Type(s)

Project

Date

Notes

GENERAL INFORMATION

The compact Navis 50 luminaire is ideally suited for installation in areas that desire a small aperature for general illumination.

Navis is for architectural lighting applications where high-quality optics and extremely accurate and smooth dimming are required. Easy installation is a must, using simple, wind-down clamps, Navis 50 can be installed in a variety of ceiling thicknesses. Whether a new install, retrofit, surface mount, or pendant, Navis 50 is a versatile addition to your architectural luminaire system.
All backed by the access and robustness of external driver technology that removes critical components from ceiling spaces and moves them to exactly where you want them, whether in an equipment closet or in a convenient wallmount location.

Navis 50 is designed for a low voltage power over Cat 6 system, and requires a direct connection to an F-Drive RX LED driver (see separate datasheet for more details).

GENERAL INFORMATION

APPLICATIONS
- Auditoriums
- Cruise ships
- Houses of worship
- Restaurants
- Retail
- Museums
- Hospitality

PRODUCT FEATURES
- High-grade, field-changeable TIR optics and accessories
- Stepless smooth dimming
- Convection cooled for fan-free, silent operation
- Multiple color-temperatures, including Fade To Warm options
- Remote driver for improved accessibility
- Cat 6 and RJ45 wiring scheme including multiple individually controlled fixtures per cable
- Wide variety of mounting options including variable ceiling thickness, pendant, new install, retrofit, and more.
- 30° room-side lockable tilt

ORDERING INFORMATION

Navis 50

Model	LED	Color Temp	Beam Angle	Trim Plate	Trim Color	Mounting
ARCN-050	W - Fixed White F - Fade to Warm*	2 - 2700 K 3 - 3000 K* 35 - 3500 K 4 - 4000 K 5 - 5000 K *FTW option only available at 3000 K	15 - 15° 25 - 25° 40 - 40° 60 - 60° WW - Wall Wash	S - Standard C- Curve‡ P - Pinhole O - Off-set Slot (Blank) - Wall Wash ‡Curve limits tilt angle to 15° max.	B - Black W- White P - Primed C - Custom	A - Adjustable Recessed
ARCN-050						

To complete the form, simply select an option at the bottom of each column to populate the last row with your desired model number.
Color options: Standard in black, white, or primed (for painting by others). For additional colors please contact ETC.

PRODUCT SPECIFICATIONS NAVIS 50 FIXED WHITE

Source

LED Details	Nichia
Max Delivered Lumens	685 w/ 60°TIR lens
Efficacy (Lumens/Watt)	95
L70 Rating (Hours to 70% Output)	55,000

Color

Color Temperature Options	2700 K 3000 K 3500 K 4000 K 5000 K

Optical

Interchangeable Beam Angles	15° / 25° / 40° / 60°
CRI	>90 (5000 K >80)
TM-30-18 Data	Refer to charts on page 5
Photometry Data	Refer to charts on page 5

LED Driver

Approved Drivers	F-Drive RX Output Card - CC 8 Model Number: FD-RX-OC-CC-8
Luminaire Input Type	RJ45 in and thru connector Minimum required conductor gauge 23 AWG / 0.25 mm²
Maximum Navis 50 White per Approved Driver	FD-RX-OC-CC-8 : eight (8) Navis 50 Fixed White FD-SBOX-R expands this to three (3) Luminaires per channel (controlled together) (max 24 luminaires)
Refresh Rate	1500 Hz
Dimming	Smooth dimming to 0% intensity
Control	Control via F-Drive RX
Configuration	Yes, via ETC Concert
Complete Driver Data	https://www.etcconnect.com/Products/Power-Controls/LED-Drivers/F-Drive/Features.aspx

Electrical

Luminaire Operating Current	700 mA
Wattage (Typical)	7.2 W per Navis 50 Fixed White luminaire
Voltage Range	12 VDC constant current

Thermal

Ambient Operating Temp	0°C to 40°C (32°F to 104°F)
Fan (Controllable)	Fanless, convection cooled luminaire
BTUs/Hour	24.57

Physical

Materials	Die-cast aluminum and cold-rolled steel
Color Options	Luminaire available in Black. Trim plates available in white, black, primed, and custom color. Please contact ETC regarding custom colors.
Mounting Options	-Retro fit mounting in ceilings of 0.5 mm to 32 mm -New install ceiling bracket (optional accessory) -Surface Cylinder mounting (optional accessory) -Pendant mounting (optional accessory)
IP Rating	IP-20, suitable for damp locations
IC Rated	No
Vibration Testing	TBD
Salt Fog Testing	TBD
Weight	Product weight: 0.23 kg (0.50 lb) Shipping weight: 0.68 kg (1.50 lb)
Included Accessories	Trim plate (when selected)
Maximum Fixture Rotation	Infinite during fixture positioning
Maximum Fixture Tilt	30° (15° maximum with curve trim plate)
Lockable Tilt/Rotate	Yes - via torx #8 screw on room side of luminaire

