

# Acoustic Drum Overview

ACOUSTIC COLLECTION



## Specifications

<b>LIGHTING</b>	Integrated LED light source offering high lumen output and efficacy. Color consistency of 3 SDCM. See additional information summarizing lumen distribution, wattage, and efficacy on following pages. Tunable white option available.	<b>CERTIFICATION</b>	Luminaire is CSA listed conforming to UL Standard 1598 in the U.S. and CAN/CSA C22.2 No. 250.0 in Canada. In accordance with NEC Code 410.73 (G), this luminaire contains an internal driver disconnect. Damp Location Rated. All electronic components are RoHS compliant, and the mechanical components of the luminaire have been verified to meet RoHS Directive 2002/95/EC.
<b>LUMEN MAINTENANCE</b>	Reported TM-21 Lifetimes L90(17k) = 52,600 hours L80(17k) > 102,000 hours L70(17k) > 102,000 hours	<b>SHADES</b>	4.5mm thick Sola Felt, a PET material manufactured with 50% post-consumer recycled content. Sola Felt is a LBC Red List Free labeled product, eligible for LEED, Living Building Challenge, and other green building certification credits.
<b>CONSTRUCTION</b>	3/16" Sola Felt. White Opal top and bottom diffuser. Contact your local sales rep for material samples.	<b>CLEANING &amp; CARE</b>	The best way to remove airborne debris and dust from shades is to periodically vacuum. A Swiffer sheet or feathered duster can also be used for light dusting. To treat liquid stains, remove spills immediately with a clean damp cotton cloth or with detergent soap and warm water. Carpet and fabric cleaners can usually be used. Always test an inconspicuous area before applying cleaners to the actual stain.
<b>ELECTRICAL</b>	Emergency battery output: 6 watts for 90 minutes. Maximum Mounting height: 10.5ft. Compatible with Signify Bodine sinusoidal output emergency lighting inverters. Signify Bodine inverters allow designated lighting fixtures to serve as code compliant emergency lighting sources during failure of normal AC power. For additional information see link: <a href="http://www.bodine.com/products/inverter.html">http://www.bodine.com/products/inverter.html</a>	<b>WARRANTY</b>	5 year warranty on all standard components.
<b>MOUNTING</b>	Adjustable stainless steel aircraft cable, contact studio for lengths over 20'		
<b>DRIVERS</b>	120-277V constant current, dimming driver standard. Can be wired dimming or non-dimming. 0-10v dimming input with a range of 1%-100%. Dim-to-Off standard. Driver can be accessed from the fixture. Power factor of > .95. Total Harmonic Distortion (THD) of < 20%.		



