

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- Low profile, full distribution back-lit troffer, ideal for crowded ceilings
- Expansive lumen output range
- ISO4 standard; suitable for ISO Class 4-9 positive and negative pressure clean rooms
- Integrated control options to meet code compliance and drive energy efficiency
- Optional IP65 rating for dust-tight and wet location applications
- Optional IK10 impact resistance rating for demanding environments
- Multiple lens options including Pattern A12, A19 and Frosted Polycarbonate



CONTROLS TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Aluminum lens frame has a matte white finish standard, matte black, antimicrobial white and silver finish options available
- Luminaire housing is die formed code-gauge steel
- Low profile design is ideal for shallow plenum applications

OPTICS

- Acrylic micro-optics over each LED provide edge to edge illumination without pixelation or bright spots
- Frosted textured lens provides smooth surface brightness

INSTALLATION

- An access plate is furnished with each luminaire for fast wiring
- Luminaire fits recessed exposed grid ceilings (G); four integral T-bar clips with holes for seismic wires are standard
- Available with Slot Grid (SG) frame for flush mounting in Slot Grid applications
- For surface mount applications use surface mount kit accessories
- For plaster or sheet rock installations, use flange kit accessories
- For cable mount applications use surface mount kit accessory and cable kit accessor

ELECTRICAL

- 60,000 hour LEDs at L80 for reduced maintenance
- 80 CRI standard or optional 90 CRI for color sensitive applications

CONTROLS

- NX Lighting Controls provides options for standalone and networked integrated sensor with wired or wireless connectivity for NX system deployments
- NX Connect is a standalone wireless deployment for room based applications using wireless enabled and battery operated devices.

CERTIFICATIONS

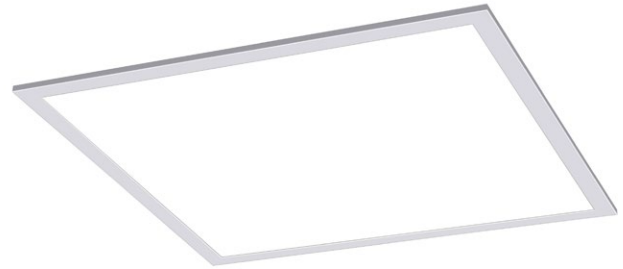
- All luminaires are built to UL 1598 standards and bear appropriate cULus labels
- Damp location label standard, optional IP65 rating available
- Adheres to LM79, LM80, and TM21 industry standards for photometrics and lifetime calculations
- IC label is standard for recessed products

CERTIFICATIONS (CONTINUED)

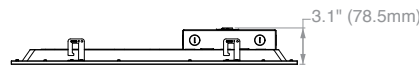
- CSA certified to UL 924 standards with battery pack or DTS (Dimming Bypass Module) options
- UL Sanitation Certified to NSF 2 Food Equipment standard for non-food zones
- Tested in accordance with ISO 14644-1; suitable for ISO Class 4-9 positive and negative pressure clean rooms
- DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Emergency battery options are California Energy Commission (CEC) Title 20 Compliant
- Suitable for ambient temperatures from -25°C to 25°C, 0°C to 25°C when integrated batteries are selected
- BAA Option: This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9). See Buy America(n) Solutions
- FCC Part 15b (FCC Communications Interference) Compliant
- CCEA approved option (CP) available

WARRANTY

- 5 year warranty



SERVICE PROGRAMS



Typical Dimensions and Weights	
Width	23.74" / 603 mm
Length	23.74" / 603 mm
Height	3.1" / 78.5 mm
Weight*	6.67lbs / 3.03kg

