FLUXWERX

SPECIFICATION DATA

INBOX 2x2 | 4-SIDED OPTICS (NB122)

100% Dn

CATALOG #

PROJECT

NOTES

PERFORMANCE FOCUS

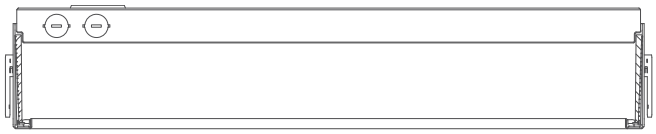
80 CRI 4000 K (NB122x40)

	Energy (W)	Light (lm)	Efficacy (lm/W)	DLC
A	**23 W**	2750	119	QUALIFIED
B	**29 W**	3300	117	
C	**38 W**	4300	115	
D	**47 W**	5100	111	

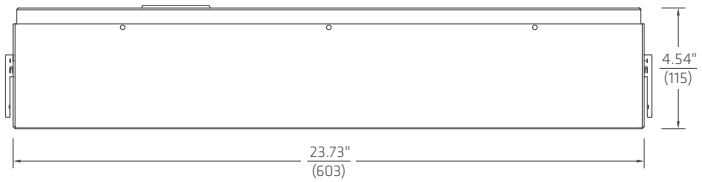
Color Matching (SDCM)	Lumen Maintenance (hr) L90 per TM21	L70 Estimate
< 2	> 60,000	> 200,000

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

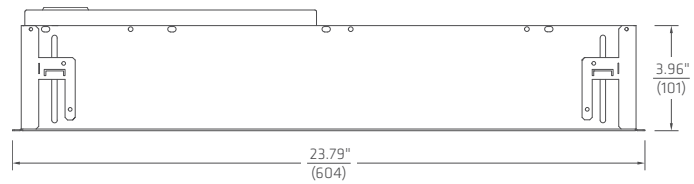
CROSS SECTION



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 (2700–6500K) enabled 2×2 (4-sided) version.

FLUXWERX®

SPECIFICATION DATA

INBOX 2 x 2 | 4-SIDED OPTICS (NB122)

ORDER GUIDE

1	2	3	4	5	6	OPTIONS	CONTROLS
NB1	**22**						

1 FAMILY

NB1 Inbox
4-sided optics

2 SIZE

▸**22** 2 x 2

3 ENERGY [1]

A 23 W
B 29 W
C 38 W
D 47 W

[1] Nominal input power. Add 4 W for 347 V with E1-4/L1/W1.

4 CRI-CCT

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
W2 80 CRI 2700–6500 K [4]

5 DRIVER

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)
W1 eldoLED DUAL DALI Dynamic White 0.1% [4]

6 VOLTAGE

M 120–277 V
3 347 V [2]

[2] 347 V Driver for F1/F2, 347 V Transformer & Driver for E1-4/L1/W1.

OPTIONS [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

[3] BP & GTD available for 120–277 V.

CONTROLS

SENSORS & CONTROLLERS

RE1 Remote Enlighted Smart Sensor
VN1 Acuity nLight Converter

DYNAMIC WHITE [4]

WF1 Fluxwerx Wall Control

WN1 Acuity nLight
WC1 0–10 V Linear Dim
WC2 0–10 V Log Dim
WD1 DALI Linear Dim
WD2 DALI Inverse Log Dim

[4] Available in 2 x 2 (4-sided) only. Refer to later section for DW spec & performance details.

FLUXWERX

SPECIFICATION DATA

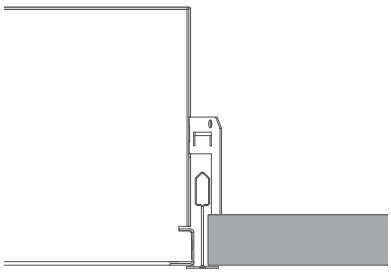
INBOX 2x2 | 4-SIDED OPTICS (NB122)

