



DATE

**PROJECT** 

COMMENTS

CERTIFICATION

**FEATURES** 

ORDERING









# **2SA-ID ACOUSTIC SUSPENDED**

INDIRECT / DIRECT

AN EXTENSION OF OUR 2S SERIES

The 2SA Acoustic series is an architectural fusion of light and sound. The slim 2" aperture is paired with an acoustic baffle to provide versatile illumination and substantial sound dampening for a wide variety of commercial, civic, and educational spaces.

#### **SOUND DAMPENING RATING**

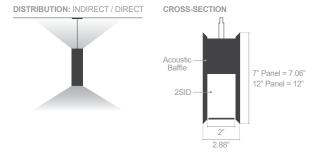
Sound Absorption: Average NRC 1.4 (Subject to mounting conditions)

#### **VERSATILITY**

tin 3000K, 3500K & 4000K CCT provides specifiers with accurate and powerful levels of illumination and color within each space.

#### **OPTICS**

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



#### SAMPLE PART NUMBER: 2SA-ID-06-HU-HD-35-UNV-JB-BLK-03-P12-C90

SERIES	LE	NGTH <sup>1</sup>	UPF	PER OUTPUT	DIRI	ECT OUTPUT		CCT	\	/OLTAGE		MOUNTING	FIX	TURE COLOR
2SA-ID														
	02	2 FT	VHU	1250 LM/FT	VHD	1250 LM/FT	30	3000K	UNV	120-277V	T1	1" Grid	WH	White
	04	4 FT	HU	1000 LM/FT	HD	1000 LM/FT	35	3500K	347 <sup>2</sup>	347V	T9	9/16" Grid	BLK	Black
	06	6 FT	MU	750 LM/FT	MD	750 LM/FT	40	4000K			SC	Screw Slot	S	Silver
	80	8 FT	LU	500 LM/FT	LD	500 LM/FT					HC	Hard Ceiling	GR	Charcoal Gray
			VLU	250 LM/FT	VLD	250 LM/FT					JB	Junction Box		
ORDERING & OPTION NO	TES		CU	Custom	CD	Custom								
1. Individual fixtures only 2'r	nininaum	longth 0' may	rimum lana	th										

- Individual fixtures only. 2' minimum length, 8' maximum length.
- 2 EM not available with 347V.
- 3 EM and sensors are not available with 2' and 3' fixtures.
- 4 Consult factory for component or system not listed.

#### ACOUSTIC BAFFLE COLOR

PANEL HEIGHT

Colors						Textures				P07	7" Tall Panel			
03 Marble	12 Avocado	18 Granite	33 Slate	92	Denim	192 Ocean	50	Dark Walnut	61	FRESH Plywood	65	Vista Walnut	P12	12" Tall Panel
<b>04</b> Graphite	13 Wine	21 Cream	39 Earth	93	Sage			Ash			66	WEATHERED Plywood		
<b>07</b> Sand	14 Biscuit	22 Khaki	40 Coffee	157	Midnight		53	Honey	63	MAIN STREET Elm		,		
<b>09</b> Onyx	15 Evergreen	<b>24</b> Snow	43 Ivory	191	Stone		54	Plywood	64	Planche Oak				
	1	1	1			1			1					OPTIONS

	CRI	SUSPENSION	INTEGRATED CONTROLS <sup>3, 4</sup>	CIRCUITING	EMERGENCY <sup>3</sup>
	C90				
C90	90 CRI	BLANK = 48" CABLE CB144 144" Cables	DOS Daylight Occupancy Sensor	SS-U/D Separate Switching UPWARDS/DOWNWARDS	EM <sup>3</sup> Emergency Battery
		CB96 96" Cables BC Black Canopy & Cord			EC Emergency Circuit

# **2SA-ID ACOUSTIC SUSPENDED**

#### INDIRECT / DIRECT













PHOTOMETRICS & ENERGY CHARTS

#### 2SA-ID-04-HU-HD-35-UNV-XX-C90

Ratio: 50% Up & 50% Down 1231 Wattage: 61.52

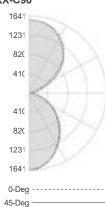
Efficacy: 131.0 LM/W Fixture Length: Four Feet

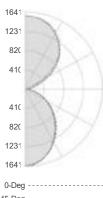
Total Lumens: 8,088

## **Zonal Lumen Summary**

		. ,
Zone	Lumens	% Fixt
0 - 30	1206.8	14.9
0 - 40	1923.4	23.8
0 - 60	3247.4	40.2
0 - 90	4054.6	50.1
90 - 180	4033.0	49.9
0 - 180	8087.6	100.0

