

**LED**



**INTERACTIVE MENU** 

- Ordering Guide
- Product Availability Tables
- Photometric Data
- Dimensional Data

**HUBBELL CONTROL SOLUTIONS**

- SpectraSync™ Overview
- SpectraSync Product Availability Tables
- NX™ SpectraSync Solution Guide
- NX In-Fixture Solution Guide

**EXTERNAL LINKS**

- NX Distributed Intelligence Brochure
- SpectraSync Brochure

**PROJECT INFORMATION**

Project Name \_\_\_\_\_

Type \_\_\_\_\_

Catalog No. \_\_\_\_\_

Date \_\_\_\_\_

**COMPATIBLE WITH:**



**FEATURES**

- High efficiency acrylic center lens features linear prisms for high performance without pixelation
- Appropriate for offices, schools, medical, and public spaces
- High performance reflector with matte white paint standard
- 60,000 hour LEDs at L80 (up to 150,000 projected life) for reduced maintenance
- 83 CRI standard or optional 90 CRI for color sensitive applications
- HE lumen packages available
- LED modules and electrical accessible from below
- Optional architecturally styled integration of daylight and occupancy sensor(s)
- QR code traceability
- Compatible with Dual-Lite inverters
- Optional SpectraSync™ offers three modes of tunable white solutions and integrates seamlessly into a variety of control systems
- NX Distributed Intelligence™ provides options for standalone and networked integrated sensor with wired or wireless connectivity for NX system deployments
- DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations - see [www.designlights.org](http://www.designlights.org)
- Five year warranty (Terms and Conditions apply)



**LCAT24**

**CONSTRUCTION**

Luminaire housing, reflectors and end caps are die formed code gauge cold rolled steel. High transmission extruded acrylic enclosed lens features linear prisms with custom frost for high efficacy without pixelation.

**SHIELDING**

Removable lens for easy access to LED module and electrical components.

**FINISH**

All reflective surfaces are finished after fabrication with unique formula high reflectivity matte white paint for soft, uniform indirect illumination.

**INSTALLATION**

An access plate is furnished with each luminaire for fast wiring access without the necessity to open the fixture or wireway.

**IC RATING**

IC label is standard for recessed products. Note that IC label is void if product is installed on site with a combination of both battery pack plus through wiring or for air return fixtures.

**CEILING COMPATIBILITY**

Luminaire fits recessed exposed Grid ceilings (G); four integral NEC compliant T-bar clips are standard. Can be placed in Slot Grid (SG) style ceiling with regress 3/8" above ceiling plane. A Flange Kit (FK) accessory is available for recessed hard ceiling applications. Surface Mount (SM) option allows placement below ceiling plane. Cable Mount (CM) option allows suspension below ceiling plane.

**CERTIFICATION**

All luminaires are built to UL1598 and 2108 standards, and bear appropriate CSA labels. Damp location label standard. Emergency-equipped fixtures labeled UL 924 and Dry Location unless specified. Adheres to LM79, LM80, and TM21 industry standards. DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at [www.designlights.org](http://www.designlights.org). NX is available in U.S., Canada and Mexico. For other locations consult factory.



**WARRANTY**

Five year warranty (Terms and Conditions apply).

**ORDERING INFORMATION**

EXAMPLE LCAT24-35MLG-ESDU

YOUR ORDER **LCAT24-** - - -

LCAT		24 -							
MODEL	SIZE	CRI	COLOR TEMPERATURE		LUMEN OUTPUT		CEILING TYPE		SHIELDING
LCAT LED Contemporary Architectural Troffer	24 2' x 4'	Blank >80 9 >90 <sup>1</sup>	30 3000K 35 3500K 40 4000K 50 5000K	2750T 2700K-5000K SpectraSync™ Tunable White <sup>2</sup> 2765T 2700K-6500K SpectraSync™ Tunable White <sup>2</sup>	XW Extra Low Watt XWHE Extra Low Watt High Efficacy VW Very Low Watt VWHE Very Low Watt High Efficacy MW Medium Low Watt MWHE Medium Low Watt High Efficacy LW Low Watt ML Medium Lumen HL High Lumen VL Very High Lumen <sup>21</sup> XL Extra High Lumen	G Grid Lay-in <sup>3</sup> SM Surface Mount <sup>4,19</sup> CM Cable Suspended Mount <sup>4,5</sup>	Blank Curve  R Rectangular 		

See Product Availability Table on following pages.

