

## WHISPER ½" TRIMLESS LED DOWNLIGHT

WS-	I	(
-----	---	---

PROJECT:	
TYPE:	





CONTACT:

# Impossibly Small, 1/2" Aperture

#### **FEATURES**

- 1/2" aperture, trimless downlight minimizes fixture and light noise at the ceiling
- · Delivers up to 1100 lumens of general or accent light using SilentVu<sup>™</sup> optical control at 50° or 30°
- 100,000 hr LED lifetime and available integral or remote driver options

### **LED LIGHT ENGINE**

RATED WATTAGE	16.1W
DELIVERED LUMENS	Up to 1100 lm @ 4000K - 50° Optic
EFFICACY	Up to 69.1 LPW @ 4000K - 50° Optic
CCT @ 90CRI	2700K, 3000K, 3500K, 4000K
COLOR QUALITY	90+ CRI, 2-Step SDCM
LED LIFETIME	100,000 hours @ L90
MAX AMBIENT	35°C (95°F)

#### **DELIVERED LUMENS MATRIX**

		30° Optic	50° Optic
	2700K (90CRI)	651 lm	977 lm
	3000K (90CRI)	651 lm	977 lm
16.1 W	3500K (90CRI)	696 lm	1054 lm
	4000K (90CRI)	735 lm	1104 lm

#### SILENT VU™ OPTICS TECHNOLOGY

OPTICS	50° Installed and 30° Included
--------	--------------------------------

### **POWER SUPPLY**

INPUT VOLTAGE	120-277V, 50/60Hz	
DIMMING	Multiple dimming drivers available	

#### HOUSING INSTALLATION

- Mud-in only
- 51/2" Diameter ceiling cutout
- 3" drywall toggle bolts included
- Optional rough-in pan available
- ½" − 2" ceiling thickness
- 2½" minimum plenum height above ceiling required
- · Above ceiling access required for remote driver option

#### LISTINGS AND WARRANTY

cULus Listed

UL Listed for Wet Location

ASTM E283 Certified Airtight

IC Rated

ENERGY STAR® Certified with 50° optic

CA Title 24-JA8 Compliant with 50° optic, 90+ CRI

Five (5) years limited warranty, extended to Ten (10) years with remote driver option























### $SPEC-00270 \quad \text{WHISPER}, \ 0.5", \ \ \text{V-}5.0, \ \ \text{UPDATED} \ 06/12/23$

# WHISPER ½" TRIMLESS LED DOWNLIGHT

ı	PROJECT:	
	TYPE:	
	CONTACT:	