*Base configurations; weight varies by option

ORDERING GUIDE

Example: NBT22-40L044G-FP-ED1U

CATALOG # _____

NBT											
Model	Size	CRI	Color Temp	Nominal Lumens ¹	Ceiling	Shielding	Driver	Voltage			
NBT Back-lit Troffer	22 2x2	Blank >80 9 >90	30 3000 K 35 3500 K 40 4000 K 50 5000 K	L021 2100 Lumens L026 2600 Lumens L031 3100 Lumens L036 3600 Lumens L044 4400 Lumens L054 5400 Lumens L062 6200 Lumens	G Standard or Silhouette Grid ² SG Slot Grid	SF Smooth Frosted A12F Pattern 12 Acrylic Lens A12125F Pattern 12 Acrylic Lens, 0.125" Nominal A19F Pattern 19 Frosted Acrylic, 0.156" Nominal FP Frosted Polycarbonate	ED1 0–10V 1% Dimming EDD 0–10V Dim-to-Dark ESD Step Dimming ³ LUTH Hi-Lume 1% EcoSystem LED driver ^{3,4} DALIP Powered by DALI ³	U 120V–277V 347 347V			

Options	
ELL14	Emergency Battery Pack Installed, 1400 Lumens ^{3,5,6,7,8}
ELL14H2	1400 Lumen Emer Pack, 2 Hour Run Time ^{3,5,6,7,8,9}
ELL14ST	Emergency Battery Back, 1400 Lumens, Self Test ^{3,5,7}
DTS	Dimming Bypass Module ^{3,6,7,8,10,11}
CP	Chicago Plenum ¹²
C388	3-wire flex
C488	4-wire flex
C588	5-wire flex
GLR	Fast Blow Fuse ^{3,13}
BAA	Buy American Act (FAR 52.225-9)
IK10	IK10 rated ^{14,15,16}
IP65	IP65 Certified ^{14,16,17}
Color Options (standard white w/ no selection)	
AM	White Antimicrobial
MB	Black
SLV	Silver

Controls Options ¹⁸	
NX Lighting Controls	
NX Wired	
NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor ¹⁹
NXESM	NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming ¹⁹
NX Wireless	
NXWSM	NX Networked Wireless Enabled Integral NXSMP2-SMI/ LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming ¹⁹
NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ¹⁹
NX Connect	
NXCS	NX Connect NXC-WIZ20 Wireless Indoor Occupancy and Photocell Sensor ^{3,20,21,22}
Other Lighting Controls	
Networked Wireless	
LVR	Lutron Vive Integrated Fixture Control DFCSJ-OEM-RF ^{3,22,23}
LVS	Lutron Vive Integrated Fixture Control DFCSJ-OEM-OCC ^{3,22,23}
AWNS	Lutron Athena Sensor ^{3,22}
AWNR	Lutron Athena Radio ^{3,22}

Accessories

- FK22** Flange Kit
- DSMK22** Surface Mount Kit
- CFPCM36YSC5F-KIT** 36" Cable Mount Kit for 1' or 2' wide Cable Mount fixtures, 5-wire^{3,24}

- Notes:**
- Refer to performance tables for exact values and available lumen outputs for fixture size
 - For drywall, order G with flange kit accessory
 - Not available with 347V
 - Not available with L062 lumen package
 - To determine lumen output in emergency mode, multiply the battery pack wattage by the fixture lumens per watt (LPW)
 - Not available with L054 and L062 lumen packages
 - For compatibility with Dual-Lite Litegear Inverters, contact lighting representative
 - L036 and higher lumen packages are not available with thru-wiring.
 - Not available for use in Canada
 - Not available with ESD or LUTH driver options
 - For emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. Only available with 0-10V drivers. See wiring diagram.
 - Not available with NXE, NXESM and NXW control options
 - Not available with ESD driver option
 - Control Options limited to NXW, NXE or AWNR only
 - Only available with G ceiling type and FP lens option
 - Not available with Emergency Battery Pack (ELL14 or ELL14H2) or DTS options
 - Only available with SF and FP lens choices

