

Lumination® LED Luminaires

LDS Series



Product Description:

The LDS series features mechanical designs which allow quick, easy and trouble-free installation of continuous rows with minimum labor for both suspended as well as surface mount applications. Multiple beam distributions and a wide range of lumen levels allow for easily optimized lighting designs for your application and make retrofitting simple. The simplicity of this design makes it seamless and yet impactful in your ceiling. Further, TriGain™ technology gives you enriched color performance with no sacrifice to efficiency. With CRI and R9 above 90 and efficacy at a remarkable 140 lumens per watt, there is no need to choose between premium light and low operating costs. The LDS series is one of the most advanced technological luminaire with the ability to connect to Daintree, and motion sensors.



Performance Highlights:

- Distribution Patterns:** Direct, Wide, Narrow, Wall Wash, Uplight, Louvers
- Delivered Lumen Output:** 3,400-17,000lm
- System Input Power:** 31-145W
- Efficacy:** 105-140 LPW
- Input Voltage:** 120-277V & 347V
- Standard Dimming Control:** 0-10V
- CCT:** 3000K, 3500K, 4000K
- Typical CRI:** 83, 90+ TriGain™
- Color Consistency:** 4 Step MacAdam Ellipse
- Input Frequency:** (Hz): 50/60Hz
- Power Factor:** >0.9*
- Mounting:** Suspension or Direct Mount, see accessories table (pg. 2)
- Weight:** <20 lbs.
- Warranty:** 5 Years standard
- Rated Life:** >L85 @ 60000 hrs.
- Storage temperature:** -40°C to 60°C
- Operating temperature:** 0° up to 35° C

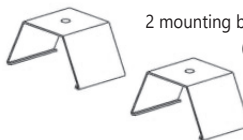
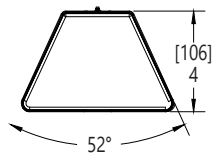
Certifications:



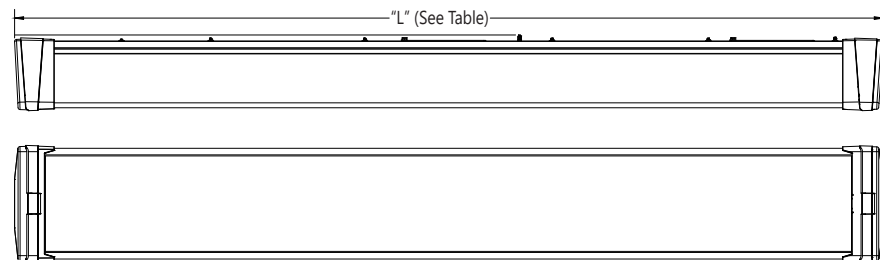
Product Dimensions:

CONFIGURATION - INDEPENDENT	4 FT	8 FT
Length "L" (Inches)	50	98
Length "L" (MM)	1270	2489
Length "L" w/SENSOR (Inches)	57	105
Length "L" w/SENSOR (MM)	1448	2667

*Continuous fixtures are exactly 48" and 96" long



2 mounting brackets come standard with fixture
 (refer to page 2 for ordering of any other accessories required)



Maximum Run Length per 1 power drop:

Supply Voltage	Lumen Code									
	[34]	[68]	[40]	[80]	[50]	[A0]	[65]	[A3]	[85]	[A7]
120V	220'	180'	160'	110'	80'					
277V or 347V	530'	420'	380'	290'	210'					