AIR FUNCTION	DRIVER	VOLTAGE	OPTIONS	CONTROL OPTIONS
Blank Static A Air Return Side Slots	E Fixed Output <sup>17</sup> ED 0-10V Dimming ED1 0-10V 1% Dimming EDD 0-10V Dim-to-Dark <sup>17</sup> ESD Step Dimming <sup>6,8,17</sup> LUTH Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology <sup>6,8,17</sup> LUT5 5-Series EcoSystem LED driver <sup>6,8,17</sup> DALIP DALI P driver <sup>14,15</sup>	U 120V-277V 347 347V <sup>18</sup>	ELL14 Emergency Battery Pack Installed, 1400 Lumens <sup>18</sup> C388 3-Wire Flex <sup>20</sup> C488 4-Wire Flex <sup>20</sup> C588 5-Wire Flex <sup>20</sup> GLR Fast Blow Fuse EOR End of Row (SM and CM only. Provides end wiring access for continuous row mounting.) <sup>4</sup> INT Intermediate (SM and CM only. Provides ends with wiring access for continuous row mounting.) <sup>4</sup> CP Chicago Plenum	NXS NX, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>16,17,18</sup> NXSW NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>16,17,18,19</sup> NXWE NX Wireless Enabled <sup>16,17,18,19</sup> NXE NX Enabled, Dual SmartPorts <sup>16,17,18</sup> NXES NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>16,17,18</sup> ODPG Occupancy and Daylight Sensors w/ Grouping, Philips SNS200 <sup>8,9,16</sup> ZRE ControlScope® compatible <sup>10,16</sup> LV Lutron Vive Attached FCJS POWPAK Fixture Control (RF only) <sup>11,12,13,16</sup> LVS Lutron Vive Wireless DFCSJ-OEM-OCC In-Fixture Control with Daylight and Occupancy Sensing <sup>12,14</sup> LVR Lutron Vive Wireless DFCSJ-OEM-RF In-Fixture Control (RF only) <sup>12,14</sup>

**ACCESSORIES (ORDER SEPARATELY)**

**FK24** 2' x 4' Single Flange Kit (Shipped separately)

**CM48Y2SC3F-KIT** 48" Cable Mount Kit for 2' wide Cable Mount fixtures, 3 Wire

<sup>1</sup>Not available with HE lumen output.

<sup>2</sup>Available with ED driver and 80 CRI only, N/A with HE or XL lumen outputs. See pages 7-9 for more information.

<sup>3</sup>For drywall, order G with Flange Kit Accessory.

<sup>4</sup>Not available with Air Return (A) air function.

<sup>5</sup>Order hanger accessories separately.

<sup>6</sup>Limitations apply based on lumen packages (see Driver Table).

<sup>7</sup>For compatibility with Dual-Lite LiteGear® inverters, contact Hubbell Lighting Representative.

<sup>8</sup>Not available in 347V.

<sup>9</sup>Only available with 0-10V Dimming (ED) Driver Option.

<sup>10</sup>Registered trademark of Daintree Networks, used by permission.

<sup>11</sup>Not available with E, ESD, LUTH or LUT5.

<sup>12</sup>VIVE is a trademark of Lutron Electronics Co., Inc.

<sup>13</sup>Installations controlled solely by the Lutron Pico controller require accessing the LV (Lutron FCJS) module for commissioning after the circuit has been energized.

<sup>14</sup>LVS and LVR only available with DALIP.

<sup>15</sup>DALIP only available with LVS and LVR Control Options.

**NX In-Fixture Control Options:**

<sup>16</sup>NX controls can only be used with NX Sensor options.

<sup>17</sup>NX is available with ED and ED1 drivers only.

<sup>18</sup>NX combined with Spectrasync is not available in 347V.

<sup>19</sup>NXSW and NXWE cannot be used with surface mount versions.

<sup>20</sup>For NX control and Flex Wire together, consult factory.

<sup>21</sup>NX control function not available with VL lumen output.

For questions about configuration options, contact Hubbell Representative.

**DRIVER AVAILABILITY TABLE**

	XW	XWHE	VW	VWHE	MW	MWHE	LW	ML	HL	VL	XL
E	X	X	X	X	X	X	X	X	X	X	X
ED	X	X	X	X	X	X	X	X	X	X	X
ED1	X	X	X	X	X	X	X	X	X	X	X
EDD			X	X	X	X	X	X	X		
ESD	X	X	X	X	X	X	X	X	X	X	X
LUT5	X		X		X		X	X	X		
LUTH	X		X		X		X	X	X		
347	X		X		X		X	X	X		X