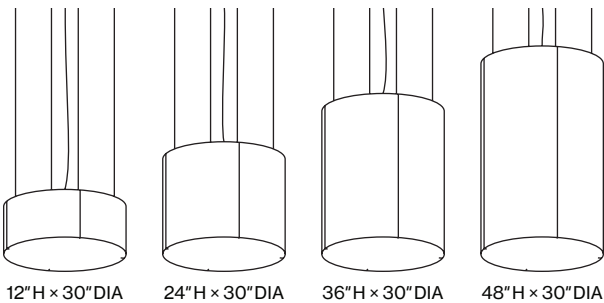
# Acoustic Drum

Fixture Options

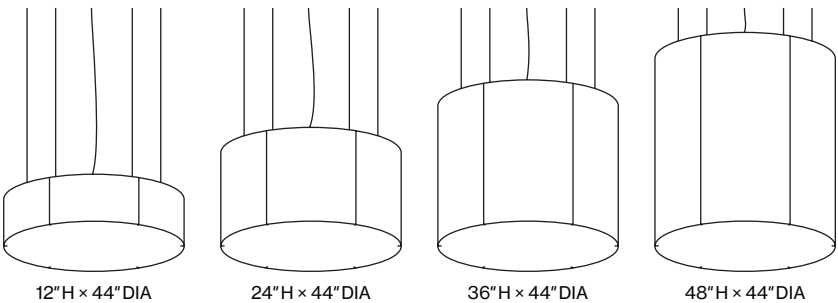
ACOUSTIC COLLECTION

## DIMENSIONS

### 30" DIAMETER



### 44" DIAMETER



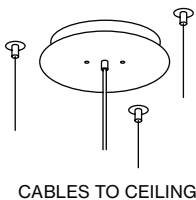
## CEILING CONNECTIONS

### 30" DIAMETER

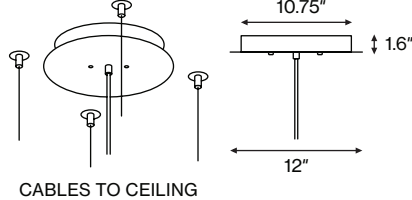
12" canopy standard for 30" Diameter.

### 44" DIAMETER

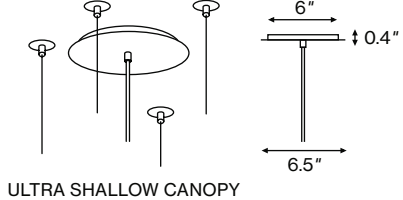
The 12" canopy is provided for configurations using standard LEDs from 1000-6000 lumens with or without an EM Battery, standard LEDs from 7000-11000 lumens without an EM Battery and for fixtures using Tunable White LEDs with a lumen range of 1-6000 lumens. All other configurations will use a driver box on board the fixture with a 6" Ultra Shallow Canopy.



CABLES TO CEILING

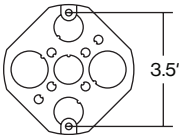


CABLES TO CEILING



ULTRA SHALLOW CANOPY

## 4" OCTAGONAL JUNCTION BOX (BY OTHERS)



Required for powered units;  
optional for unlit units

## CANOPY/DRESS PLATE FINISH OPTIONS

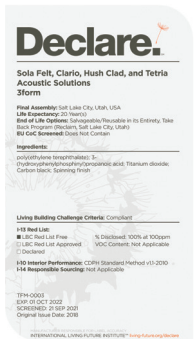


## FELT COLOR & PATTERN OPTIONS

### COLOR OPTIONS



### PATTERN OPTIONS



# Acoustic Drum

Lighting Details

ACOUSTIC COLLECTION

**PERFORMANCE – ACOUSTIC DRUM 30"**  
Based on 3500K / 90CRI / Standard Distribution

NOMINAL LUMEN OUTPUT (LM)	INPUT POWER (W)	EFFICACY (LM/W)
1000	19.36	51.66
2000	38.87	51.45
3000	59.90	50.08
4000	82.20	48.66
5000	105.91	47.21
6000	131.08	45.77
7000	157.97	44.31
8000	186.65	42.86

**PERFORMANCE – ACOUSTIC DRUM 44"**  
Based on 3500K / 90CRI / Standard Distribution

NOMINAL LUMEN OUTPUT (LM)	INPUT POWER (W)	EFFICACY (LM/W)
1000	17.15	58.30
2000	33.91	58.98
3000	51.37	58.40
4000	69.23	57.78
5000	87.45	57.17
6000	106.03	56.59
7000	125.01	56.00
8000	144.48	55.37
9000	164.45	54.73
10000	184.78	54.12
11000	205.68	53.48
12000	227.09	52.84
13000	248.92	52.23
14000	271.47	51.57
15000	294.60	50.92
16000	318.23	50.28
17000	342.34	49.66
18000	367.44	48.99

**LIGHT DISTRIBUTION**  
Based on measurement data

COLOR TEMPERATURE / CRI	MULTIPLIER
2700K / 80	0.98
2700K / 90	0.93
3000K / 80	1.02
3000K / 90	0.97
3500K / 80	1.00
3500K / 90	1.00
4000K / 80	1.08
4000K / 90	1.03

**OUTPUT MULTIPLIERS INSTRUCTIONS**

Adjusted Value =  $L_1 \times C_m$  where:  
 $L_1$  = (Lumen output at 3500K / 90 CRI) ×  
 $C_m$  = (Color Temp. / CRI Multiplier) ×  
Example:  
850LM / 3000K / 80CRI  
(850) × (1.02) = 789LM