- All Controls**
- Minimum ambient temperature: 0°C (32°F)
- NX Lighting Controls**
- Available with ED1 driver option only
 - NX Connect devices can be configured using the NX Connect Mobile App, available in the Apple App Store
 - NX Connect devices are not compatible with NX Networked Wireless or Wired Options
- Other**
- Only available with DALIP driver option
 - Vive is a trademark of Lutron Electronics Co., Inc.
 - Use of DSMK22 is required for cable mounting applications

DELIVERED LUMENS

CRI	Model	CCT	Lumens	Input Watts	LPW
80 CRI	NBT22-L021	3000K	2122	16	132
		3500K	2125	16	132
		4000K	2215	16	137
		5000K	2215	16	137
80 CRI	NBT22-L026	3000K	2583	20	129
		3500K	2674	20	133
		4000K	2770	20	138
		5000K	2770	20	138
80 CRI	NBT22-L031	3000K	3212	25	128
		3500K	3325	25	135
		4000K	3445	25	138
		5000K	3445	25	138
80 CRI	NBT22-L036	3000K	3638	29	125
		3500K	3766	29	131
		4000K	3902	29	135
		5000K	3902	29	135
80 CRI	NBT22-L044	3000K	4406	36	122
		3500K	4561	36	128
		4000K	4725	36	131
		5000K	4725	36	131
80 CRI	NBT22-L054	3000K	5065	42	121
		3500K	5243	42	126
		4000K	5432	42	129
		5000K	5432	42	129
80 CRI	NBT22-L062	3000K	6399	52	123
		3500K	6340	52	122
		4000K	6727	53	129
		5000K	6727	53	129

CRI	Model	CCT	Lumens	Input Watts	LPW
90 CRI	NBT22-L021	3000K	1804	16	113
		3500K	1914	16	120
		4000K	1943	16	121
		5000K	1943	16	121
90 CRI	NBT22-L026	3000K	2229	20	111
		3500K	2365	20	118
		4000K	2401	20	119
		5000K	2401	20	119
90 CRI	NBT22-L031	3000K	2772	25	111
		3500K	2941	25	119
		4000K	2985	25	119
		5000K	2985	25	119
90 CRI	NBT22-L036	3000K	3140	29	108
		3500K	3331	29	116
		4000K	3381	29	117
		5000K	3381	29	117
90 CRI	NBT22-L044	3000K	3802	36	106
		3500K	4034	36	113
		4000K	4095	36	114
		5000K	4095	36	114
90 CRI	NBT22-L054	3000K	4371	42	104
		3500K	4637	42	110
		4000K	4707	42	112
		5000K	4707	42	112
90 CRI	NBT22-L062	3000K	5493	51	108
		3500K	5828	51	115
		4000K	5916	51	116
		5000K	5916	51	116

PROJECTED LUMEN MAINTENANCE

Calculation Method	Ambient Temp	25,000 hrs	50,000 hrs	60,000 hrs *
TM-21-11	25C/77F	0.92	0.85	0.84
TM-21-22	25C/77F	0.92	0.84	0.82

* Lumen maintenance values calculated per TM-21 using six times the LM-80 test time for the LED and in-situ thermal testing of the luminaire.



NX LIGHTING CONTROLS

Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
		Networkable	Grouping	Scheduling	Occupancy/Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming			
NX Wireless	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth® Programming, without Sensor	✓	✓	✓	-	-	✓	✓	✓		NXRM2-H
	NXWSM	NX Networked Wireless Enabled Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming	✓	✓	✓	✓	✓	✓	✓	✓		NXSMP2-SMI
NX Wired	NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor	✓	✓	✓	-	-	✓	✓	✓ ¹		NXDSP
	NXESM	NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming	✓	✓	✓	✓	✓	✓	✓	✓		NXDSP NXSMP2-SMI
NX Independent	NXCS	NX Connect NXC-WIZ20 Wireless Indoor Occupancy and Photocell Sensor	-	✓	-	✓	✓	✓	✓	✓ ²		NXC-WIZ20

- 1 Requires NXBTC, order separately.
- 2 Requires use of NX Connect App available for download from Apple app store.

