Echo One Overview ACOUSTIC COLLECTION



Specifications

LIGHTING 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.

LUMEN MAINTENANCE Reported TM-21 Lifetimes

L90(17k) = 52,600 hours L80(17k) > 102,000 hours L90(17k) > 102,000 hours

CONSTRUCTION 1/16" 3form Varia. White Opal top and bottom diffuser.

Contact your local sales rep for material samples.

ELECTRICAL 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

For additional information see link:

http://www.bodine.com/products/inverter.html

MOUNTING Adjustable stainless steel aircraft cable,

contact studio for lengths over 20'

DRIVERS 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%.

CERTIFICATION

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.

SHADES 9mm thick Sola Felt is 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. Frosted acrylic diffuser tube with removable acrylic bottom diffuser at bottom (for changing optic kits or relamping E26 version). Contact your local sales rep for material samples.

CLEANING & CARE

Designed to withstand the demands of rigorous cleaning requirements. Effective cleaning and disinfection of environmental surfaces reduces microbe transmission. Superior chemical resistance and durability promotes safety in any design application. Use common disinfectants and cleaners to reduce microbe transmission.

WARRANTY

5 year warranty on all standard components.



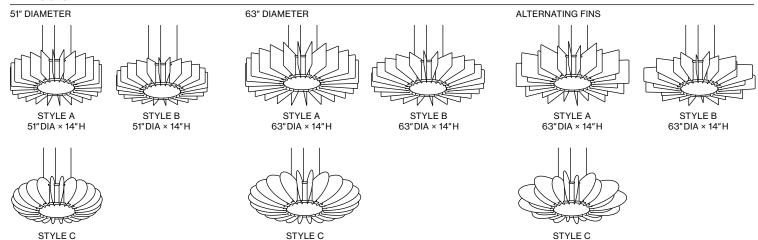








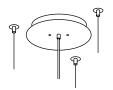




CEILING CONNECTIONS

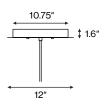
51" DIA × 14" H

DIMENSIONS Available in both Recessed and Surface Mount canopys. For recessed canopy, cut 11" dia hole and recess i-box or mounting structure by 1.5".



CABLES TO CEILING





63"DIA × 14"H

4" OCTAGONAL JUNCTION BOX (BY OTHERS)

63" DIA × 14" H



Required for powered units; optional for unlit units

PATTERN OPTIONS

CANOPY/DRESS PLATE FINISH OPTIONS





WHITE

FELT COLOR & PATTERN OPTIONS











Lighting Details

ACOUSTIC COLLECTION

PERFORMANCE - ECHO ONE

Based on 3500K / 90CRI / Standard Distribution

NOMINAL LUMEN OUTPUT (LM)	INPUT POWER (W)	EFFICACY (LM/W)
999	11.52	86.70
2002	23.76	84.30
3001	36.81	81.50
4000	50.78	78.80
4999	65.83	75.90
6002	82.11	73.10

LIGHT DISTRIBUTION

Based on measurement data

COLOR TEMPERATURE/CRI	MULTIPLIER
2700K / 80	0.98
2700K / 90	0.93
3000K / 80	1.02
3000K / 90	097
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:

 $L_1 = (Lumen output at 3500K / 90 CRI) \times$ C_m = (Color Temp. / CRI Multiplier) ×

Example:

850LM/3000K/80CRI

(850) × (1.02)= 789LM











SABINS PER FIXTURE Equivalent square feet of perfect absorption

CENTER FREQUENCY (HZ)	ECHO ONE-51-FIN STYLE B	ECHO ONE-63-FIN STYLE A
100	5.73	13.83
125	4.73	6.25
160	4.66	6.67
200	7.02	11.55
250	9.29	15.90
315	14.28	22.34
400	14.25	22.61
500	15.38	24.04
630	16.15	25.47
800	18.71	30.14
1000	19.72	30.75
1250	20.66	33.36
1600	21.18	34.49
2000	23.92	37.92
2500	25.48	41.23
3150	27.47	43.80
4000	28.73	45.05
5000	28.25	43.66
AVERAGE OF 250, 500, 1000, 2000 HZ	17.17	27.48
NRC PER FIXTURE (CIRCULAR FOOTPRINT)	1.20	1.25
EQUIVALENT SQ FT OF ACT (NRC 0.90)	19.01	30.50
EQUIVALENT SQ FT OF ACT (NRC 0.70)	24.50	39.30

Absorption

NRC per Fixture: 1.20 Absorption per Fixture: 7.59–15.50 Sabins

Average of values taken at 250, 500, 1000, and 2000 Hz

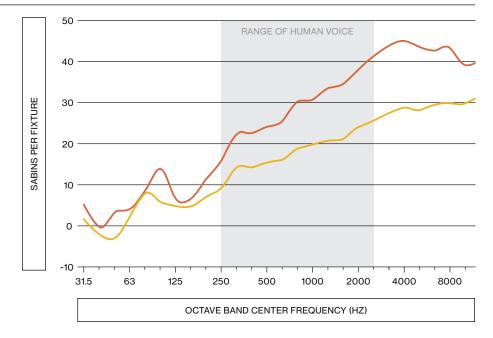
NRC for Echo system, with spanners, over entire installation footprint: 0.80 - 1.00

The C-style fixtures have not been laboratory tested. The surface area of the C-style fins and spanners meet or slightly exceed the B-style fixtures, we expect similar acoustical performance.

