FLUXWERX

SPECIFICATION DATA

INBOX 2x2 | 2-SIDED OPTICS (NB222)

100% Dn

CATALOG #

PROJECT

NOTES

PERFORMANCE FOCUS

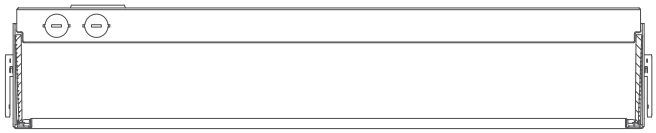
80 CRI 4000 K (NB222x40)

	Energy (W)	Light (lm)	Efficacy (lm/W)
A	**23 W**	2550	110
B	**29 W**	3100	108
C	**38 W**	4000	104

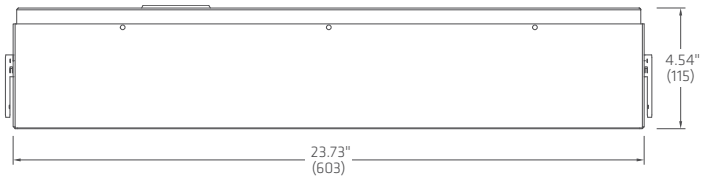
Color Matching (SDCM)	Lumen Maintenance (hr) L90 per TM21	L70 Estimate
< 2	> 60,000	> 200,000

Nominal values, refer to back pages for full performance data.

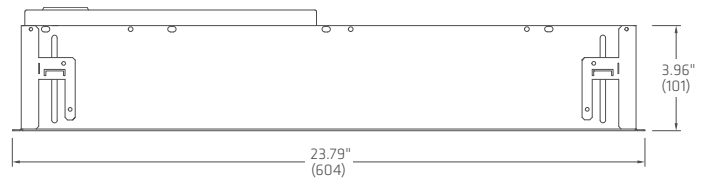
CROSS SECTION



DIMENSIONS



FRONT VIEW



SIDE VIEW

FEATURES

- Minimalist architectural aesthetic seems to disappear into the plenum.
- 2-sided or 4-sided Anidolic optics generate a visually comfortable, precisely controlled light distribution.
- Up to 12' x 12' spacing, delivering over 40 fc at less than 0.4 W/ft^2.
- Available in a variety of standard sizes (2×2, 1×4 & 2×4), as well as exclusive 1×1 & 1×2 versions as an alternative to downlights.
- Suitable for both T-Grid and drywall ceilings, using optional Trim or Trimless flange kits.
- Dynamic White (2700–6500 K) enabled 2×2 (4-sided) version.

UL CERTIFIED

5 YEAR WARRANTY

FLUXWERX®

SPECIFICATION DATA

INBOX 2 x 2 | 2-SIDED OPTICS (NB222)

ORDER GUIDE

1	2	3	4	5	6	OPTIONS	CONTROLS
NB2	**22**						

1 FAMILY	2 SIZE	3 ENERGY [1]	4 CRI-CCT	5 DRIVER
NB2 Inbox 2-sided optics	**12** 1 x 2 **14** 1 x 4 ▸**22** 2 x 2 **24** 2 x 4	**A** 23 W **B** 29 W **C** 38 W **D** 47 W [2]	**30** 80 CRI 3000 K **35** 80 CRI 3500 K **40** 80 CRI 4000 K **93** 90 CRI 3000 K **90** 90 CRI 3500 K **94** 90 CRI 4000 K	**F1** Non-Dim **F2** 0–10 V Dim 3% **E1** eldoLED ECO 0–10 V Dim 1% **E2** eldoLED SOLO 0–10 V Dim 0.1% **E3** eldoLED ECO DALI Dim 1% **E4** eldoLED SOLO DALI Dim 0.1% **L1** Lutron Hi-Lume 1% EcoSystem (LDE1) **L2** Lutron Hi-Lume 1% 2-Wire 120 V (LTEA)

[1] Nominal input power.
Add 4 W for 347 V with E1-4/L1.
[2] 1 x 4 | 2 x 4 | 2 x 2 (4-sided) only.

6 VOLTAGE	OPTIONS [4]	CONTROLS	
M 120–277 V **3** 347 V [3]	**B** Battery Pack **C** Chicago Plenum **F** 6' Flex Whip **H** Emergency Switching (GTD or Controller) **K1** Drywall Flange Kit – Trim **K2** Drywall Flange Kit – Trimless	**RE1** Remote Enlighted Smart Sensor **VN1** Acuity nLight Converter	

[3] 347 V Driver for F1/F2, 347 V Transformer & Driver for E1-4/L1.

[4] BP & GTD available for 120–277 V.