WS-IC

### **ORDER MATRIX**

### WHISPER ORDER MATRIX (Example: WS-IC-2790-S1)

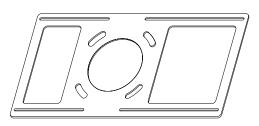
PRODUCT FAMILY CCT			CRI		INTEGRAL DRIVER OPTIONS – Includes Whisper with Integral Driver		
WS-IC-	Whisper Downlight	27	(2700K)	90	(90 CRI)	-S1	(1) Whisper with Universal Dim Driver: 1%-100% 0-10V, TRIAC, ELV, 120V/277V
	IC Rated	30	(3000K)			-EL1	(1) Whisper with EldoLED Dim Driver: 0.1%-100% 0-10V, 120V/277V
	New Construction	35	(3500K)				Integral drivers must be accessable from above the ceiling to validate warranty.
	or Remodel	40	(4000K)			REMOTE DRIVER OPTIONS — Includes Whisper(s) + Remote Driver	
						-SR1	(1) Whisper + (1) Universal Dim Driver: 1%-100% 0-10V, TRIAC, or ELV, 120V/277V
						-SR2	(2) Whispers + (1) Universal Dim Driver: 1%-100% 0-10V, TRIAC, or ELV, 120V/277V
						-SR3	(3) Whispers + (1) Universal Dim Driver: 1%-100% 0-10V, TRIAC, or ELV, 120V/277V
						-ER1	(1) Whisper + (1) EldoLED Dim Driver: 0.1%-100% 0-10V, 120V/277V
						-ER2	(2) Whispers + (1) EldoLED Dim Driver: 0.1%-100% 0-10V, 120V/277V
						-ER3	(3) Whispers + (1) EldoLED Dim Driver: 0.1%-100% 0-10V, 120V/277V
						-LRE1	(1) Whisper + (1) Lutron Dim Driver: 1%-100% EcoSystem, 120V/277V
						-LRE2	(2) Whispers + (1) Lutron Dim Driver: 1%-100% EcoSystem, 120V/277V
						-LRE3	(3) Whispers + (1) Lutron Dim Driver: 1%-100% EcoSystem, 120V/277V
							Remote Driver Options listed above are specifically tuned to power the corresponding number of Whispers indicated and must be installed in the configuration as ordered: (1) Whisper + (1) Remote Driver, (2) Whispers + (1) Remote Driver, or (3) Whispers + (1) Remote Driver as defined above.  For Remote Driver options, specific installation provisions should meet local code and jurisdiction requirements as determined by your licensed electrical contractor. DC wiring will run between the provided CSL Whisper junction box and the remote mounted driver. Generally, #12AWG, #14AWG, and #18AWG stranded or solid UL certified power wiring can accommodate run lengths of up to 50ft between the installed CSL Whisper.

### **EMERGENCY OPTIONS**

EM-1000	(25W Remote Inverter)	EM-1003	(35W Remote Inverter)	EM-1004	(50W Remote Inverter)
EM-1002	(10W Remote Emergency Driver)	EM-1003-CA	(35W Remote Inverter) Title 20	EM-1006	(25W Remote Inverter) Title 20

### **ADDITIONAL ACCESSORIES**

WS-PAN Whisper New Construction Rough-in Pan Optional, for new construction applications



Rough-in Pan



Scan code to view installation video





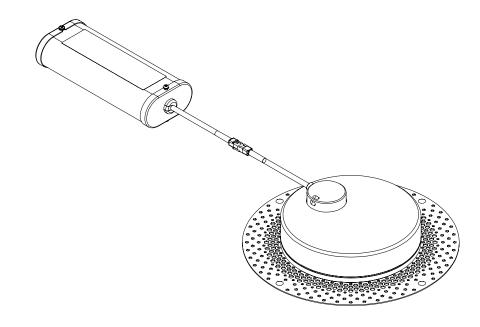
# WHISPER ½" TRIMLESS LED DOWNLIGHT

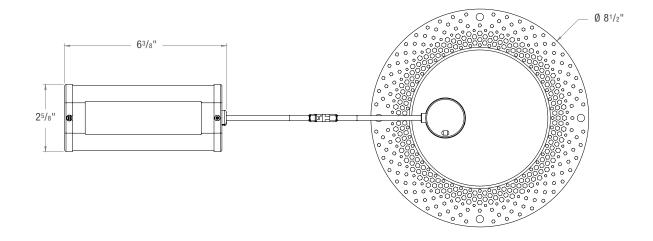
WS-IC

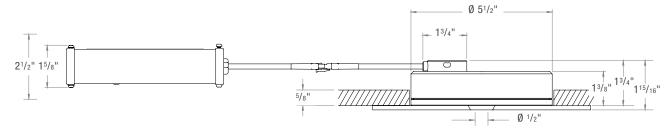
PROJECT:	

TYPE: \_\_\_\_\_

### INTEGRAL UNIVERSAL DIMMING DRIVER







Note: 2½" Minimum plenum height to accommodate driver installation into the plenum



