

DATE

PROJECT

COMMENTS

CERTIFICATIONS



## 2SA-D ACOUSTIC SUSPENDED 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)

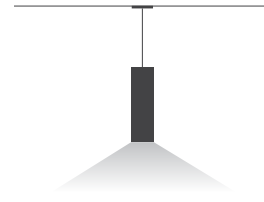
### VERSATILITY

Lumen intensities range from 250-1250 lm/ft in 3000K, 3500K & 4000K CCT provides specifiers with accurate and powerful levels of illumination and color within each space.

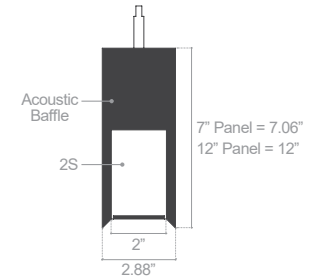
### OPTICS

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.

DISTRIBUTION: DIRECT



CROSS-SECTION



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

ORDERING

SERIES	LENGTH <sup>1</sup>	DIRECT OUTPUT				CCT		VOLTAGE		MOUNTING				FIXTURE COLOR	
2SA-D															
	02 2 FT	VHD	1250 LM/FT	LD	500 LM/FT	30	3000K	UNV	120-277V	T1	1" Grid	HC	Hard Ceiling	WH	White
	04 4 FT	HD	1000 LM/FT	VLD	250 LM/FT	35	3500K	347 <sup>2</sup>	347V	T9	9/16" Grid	JB	Junction Box	BLK	Black
	06 6 FT	MD	750 LM/FT	CD	Custom	40	4000K			SC	Screw Slot			S	Silver
	08 8 FT													GR	Charcoal Gray

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								
04 Graphite	13 Wine	21 Cream	39 Earth	93 Sage		52 Ash	62 ITALIAN Walnut	66 WEATHERED Plywood									
07 Sand	14 Biscuit	22 Khaki	40 Coffee	157 Midnight		53 Honey	63 MAIN STREET Elm										
09 Onyx	15 Evergreen	24 Snow	43 Ivory	191 Stone		54 Plywood	64 Planche Oak										

OPTIONS

CRI	SUSPENSION	INTEGRATED CONTROLS <sup>3,4</sup>		EMERGENCY <sup>3</sup>	ORDERING & OPTION NOTES	
C90					1 Individual fixtures only, 2' minimum length, 8' maximum length.	
C90	90 CRI	BLANK = 48" CABLE	CB144	144" Cables	2 EM not available with 347V.	
		CB96	96" Cables	BC	3 EM and sensors are not available with 2' and 3' fixtures.	
				DOS	4 Consult factory for component or system not listed.	
				Daylight Occupancy Sensor		
				DALI DRIVER STANDARD		
				EM	Emergency Battery	
					CEC LISTED	

2SA-D ACOUSTIC SUSPENDED  
DIRECT



Manufactured in the USA



10-Year Warranty



Standard 90+ CRI



Vertically Integrated Manufacturing



Extruded Aluminum Housing



Acoustic Baffle

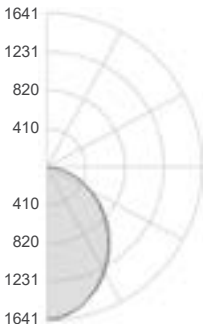


PHOTOMETRICS & ENERGY CHARTS

2SA-04-HD-35-UNV-XX-C90

Total Lumens: 4,055  
Ratio: 0% Up & 100% Down  
Wattage: 37.4  
Efficacy: 108.0 LM/W  
Fixture Length: Four Feet

0-Deg -----  
45-Deg -----  
90-Deg -----



Zonal Lumen Summary

Zone	Lumens	% Fixt
0 - 30	1206.8	29.8
0 - 40	1923.4	47.4
0 - 60	3247.4	80.1
0 - 90	4054.6	100.0
90 - 180	0.2	0.0
0 - 180	4054.8	100.0

Direct (Lambertian) Light at 90 CRI

	VHD:1250	HD:1000	MD:750	LD:500	VLD:250
Watts/ft	11.5	9.4	6.9	4.4	2.3
Lumens/ft	1262	1014	779	492	250
LPW	109.7	108.4	112.5	111.8	108.7

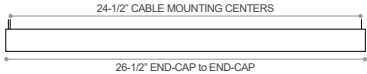
Lumen Adjustment Calculations

LUMEN MULTIPLIERS	
3000K	0.995
3500K	1.000
4000K	1.023

Example: MD Output, 3000K at 90CRI  
Total Light Output: 3116 x 0.995 = 3100 lm  
Total Light Output Per Foot: 779 x 0.995 = 775 lm/ft  
Efficacy = 775 / 6.9 = 112.3 lm/W