FLUXWERX

SPECIFICATION DATA

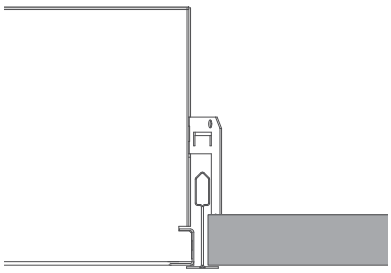
INBOX 2 x 2 | 2-SIDED OPTICS (NB222)

PRODUCT DETAILS

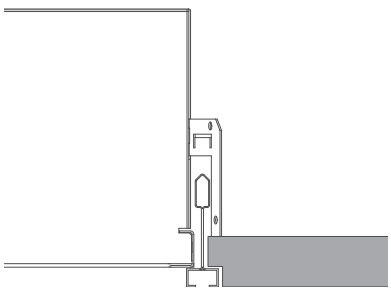
LINEAR ANIDOLIC OPTIC

CEILING INTEGRATION

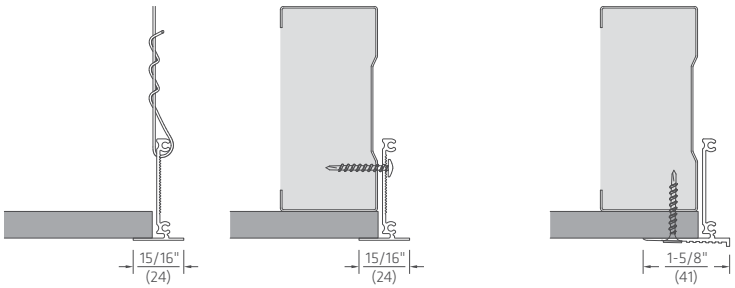
FLAT GRID



SLOT GRID



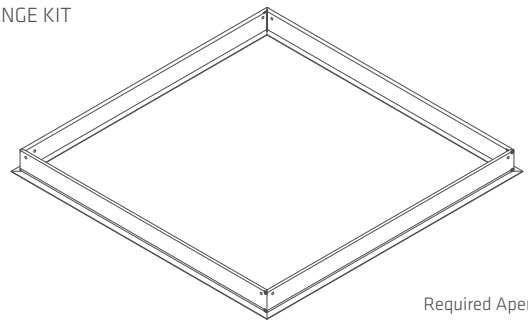
DRYWALL



Trim Flange Kit

Trimless (mud-in) Flange Kit

DRYWALL FLANGE KIT



Required Aperture: 24.5" x 24.5" (622 x 622)

FLUXWERX

SPECIFICATION DATA

INBOX 2 x 2 | 2-SIDED OPTICS (NB222)

NOTES

CONSTRUCTION

- Formed 22 ga. steel housing
- Quick wire access plate and integral seismic restraint tabs/tie-offs
- Optional drywall trim or trimless (mud-in) flange kits
- High reflectance diffuse white textured powdercoat

OPTICAL

- Anidolic optical structures with linear light extraction elements
- Precision molded high transmittance clear acrylic lenses
- Long life LED system designed for typical TM21 lumen maintenance ≥ L90 @ 60,000 h
- Available in 3000 K, 3500 K, 4000 K with CRI ≥ 80 and R9 ≥ 0, or CRI ≥ 90 and R9 ≥ 50, all with color accurate binning ≤ 2 SDCM

ELECTRICAL

- Integral high efficiency drivers for 50–60 Hz, 120–277 V or 347 V
- Power Factor > 0.90
- Total Harmonic Distortion < 20%
- Dim level: Standard 3%, optional 1% or 0.1%
- Optional Battery Pack delivers 10 W Class 2 rated output for 90 min. Use 12 W input energy to estimate emergency flux, typically 1150–1750 lm (@ 100–150 lm/W).
- Optional GTD (Generator Transfer Switch), 120–277 V, disables 0–10 V control during emergency for full light output
- Optional flex whip: 6' prewired
- Surge Protection: Meets ANSI C82.11 spec and ANSI/IEEE C62.41
- Inrush Current: Meets NEMA 410

ENVIRONMENTAL & CARE

- Designed for use in dry or damp indoor locations with ambient temperatures of 0–30° C (32–86° F)
- Not suitable for natatorium environments, e.g. swimming pools, hot tubs and saunas. The luminaire may be damaged by chemicals such as chlorine, solvents, ammonia, alcohol or sulfur in the area of operation or in cleaning products. Damage from contaminants is not covered under warranty.
- Clean only by wiping with a slightly water-damp, soft, clean cloth.

WEIGHT

- Maximum 15 lbs (6.5 kg) with standard driver
- Maximum 19 lbs (8.6 kg) with battery pack or 347 V transformer

WARRANTY

- 5 year limited warranty on all components and workmanship

INDEPENDENT TESTING

- IESNA LM79
- IESNA LM80 (LED @ 10,000 h)

APPROVALS

- UL Listed (USA + Canada)
- CCEA Chicago Plenum
- IC Rated

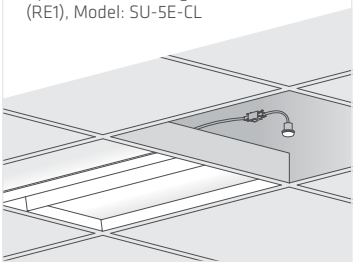
Protected by one or more US patents: 10215344, 10830415, 9733411, 9823406, D848047.