Product Availability 80 CRI					Product Availability 90 CRI				
Lumen Package	Shielding	Lumens	Input Watts	LPW	Lumen Package	Shielding	Lumens	Input Watts	LPW
LCAT24-30XW	Curve	2341	19	123	LCAT24-930XW	Curve	2142	20	106
LCAT24-30XWx-R	Rectangle	2601	20	128	LCAT24-930XWx-R	Rectangle	2212	20	109
LCAT24-30XWHE	Curve	2458	19	129					
LCAT24-30XWHEx-R	Rectangle	2555	20	128					
LCAT24-35XW	Curve	2424	19	127	LCAT24-935XW	Curve	2187	20	108
LCAT24-35XWx-R	Rectangle	2690	20	133	LCAT24-935XWx-R	Rectangle	2259	20	111
LCAT24-35XWHE	Curve	2542	19	134					
LCAT24-35XWHEx-R	Rectangle	2642	20	132					
LCAT24-40XW	Curve	2458	19	129	LCAT24-940XW	Curve	2234	20	110
LCAT24-40XWx-R	Rectangle	2732	20	135	LCAT24-940XWx-R	Rectangle	2308	20	114
LCAT24-40XWHE	Curve	2581	19	136					
LCAT24-40XWHEx-R	Rectangle	2683	20	134					
LCAT24-50XW	Curve	2524	19	132	LCAT24-950XW	Curve	2380	20.3	117
LCAT24-50XWx-R	Rectangle	2805	20	138	LCAT24-950XWx-R	Rectangle	2458	20.3	121
LCAT24-50XWHE	Curve	2650	19	139					
LCAT24-50XWHEx-R	Rectangle	2754	20	138					
LCAT24-30VW	Curve	3124	28	113	LCAT24-930VW	Curve	2655	28	96
LCAT24-30VWx-R	Rectangle	3224	28	114	LCAT24-930VWx-R	Rectangle	2740	28	97
LCAT24-30VWHE	Curve	3310	27	123					
LCAT24-30VWHEx-R	Rectangle	3280	26	126					
LCAT24-35VW	Curve	3217	28	117	LCAT24-935VW	Curve	2717	28	98
LCAT24-35VWx-R	Rectangle	3334	28	118	LCAT24-935VWx-R	Rectangle	2799	28	99
LCAT24-35VWHE	Curve	3409	27	126					
LCAT24-35VWHEx-R	Rectangle	3391	26	130					
LCAT24-40VW	Curve	3267	28	118	LCAT24-940VW	Curve	2780	28	101
LCAT24-40VWx-R	Rectangle	3386	28	120	LCAT24-940VWx-R	Rectangle	2859	28	101
LCAT24-40VWHE	Curve	3462	27	128					
LCAT24-40VWHEx-R	Rectangle	3443	26	132					
LCAT24-50VW	Curve	3558	28	129	LCAT24-950VW	Curve	2936	28	106
LCAT24-50VWx-R	Rectangle	3476	28	123	LCAT24-950VWx-R	Rectangle	3045	28	108
LCAT24-50VWHE	Curve	3770	27	140					
LCAT24-50VWHEx-R	Rectangle	3535	26	136					
LCAT24-30MW	Curve	3363	30	111	LCAT24-930MW	Curve	2859	30	95
LCAT24-30MWx-R	Rectangle	3472	30	115	LCAT24-930MWx-R	Rectangle	2953	30	98
LCAT24-30MWHE	Curve	3717	31	120					
LCAT24-30MWHEx-R	Rectangle	3660	29	126					
LCAT24-35MW	Curve	3464	30	115	LCAT24-935MW	Curve	2926	30	97
LCAT24-35MWx-R	Rectangle	3590	30	119	LCAT24-935MWx-R	Rectangle	3015	30	100
LCAT24-35MWHE	Curve	3829	31	124					
LCAT24-35MWHEx-R	Rectangle	3785	29	131					
LCAT24-40MW	Curve	3518	30	116	LCAT24-940MW	Curve	2993	30	99
LCAT24-40MWx-R	Rectangle	3646	30	121	LCAT24-940MWx-R	Rectangle	3080	30	102
LCAT24-40MWHE	Curve	3888	31	125					
LCAT24-40MWHEx-R	Rectangle	3843	29	133					
LCAT24-50MW	Curve	3831	30	127	LCAT24-950MW	Curve	3161	30	105
LCAT24-50MWx-R	Rectangle	3744	30	124	LCAT24-950MWx-R	Rectangle	3280	30	109
LCAT24-50MWHE	Curve	4234	31	137					
LCAT24-50MWHEx-R	Rectangle	3946	29	136					