Ordering Number Logic

LDS

B

CS

PRODUCT ID	FIXTURE TYPE	GEN.	VOLTAGE	LUMEN	DISTRIBUTION	CRI	CCT	CONTROLS	MOUNTING	FINISH	OPTIONS				
LDS = Direct Suspended	I4 = 4 Ft Independent C4 = 4 Ft Continuous* I8 = 8 Ft Independent C8 = 8 Ft Continuous* * Starter kit required (see accessory page below) Note: I4 not available with distribution: "W1", "N1" and "L1"	B = 2nd Gen	0 = 120-277 D = 347	<table border="1"> <tr> <td>4 FT</td> <td>34 = 3400 Lumen 40 = 4000 Lumen 50 = 5000 Lumen 65 = 6500 Lumen* 85 = 8500 Lumen*</td> </tr> <tr> <td>8 FT</td> <td>68 = 6800 Lumen 80 = 8000 Lumen A0 = 10000 Lumen A3 = 13,000 Lumen* A7 = 17,000 Lumen*</td> </tr> </table>	4 FT	34 = 3400 Lumen 40 = 4000 Lumen 50 = 5000 Lumen 65 = 6500 Lumen* 85 = 8500 Lumen*	8 FT	68 = 6800 Lumen 80 = 8000 Lumen A0 = 10000 Lumen A3 = 13,000 Lumen* A7 = 17,000 Lumen*	W0 = Wide W1 = Wide + Uplight* N0 = Narrow N1 = Narrow + Uplight* WW1 = Wall Wash* L0 = Louvers* L1 = Louvers + Uplight*	T* = 90 with Trigain 8 = 83 CRI *Note: "T" available only in 34, 40, 50, 68, 80, and A0 lumen options	30 = 3000 CCT* 35 = 3500 CCT 40 = 4000 CCT *30 not available for 90 CRI.	VQ = 0-10V Dimming TQ = Zigbee Enabled TS = Zigbee Enabled with Daintree WFA T1 = Daintree One w/ fixture integrated sensor, factory programmed preset** TT = Daintree EZ connect Wireless w/ fixture integrated sensor** TZ = Daintree Enterprise Wireless w/ fixture integrated sensor**	CS = 2 Mounting Brackets *See accessories page below for further accessory/ mounting options which need to be ordered separately.	WHITE = White BLCK = Black ST01 = Stainless Steel	A = Branch Circuit ³ E2 = Emergency Battery ² SPL = Sample with 6' cord and 120Vac wall plug ¹ R10 = RELOC 277V 10' 3-Circuit ¹ P10 ⁴ = 10' power cord, 14AWG 5-COND P20 ⁴ = 20' power cord, 14AWG 5-COND SP = Single Pack
4 FT	34 = 3400 Lumen 40 = 4000 Lumen 50 = 5000 Lumen 65 = 6500 Lumen* 85 = 8500 Lumen*														
8 FT	68 = 6800 Lumen 80 = 8000 Lumen A0 = 10000 Lumen A3 = 13,000 Lumen* A7 = 17,000 Lumen*														

*Note: Not available with DISTRIBUTION = W1, N1, WW, L0, L1, CRI = T
*Note: Uplight Distribution = 20%
*Not available with 65, 85, A3, A7 lumen codes

**T1 mounting height limitation, not available with 347V or E2 options
S1 = On/Off occ sensor*, only for height > 10'
S2 = On/Off occ & daylight harvesting sensor* only for height > 10'
*Not compatible with 347V
*Order programming remote (197634) separately

¹Only 1 cord option (SPL, R10, P10, P20) per SKU.
²Cord options not available with E2 or A options.
³SPL option is not UL listed. Only available as Independent fixture and only compatible with 120/277V input voltage.
⁴R10 option available with Independent fixture and only compatible with 277Vac RELOC installation.
⁵Emergency Battery only available with VQ controls and W0, N0, N1, WW, L0 distributions
⁶Branch circuit only available with C4/C8 fixture type
⁷White cord for 'WHITE' and black cord for 'BLCK' or 'ST01' finishes. Independent fixtures only

80 CRI: 3500K, Narrow distribution

LENGTH	LUMEN CODE	LUMEN	POWER 120-277V (W)	POWER 347V (W)	LPW 120-277V	LPW 347V
4 ft	34	3400	27	29	126	116
4 ft	40	4000	32	34	127	119
4 ft	50	5000	39	42	129	119
4 ft	65	6500	52	54	125	121
4 ft	85	8250	70	73	118	113
8 ft	68	6800	53	55	128	124
8 ft	80	8000	62	64	129	124
8 ft	A0	10000	79	81	127	123
8 ft	A3	13,000	107	110	122	118
8 ft	A7	17,000	145	151	117	113

