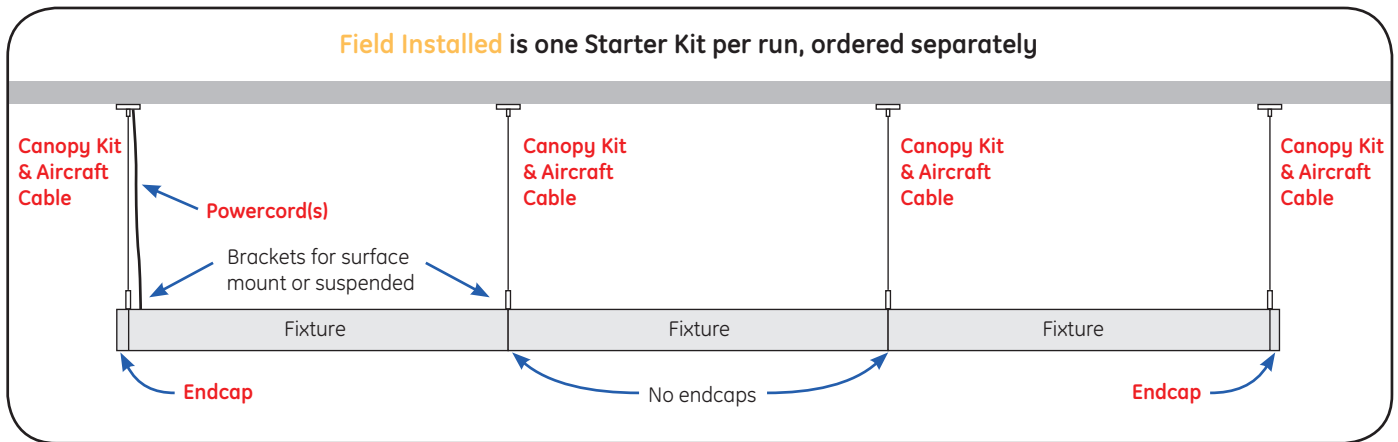
Please contact the Fixture Technical Support team for technical questions. lightingproinfo@ge.com or 1-888-694-3533, Option #2

Independent



- **RED** indicates items that must be ordered as options or accessories.

Continuous Run



- **RED** indicates items that must be ordered as options or accessories. The starter, when suspended, is normally the only fixture in the row with (2) suspension hangers. The rest of the run may be suspended from a single hanger.

Performance Tables:

REVEAL TRIGAIN, CRI = 90+

DIMENSION	OPTICAL CODE	CCT	LUMENS	POWER	LPW
4 FT	42P35	3500	4000	34	117.6
4 FT	42P40	4000	4200	34	123.5
4 FT	52P35	3500	5000	43	116.3
4 FT	52P40	4000	5200	43	120.9
8 FT	84P35	3500	8000	66	121.2
8 FT	84P40	4000	8400	66	127.3
8 FT	A0P35	3500	9900	84	117.9
8 FT	A0P40	4000	10,400	84	123.8

***NOTE:**
 - SW increment for EL option
 - 2W increment for S1, S2, VQ, VT option

HIGH EFFICIENCY (HE) OPTION

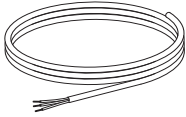
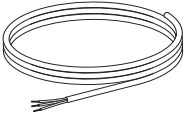
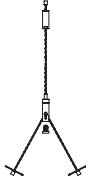

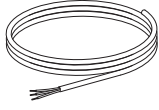
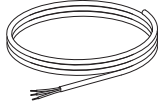

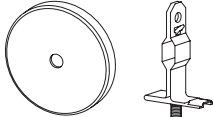
DIMENSION	OPTICAL CODE	CCT	LUMENS	POWER	LPW
4 FT	42840	4000	4200	27	155
4 FT	52840	4000	5200	34	153
8 FT	84840	4000	8400	53	158
8 FT	A0840	4000	10400	66	158

***NOTE:**
 HE option ONLY
 Lumen multiplier:
 CCT = 3500K -> 0.97
 CCT = 5000K -> 1.02
 Not available in [T] CRI
 Only available for following lumen code:
 [42] & [52] for 4ft.,
 [84] & [A0] for 8ft.

CRI = 83

DIMENSION	OPTICAL CODE	CCT	LUMENS	POWER	LPW
4 FT	42840	4000	4200	31	135.5
4 FT	52840	4000	5200	38	136.8
4 FT	62840	4000	6250	48.5	128.9
4 FT	65840	4000	6500	43.2	150.5
4 FT	85840	4000	8500	58.3	145.8
4 FT	A1840	4000	10500	75	140
4 FT	A2840	4000	12300	89.6	137.3
8 FT	84840	4000	8400	60	140.0
8 FT	A0840	4000	10400	78	133.3
8 FT	A2840	4000	12500	96	130.2
8 FT	A3840	4000	13000	86.5	150.3
8 FT	A7840	4000	17000	113	150.4
8 FT	B1840	4000	21100	150	140.7
8 FT	B4840	4000	24500	182	134.6