Product Availability 80 CRI					Product Availability 90 CRI				
Lumen Package	Shielding	Lumens	Input Watts	LPW	Lumen Package	Shielding	Lumens	Input Watts	LPW
LCAT24-30LW	Curve	4268	36	118	LCAT24-930LW	Curve	3628	36	100
LCAT24-30LWx-R	Rectangle	4420	36	122	LCAT24-930LWx-R	Rectangle	3759	36	104
LCAT24-35LW	Curve	4396	36	122	LCAT24-935LW	Curve	3713	36	103
LCAT24-35LWx-R	Rectangle	4570	36	127	LCAT24-935LWx-R	Rectangle	3838	36	106
LCAT24-40LW	Curve	4465	36	124	LCAT24-940LW	Curve	3798	36	105
LCAT24-40LWx-R	Rectangle	4642	36	129	LCAT24-940LWx-R	Rectangle	3920	36	109
LCAT24-50LW	Curve	4861	36	135	LCAT24-950LW	Curve	4012	36	111
LCAT24-50LWx-R	Rectangle	4766	36	132	LCAT24-950LWx-R	Rectangle	4175	36	116
LCAT24-30ML	Curve	4771	39	123	LCAT24-930ML	Curve	4055	39	105
LCAT24-30MLx-R	Rectangle	4923	39	127	LCAT24-930MLx-R	Rectangle	4186	39	108
LCAT24-35ML	Curve	4914	39	127	LCAT24-935ML	Curve	4150	39	107
LCAT24-35MLx-R	Rectangle	5091	39	131	LCAT24-935MLx-R	Rectangle	4274	39	110
LCAT24-40ML	Curve	4990	39	129	LCAT24-940ML	Curve	4246	39	109
LCAT24-40MLx-R	Rectangle	5170	39	133	LCAT24-940MLx-R	Rectangle	4366	39	113
LCAT24-50ML	Curve	5434	39	140	LCAT24-950ML	Curve	4484	39	116
LCAT24-50MLx-R	Rectangle	5308	39	137	LCAT24-950MLx-R	Rectangle	4651	39	120
LCAT24-30HL	Curve	5443	44	124	LCAT24-930HL	Curve	4810	43	112
LCAT24-30HLx-R	Rectangle	5533	43	128	LCAT24-930HLx-R	Rectangle	4704	43	109
LCAT24-35HL	Curve	5606	44	127	LCAT24-935HL	Curve	4913	43	114
LCAT24-35HLx-R	Rectangle	5721	43	133	LCAT24-935HLx-R	Rectangle	4803	43	111
LCAT24-40HL	Curve	5694	44	129	LCAT24-940HL	Curve	5019	43	116
LCAT24-40HLx-R	Rectangle	5810	43	135	LCAT24-940HLx-R	Rectangle	4907	43	114
LCAT24-50HL	Curve	6200	44	141	LCAT24-950HL	Curve	5346	43	124
LCAT24-50HLx-R	Rectangle	5966	43	138	LCAT24-950HLx-R	Rectangle	5227	43	121
LCAT24-30VL	Curve	6999	59	119	LCAT24-930VL	Curve	5883	58	102
LCAT24-30VLx-R	Rectangle	6952	58	121	LCAT24-930VLx-R	Rectangle	5912	58	103
LCAT24-35VL	Curve	7209	59	122	LCAT24-935VL	Curve	6007	58	104
LCAT24-35VLx-R	Rectangle	7189	58	125	LCAT24-935VLx-R	Rectangle	6036	58	105
LCAT24-40VL	Curve	7321	59	124	LCAT24-940VL	Curve	6136	58	107
LCAT24-40VLx-R	Rectangle	7301	58	127	LCAT24-940VLx-R	Rectangle	6166	58	107
LCAT24-50VL	Curve	7972	59	135	LCAT24-950VL	Curve	6537	58	114
LCAT24-50VLx-R	Rectangle	7496	58	130	LCAT24-950VLx-R	Rectangle	6568	58	114
LCAT24-30XL	Curve	8168	74	111	LCAT24-930XL	Curve	7058	75	95
LCAT24-30XLx-R	Rectangle	8112	75	109	LCAT24-930XLx-R	Rectangle	6895	75	92
LCAT24-35XL	Curve	8412	74	114	LCAT24-935XL	Curve	7207	75	97
LCAT24-35XLx-R	Rectangle	8388	75	112	LCAT24-935XLx-R	Rectangle	7043	75	94
LCAT24-40XL	Curve	8547	74	116	LCAT24-940XL	Curve	7362	75	99
LCAT24-40XLx-R	Rectangle	8519	75	114	LCAT24-940XLx-R	Rectangle	7194	75	96
LCAT24-50XL	Curve	9304	74	126	LCAT24-950XL	Curve	7842	75	105
LCAT24-50XLx-R	Rectangle	8747	75	117	LCAT24-950XLx-R	Rectangle	7664	75	103

Test 16519 Test Date 6/13/2016

**PHOTOMETRIC DATA**

**LUMINAIRE DATA**

Luminaire	LCAT24-35LWG-EU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	Xi040C110V054BST1
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4396
Watts	36.10
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.22 90° = 1.32
Luminous Opening in Feet	Length: 3.92 Width: 1.92 Height: 0.00

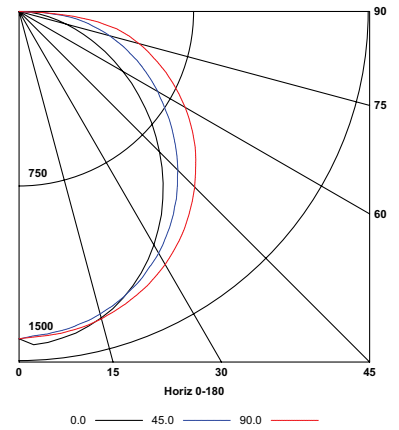
**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt.
0-30	1098	25.0	25.0
0-40	1804	41.0	41.0
0-60	3240	73.7	73.7
0-90	4396	100.0	100.0
0-180	4396	100.0	100.0