90 CRI: TriGain™

LENGTH	LUMEN CODE	LUMEN	POWER 120-277V, 347V	LPW
4 ft	34	3400	31	110
4 ft	40	4000	38	118
4 ft	50	5000	43.6	115
8 ft	68	6800	62	110
8 ft	80	8000	66	121
8 ft	A0	10000	84.5	118

Integrated Sensor option

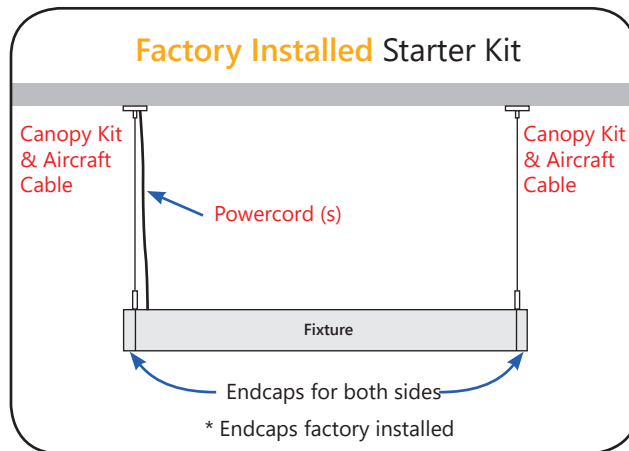


Please contact the Fixture Technical Support team for technical questions. lightingproinfo@gecurrent.com or 1-888-694-3533, Option #2

- Table Lumens at CCT = 3500K
- Lumen Multiplier = 0.97 for CCT = 3000K (N/A for 90CRI)
- Lumen Multiplier = 1.008 for CCT = 5000K (N/A for 90CRI)
- Lumen Multiplier = 1.04 for CCT = 4000K
- 3 Watt increment for 347V & E2 option
- 2 Watt increment for TQ, TS, T1, TT & TZ options

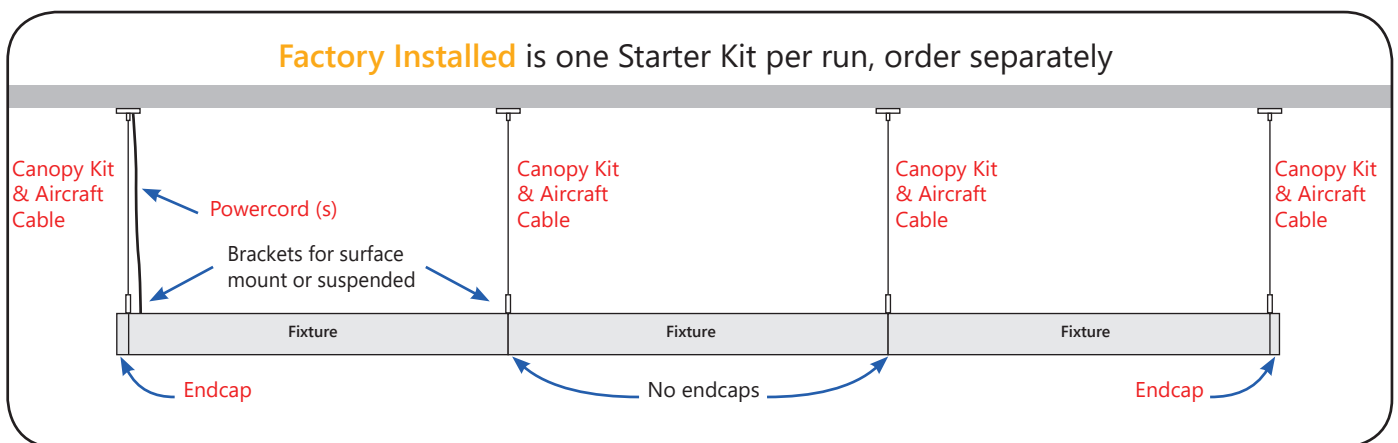
Understanding Continuous Runs

Independent










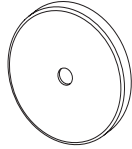
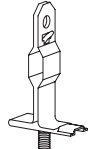
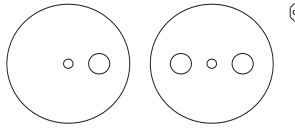
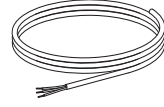
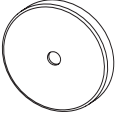