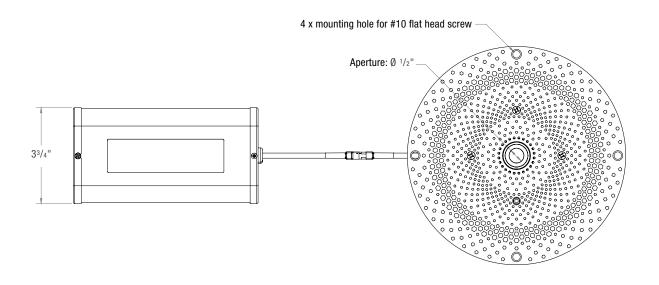
# WHISPER ½" TRIMLESS LED DOWNLIGHT

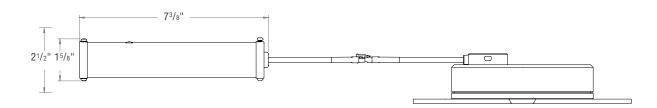
PROJECT:	
T) (DE	
I TYPE:	

WS-IC

CONTACT:

### **INTEGRAL PERFORMANCE DIMMING DRIVER**





Note: 2½" Minimum plenum height to accommodate driver installation into the plenum



# WHISPER ½" TRIMLESS LED DOWNLIGHT

PROJECT:	
TYPE:	

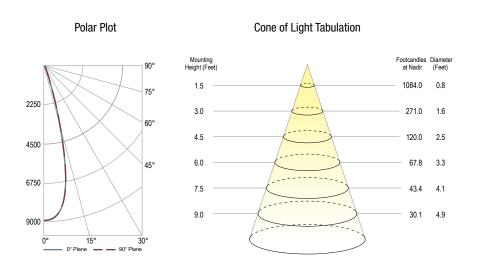
SPEC-00270 WHISPER, 0.5", V-5.0, UPDATED 06/12/23

WS-IC

TYPE:		
CONTACT:		

### **PHOTOMETRICS**

Whisper Downlight  $\frac{1}{2}$ " (3000K, 90 CRI, 30° Optic, 16.1W) Trimless



Voltage	Current	Power
120.2 VAC	0.1345 A	15.97 W

Power Factor	Frequency	Current THD
0.988	60 Hz	12.5%

#### **Summary of Results**

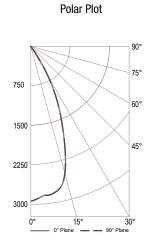
 Spacing Criteria
 Total Lumen Output:
 650 Lumens

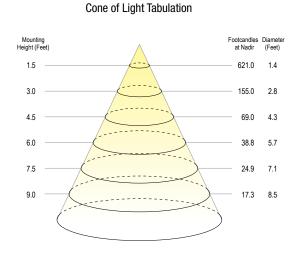
 0-180: 0.52
 Luminaire Efficacy:
 40.7 lm/w