PRODUCT DETAILS

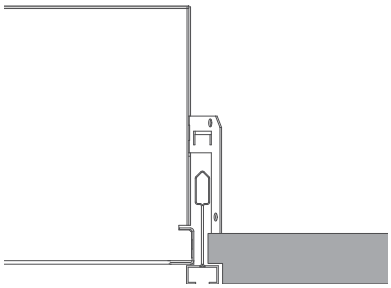
LINEAR ANIDOLIC OPTIC

CEILING INTEGRATION

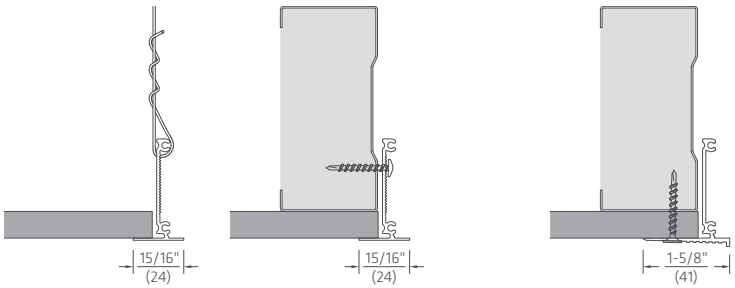
FLAT GRID



SLOT GRID



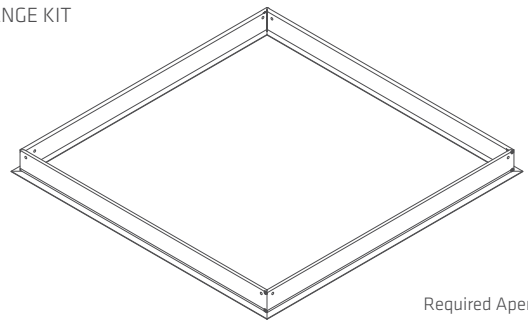
DRYWALL



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 2x2 | 4-SIDED OPTICS (NB122)

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 or 2700–6500 K with CRI ≥ 80 and R9 ≥ 0. Also static white with 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 17 lbs (7.6 kg) with standard driver
- Maximum 21 lbs (9.5 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

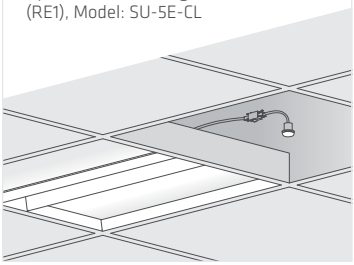
- UL Listed (USA + Canada)
- CCEA Chicago Plenum
- IC Rated
- DesignLights Consortium®
  Most options DLC qualified, please check catalog number in the QPL list (www.designlights.org/QPL)

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.

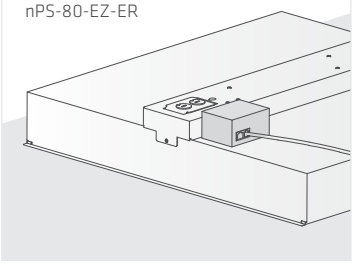
enlighted™

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 2x2 | 4-SIDED OPTICS (NB122)

FAMILY PERFORMANCE

80 CRI

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

LUMEN MAINTENANCE	A 23 W	B 29 W	C 38 W	D 47 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)	1430	1380	1350

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

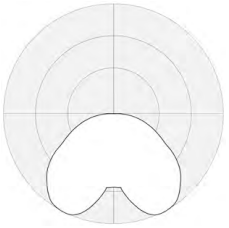
For Light (lm), Intensity (Cd) or Luminance (Cd/m²) in 90 CRI, multiply 80 CRI values by the 90 CRI Multiplier for chosen CCT.

VERSION PERFORMANCE

80 CRI, 100% Down

CONFIGURATION			LIGHT & POWER				VISUAL COMFORT	
CCT	ENERGY (NOM.)		LIGHT (lm)	POWER (W)	EFFICACY (lm/W)	DLC	MAX INTENSITY 45–90° (Cd)	MAX LUMINANCE 45–90° (Cd/m²)
NB122x40 4000 K	A	23 W	2745	23.03	119.2	QUALIFIED	739	3,332
	B	29 W	3334	28.39	117.4		897	4,046
	C	38 W	4290	37.43	114.6		1,154	5,207
	D	47 W	5130	46.32	110.8		1,380	6,226
NB122x35 3500 K	A	23 W	2655	23.03	115.3	QUALIFIED	714	3,223
	B	29 W	3281	28.39	115.6		883	3,982
	C	38 W	4221	37.43	112.8		1,136	5,124
	D	47 W	5048	46.32	109.0		1,358	6,127
NB122x30 3000 K	A	23 W	2565	22.75	112.8	QUALIFIED	690	3,113
	B	29 W	3227	28.39	113.7		868	3,917
	C	38 W	4153	37.43	110.9		1,117	5,040
	D	47 W	4966	48.28	102.9		1,336	6,027

LIGHT DISTRIBUTION



Inbox Recessed
100% Dn

Photometry Reports: 11660485.02 (23 W), 11660485.03 (29 W), 11660485.04 (38 W), 11660485.07 (47 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). Candlepower Distribution scaled per total lumens of Integrating Sphere results.