**ENERGY DATA**

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	122
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$1.97 based on 3000 hrs. and \$0.08 per KWH

**INDOOR CANDELA PLOT**



Test 16522 Test Date 7/27/2016

**LUMINAIRE DATA**

Luminaire	LCAT24-35MLG-EU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	Xi040C110V054BST1
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4914
Watts	38.80
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.22 90° = 1.30
Luminous Opening in Feet	Length: 3.92 Width: 1.92 Height: 0.00

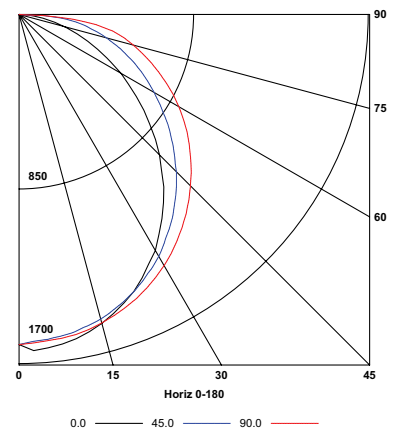
**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt.
0-30	1250	25.4	25.4
0-40	2049	41.7	41.7
0-60	3648	74.2	74.2
0-90	4914	100.0	100.0
0-180	4914	100.0	100.0

**ENERGY DATA**

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	127
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$1.90 based on 3000 hrs. and \$0.08 per KWH

**INDOOR CANDELA PLOT**



Test 16525 Test Date 8/25/2016

**LUMINAIRE DATA**

Luminaire	LCAT24-35HLG-EU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	Xi054C150V054BST1
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	5607
Watts	44.00
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.22 90° = 1.31
Luminous Opening in Feet	Length: 1.75 Width: 1.83 Height: 0.00

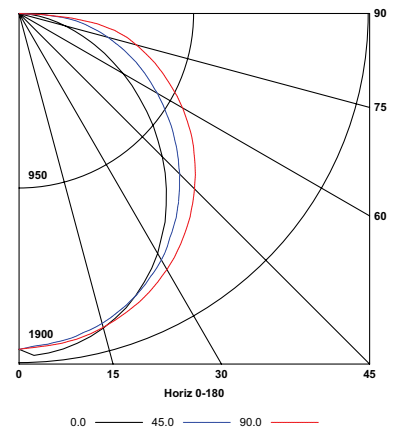
**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt.
0-30	1422	25.4	25.4
0-40	2333	41.6	41.6
0-60	4161	74.2	74.5
0-90	5607	100.0	100.0
0-180	5607	100.0	100.0

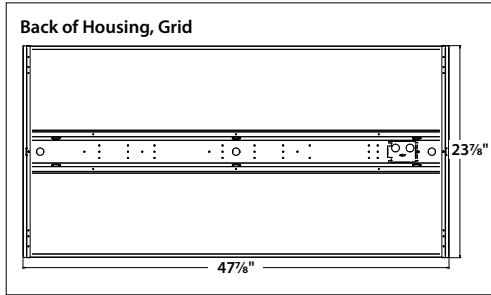
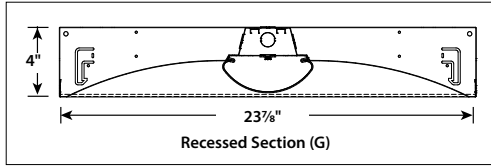
**ENERGY DATA**

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	127
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$1.89 based on 3000 hrs. and \$0.08 per KWH

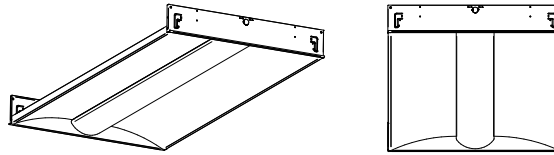
**INDOOR CANDELA PLOT**



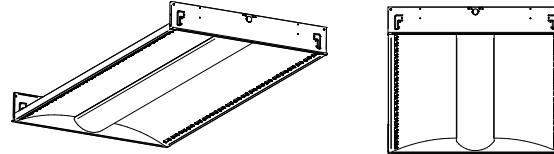
**DIMENSIONAL DATA — GRID**



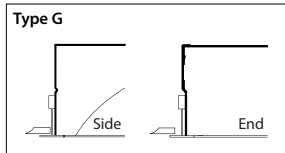
**GRID, STATIC**



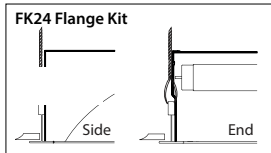
**GRID, AIR RETURN**



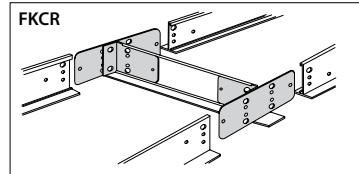
**CEILING COMPATIBILITY**



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.