 90-270: 0.52
 Maximum Candela:
 2439 Candela

Zone	Lumens	% of Luminaire	
0-40	641	98.6%	
0-60	648	99.6%	
0-90	651	100.0%	

Whisper Downlight  $\frac{1}{2}$ " (3000K, 90 CRI, 50° Optic, 16.1W) Trimless





Voltage	Current	Power
120.1 VAC	0.1347 A	15.97 W

Power Factor	Frequency	Current THD
0.988	60 Hz	12.6%

#### **Summary of Results**

 Spacing Criteria
 Total Lumen Output:
 977.4 Lumens

 0-180: 0.80
 Luminaire Efficacy:
 61.2 lm/w

 90-270: 0.80
 Maximum Candela:
 1398 Candela

Zone	Lumens	% of Luminaire
0-40	935	96.7%
0-60	975	99.8%
0-90	977	100.0%





# WHISPER ½" TRIMLESS LED DOWNLIGHT

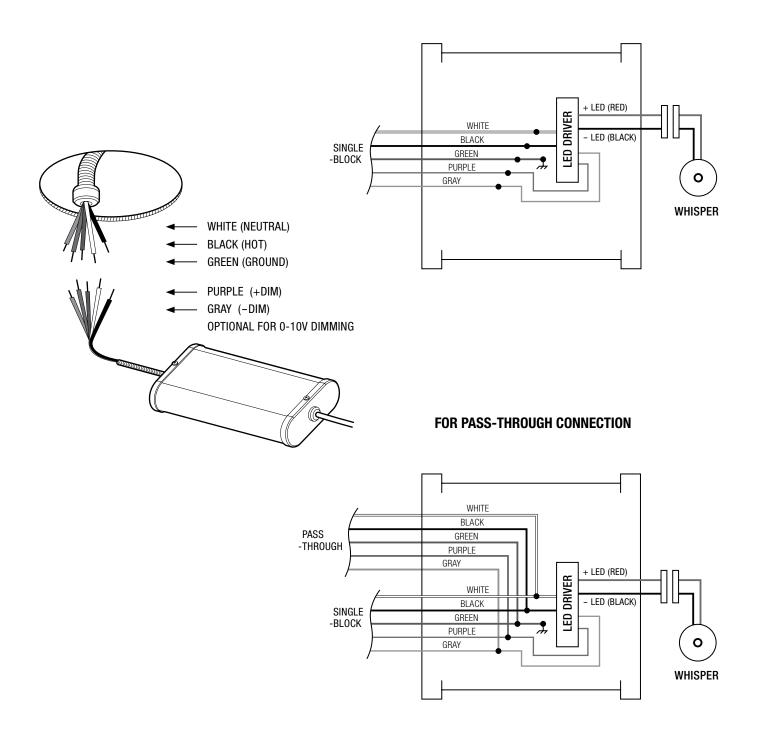
PROJECT:	
TYPE:	
CONTACT:	

WS-IC

## **WIRING DIAGRAM - INTEGRAL DRIVER OPTIONS**

### **LED Driver Inside**

### FOR SINGLE-BLOCK CONNECTION





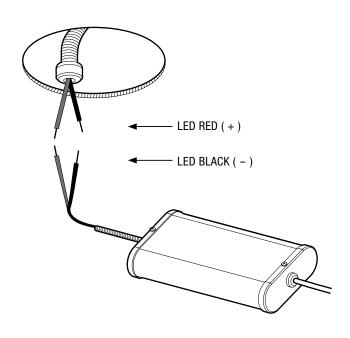
# WHISPER ½" TRIMLESS LED DOWNLIGHT

W	S	-1(
* *	v	٠,

PROJECT:	
TYPE:	
CONTACT:	

# WIRING DIAGRAM - REMOTE DRIVER OPTIONS

**LED Driver Outside** 



# **MARNING**

A SINGLE LUMINAIRE SHALL NOT HAVE MORE THAN 14.4W (400MA @ 36VDC) SUPPLIED

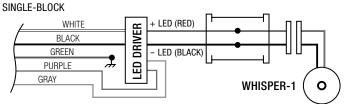
# **MARNING**

MAKE SURE THAT THERE ARE NO EXPOSED STRANDS OF WIRE THAT COULD CAUSE A DANGEROUS SHORT CIRCUIT!

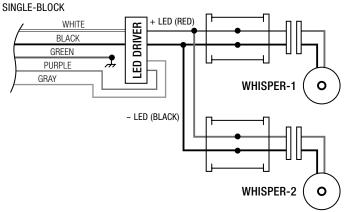
# **MARNING**

NEVER FASTEN THE GROUND WIRE (GREEN)
TO THE HOT (BLACK) WIRE!
FAILURE TO FOLLOW THIS INSTRUCTION COULD
RESULT IN SERIOUS INJURY OR DEATH!