***NOTE:**
 - Lumen Multiplier = 0.95 for CCT = 3000K
 - Lumen Multiplier = 0.97 for CCT = 3500K
 - Lumen Multiplier = 1.02 for CCT = 5000K
 - 5 Watt increment for EL option
 - 2W increment for S1, S2, VQ, VT option

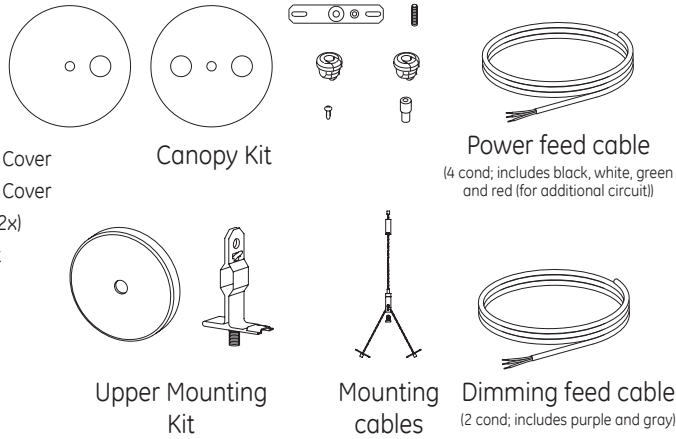
Accessories	Product code
<p>Sample SKU: LISI4B042D1P40VQCSWHTESPL</p>	<p>93073490</p>
<p>Power Cord Kit - Options</p> <p>Comes with:</p> <ul style="list-style-type: none"> • 1x Power Feed Cable • 1x Strain Relief <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Power feed cable <small>(4 cond; includes black, white, green and red (for additional circuit))</small></p> </div> <div style="text-align: center;">  <p>Dimming feed cable <small>(2 cond; includes purple and gray)</small></p> </div> </div> <p style="text-align: center; font-size: small;">**Power and Dimming Feed Cables are #14 gauge 600V rated</p>	<p>10 FT KIT 93083221: BLK 93083222: WHT</p> <hr/> <p>20 FT KIT 93083223: BLK 93083224: WHT</p>
<p>Suspended Kits - Mounting Open/Unfinished Ceiling</p> <p>Comes with:</p> <ul style="list-style-type: none"> • 2x Aircraft Cables <div style="text-align: center;">  <p>Mounting cables</p> </div>	<p>10 FT KIT 93035285: 10' Kit</p> <hr/> <p>20 FT KIT 93116031: 20' Kit</p>
<p>Suspended Kits - Mounting + Power Open/Unfinished Ceiling</p> <p>Comes with:</p> <ul style="list-style-type: none"> • 2x Aircraft Cables • 1x Power Feed Cable <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Mounting cables</p> </div> <div style="text-align: center;">  <p>Power feed cable <small>(4 cond; includes black, white, green and red (for additional circuit))</small></p> </div> <div style="text-align: center;">  <p>Dimming feed cable <small>(2 cond; includes purple and gray)</small></p> </div> </div> <p style="text-align: center; font-size: small;">**Power and Dimming Feed Cables are #14 gauge 600V rated</p>	<p>10 FT KIT 93122346: WHT with Dimming 93122348: BLK with Dimming 93115897: WHT No Dimming 93115899: BLK No Dimming</p> <hr/> <p>20 FT KIT 93122347: WHT with Dimming 93122349: BLK with Dimming 93115898: WHT No Dimming 93115900: BLK No Dimming</p>
<p>Suspended Kits - Mounting Finished Ceiling</p> <p>Comes with:</p> <ul style="list-style-type: none"> • 2x Aircraft Cables • 2x Upper Mounting Kit <ul style="list-style-type: none"> ○ 2" canopy Cover ○ T-Bar Clips <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Mounting cables</p> </div> <div style="text-align: center;">  <p>Upper Mounting Kit</p> </div> </div>	<p>10 FT KIT 93115708: WHT Canopy 93115710: BLK Canopy</p> <hr/> <p>20 FT KIT 93115709: WHT Canopy 93115711: BLK Canopy</p>

Accessories **Product code**

Suspended Kits - Mounting + Power Finished Ceiling

Comes with:

- 2x Aircraft Cables
- 1x Power Feed Cable
- 1x Canopy Kit
 - 2 Cord Power Drop Canopy Cover
 - 1 Cord Power Drop Canopy Cover
 - Canopy Cover Strain relief (2x)
 - Canopy Cover Hardware kit
- 2x Upper Mounting Kit
 - 2" canopy Cover
 - T-Bar Clips



10 FT KIT
93122350: WHT with Dimming
93122352: BLK with Dimming
93115847: WHT No Dimming
93115849: BLK No Dimming

20 FT KIT
93122351: WHT with Dimming
93122353: BLK with Dimming
93115848: WHT No Dimming
93115850: BLK No Dimming

Starter Kit (1 row)

Comes with:

- 1x Starter Harness
- 2x Endcaps



End Caps Colors
93018007: WHT End Caps
93081607: GRY End Caps
93081606: BLK End Caps
93081609: RED End Caps

Starter Kit (10 rows)