2' FIXTURE





90-Deg -----

# Indirect (Lambertian) / Direct (Lambertian) Light at 90 CRI

	VHU-VHD	VHU-HD	VHU-MD	VHU-LD	VHU-VLD
Watts/ft	19.3	17.2	14.7	12.2	10.1
Lumens/ft	2550	2302	2067	1780	1538
LPW	132.1	134.2	140.4	145.9	152.3

	HU-VHD	HU-HD	HU-MD	HU-LD	HU-VLD
Watts/ft	17.5	15.4	13.0	10.4	8.3
Lumens/ft	2270	2022	1787	1500	1258
LPW	129.5	131.5	138.0	143.8	151.0

	MU-VHD	MU-HD	MU-MD	MU-LD	MU-VLD
Watts/ft	16.0	13.8	11.4	8.9	6.8
Lumens/ft	2004	1755	1521	1234	992
LPW	125.4	126.9	133.3	138.9	146.2

	LU-VHD	LU-HD	LU-MD	LU-LD	LU-VLD
Watts/ft	14.6	12.5	10.0	7.5	5.4
Lumens/ft	1773	1524	1290	1003	761
LPW	121.4	122.4	128.6	133.7	140.8

	VLU-VHD	VLU-HD	VLU-MD	VLU-LD	VLU-VLD
Watts/ft	13.2	11.0	8.6	6.1	4.0
Lumens/ft	1524	1276	1041	754	512
I PW	115.9	116.0	121 4	124 6	129 6

#### **Lumen Adjustment Calculations**

LUMEN MU	JLTIPLIERS
3000K	0.995
3500K	1.000
4000K	1.023

Example: HU-MD Output, 3000K at 90CRI Total Light Output: 7148 x 0.995 = 7112 lm Total Light Output Per Foot: 1787 x 0.995 = 1778 lm/ft Efficacy = 1778 / 13.0 = 136.7 lm/W

#### FIXTURE ROW LAYOUT: SINGLE UNIT 2' - 4' - 6' - 8'

# 26-1/2" END-CAP to END-CAP 4' FIXTURE 47-1/4" CABLE MOUNTING CENTERS 6' FIXTURE 71-1/4" CABLE MOUNTING CENTERS 73-1/4" END-CAP to END-CAP 8' FIXTURE

93-21/32" CABLE MOUNTING CENTERS

95-21/32" END-CAP to END-CAP

ORDER LENGTH	CABLE MOUNTING CENTERS	ACTUAL OVERALL LENGTH
02	24.50	26.50
04	47.25	49.25
06	71.25	73.25
08	93.65	95.65

# **2SA-ID ACOUSTIC SUSPENDED**

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ACOUSTIC BAFFLE OPTIONS





03 Marble



13 Wine







**192** Ocean



04 Graphite



14 Biscuit



































21 Cream



40 Coffee









50 Dark Walnut



53 Honey



61 Fresh Plywood



63 Main Street Elm



65 Vista Walnut





54 Plywood



62 Italian Walnut

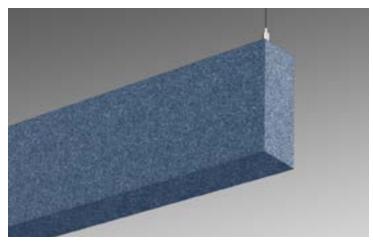


64 Planche Oak



66 Weathered Plywood

#### COMPLETE SERIES COLLECTION



#### **ACOUSTIC UNLIT BOX**

**VIEW SPEC SHEET** 

Dimensions: 7.00" or 12.00"H x 2.875"W Mounting: Pendant or Magnetic Surface

Sound Absorption: Average NRC 1.14 (Subject to mounting conditions)

Learn more at: Lumato.com/Project/acoustic-unlit-box



#### **ACOUSTIC UNLIT BLADE**

Dimensions: 7.00" or 12.00"H x 1.13"W Mounting: Pendant or Magnetic Surface

Sound Absorption: Average NRC 0.85 (Subject to mounting conditions)

**VIEW SPEC SHEET** 

Learn more at: Lumato.com/Project/acoustic-unlit-blade

## 2SA-ID ACOUSTIC SUSPENDED

#### INDIRECT / DIRECT













**SPECIFICATIONS** 

#### **MECHANICAL**

## **Housing Construction:**

Extruded aluminum 6063-T5 alloy outer housing and our high-quality diecast 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.

Lengths:

The 2SA Acoustic is available in direct 2-foot increments. Individual 2-foot (24"), 4-foot (48"), 6-foot (72"), and 8-foot (96") lengths (±0.030"). Overall lengths with acoustic baffle are 2-foot (26.50"), 4-foot (49.25"), 6-foot (73.25") and 8-foot (95.65").