- RED indicates items that must be ordered as options or accessories.

Continuous Run

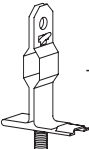
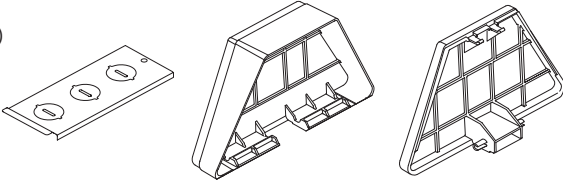


- RED indicates items that must be ordered as options or accessories. The starter, when suspended, is normally the only fixture in the row with (2) suspension hangers. The rest of the run may be suspended from a single hanger.

Accessories

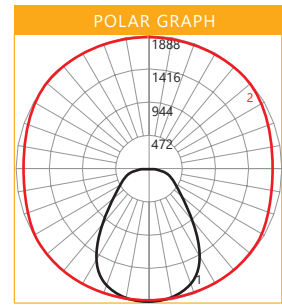
IMAGE	Product Code
<p>Sample SKU: LDSI4B034W0T40VQCSWHTESPL</p>	<p>93073488</p>
<p>Power Cord Kit - Options</p> <p>Comes with:</p> <ul style="list-style-type: none"> • 1x Power Feed Cable • 1x Strain Relief <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Power feed cable (4 cond; includes black, white, green and red (for additional circuit))</p> </div> <div style="text-align: center;">  <p>Dimming feed cable (2 cond; includes purple and gray)</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>Power Cord Kit - Options</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;"> <div style="text-align: center;">  <p>Mounting Cables</p> </div> <div style="text-align: center;">  <p>Power feed cable (4 cond; includes black, white, green and red (for additional circuit))</p> </div> <div style="text-align: center;">  <p>Dimming feed cable (2 cond; includes purple and gray)</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;"> <div style="text-align: center;">  <p>Mounting Cables</p> </div> <div style="text-align: center;">  <p>Canopy Cover</p> </div> <div style="text-align: center;">  <p>T-Bar Clips</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>
<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 • 1x Canopy Kit <ul style="list-style-type: none"> ◦ 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 <ul style="list-style-type: none"> ◦ 2" canopy Cover ◦ T-Bar Clips <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Canopy Kit</p> </div> <div style="text-align: center;">  <p>Power feed cable (4 cond; includes black, white, green and red (for additional circuit))</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Upper Mounting Cables</p> </div> <div style="text-align: center;">  <p>Mounting Cables</p> </div> <div style="text-align: center;">  <p>Dimming feed cable (2 cond; includes purple and gray)</p> </div> </div>	<p>10 FT KIT 93122350: WHT with Dimming 93122352: BLK with Dimming 93115847: WHT No Dimming 93115849: BLK No Dimming</p> <hr/> <p>20 FT KIT 93122351: WHT with Dimming 93122353: BLK with Dimming 93115848: WHT No Dimming 93115850: BLK No Dimming</p>

Accessories

IMAGE	Product Code
<p>Suspended Kits - Direct Mounting Open/Unfinished Ceiling</p> <p>Comes with:</p> <ul style="list-style-type: none"> • 2x T-Grip Clips + bolts  <p>T-Grid clip + bolt</p>	<p>T-Grid Clip + bolt 93126294</p>
<p>LDS Starter Kit (5 sets of endcaps & knockout plates)</p> 	<p>White: 211994 (kit qty = 5 sets) Black: 211995 (kit qty = 5 sets) Stainless Steel/Grey: 93051298 (kit qty = 5 sets)</p>