For hard ceiling applications, order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.



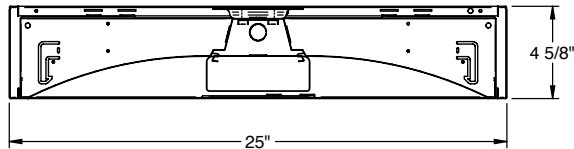
For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:  
Width 24 3/8", Length [48" x (# in row)] + 3/8"  
Example: (48" x 2) + 3/8" = 96 3/8"

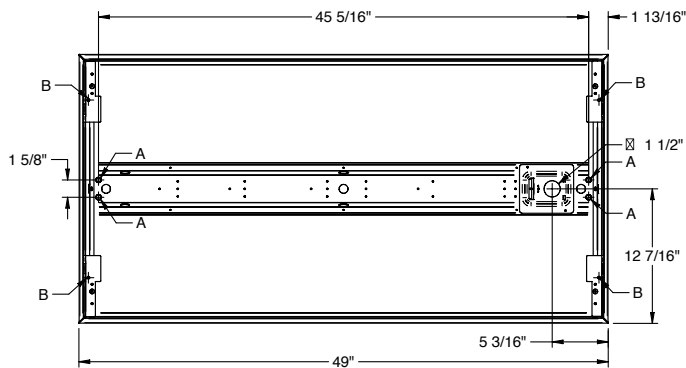
**Flange kit cut out dimension for single unit only: 24 3/8" x 48 3/8"**

**DIMENSIONAL DATA — SURFACE MOUNT OR CABLE MOUNT, STATIC ONLY**

Surface Section (SM) – Image shown with rectangular lens



Back of Housing, Surface Mount (SM) and Cable Mount (CM)



**Surface Mount:**

Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock-outs, 3/8", provided in center channel as indicated at left, marked A.

**Cable Mount:**

Order CM ceiling type. Use CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide CM trim fixtures. Mounting holes are provided in diagonal straps shown at left, marked B.

\* For Cable Mount a 2" x 3" access plate with (4) 7/8" KO's provided in place of Mounting Collar shown.

**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

**SPECTRASYNCTM COLOR TUNING TECHNOLOGY**

Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync Color Tuning Technologies.

**Dim to Warm**

Dim to Warm mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed. (Available with 2200K-3000K)

**Tunable White**

Tunable White offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors, or the aesthetics of the space. (Available with 2700K-5000K or 2700K-6500K)

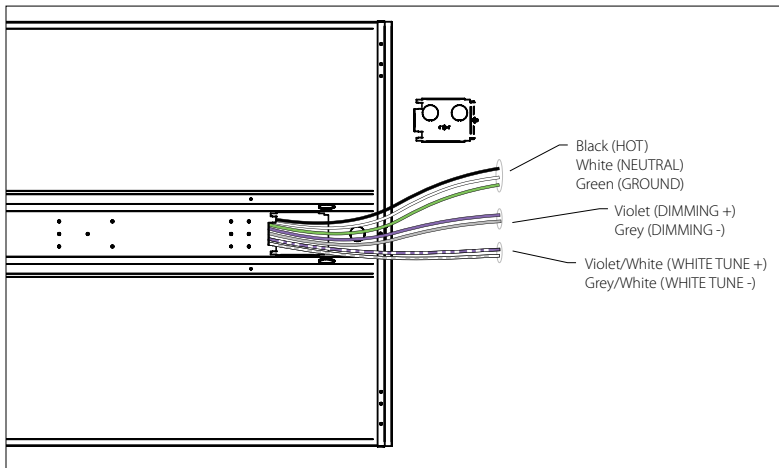
**Scheduled White**

Scheduled White creates an environment that mimics the rhythms of natural light throughout the day, enhancing occupant's mood and well-being. (Available with 2700K-5000K or 2700K-6500K)

**SPECTRASYNCTUNABLE WHITE**

**2750T OR 2765T- SPECTRASYNCTUNABLE WHITE, 2700K-5000K OR 2700K-6500K**

Requires (2) 0-10V controllers, (1) for intensity and (1) for CCT. Minimum 5% dimming.



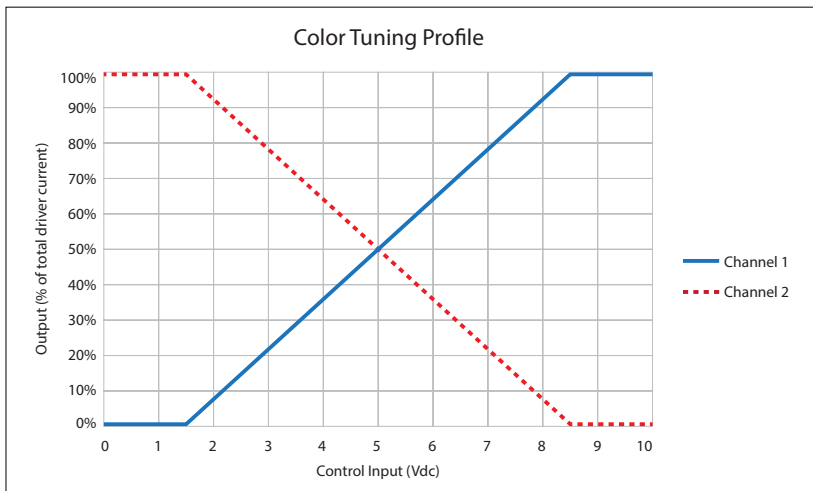
SpectraSync tunable white luminaires are provided with (2) 0-10V circuits. The violet and grey circuit is for wiring to any qualified 0-10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0-10V controller for tunable white CCT control.

