# 



CERTIFICATIONS

FEATURES

ORDERING

DATE	PROJECT	
COMMENTS		
c (UL) us		

LISTED

## 2SID SUSPENDED INDIRECT / DIRECT

AN EXTENSION OF OUR 2-INCH LINEAR FAMILY SERIES

#### **OPTICAL SYSTEM**

- 1. OPTIMAL BATWING DISTRIBUTION 135° ultra-wide batwing distribution provides even illumination across a ceiling while allowing for maximum snacing between fixtures
- for maximum spacing between fixtures. 2. VERSATILE LIGHT ENGINE Multiple lumen intensities along with various up/ down light options to provide the correct level of illumination within each space. 3. EVENLY ILLUMINATED DIRECT LENS
- 3. EVENLY ILLUMINATED DIRECT LENS High efficiency diffuser designed to minimize glare and provide uniform light distribution.

#### HOUSING

#### 4. ARCHITECTURAL DETAILS

Provide a clean architectural appearance with the hidden connect mounting system and seamlessly adjoin luminaires with the sure-fit alignment process.

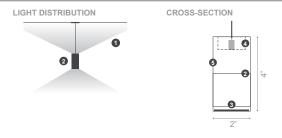
#### 5. SURE-FIT ALIGNMENT

Full-body alignment system adjoins each luminaire section to ensure straighter rows while minimizing the appearance of seams.

ELECTRICAL 6. OPTIONAL INTEGRAL EMERGENCY BATTERY PACK

UL Listed 924 emergency system has been engineered to exceed UL minimum safety standards.

7. 0-10 VOLT DIMMING STANDARD 120/277VAC 0-10V dimming to 1% standard.



SERIES	LENGTH		UPPER	Ουτρι	JT		DIRECT	OUTP	UT	CCT	V	OLTAGE		MOUNTING	F	INISH
2SID																
	XXX FT	VHU	1250 LM/FT	LU	500 LM/FT	VHD	1250 LM/FT	LD	500 LM/F	T <b>30</b> 3000	UNV	120-277V	T1	1" T-Grid	WH	White
	2' Increments EX: 20' = 20	HU	1000 LM/FT	VLU	250 LM/FT	HD	1000 LM/FT	VLD	250 LM/F	T <b>35</b> 3500	)K <b>347</b> 1	347V	Т9	9/16" T-Grid	BLK	Black
	27.20 20	MU	750 LM/FT	CU	Custom	MD	750 LM/FT	CD	Custom	<b>40</b> 4000	)K		SC	Screw Slot Grid	S	Silver
ORDERING N				1				1					нс	Hard Ceiling	GR	CHARCO Gray
	able with 347V. able with 2' and		20										JB	Junction Box		5
																OPTIO
CR	1			SUS	PENSION	1			INTEG	RATED	ONTRO	LS		OPTICAL		
BLANK =	80 CRI BI	LANK	= 48" CAB	LE	<b>CB144</b> 1	44" C	ables	c	DS Occ	upancy S	ensor	BLA	NK	= LAMBERTIAN		
<b>C90</b> 90 (	CRI CI	B96	96" Cables		BC E	lack (	Canopy & Co	ord 🕻	DOS Day	light Occu	ipancy S	ensor <b>BW</b>	Up	oper Batwing		
С	RCUITING	3	FO	r indi	VIDUALS		FOR LIN	IEAR F	RUNS <sup>3, 4</sup>	EME	RGENCY	OPTION NOTES	;			
-		-					EM			3 EN dis	and EC 0 crete fixture	Quantity is not to sections in a ro	o exce N.	eed number of		
	eparate Sv		g <b>EM</b> <sup>2</sup>	Emerg	ency Batte	ery <sub>E</sub>	EMERGENCY	QUANTIT PER RUN		N run 4 Po:	that will sition Option	osition refers to be powered by ons: <b>S</b> =Starter,	the J=Jo	EM/EC circuit. iner. <b>E</b> =Ender		
			EC	Emerg	ency Circu	it	EC			T	23ID-24-H	U-HD-35-UNV-1	T	<del></del>		
								QUANTIT PER RUN			STARTER	JOINER		ENDER CABLE		

We are constantly improving our fixtures and reserve the right to change options and specifications. For specific requirements, contact the Lumato sales team. For additional information and details visit our website at www.lumato.com. All products proudly manufactured in the USA. All rights reserved. All names and trademarks are property of their respective owners.