Warranty

Full Fixture	5 years
LED Array	10 years

Regulatory & Compliance

Regulatory Standards	UL 2108/CSA C22.2 No. 250.2, Low Voltage Lighting System UL 1598/UL1598A Recess Luminaires, Marine grade Plenum Rated to UL 2043/CAN/ULC S142 Meets requirements for Emergency Lighting and Power Equipment when paired with a UL924 driver. CE Compliant IEC EN 60598-1 Luminaires IEC EN 60598-2-2 Recessed luminaires IEC EN 60598-2-22 Emergency Lighting Certified by Lloyd's Registry

PRODUCT SPECIFICATIONS NAVIS 50 FADE TO WARM

Source

LED Details	Nichia
Max Delivered Lumens	523 w/ 60° TIR lens
Efficacy (Lumens/Watt)	62
L70 Rating (Hours to 70% Output)	55,000

Color

Color Temperature	3000 K shifting to 1800 K while dimming
Color Features	Warm trim allows configuration of Fade to Warm functionality

Optical

Distribution Beam Angles	15° / 25° / 40° / 60°
CRI	>90
TM-30-18 Data	Refer to charts on page 5
Photometry Data	Refer to charts on page 5

LED Driver

Approved Drivers	F-Drive RX Output Card - Fade to Warm 8 Model Number: FD-RX-OC-FTW-8
Luminaire Input Type	RJ45 in and thru connector Minimum required conductor gauge 23 AWG / 0.25 mm²
Maximum Navis 50 FTW per Approved Driver	FD-RX-OC-FTW-8 : eight (8) Navis 50 FTW FD-SBOX-R expands this to three (3) Luminaires per channel (controlled together) (max 24 luminaires)
Refresh Rate	1500 Hz
Dimming	Smooth dimming to 0% intensity
Control	Control via F-Drive RX
Configuration	Yes, via ETC Concert
Complete Driver Data	https://www.etcconnect.com/Products/Power-Controls/LED-Drivers/F-Drive/Features.aspx

Electrical

Luminaire Operating Current	700 mA
Wattage (Typical)	8.4 W per Navis 50 Fade to Warm luminaire
Voltage Range	12 VDC constant current

Thermal

Ambient Operating Temp	0°C to 40°C (32°F to 104°F)
Fan (Controllable)	Fanless, convection cooled luminaire
BTUs/Hour	28.66

Physical

Materials	Die-cast aluminum and cold-rolled steel
Color Options	Luminaire available in Black. Trim plates available in white, black, primed, and custom. Please contact ETC regarding custom colors.
Mounting Options	-Retro fit mounting in ceilings of 0.5 mm to 32 mm -New install ceiling bracket (optional accessory) -Surface Cylinder mounting (optional accessory) -Pendant mounting (optional accessory)
IP Rating	IP-20, suitable for damp locations
IC Rated	No
Vibration Testing	TBD
Salt Fog Testing	TBD
Weight	Product weight: 0.23 kg (0.50 lb) Shipping weight: 0.68 kg (1.50 lb)
Included Accessories	Trim plate (when selected)
Maximum Fixture Rotation	Infinite during fixture positioning
Maximum Fixture Tilt	30° (15° max with curve trim plate)
Lockable Tilt/Rotate	Yes - via torx #8 screw on room side of luminaire

Warranty

Full Fixture	5 years
LED Array	10 years

Regulatory & Compliance

Regulatory Standards	UL 2108/CSA C22.2 No. 250.2, Low Voltage Lighting System UL 1598/UL1598A Recess Luminaires, Marine grade Plenum Rated to UL 2043/CAN/ULC S142 Meets requirements for Emergency Lighting and Power Equipment when paired with a UL924 driver. CE Compliant IEC EN 60598-1 Luminaires IEC EN 60598-2-2 Recessed luminaires IEC EN 60598-2-22 Emergency Lighting Certified by Lloyd's Registry

OPTICAL ACCESSORIES

| CLEAR | FROSTED | HEX LOUVER | LINEAR | SOLITE |

Model	Optical Accessories
ARCNA-050-SO-CL1	Clear Lens
ARCNA-050-SO-FL1	Frosted Lens
ARCNA-050-SO-LS1	Linear Spread
ARCNA-050-SO-SG1	Solite Glass
ARCNA-050-OA-HL1B	Hex Louver Black
ARCNA-050-OA-FRB	Finishing Ring Black
ARCNA-050-OA-FRW	Finishing Ring White

Note: Up to two optical accessories can be used simultaneously.