Comes with:

- 10x Starter Harness
- 20x Endcaps



End Caps Colors
93022791: WHT End Caps
93081608: GRY End Caps
93081245: BLK End Caps
93081610: RED End Caps

Anti-Snaking Brackets

Use if extra brackets are required. See diagram on next page - brackets included with each fixture

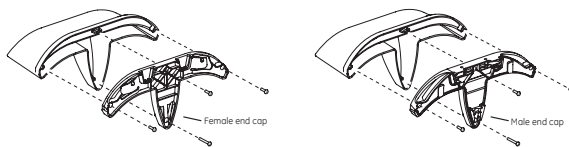
Comes with:

- 10x Suspension Brackets



94210: Standard Suspension Brackets
93088000: Anti-Snaking Suspension Brackets

Architectural End Cap



93039940: Contains set (2)

Photometric Data: LISI8 Series

L-IS-X8-BX84DIP40-VQCS-WHTE-XX

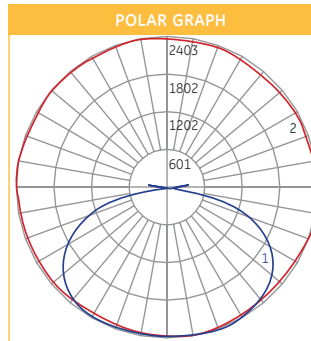
CANDLEPOWER SUMMARY			
Angle	0°	45°	90°
45°	3876	4368	4659
55°	3906	4717	4919
65°	3926	4995	4964
75°	3866	4988	4225
85°	3389	2511	2399

ZONAL LUMEN SUMMARY	
Zone	Lumens
0-10	227.53
10-20	666.91
20-30	1044.13
30-40	1331.00
40-50	1491.13
50-60	1477.78
60-70	1252.06
70-80	787.23
80-90	207.36
90-100	67.52
100-110	29.05
110-120	9.49
120-130	2.05
130-140	1.79
140-150	1.76
150-160	1.62
160-170	1.14
170-180	0.43

COEFFICIENTS OF UTILIZATION																			
RC	80%				70%				50%				30%				10%		0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99	
1	107	102	98	93	105	100	96	92	95	92	89	91	88	86	87	85	83	81	
2	97	88	81	74	94	86	79	73	82	76	71	79	74	70	75	71	68	65	
3	88	76	68	61	85	75	67	60	71	64	59	68	62	58	66	61	56	54	
4	80	67	58	51	77	66	57	50	63	55	49	60	54	48	58	52	48	45	
5	73	59	50	43	71	58	49	43	56	48	42	54	47	41	52	46	41	39	
6	67	53	44	37	65	52	43	37	50	42	36	48	41	36	47	40	35	33	
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	42	36	31	29	
8	58	44	35	29	56	43	34	29	41	34	28	40	33	28	39	32	28	26	
9	54	40	31	26	52	39	31	26	38	31	25	37	30	25	36	29	25	23	
10	50	37	29	23	49	36	28	23	35	28	23	34	27	23	33	27	22	21	

NOTE: Floor Cavity Reflectance : 20%

ZONAL LUMEN SUMMARY			
Zone	Lumens	% of Lamp	% of Fixture
0-20	894.44	N.A.	10.40
0-30	1938.57	N.A.	22.50
0-40	3269.58	N.A.	38.00
0-60	6238.49	N.A.	72.50
0-80	8277.78	N.A.	96.30



Product Specifications:

Construction:

- Fully recyclable heatsink
- IP Rating: IP20
- Impact Resistance: IK=2

Electrical System:

- Class 2, replaceable, high efficiency LED driver rated for 50,000 hours when used within operating conditions.
- Audible Noise – Per 29CFR 1910 sub part G: <24 dba (1 foot)
- THD: <20%
- PF > 0.9 except for the following conditions:
 - 4ft SKU with [A3] lumen
 - 4ft SKU with [EL] option
- Transient Protection: 100 kHz ring wave, 2.5 kV level
- Environmental Testing: High Temperature High Humidity: 60°C / 90% (non-condensing)
- Electronic Vibration Testing: Multi Axis, Random Vibration Profile: 2-2000 Hz, 5Gs on electronics
- Compliant with the material restriction requirements of RoHS

Installation:

- When ordering Lumination IS Series LED Luminaires 2 mounting brackets are included with each fixture.
- Additional mounting brackets can be ordered if needed, depending upon mounting and spacing of application.

Emergency Battery Option:

- Luminaires with the “EL” option code come equipped with an IOTA Engineering ILB-SLHE-10 emergency battery back-up system to provide lighting during power interruptions.
- To calculate delivered lumens for an EL equipped luminaire use the following formula:

$$\text{Emergency Mode Lumens} = P \times \text{LPW}$$

- “P” is the output power of the emergency system (10W for “EL”)
- “LPW” is the efficacy of the system as determined from the performance data
- For more information refer to www.iotaengineering.com/ILB/ILBPCManual.pdf

For more information and access to all of our resources, including our design tool visit: www.LED.com



www.LED.com

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IND276 (Rev 10/25/19)