**CONTROLLER MANUFACTURER DATA**



**Suggested controllers to be used with SpectraSync:**

SpectraSync tunable white was designed to be used with sinking style dimmers (provided by others) and is compatible with:

- Hubbell Control Solutions (HCS): NX Distributed Intelligence Room Controllers (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DDTV, DVSTV, and NFTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



To enable scheduling and for use with NX wall control preset stations please refer to Hubbell Control Solutions NX SpectraSync technical sheet.

Shielding	Lumen Output	Watts	2700		3000		3500		4000		5000		6500	
			Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
Curve 	XW	19	2240	117	2341	123	2383	125	2414	126	2493	131	2456	129
	VW	28	2990	108	3124	113	3180	115	3221	117	3327	121	3277	119
	MW	30	3218	107	3363	111	3424	113	3467	115	3582	119	3528	117
	LW	36	4084	113	4268	118	4345	120	4400	122	4545	126	4477	124
	ML	39	4566	118	4771	123	4857	125	4919	127	5081	131	5005	129
	HL	44	5209	118	5443	124	5541	126	5612	128	5797	132	5710	130
	VL	59	6698	114	6999	119	7125	121	7216	122	7454	126	7342	124
Rectangle 	XW	20	2489	123	2601	128	2648	130	2682	132	2770	136	2728	134
	VW	28	3085	109	3224	114	3282	116	3324	118	3434	122	3382	120
	MW	30	3323	110	3472	115	3534	117	3580	119	3698	122	3642	121
	LW	36	4230	117	4420	122	4500	125	4557	126	4707	130	4637	128
	ML	39	4711	121	4923	127	5012	129	5076	131	5243	135	5164	133
	HL	43	5295	123	5533	128	5633	131	5705	132	5893	137	5804	135
	VL	58	6653	116	6952	121	7077	123	7168	125	7404	129	7293	127



**NX™ SOLUTION GUIDE FOR SPECTRASync™ COLOR TUNING TECHNOLOGY**

When paired with SpectraSync™ enabled luminaires, NX Distributed Intelligence lighting control delivers a comprehensive color control solution, simplifying setup and code compliance through self-configuration and an optional Bluetooth® interface with mobile application.

- Complete control solutions using SpectraSync color tuning technology
- Device auto-configuration and plug-n-play connectivity
- Intuitive app interface and user-friendly wall stations

NX™ Distributed Intelligence Accessories for SpectraSync Control	
CATALOG NUMBER	DESCRIPTOR
NXAC-120	NX Area Controller, NEMA 1, HubbNET, BACnet™, 120 Volt
NXHNB	NX Network Bridge Module
NXRC-2RD-UNV	NX Room Controller, 2 Relay, 0-10V Dimming, Universal Voltage
NXSW-CCT-xx	NX Digital CCT Scene Switch, 6 Buttons, 4 Presets, Raise/Lower
NXSW-SS-xx	NX Digital Scene Switch, 6 Buttons, 4 Presets, Raise/Lower
NXSW-ORLO-xx	NX Digital Switch Station, On/Raise/Lower/Off
NXSW-RL-xx	NX Digital Switch Station, 2 Buttons, Raise/Lower
NXSW-OO-xx	NX Digital Switch Station, On/Off
NXSW-TO-xx	NX Digital Switch Station, Timed-On, Pilot

Order as separate catalog number. Visit [www.hubbellcontrolsolutions.com](http://www.hubbellcontrolsolutions.com)

Note: 'xx' = color; Black (BK), Gray (GY), Ivory (IV), Light Almond (LA), Red (RD), White (blank).