Distribution Narrow

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%	50%	30%	10%	0%				
0	119	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	84	84	84	84	84			
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	74	72	72	72	72	72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62	62	62	62	62	62			
4	85	73	65	59	82	72	64	58	69	63	57	67	61	57	65	60	56	54	54	54	54	54	54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47	47	47	47	47	47			
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44	42	42	42	42	42	42			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38	38	38	38	38	38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34	34	34	34	34	34			
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31	31	31	31	31	31			
10	56	43	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29	29	29	29	29	29			



Effective Floor Cavity Reflectance 0.20

ZONAL LUMEN SUMMARY			
Zone	Lumens	% of Lamp	% of Fixture
0-20°	537.14	N.A.	13.40
0-30°	1131.35	N.A.	28.30
0-40°	1837.88	N.A.	45.90
0-60°	3199.99	N.A.	80.00
0-80°	3936.85	N.A.	98.40
0-90°	3992.86	N.A.	99.80

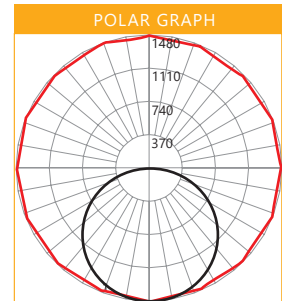
LUMINANCE DATA (CD/SQ.M)			
Angle in Degrees	0°	45°	90°
45°	5219	3974	3705
55°	4252	2934	2639
65°	4147	2504	2272
75°	4174	2061	1861
85°	2216	831	915

ZONAL LUMEN SUMMARY	
Zone	Lumens
0-10	175.00
10-20	501.45
20-30	733.69
30-40	747.87
40-50	596.59
50-60	469.07

Total Luminaire Efficiency = N.A.%

Distribution Wide

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%	50%	30%	10%	0%				
0	119	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	84	84	84	84	84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70	70	70	70	70	70			
3	91	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59	59	59	59	59	59			
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51	51	51	51	51	51			
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44	44	44			
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39	39	39	39	39	39			
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34	34	34	34	34	34			
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30	30	30	30	30	30			
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27	27	27	27	27	27			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25	25	25	25	25	25			



Effective Floor Cavity Reflectance 0.20

ZONAL LUMEN SUMMARY			
Zone	Lumens	% of Lamp	% of Fixture
0-20°	537.16	N.A.	13.40
0-30°	1131.39	N.A.	28.30
0-40°	1837.95	N.A.	45.90
0-60°	3200.11	N.A.	80.00
0-80°	3937.00	N.A.	98.40
0-90°	3993.02	N.A.	99.80

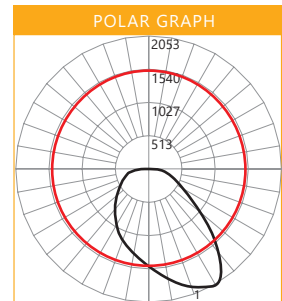
LUMINANCE DATA (CD/SQ.M)			
Angle in Degrees	0°	45°	90°
45°	7805	7735	7595
55°	7388	7294	7083
65°	6896	6646	6416
75°	5871	5459	5078
85°	3634	2651	2221

ZONAL LUMEN SUMMARY	
Zone	Lumens
0-10	139.63
10-20	397.53
20-30	594.23
30-40	706.56
40-50	721.43
50-60	640.73