# **2SID** SUSPENDED

**INDIRECT / DIRECT** 





Watts/ft 14.8

LPW 116.1

Lumens/ft 1714

#### PHOTOMETRICS & ENERGY CHARTS

LU-VHD LU-HD LU-MD LU-LD LU-VLD

VHU-VHD VHU-HD VHU-MD VHU-LD VHU-VLD Watts/ft 13.1 11.2 8.7 6.3 3.9

1556

Lumens/ft 1444 1287 1012 764

121.4 123.9

LPW 110.0 115.1 116.3 121.7 128.7

128 103 79

1282 1034

130.5

56

773

139.2

503

Total Lur	mens: 8,4	19	1694					
Ratio: 50% Up & 50% Down								
Wattage	847							
-	129.1 LI		424					
	ength: F		121					
Zonal L	umen Su	mmary						
Zone	Lumens	% Fixt	424					
0 - 30	1245.1	14.8	847					
0 - 40 0 - 60	1982.2 3339.1	23.5 39.7	1271					
0 - 80	4147.4	49.3	1694					
90 - 180	4271.2	50.7						
0 - 180	8418.6	100.0	0-Deg					

2SID-04-HU-HD-35-UNV-XX-X-BW

Ratio: 50% Up & 50% Down

Total Lumens: 8,199

Efficacy: 126.0 LM/W

Fixture Length: Four Feet

Zonal Lumen Summary Zone Lumens % Fixt

0 - 30 1245 1 15 2

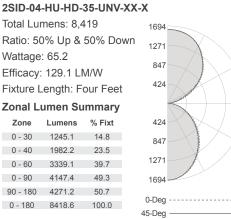
0 - 40 1982.2 24.2

0 - 60 3339.1 40.7 0 - 90 4147.4 50.6

90 - 180 4051.5 49.4

0 - 180 8198.8 100.0

Wattage: 65.2



90-Deg -----

45-Dea

2645

1984

1323

661

45-Deg

90-Deg -----

Indirect (Lambertian) / Direct (Lambertian) Light										
	VHU-VHD	VHU-HD	VHU-MD	VHU-LD	VHU-VLD					
Watts/ft	19.5	17.6	15.1	12.7	10.3					
Lumens/ft	2468	2311	2036	1789	1528					
LPW	126.6	131.6	135.0	141.3	148.5					
	HU-VHD	HU-HD	HU-MD	HU-LD	HU-VLD					
Watts/ft	18.2	16.3	13.8	11.4	9.0					
Watts/ft Lumens/ft	18.2 2261	16.3 2104	13.8 1829	11.4 1581	9.0 1320					
Lumens/ft	2261	2104	1829	1581	1320					
Lumens/ft	2261	2104	1829	1581	1320					

Lumens/ft 1977 1819 1545 1297 1036

LPW 121.1 126.5 129.8 136.8 145.7

#### Indirect (Batwing) / Direct (Lambertian) Light

-X-D44	inuneci (E	atwing)	/ Direc	t (Laint	Jer tian,	Light
1694		VHU-VHD	VHU-HD	VHU-MD	VHU-LD	VHU-VLD
1271	Watts/ft	19.5	17.6	15.1	12.7	10.3
	Lumens/ft	2410	2253	1979	1731	1470
847	LPW	123.6	128.3	131.2	136.7	142.8
424		HU-VHD	HU-HD	HU-MD	HU-LD	HU-VLD
	Watts/ft	18.2	16.3	13.8	11.4	9.0
424	Lumens/ft	2207	2050	1775	1527	1266
847	LPW	121.2	126.0	128.7	134.4	140.8
1271						
		MU-VHD	MU-HD	MU-MD	MU-LD	MU-VLD
1694	Watts/ft	16.3	14.4	11.9	9.5	7.1
0 Dec	Lumens/ft	1941	1784	1509	1261	1000
0-Deg	LPW	118.9	124.0	126.8	133.0	140.7