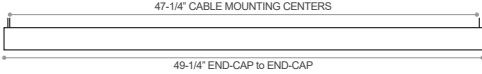
FIXTURE ROW LAYOUT: SINGLE UNIT 2' - 4' - 6' - 8'

2' FIXTURE



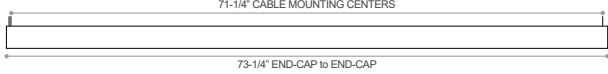
24-1/2" CABLE MOUNTING CENTERS  
26-1/2" END-CAP to END-CAP

4' FIXTURE



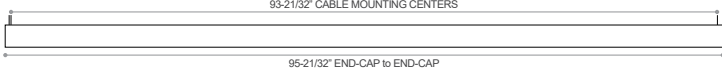
47-1/4" CABLE MOUNTING CENTERS  
49-1/4" END-CAP to END-CAP

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

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Extruded Aluminum Housing

Acoustic Baffle

## ACOUSTIC BAFFLE OPTIONS

COLORS

03 Marble

04 Graphite

07 Sand

09 Onyx

12 Avocado

13 Wine

14 Biscuit

15 Evergreen

18 Granite

21 Cream

22 Khaki

24 Snow

30 Slate

33 Slate

39 Earth

40 Coffee

43 Ivory

92 Denim

93 Sage

157 Midnight

191 Stone

192 Ocean

TEXTURES

50 Dark Walnut

52 Ash

53 Honey

54 Plywood

61 Fresh Plywood

62 Italian Walnut

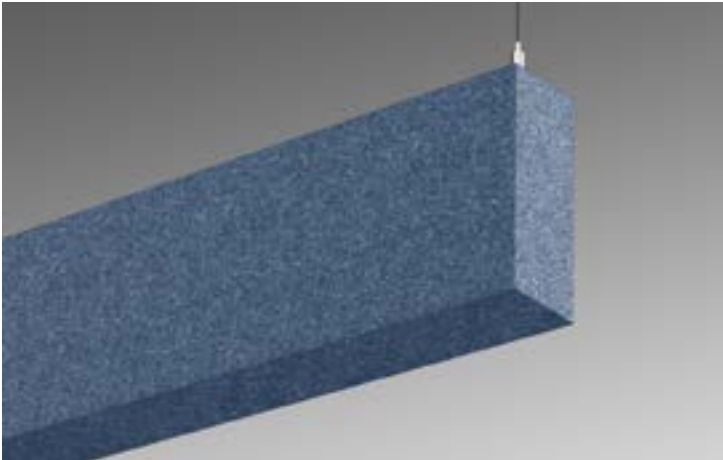
63 Main Street Elm

64 Planche Oak

65 Vista Walnut

66 Weathered Plywood

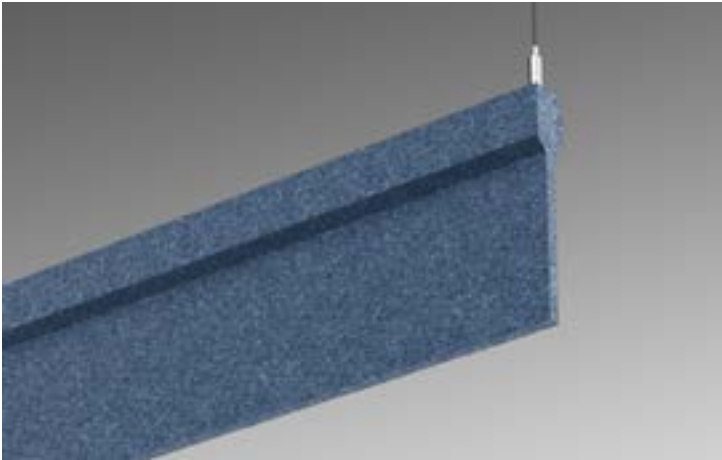
## COMPLETE SERIES COLLECTION



**ACOUSTIC UNLIT BOX**  
 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)

[VIEW SPEC SHEET](#)

Learn more at: [Lumato.com/Project/acoustic-unlit-box](https://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](https://lumato.com/Project/acoustic-unlit-blade)

# 2SA-D ACOUSTIC SUSPENDED DIRECT



Manufactured  
in the USA



10-Year  
Warranty



Standard  
90+ CRI



Vertically  
Integrated  
Manufacturing



Extruded  
Aluminum  
Housing



Acoustic  
Baffle



## SPECIFICATIONS

### MECHANICAL

#### Housing Construction:

Extruded aluminum 6063-T5 alloy outer housing and 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 minimalist 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 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 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:

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 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 Optics:

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.

#### 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 2SA 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).

#### Certification:

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.