TRIM PLATE ADDITIONAL ACCESSORIES

| STANDARD | WALL WASH | | CURVE | PINHOLE | OFF-SET SLOT |

Model	Trim Plate	Color
ARCNA-050-OA	S - Standard WW - Wall Wash C - Curve P - Pinhole O - Off-set Slot	B - Black W - White P - Primed
ARCNA-050-OA		

Note: Each luminaire comes with a trim ring as specified in the model number. Model numbers listed here are for extra or spare trim rings only.

PHOTOMETRY

Lumen Table

COLOR TEMP	LENS TYPE	DELIVERED LUMENS	MAX CANDELA	CRI	TM-30-18 RF	TM-30-18 RG
2700 K	40°	517	889	>90	>91	97
3000 K	40°	565	971	>90	>90	97
3500 K	40°	568	977	>90	>91	100
4000 K	40°	576	1027	>90	>91	98
5000 K	40°	622	1070	>90	>91	101
3000 K FTW	40°	480	826	>90	>92	102

Note: The above table is reported using a Navis 50 with 40° lens, standard trim plate, and no secondary optics.

IES light files are available for all beam angles of ArcSystem Navis at etcconnect.com.

Full photometry and color information for the ArcSystem Navis family is available in the ArcSystem Navis Photometry and Color Info Guide.

DRIVER COMPATIBILITY

Fixture Type	Compatibile Drivers	Luminaires per Driver	Model Number
Navis 50 Fixed White	F-Drive RX Output Card - Constant Current 8	8 from two cable runs, expandable to 24 with F-Drive S-Box	FD-RX-OC-CC8
Navis 50 Fade to Warm	F-Drive RX Fade To Warm 8 Output Card	8 from two cable runs, expandable to 24 with F-Drive S-Box	FD-RX-OC-FTW8

PHYSICAL

Navis 50 Dimensions

Model	Height		Width		Depth	
	mm	in	mm	in	mm	in
Navis 50 White/FTW	71	2.78	100	3.9	100	3.9
Navis 50 FTW	71	2.78	100	3.9	100	3.9

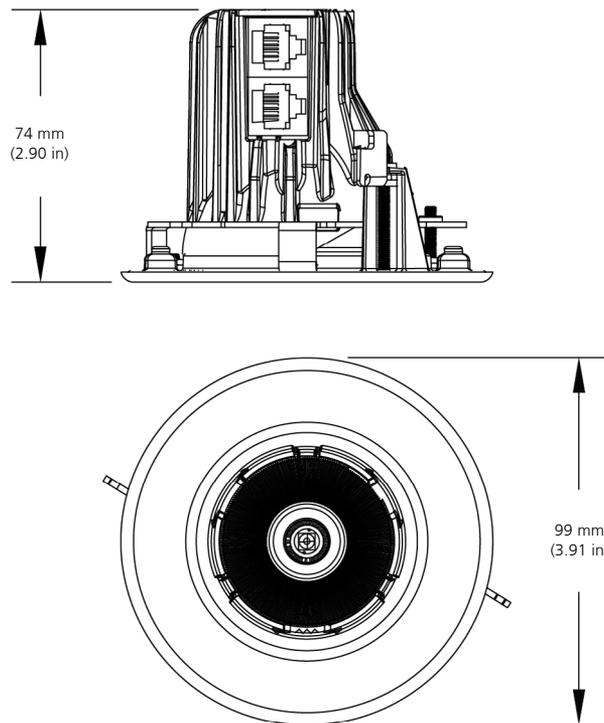Recommended hole cut-out: 90 mm / (3.54 in)

All versions of Navis 50 not IC rated and require 75 mm (3 in) clearance between luminaire and insulation.

Navis 50 Weights

Model	Weight†		Shipping Weight	
	kg	lb	kg	lb
Navis 50 Fixed White	0.23	0.5	0.68	1.5
Navis 50 FTW	0.23	0.5	0.68	1.5

†When fitted with standard trim ring and primary optic only

Navis 50 Recessed Luminaire

74 mm
(2.90 in)

99 mm
(3.91 in)

etcconnect.com