	LU-VHD	LU-HD	LU-MD	LU-LD	LU-VLD
Watts/ft	14.8	12.8	10.3	7.9	5.6
Lumens/ft	1690	1533	1258	1010	749
LPW	114.5	119.6	121.6	127.6	135.0

#### VHU-VHD VHU-HD VHU-MD VHU-LD VHU-VLD

Watts/ft	13.1	11.2	8.7	6.3	3.9
Lumens/ft	1432	1275	1000	753	492
LPW	109.2	114.1	115.0	119.9	125.8

## 2SID-04-HU-HD-35-UNV-XX-X-AU

Total Lumens: 8,235 Ratio: 50% Up & 50% Down Wattage: 65.2 Efficacy: 126.6 LM/W Fixture Length: Four Feet

#### **Zonal Lumen Summary**

Zone	Lumens	% Fixt
0 - 30	1245.1	15.1
0 - 40	1982.2	24.1
0 - 60	3339.1	40.5
0 - 90	4147.4	50.4
90 - 180	4087.4	49.6
0 - 180	8234.8	100.0

Indirect (Asymmetric) / Direct (Lambertian) Light

		,	``		,
	VHU-VHD	VHU-HD	VHU-MD	VHU-LD	VHU-VLC
Watts/ft	19.5	17.6	15.1	12.7	10.3
Lumens/ft	2421	2264	1989	1741	1480
LPW	124.1	128.9	131.8	137.5	143.8
	HU-VHD	HU-HD	HU-MD	HU-LD	HU-VLD
Watts/ft	18.2	16.3	13.8	11.4	9.0
Lumens/ft	2216	2059	1784	1536	1275
LPW	121.7	126.6	129.4	135.2	141.8
	MU-VHD	MU-HD	MU-MD	MU-LD	MU-VLD
Watts/ft	16.3	14.4	11.9	9.5	7.1
Lumens/ft	1947	1790	1515	1267	1006
 LPW	119.3	124.5	127.2	133.7	141.5

90-Deg -----

0-Deg -----

	LU-VHD	LU-HD	LU-MD	LU-LD	LU-VLD
Watts/ft	14.8	12.8	10.3	7.9	5.6
Lumens/ft	1689	1531	1257	1009	748
LPW	114.4	119.4	121.5	127.4	134.7

#### VHU-VHD VHU-HD VHU-MD VHU-LD VHU-VLD

Watts/ft	13.1	11.2	8.7	6.3	3.9
Lumens/ft	1437	1280	1005	757	496
LPW	109.5	114.5	115.5	120.7	127.0

## 2SID SUSPENDED

**INDIRECT / DIRECT** 





SPECIFICATIONS

## **MECHANICAL**

#### Housing Construction:

Extruded Aluminum 6063-T5 alloy outer housing with die-formed steel internal components for strength, alignment and mounting attachment. Our high-quality die-cast end caps are engineered to conceal all fasteners and to retain the sealing gaskets on the inside of the fixture while completing the clean and minimalistic look of this luminaire.

#### Alignment/Assembly:

The alignment system employs a seven-point alignment and attachment method, designed to create straighter rows and minimize seams between sections (field assembled). Four alignment pins ensure the outer extruded aluminum rails are aligned, two extended biscuits provide additional strength and a light shield, while a vertical draw-screw secures housing-to-housing attachment.

Lengths: The 2SID is available in a minimum 2-foot (nominal) length with additional 2-foot increments available. Longer fixture rows are available and will be configured per Lumato factory specifications; typical rows are configured with 4-foot, 6-foot and 8-foot fixtures. Max run length on one power feed is 72'. Continuous runs over 72' will require 2 power feeds.