Total Luminaire Efficiency = N.A.%

Wall Wash

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%	50%	30%	10%	0%				
0	119	119	119	119	119	116	116	116	116	108	108	108	103	103	103	97	97	97	95	95	95	95	95			
1	109	104	100	96	106	102	98	95	93	89	86	88	85	83	84	81	79	77	77	77	77	77	77			
2	100	92	85	80	97	90	84	79	81	75	71	77	72	68	73	69	66	64	64	64	64	64	64			
3	91	81	74	67	89	80	73	67	71	65	59	68	62	58	65	60	56	53	53	53	53	53	53			
4	84	73	64	58	82	71	64	58	63	56	51	60	54	49	58	52	48	46	46	46	46	46	46			
5	78	66	57	51	76	65	56	50	57	49	44	54	48	43	52	46	42	40	40	40	40	40	40			
6	72	60	51	45	70	59	50	45	51	44	38	49	43	38	47	41	37	35	35	35	35	35	35			
7	67	54	46	40	66	54	46	40	47	39	34	45	38	33	43	37	33	31	31	31	31	31	31			
8	63	50	42	36	61	49	41	36	43	36	30	41	35	30	40	34	29	27	27	27	27	27	27			
9	59	46	38	33	58	45	38	33	40	32	27	38	32	27	37	31	27	25	25	25	25	25	25			
10	55	43	35	30	54	42	35	30	37	30	25	35	29	25	34	28	24	22	22	22	22	22	22			



Effective Floor Cavity Reflectance 0.20

ZONAL LUMEN SUMMARY			
Zone	Lumens	% of Lamp	% of Fixture
0-20°	595.84	N.A.	15.5
0-30°	1279.22	N.A.	33.3
0-40°	2022.99	N.A.	52.7
0-60°	3101.73	N.A.	80.8
0-80°	3746.99	N.A.	97.6
0-90°	3837.66	N.A.	100

LUMINANCE DATA (CD/SQ.M)			
Angle in Degrees	0°	45°	90°
45°	8129	7695	5680
55°	6140	5812	4725
65°	5560	5356	4758
75°	5588	5588	5381
85°	3702	4504	6046

ZONAL LUMEN SUMMARY	
Zone	Lumens
0-10	151.85
10-20	443.98
20-30	683.39
30-40	743.76
40-50	608.43
50-60	470.32

Total Luminaire Efficiency = N.A.%

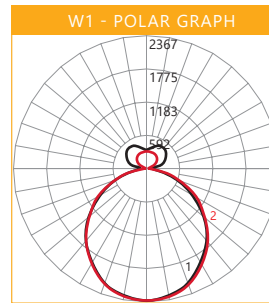
W1 - Wide + Uplight

W1 - COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																					
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%	50%	30%	10%	0%
0	115	115	115	115	110	110	110	110	101	101	101	92	92	92	85	85	85	81	81	81	81
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	75	73	71	68	68	68	68
2	96	88	82	76	91	85	79	74	78	73	69	72	68	65	66	63	61	58	58	58	58
3	88	78	70	64	84	75	68	63	69	64	59	64	60	56	59	56	53	50	50	50	50
4	81	70	62	55	77	67	60	54	62	56	51	58	53	49	54	50	46	43	43	43	43
5	75	63	55	48	71	61	53	47	56	50	45	53	47	43	49	44	41	38	38	38	38
6	69	57	49	43	66	55	47	42	51	45	40	48	43	38	45	40	37	34	34	34	34
7	65	52	44	38	62	50	43	37	47	41	36	44	39	34	41	37	33	31	31	31	31
8	60	48	40	34	58	46	39	34	43	37	32	41	35	31	38	33	30	28	28	28	28
9	56	44	36	31	54	43	36	31	40	34	29	38	32	28	36	31	27	25	25	25	25
10	53	41	33	28	51	40	33	28	37	31	27	35	30	26	33	28	25	23	23	23	23

Effective Floor Cavity Reflectance 0.20

W1 - ZONAL LUMEN SUMMARY A			
Zone	Lumens	% of Lamp	% of Fixture
0-20°	859.58	N.A.	10.70
0-30°	1810.53	N.A.	22.60
0-40°	2941.22	N.A.	36.80
0-60°	5122.37	N.A.	64.00
0-80°	6335.42	N.A.	79.20
0-90°	6478.86	N.A.	81.00
10-90°	6255.41	N.A.	78.20
20-40°	2081.65	N.A.	26.00
20-50°	3236.26	N.A.	40.40
40-70°	2953.98	N.A.	36.90
60-80°	1213.05	N.A.	15.20
70-80°	440.22	N.A.	5.50
80-90°	143.43	N.A.	1.80
90-110°	247.46	N.A.	3.10
90-120°	467.63	N.A.	5.80
90-130°	732.03	N.A.	9.10
90-150°	1228.29	N.A.	15.30
90-180°	1523.53	N.A.	19.00
110-180°	1276.06	N.A.	15.90
0-180°	8002.38	N.A.	100.00