Mounting Method/Hardware:

The Hidden-Connect design recesses all attachment hardware (hanging cable and power cord) below the top plane of the housing to enable a sleek, clean finished look. 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 power coru and 34 aircraπ cables to accommodate a 48" mounting distance from the ceiling. Longer hanging cables and power cords are available as an option. Ceiling type options are "T1" = T-Grid, "T9" = T-Grid, "SC" = Screw Slot Grid, "HC" = Hard Ceiling or "JB" = J-Box mount. Ceiling canopy provided. All Lumato suspension hardware is tested and listed to UL1598 requirements for loading/fixture support.

**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. (JB = 5" O.D.). Cable lengths can be specified for 48", 96" and 144" suspension lengths.

#### Fixture Trim Finish:

The 2SA fixture finish is available in in White, Black, Silver, or Charcoal Gray polyester powder coat finish to ensure durability. Exposed, direct trim surrounding acrylic lens to be painted specified finish.

#### **Acoustic Color:**

Acoustic Color:
The acoustic baffle is made of 100% polyester fiber. Available in the following Colors: Marble (03), Graphite (04), Sand (07), Onyx (09), Avocado (12), Wine (13), Biscuit (14), Evergreen (15), Granite (18), Cream (21), Khaki (22), Snow (24), Slate (33), Earth (39), Coffee (40), Ivory (43) Denim (92), Sage (93), Midnight (157), Stone (191), Ocean (192). Available Textures: Dark Walnut (50), Ash (52), Honey (53), Plywood (54), Fresh Plywood (61), Italian Walnut (62), Main Street Elm (63), Planche Oak (64), Vista Walnut (65), Weathered Plywood (66).

**Integral Controls:** 

The 2SA-ID 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. Philips EasySense is standard daylight/occupancy sensor. DALI driver required. If your project requires a component or system not listed, please contact your Lumato lighting representative.

MANUFACTURER	ORDERING CODE	SENSOR	CONNECTION	DRIVER
Philips EasySense	DOS	Daylight/PIR Occupancy	Wireless	DALI (Advanced Xitanium SR, 1% Dimming)

#### **OPERATION**

#### **Light Engine:**

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

Direct: The back lit extruded acrylic lens ensures high efficiency light output in a minimal form factor for a clean, evenly illuminated surface with minimal glare. Indirect: Standard extruded acrylic lambertian lens.

#### Electrical:

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

The 2SA-ID comes standard with 0-10V dimming to 1%. For DOS (Daylight/ Occupancy Sensor) ordering code, DALI driver required. Advance Xitanium SR, 1% dimming to be utilized.

**Emergency Battery Pack:**Emergency Battery Pack has been engineered to exceed UL minimum safety standards. Standard battery is CEC Listed. For most fixtures, the entire direct portion of the fixture will be illuminated by the EM Battery Pack. For 8' VHD, only the first portion of the fixture will be illuminated by the EM battery pack.

#### **PERFORMANCE**

#### **Acoustic Materials:**

All raw materials are sustainably sourced from carefully selected vendors within the USA and abroad. All acoustic felt is made from low-VOC, 60% recycled PET polyester felt material. Hardware, fasteners, and frame components are also made from recycled aluminum. Frames are custom ordered in standardized sizes to prevent waste in the supply chain.

All Lumato Acoustic products are free of allergens, irritants, and coatings/sprays that degrade or give off VOC's. All acoustic materials also meet ASTM E84 Class A, Flame Spread 40.

#### **Product Maintenance:**

Our acoustic baffles and panels are inherently easy to maintain. They can be wiped down with a damp cloth or vacuumed as needed.

If a stain does appear, warm water and soap can be used to gently blot the area affected.

Acoustic baffles and panels are 100% recyclable at end of life.

#### **GENERAL**

#### Warranty:

Ten (10) year limited warranty from date of shipment, covers LED's, driver and luminaire. Two (2) year limited warranty for the acoustic baffle. Optional accessories are covered by their individual manufacturer warranties.

#### **Lumen Maintenance:**

Rated for 85% initial lumen output (L85) at 90,000 hours of operation, operated at 25°C ambient temperatures; per TM-21 Guidelines published by the Illuminated Engineering Society (IES)

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

**Acoustic Baffle Fire Rating:** 

ASTM E84 Class A Fire Spread rating is permanently achieved by infusing 40% new material into the panel. Our manufacturing process never uses sprays or coatings that degrade or lose their rating status.

#### 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.

#### Shipping:

6-8 week lead-time for orders up to 1000 linear feet.

Lead-time for orders greater than 1000 linear feet will be determined at time of order.