#### Mounting Method/Hardware:

Standard hanging hardware includes 1/16" diameter, galvanized steel aircraft cable with adjustable and lockable nickel-plated cable grippers and a white 18/5 S.J.T. power cord. The standard hardware includes a 60" power cord and 54" aircraft cables to accommodate a 48" mounting distance from the ceiling. Ceiling canopy provided. All suspension hardware is tested and listed to UL1598 requirements for loading/fixture support.

#### **Exterior Finish:**

The 2SID is available in White and Black polyester powder coat finish to ensure durability.

#### **Suspension Components:**

Fixtures are suspended by 1/16" galvanized aircraft cable. Cables are attached to the ceiling suspension point with a 1/4-20 threaded ceiling cable barrel that incorporates a threaded ring to support the feed/hanger canopy allowing access to the j-box/hanger without removal of the suspension cable allowing conductor inspection/service without having to support the fixture(s). Feed canopies are 5" O.D. and hanger canopies are 2" O.D. Cable lengths can be specified for 48", 96" and 144" suspension lengths. Ceiling type options are "T1" T-Grid, "T9" T-Grid, "SC" screw slot grid, "HC" hard ceiling or "JB" hard ceiling j-box mount.

#### **Integrated Controls:**

The 2SID is available with optional integrated controls. Sensors are conveniently designed to mount in aperture and are located at the power feed end of each fixture. For runs, each fixture section will be supplied with a discrete sensor that will control that specific section.

#### **OPERATION**

#### Light Engine:

The 2SID is available in 3000K, 3500K and 4000K CCT all within a 3-Step MacAdam Ellipse and has a standard CRI of 80+. Optional 90+ CRI available.

The back-lit extruded acrylic lens ensures high-efficiency light output, in a minimal form factor for a clean, evenly illuminated lower surface with minimal glare.

#### **Electrical:**

Class 2 programmable (factory pre-set) premium power supply, 120-277VAC input. Power factor >0.9. THD <15%. Integral Surge Protection to 2KV.

#### Dimming:

The 2SID comes standard with 0-10V dimming down to 1%.

Emergency Battery Pack: UL Listed 924 Emergency System has been engineered to exceed UL Minimum Safety Standards. For most fixtures, the entire direct portion of the fixture will be illuminated by the EM Battery Pack. For 8' VHD, 10' HD and VHD, and 12' MD, HD, and VHD, only the first portion of the fixture will be illuminated by the EM battery pack. "Quantity per Run" refers to the number of fixtures in the run that will be supplied with an emergency battery pack. "Position in Run" refers to which fixture in the run that will contain the battery. Position options are Starter (S), Joiner (J), or Ender (E). For example, a 24' run needing two emergency EM2SJ. When a joiner is selected, battery packs are always supplied in 8' fixtures before 6' fixtures in that run.

Emergency Circuit: Emergency Circuit fixtures are engineered so that the entire fixture is wired to the emergency circuit. "Quantity per Run" refers to the number of fixtures in the run that are wired to the emergency circuit. "Position in Run" refers to which fixture in the run that will be powered by the Emergency Circuit. Position options are Starter (S), Joiner (J), or Ender (E). For example, a 24' run with be ordered as EC2SJ. When a joiner is selected, Emergency Circuits are always supplied in 8' fixtures before 6' fixtures in that run.

#### **GENERAL**

## Warranty:

Five (5) Year limited warranty from date of shipment.

## Lumen Maintenance:

Rated for 85% initial lumen output at 85,000 Hours of operation, operated at 25°C ambient temperature; per TM-21 Guidelines published by the Illuminating Engineering Society (IES).

#### Certifications:

All Luminaires are UL/cUL Listed to UL 1598 Standards and approved for Indoor use in Dry/Damp Locations.

#### Shipping:

2-Week lead time for orders up to 1000 Linear Feet.

4-Week lead time for orders with a Black finish.

Lead time for orders greater and 1,000' will be determined at time of order.

#### Manufactured in the USA:

All Lumato Luminaires and Components (with the exception of our LED boards and drivers) are proudly manufactured and assembled in the USA.