W1 - ZONAL LUMEN SUMMARY B	
Zone	Lumens
0-10	223.44
10-20	636.13
20-30	950.96
30-40	1130.69
40-50	1154.62
50-60	1026.53
60-70	772.84
70-80	440.22
80-90	143.43
90-100	93.83
100-110	153.63
110-120	220.17
120-130	264.40
130-140	266.42
140-150	229.84
150-160	167.13
160-170	96.77
170-180	31.35



Total Luminaire Efficiency = N.A.%

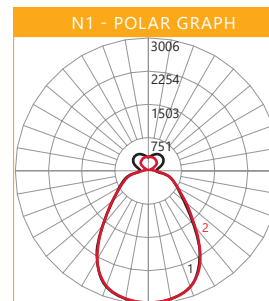
N1 - Wide + Uplight

N1 - COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																					
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%	50%	30%	10%	0%
0	115	115	115	115	110	110	110	110	101	101	101	92	92	92	85	85	85	81	81	81	81
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	75	73	71	68	68	68	68
2	96	88	82	76	91	85	79	74	78	73	69	72	68	65	66	63	61	58	58	58	58
3	88	78	70	64	84	75	68	63	69	64	59	64	60	56	59	56	53	50	50	50	50
4	81	70	62	55	77	67	60	54	62	56	51	58	53	49	54	50	46	43	43	43	43
5	75	63	55	48	71	61	53	47	56	50	45	53	47	43	49	44	41	38	38	38	38
6	69	57	49	43	66	55	47	42	51	45	40	48	43	38	45	40	37	34	34	34	34
7	65	52	44	38	62	50	43	37	47	41	36	44	39	34	41	37	33	31	31	31	31
8	60	48	40	34	58	46	39	34	43	37	32	41	35	31	38	33	30	28	28	28	28
9	56	44	36	31	54	43	36	31	40	34	29	38	32	28	36	31	27	25	25	25	25
10	53	41	33	28	51	40	33	28	37	31	27	35	30	26	33	28	25	23	23	23	23

Effective Floor Cavity Reflectance 0.20

N1 - ZONAL LUMEN SUMMARY A			
Zone	Lumens	% of Lamp	% of Fixture
0-20°	1095.69	N.A.	13.70
0-30°	2279.9	N.A.	28.50
0-40°	3500.01	N.A.	43.70
0-60°	5212.45	N.A.	65.10
0-80°	6282.94	N.A.	78.50
0-90°	6479.89	N.A.	81.00
10-90°	6195.72	N.A.	77.40
20-40°	2404.32	N.A.	30.00
20-50°	3374.52	N.A.	42.20
40-70°	2321.87	N.A.	29.00
60-80°	1070.49	N.A.	13.40
70-80°	461.06	N.A.	5.80
80-90°	196.95	N.A.	2.50
90-110°	247.50	N.A.	3.10
90-120°	467.46	N.A.	5.80
90-130°	731.67	N.A.	9.10
90-150°	1227.88	N.A.	15.30
90-180°	1523.51	N.A.	19.00
110-180°	1276.02	N.A.	15.90
0-180°	8003.4	N.A.	100.00

N1 - ZONAL LUMEN SUMMARY B	
Zone	Lumens
0-10	284.16
10-20	811.53
20-30	1184.21
30-40	1220.11
40-50	970.21
50-60	742.23
60-70	609.43
70-80	461.06
80-90	196.95
90-100	93.97
100-110	153.53
110-120	219.96
120-130	264.22
130-140	266.31
140-150	229.89
150-160	167.29
160-170	96.93
170-180	31.41