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

- 63 DIA FIN STYLE A

51DIA FIN STYLE B













5	SPECIFICATION	CODE	Example: 2 QTY	ACC-SHPE-ECON-51D-B-	CT-STD-835CK-20	00LM-P01-BPC-WH-C	CCL-EOP		
Г	ACC-	SHPE-ECON			7_ [٦		
L	QTY.	SHPE-ECON	0 2	3 4 5		7 8 9		0	
	Q11.		U G		•			U	
				r, make one selection and e	nter in the correspo	nding box above.			
*Inc	aicates moaifiea	choices; additional led	ia times ana/or cos	sts may арріу.					
0	DIAMETER / FII	N CONFIGURATION		FIN STYLE All fins 14" in he	eight				
	51D	51" DIAMETER		ПА	A FINS	B FINS	\Box	C FINS	
	63D	63" DIAMETER		В	51" Dia 63" Dia	51" Dia 63 Dia		51" Dia 63" Dia	
	EALT	ALTERNATING FINS		C			INEDC C	~	
				<u> </u>	A SPANNERS for grids	B SPAN for Grids		C SPANNERS for Grids	
				<u> </u>					
3	FELT COLOR								
	COLOR OPTION	NS					PATTERN	OPTIONS	
	ЕВ	EBONY	EM	EMERALD	LC	LILAC	DW	WALNUT	
	☐ NF	NIGHTFALL	☐ BU	BURGUNDY	☐ AD	ADMIRAL	☐ IOK		
	CA	CAST	CI	CINNAMON	☐ DK	DUSK	☐ WA	CARMEL O	AK
	SLT	SILT	JP	JASPER	STB	STEELBLUE	ВА	RICH BAMB	300
	ML ML	MINERAL	SF	SAFFRON	☐ PT	PLATINUM			
	STL	STEEL	ОСН	OCHRE	DW	DRIFTWOOD			
	☐ AR	ARMOR	∐ MU	MUSTARD	☐ DN	DUNE			
	∐ NI □ ZN	NICKEL	☐ AS	ARIES CITRINE	∐ VL	VANILLA			
		21140		OTTINE					
4	SUSPENSION				5 LED CRI/CCT				
	STD	12" – 96"			827CK	80 CRI / 2700K	930СК	90 CRI / 3000K	
	EXT*	12"-90"			830CK	80 CRI / 3000K	935CK	90 CRI / 3500K	
					835CK	80 CRI / 3500K	940CK	90 CRI / 4000K	
					840CK	80 CRI / 4000K	TW	TUNABLE WHITE	
					927CK	90 CRI / 2700K			
6	OUTPUT								
	1000LM	1000 LM	5000LM	5000 LM					
	2000LM	2000 LM	6000LM	6000 LM					
	3000LM	3000 LM	CU*	CUSTOM OUTPUT					
	4000LM	4000 LM		lm					

 ${}^* \textit{Indicates modified choices; additional lead times and/or costs may apply.}$

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CONTINUE TO NEXT PAGE TO COMPLETE SPECIFICATION











Echo One

CONTINUE SPECIFICATION

0	DIMMING AND C	CONTROLS	8	CANOPY OPTIC	DNS	
	P01 LEC* EBM	0-10V 1% DIMMING HI-LUME 1% ECOSYSTEM LED DRIVER SO FADE TO BLACK (LDE1 SERIES) 0-10V 1% DIMMING INTEGRATED EM BAT Max Lumen ouput limited—consult LightArt. Not available with Tunable White. DALI CONTROL	,	☐ WPC ☐ BPC ☐ RWPC ☐ RBPC	WHITE BLACK RECESSED WHITE RECESSED BLACK	
9	POWER CORD WH BK	Cord color dictates visible metal color WHITE BLACK	©	CABLE CONNEC	CTION CABLES TO CEILING CABLES TO CANOPY	
0	ARRANGEMENT EOP CG*	ECHO PENDANT CUSTOM GRID	CUSTOM GRID EXAMPL		TRIANGLE GIRD	

*Indicates modified choices; additional lead times and/or costs may apply.