CONTROLS & SENSORS

Fluxwerx products are designed for simple integration with a wide range of sensors, lighting controls and building management systems. Many projects incorporate occupancy sensing, daylight harvesting, individual or central adjustment of light levels and luminaire or space monitoring in order to save energy, reduce costs and maximize occupant comfort. Fluxwerx offers a number of standard driver and controller options to support various wired and wireless network protocols.

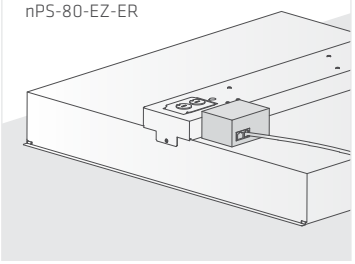
enlighted

Enlighted wireless, networked smart sensor integrates occupancy sensing, daylight harvesting, energy usage, temperature and light level control.
Option: Remote Enlighted sensor (RE1), Model: SU-5E-CL



nLIGHT

nLight wired, 2-way network supports luminaire light level control as well as occupancy and daylight sensors.
Option: Acuity nLight Converter (VN1), Model: nPS-80-EZ or nPS-80-EZ-ER



eldoLED

EldoLED drivers support common wired protocols, 0–10 V and DALI. They also provide access to finer dimming control, dynamic white and Bluetooth low-energy (BLE) wireless.
Options: ECO 1% (E1), SOLO 0.1% (E2)

LUTRON

Lutron EcoSystem network protocol enables on/off, dimming, occupancy sensing and daylight harvesting.
Option: Hi-Lume 1% EcoSystem (L1), Model: LDE1

legrand® Wattstopper® Pass & Seymour®
LEVITON® EATON® DISTECH CONTROLS™
CRESTRON®

FLUXWERX®

SPECIFICATION DATA

INBOX 2 x 2 | 2-SIDED OPTICS (NB222)

FAMILY PERFORMANCE

80 CRI

COLOR	4000 K	3500 K	3000 K
Color Rendering (CRI)	83	83	82
Red Index (R9)	10	10	4
Color Matching (SDCM)		< 2	

LUMEN MAINTENANCE	A 23 W	B 29 W	C 38 W
L90 per TM-21 (hr)		> 60,000	
L70 Estimate (hr)		> 200,000	

BATTERY OUTPUT – 80 CRI	4000 K	3500 K	3000 K
10 W BP Light (Est. lm)	1320	1300	1280

90 CRI

COLOR	4000 K	3500 K	3000 K
Color Rendering (CRI)	92	92	92
Red Index (R9)	63	63	59
Color Matching (SDCM)		< 2	

90 CRI OUTPUT	4000 K	3500 K	3000 K
90 CRI Multiplier	0.80	0.80	0.80

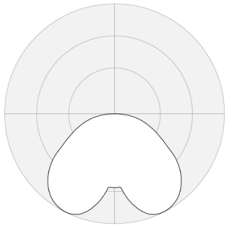
For Light (lm), Intensity (Cd) or Luminance (Cd/m²) in 90 CRI, multiply 80 CRI values by the 90 CRI Multiplier for chosen CCT.

VERSION PERFORMANCE

80 CRI, 100% Down

CONFIGURATION			LIGHT & POWER			VISUAL COMFORT	
CCT	ENERGY (NOM.)		LIGHT (lm)	POWER (W)	EFFICACY (lm/W)	MAX INTENSITY 45–90° (Cd)	MAX LUMINANCE 45–90° (Cd/m²)
NB222x40 4000 K	A	23 W	2541	23.04	110.3	684	2,953
	B	29 W	3098	28.80	107.6	834	3,600
	C	38 W	3997	38.30	104.4	1,076	4,645
NB222x35 3500 K	A	23 W	2499	23.04	108.4	673	2,904
	B	29 W	3013	28.80	104.6	811	3,501
	C	38 W	3888	38.30	101.5	1,047	4,517
NB222x30 3000 K	A	23 W	2456	22.97	106.9	661	2,854
	B	29 W	2928	28.80	101.7	789	3,403
	C	38 W	3778	37.96	99.5	1,017	4,390

LIGHT DISTRIBUTION



Inbox Recessed
100% Dn

Photometry Reports: 11660485.15 (23 W), 11660485.16 (29 W), 11660485.18 (38 W)

Integrating Sphere and Photometric results at 4000K by an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011.
Results for 3000K, 3500K scaled based on integrating sphere results at 47W (D) and 2x2 4-sided integrated sphere results for lumen outputs A, B, C. Candlepower Distribution scaled per total lumens of Integrating Sphere results.