FLUXWERX®

SPECIFICATION DATA

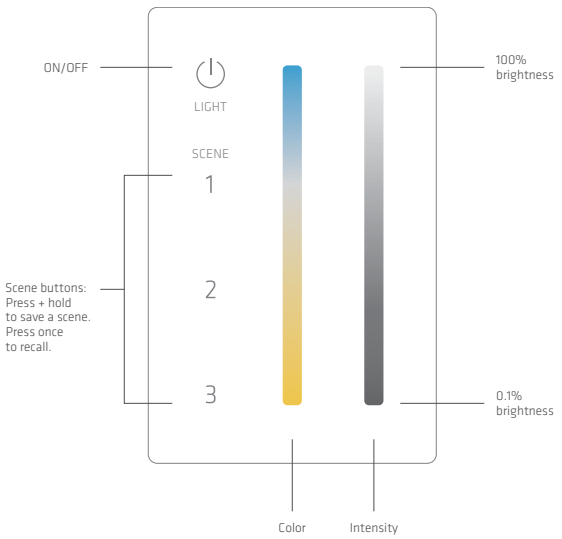
INBOX 2x2 | 4-SIDED OPTICS (NB122)

DYNAMIC WHITE CONTROL OPTIONS

CONTROLS PROTOCOL	CONTROL CURVE	CONTROLS BRAND	DW CODE	CONTROLLER COMPONENTS* (ordered separately)	
DALI	**Linear**	**FLUXWERX**	**WF1**	**Fluxwerx Wall Controller**	
		e.g. Lutron, Crestron	WD1	Controller supplied by others	
	Inverse Log	e.g. Distech, Helvar	WD2		
nLight	**Linear**	Acuity	WN1	Controller supplied by others	Factory installed nLight converter
0–10 V	**Linear**	e.g. Leviton, Watt Stopper, Crestron, Pass & Seymour	WC1		Fluxwerx 0–10 V converter per zone
	Log	e.g. Lutron, Cooper Controls	WC2		

** See Dynamic White controller data sheet*

FLUXWERX WALL CONTROLLER

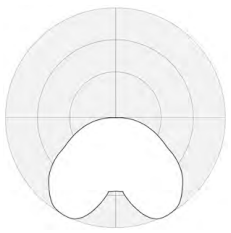


DYNAMIC WHITE PERFORMANCE DATA

80 CRI, 100% Down (NB122xW2)

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)
6500 K	**A**	**23 W**	2680	23.45	114.3		
	B	**29 W**	3230	29.41	109.8		
	C	**38 W**	4190	39.01	107.4		
	D	**47 W**	5060	48.96	103.4		
5000 K	**A**	**23 W**	2630	21.86	120.3		
	B	**29 W**	3170	27.22	116.5		
	C	**38 W**	4100	36.44	112.5		
	D	**47 W**	4960	45.95	107.9		
4000 K	**A**	**23 W**	2620	21.76	120.4		
	B	**29 W**	3160	27.09	116.6		
	C	**38 W**	4090	36.27	112.8		
	D	**47 W**	4940	45.74	108.0		
3500 K	**A**	**23 W**	2580	22.13	116.6	694	3,131
	B	**29 W**	3120	27.55	113.3	839	3,787
	C	**38 W**	4030	36.88	109.3	1,084	4,891
	D	**47 W**	4870	46.51	104.7	1,310	5,911
3000 K	**A**	**23 W**	2520	22.91	110.0		
	B	**29 W**	3030	28.53	106.2		
	C	**38 W**	3930	38.19	102.9		
	D	**47 W**	4740	48.16	98.4		
2700 K	**A**	**23 W**	2500	23.75	105.3	673	3,034
	B	**29 W**	3010	29.79	101.0	810	3,653
	C	**38 W**	3900	39.51	98.7	1,049	4,733
	D	**47 W**	4710	49.59	95.0	1,267	5,717

LIGHT DISTRIBUTION



Inbox Recessed
100% Dn

Photometry Reports: Fluxwerx

Integrating Sphere and Photometric results scaled from NB122 and PF1xA Dynamic White results from an independent accredited testing laboratory per IES LM-79-2008 and ANSI C78.377-2011. Candlepower Distribution scaled per total lumens of Integrating Sphere results.