# Acoustic Drum

Acoustic Details

ACOUSTIC COLLECTION

SABINS PER FIXTURE    Equivalent square feet of perfect absorption

CENTER FREQUENCY (HZ)	44 DIA 24 H DRUM	44 DIA 48 H DRUM	44 DIA 48 H UNLIT DRUM
100	21.40	35.58	30.73
125	20.14	28.39	29.37
160	19.04	30.45	32.14
200	16.82	32.56	31.24
250	18.14	36.68	36.60
315	19.11	38.42	42.04
400	20.26	38.84	42.94
500	18.72	36.97	41.10
630	18.67	37.63	41.08
800	19.65	38.70	42.68
1000	19.54	39.06	42.50
1250	19.81	40.52	43.48
1600	20.16	40.62	44.89
2000	20.91	41.98	46.25
2500	21.41	42.84	48.72
3150	21.74	43.78	48.91
4000	21.85	45.07	50.18
5000	22.73	46.00	50.15
AVERAGE OF 250, 500, 1000, 2000	19.43	38.75	41.96
EQUIVALENT SQ FT OF ACT (NRC 0.90)	21.60	43.10	46.60
EQUIVALENT SQ FT OF ACT (NRC 0.70)	27.80	55.40	59.90

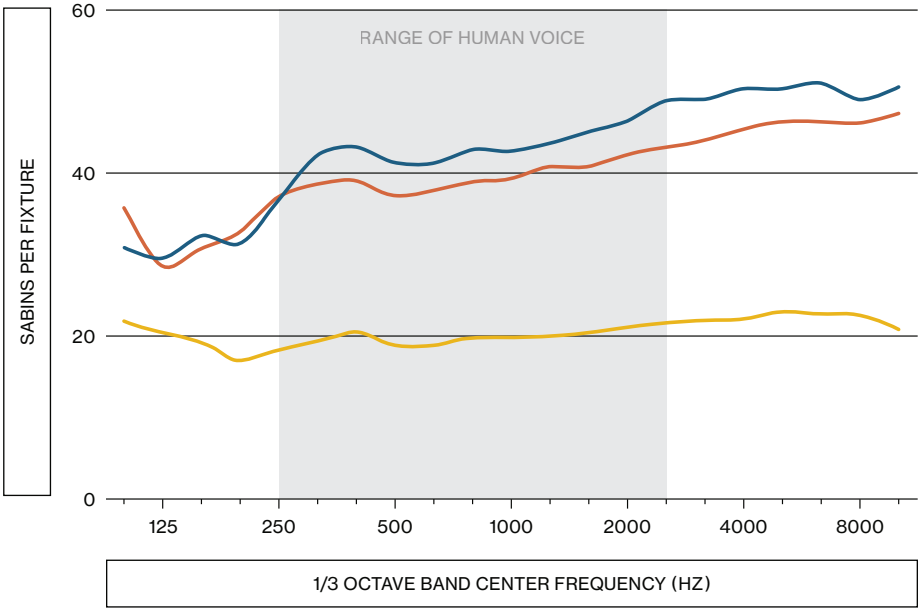
## Absorption

NRC per Fixture: 0.85–1.00

The NRC of felt depends on its configuration. LightArt fixtures utilize deep airspaces and multiple layers to keep NRC ratings high for all exposed felt surfaces.

The acoustic testing of Acoustic Drum was conducted at NVLAP accredited laboratories and meets ISO 354 and ASTM C423. Formal test reports are available upon request.

- 44 DIA 48 H UNLIT DRUM
- 44 DIA 48 H DRUM
- 44 DIA 24 H DRUM



# Acoustic Drum

## Part Number Specification

ACOUSTIC COLLECTION

SPECIFICATION CODE

Example: 2 QTY ACC-SHPE-DRUM-30D-24H-ML-STD-927CK-6000LM-P01-RWPC-WH

ACC-SHPE-DRUM-

-

-

-

-

-

-

-

-

QTY.

1

2

3

4

5

6

7

8

9

Complete form to order Acoustic Drum fixture(s). For each number, make one selection and enter in the corresponding box above.  
\*Indicates modified choices; additional lead times, cost, and limited lumen outputs may apply.