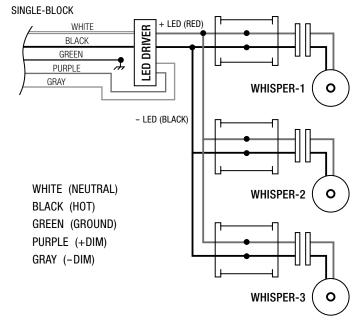
## ① WHISPER + ① REMOTE DRIVER 400mA



# ② WHISPERS + ① REMOTE DRIVER 800mA



### ③ WHISPERS + ① REMOTE DRIVER 1200mA







# WHISPER ½" TRIMLESS LED DOWNLIGHT

N	c		$\sim$	
٧V	o	-1	U	

PROJECT:	
TYPE:	
CONTACT:	

### **DIMMING GUIDE**

### S1 (ERP)

- 120/277V input power
- 0-10V dimming, 1%-100%
- TRIAC (forward-phase or leading-edge) dimming, 1%, 120V only
- ELV (reverse-phase or trailing-edge) dimming, 1%, 120V only

## SR1 (ERP)

- 120/277V input power
- Non-linear 0-10V dimming, 1%-100%
- TRIAC (forward-phase or leading-edge) dimming, 1%, 120V only
- ELV (reverse-phase or trailingedge) dimming, 1%, 120V only

120VAC Dimmers							
Mfg.	Model	Mfg.	Model	Mfg.	Model		
Lutron	S-603PG	Lutron	DVELV-303P	Lutron	CT-103P		
Leviton	IPI06-1LZ	Lutron	SELV-300P	Cooper	SLC03P		
Leviton	6631-2	Leviton	6683-IW	Leviton	IPE04		
Lutron	DVCL-153P	Leviton	6161	Lutron	MAELV-600		
Lutron	DV-600P	Leviton	6633-P	Lutron	FAELV-500		
Lutron	TGCL-153P	Lutron	TG-600P	Lightolier	ZP260QEW		
Lutron	S-600P	Cooper	DLC03P	Cooper	DAL06P		
Leviton	VPE06	Lutron	LG-600P				

## **EL1 (ELDOLED)**

- 0-10V dimming, 1% dim-to-off
- 120/277V

## ER1 (ELDOLED)

• 0-10V dimming, 1% dim-to-off

### **Compatible 0-10V Dimmers and Switches**

Dimmer Manufacturer	Website	Туре	Recommended Dimming Curve
Busch-Jaeger	www.busch-jaeger.de	2112U-101	Logarithmic
Jung	www.jung.de	240-10	Logarithmic
Leviton Lighting Controls	www.leviton.com	IllumaTech - IP710-DLX	Logarithmic
Lightolier Controls	www.lightolier.com	ZP600FAM120	Logarithmic
Lutron Electronics	www.lutron.com/LEDtool	Nova T - NTFTV Diva - DVTV, Diva - NFTV	Linear Linear
Merten	www.merten.de	5729	Logarithmic
Pass & Seymour	www.legrand.us	CD4FB-W	Logarithmic
The Watt Stopper	www.wattstopper.com	DCLV1	Logarithmic
Sensor Switch	www.sensorswitch.com	nIO EZ	Linear
Synergy	www.synergylightingcontrols.com	ISD BC	Logarithmic

### **Compatible Dimming Control Systems**

Control Manufacturer	Website	Туре	Recommended Dimming Curve
Lutron Electronics	www.lutron.com/LEDtool	GraphicEye - GRX-TVI w GRX3503, Energy Savr Node - QSN-4T16-S, TVM2 Module	Linear
Crestron	www.crestron.com	GLX-OIMFLV8. GLXP-OIMFLV8, GLPAC-DIMFLV4-*, GLPAC-DIM- FLV8-*, GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM, DIN-A08, DIN-4DIMFLV4, CLS-EXP-DIMFLV, CLCI-1DIMFLV4EX	Logarithmic
ABB	www.abb.com/KNX	SD/S 2.16.1	Logarithmic

Note: All dimming guidance presented, based on driver manufacturers testing and recommendations.)