DEFAULT SETTINGS

NX Wireless & Wired	Occupancy Sensor	Enabled
	Occupancy Sensor Sensitivity	7 Minutes
	Occupancy Sensor Timeout	15 Minutes
	Occupied Dim Level	100%
	Unoccupied Dim Level	0% (OFF)
	Daylight Sensor	Disabled
	Bluetooth	Enabled
	2.4GHz Wireless Mesh	Off
	Passcode	Enabled
	Factory Passcode: Curr3nt!	Enabled

NX Independent - NX Connect	Settling/Dwell Time	5 sec
	Hold Time	10 min
	Group Hold Time	10 min
	Grace Time	-
	Strategy	Auto ON/OFF
	Occupancy Sensitivity	5 (highest)
	Occupancy Indicator	ON
	Partial Off/Standby	0%
	Background Level	50%
	Task Level	100%
	Daylight Harvesting	-
	Low Ambient Output	250%
	High Ambient Output	OFF

CONTROLS TECHNICAL SUPPORT

1-800-888-8006 (7:00 am–7:00 pm est)

APP INFORMATION

NX Lighting Controls App



The NX Lighting Controls App is a free to use mobile application for programming both an NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enabled luminaires and program your NX system settings.



Android



Apple iOS

NX Connect App



The NX Connect mobile App is a free to use mobile application for programming a NX Connect System. The mobile App allows you to discover, configure and share your NX Connect system.



Apple iOS

NBT

2X2 TRANSITION™ BACK-LIT TROFFER

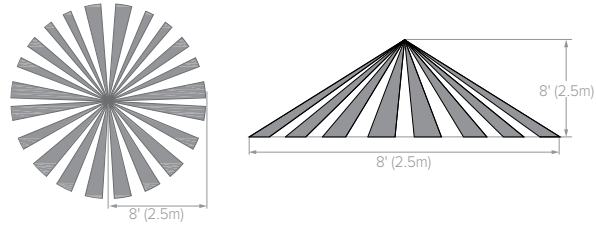
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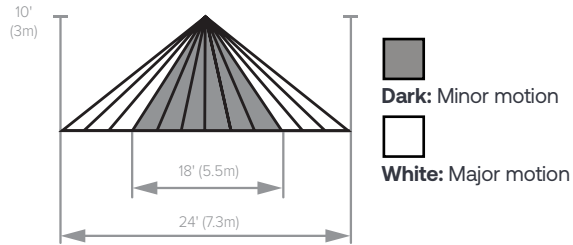
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COVERAGE PATTERNS

NXWSM/NXESM (NXSMP2-SMI SENSOR)



NXCS (NXC-WIZ20 SENSOR)



PIR sensor coverage tested as defined in NEMA WD7-2011

OTHER LIGHTING CONTROLS

Control Option Ordering Logic & Description		Control Option Functionality							Control Option Components			
		Networkable	Grouping	Scheduling	Occupancy/Motion	Daylight Harvesting	0-10V Dimming	On/Off Control			Bluetooth App Programming	
Other	LVR	The Vive integral fixture control is a radio frequency (RF) device that controls either Lutron EcoSystem or DALI drivers based on RF input from Pico remote controls, Radio Powr Savr wireless sensors, or Vive hubs. ¹	✓	✓	✓	-	-	-	✓	-		DFCSJ-OEM-RF
	LVS		✓	✓	✓	✓	✓	-	✓	-		DFCSJ-OEM-OCC
	AWNR	The Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system. ²	✓	✓	-	-	-	✓	✓	-		A-WN-D01-RF-WH
	AWNS		✓	✓	✓	✓	✓	✓	✓	-		A-WN-D01-OCC-WH

1 Lutron Vive Hub required to enable Networking, Grouping and Scheduling.
2 Lutron Athena Hub required to enable Networking, Grouping and Scheduling.

DIMENSIONS