1

SIZE

Nominal

2

HEIGHT

Nominal

30D

30" DIAMETER

44D

44" DIAMETER

12H

12" HEIGHT

24H

24" HEIGHT

36H

36" HEIGHT

48H

48" HEIGHT

3

FELT COLOR

COLOR OPTIONS

EB

EBONY

NF

NIGHTFALL

CA

CAST

SLT

SILT

ML

MINERAL

STL

STEEL

AR

ARMOR

NI

NICKEL

ZN

ZINC

EM

EMERALD

BU

BURGUNDY

CI

CINNAMON

JP

JASPER

SF

SAFFRON

OCH

OCHRE

MU

MUSTARD

AS

ARIES

CT

CITRINE

LC

LILAC

AD

ADMIRAL

DK

DUSK

STB

STEELBLUE

PT

PLATINUM

DW

DRIFTWOOD

DN

DUNE

VL

VANILLA

DWA

WALNUT

IOK

IRON OAK

WA

CARMEL OAK

BA

RICH BAMBOO

4

SUSPENSION

5

LED CRI/CCT

STD

12" – 96"

EXT\*

24" – 240"

827CK

80 CRI / 2700K

830CK

80 CRI / 3000K

835CK

80 CRI / 3500K

840CK

80 CRI / 4000K

927CK

90 CRI / 2700K

930CK

90 CRI / 3000K

935CK

90 CRI / 3500K

940CK

90 CRI / 4000K

TW

TUNABLE WHITE

CONTINUE TO NEXT PAGE TO COMPLETE SPECIFICATION

# Acoustic Drum

Part Number Specification

ACOUSTIC COLLECTION

CONTINUE SPECIFICATION

6 OUTPUT

<input type="checkbox"/> 1000LM	1000 LM	<input type="checkbox"/> 12000LM	12000 LM
<input type="checkbox"/> 2000LM	2000 LM	<input type="checkbox"/> 13000LM	13000 LM
<input type="checkbox"/> 3000LM	3000 LM	<input type="checkbox"/> 14000LM	14000 LM
<input type="checkbox"/> 4000LM	4000 LM	<input type="checkbox"/> 15000LM	15000 LM
<input type="checkbox"/> 5000LM	5000 LM 30"D Max Tunable White and Em Battery Option	<input type="checkbox"/> 16000LM	16000 LM
<input type="checkbox"/> 6000LM	6000 LM	<input type="checkbox"/> 17000LM	17000 LM
<input type="checkbox"/> 7000LM	7000 LM	<input type="checkbox"/> 18000LM	18000 LM
<input type="checkbox"/> 8000LM	8000 LM	<input type="checkbox"/> 1900LM	19000 LM
<input type="checkbox"/> 9000LM	9000 LM	<input type="checkbox"/> 20000LM	20000 LM 44"D Max Standard Output
<input type="checkbox"/> 10000LM	10000 LM 30"D Max Standard Output	<input type="checkbox"/> CU*	CUSTOM OUTPUT
<input type="checkbox"/> 11000LM	11000 LM 44"D Max Tunable White and Em Battery Option		

lm

7 DIMMING AND CONTROLS

<input type="checkbox"/> P01	0-10V 1% DIMMING
<input type="checkbox"/> LEC*	HI-LUME 1% ECOSYSTEM LED DRIVER SOFT ON, FADE TO BLACK (LDE1 SERIES)
<input type="checkbox"/> EBM	0-10V 1% DIMMING INTEGRATED EM BATTERY OPTION Max Lumen output limited—consult LightArt. Not available with Tunable White.
<input type="checkbox"/> DALI	DALI CONTROL

8 CANOPY OPTIONS

<input type="checkbox"/> WPC	WHITE
<input type="checkbox"/> BPC	BLACK
<input type="checkbox"/> RWPC	RECESSED WHITE
<input type="checkbox"/> RBPC	RECESSED BLACK

9 POWER CORD

<input type="checkbox"/> WH	WHITE
<input type="checkbox"/> BK	BLACK

\*Indicates modified choices; additional lead times, cost, and limited lumen outputs may apply.