Total Luminaire Efficiency = N.A.%

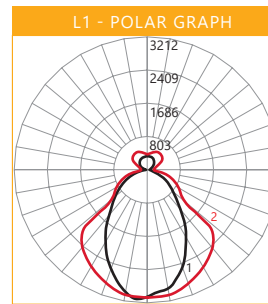
L1 - Wide + Uplight

L1 - COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																														
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%	50%	30%	10%	50%	30%	10%	0%					
0	115	115	115	115	110	110	110	110	101	101	101	92	92	92	85	85	85	81												
1	105	101	97	94	101	97	93	90	89	86	84	82	80	78	76	74	73	69												
2	97	89	83	78	92	86	80	75	79	75	71	73	70	67	68	65	62	59												
3	89	79	72	66	85	76	70	64	71	65	61	66	61	57	61	57	54	51												
4	82	71	63	57	78	68	61	55	64	58	53	59	54	50	55	51	47	45												
5	76	64	56	50	72	62	54	49	57	51	46	54	48	44	50	46	42	40												
6	70	58	50	44	67	56	48	43	52	46	41	49	43	39	46	41	38	35												
7	65	53	45	39	62	51	44	38	48	41	37	45	39	35	42	37	34	32												
8	61	48	40	35	58	47	40	34	44	38	33	41	36	32	39	34	31	29												
9	57	45	37	32	55	43	36	31	41	34	30	38	33	29	36	31	28	26												
10	53	41	34	29	51	40	33	28	38	32	27	36	30	27	34	29	26	24												

Effective Floor Cavity Reflectance 0.20

L1 - ZONAL LUMEN SUMMARY A			
Zone	Lumens	% of Lamp	% of Fixture
0-20°	1109.35	N.A.	13.9
0-30°	2269.3	N.A.	28.4
0-40°	3540.6	N.A.	44.2
0-60°	5457.15	N.A.	68.2
0-80°	6348.51	N.A.	79.3
0-90°	6481.67	N.A.	81
10-90°	6187.75	N.A.	77.3
20-40°	2431.25	N.A.	30.4
20-50°	3580.92	N.A.	44.7
40-70°	2474.58	N.A.	30.9
60-80°	891.35	N.A.	11.1
70-80°	333.32	N.A.	4.2
80-90°	133.17	N.A.	1.7
90-110°	246.08	N.A.	3.1
90-120°	465.55	N.A.	5.8
90-130°	729.49	N.A.	9.1
90-150°	1225.59	N.A.	15.3
90-180°	1521.44	N.A.	19
110-180°	1275.36	N.A.	15.9
0-180°	8003.11	N.A.	100

L1 - ZONAL LUMEN SUMMARY B	
Zone	Lumens
0-10	293.92
10-20	815.43
20-30	1159.95
30-40	1271.31
40-50	1149.67
50-60	766.88
60-70	558.03
70-80	333.32
80-90	133.17
90-100	93.17
100-110	152.91
110-120	219.47
120-130	263.94
130-140	266.20
140-150	229.91
150-160	167.37
160-170	97.02
170-180	31.46



Total Luminaire Efficiency = N.A.%

Product Specifications:

Construction:

- 22 gauge galvanized steel housing
- IP Rating: IP20

Installation:

- When ordering Lumination DS Series LED Luminaires, 2 mounting brackets are included with each fixture.
- Additional mounting brackets can be ordered if needed, depending on mounting and spacing of application.
- Suitable for damp locations.

Emergency Battery Option:

- Luminaires with the "E2" option code come equipped with an IOTA Engineering ILB-SLHE-10 emergency battery back-up system to provide egress lighting during power interruptions.
- To calculate delivered lumens for an EL equipped luminaire use the following formula:

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

"P" is the output power of the emergency system (10W for "E2")

"LPW" is the efficacy of the system as determined from the performance data

- For more information refer to www.iotaengineering.com/ILB/ILBCPManual.pdf

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 347V
 - 4ft SKU with E2 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