**NX USER INTERFACES**



Wall stations for personalized control of light and color



NX mobile app offers user-friendly configuration tool



Area Controller GUI provides simple and intuitive programming

Android

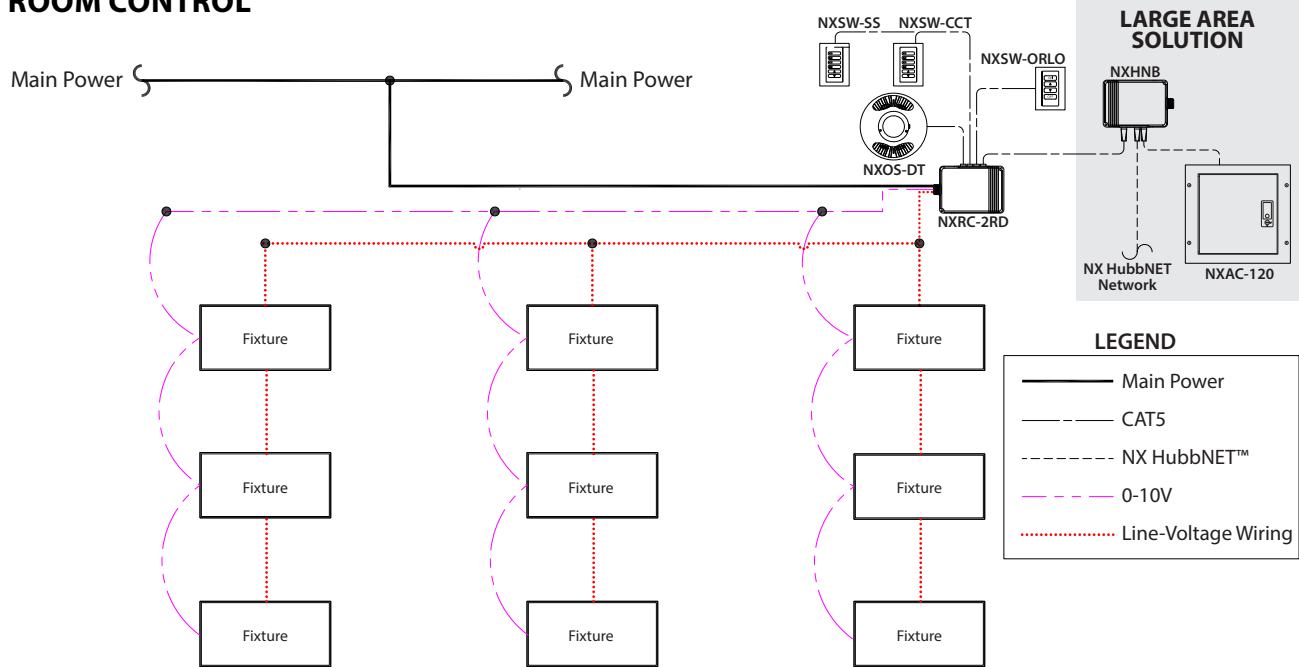


Free Bluetooth® enabled mobile app for ease of configuration

Apple



**TYPICAL NX DISTRIBUTED INTELLIGENCE™ LAYOUT FOR STAND-ALONE OR NETWORKED ROOM CONTROL**



**NX DISTRIBUTED INTELLIGENCE™ IN-FIXTURE SOLUTION GUIDE**

NX Distributed Intelligence enables Hubbell's portfolio of commercial, industrial and architectural luminaires to further reduce energy consumption and total cost of ownership for simple to complex control environments.

NX-enabled luminaires provides you the breadth and flexibility to address all your project requirements today and in the future. For a complete list of luminaires with integrated NX options please visit our website.

NX Distributed Intelligence™ In-Fixture Options			
NX CONTROL OPTIONS	DESCRIPTOR	CONNECTIVITY	APPLICATION SPACE
NXSP14F	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14'	Standalone	Both
NXSPL	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, Low Mount	Standalone	Indoor
NXOS	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, OMNI	Standalone	Indoor
NXS	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting	Standalone	Indoor
NXSPH	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, High Mount	Standalone	Indoor
NXSP30F	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30'	Standalone	Outdoor
NXEPL	NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting, Low Mount	Wired	Indoor
NXE	NX Enabled, Dual SmartPorts	Wired	Indoor
NXEOS	NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting, OMNI	Wired	Indoor
NXES	NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting	Wired	Indoor
NXESPH	NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting, High Mount	Wired	Indoor
NXSPW14F	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14'	Wireless	Both
NXWE	NX Wireless Enabled	Wireless	Both
NXSPWL	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, Low Mount	Wireless	Indoor
NXOSW	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, OMNI	Wireless	Indoor
NXSPWH	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, High Mount	Wireless	Indoor
NXSW	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting	Wireless	Indoor
NXSPW30F	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30'	Wireless	Outdoor

Visit [www.hubbellcontrolsolutions.com](http://www.hubbellcontrolsolutions.com) for additional information on the NX platform. For information on NX options available with specific Hubbell Lighting luminaires please reference specification sheets.

NX Distributed Intelligence™ Accessories	
CATALOG NO.	DESCRIPTOR
NXAC-120	NX Area Controller, NEMA 1, HubbNET, BACnet, 120 Volt
NXHNB	NX Network Bridge Module
NXRC-2RD-UNV	NX Room Controller, 2 Relay, 0 - 10V Dimming, Power Monitoring, Universal Voltage
NXOFM-1R1D-UNV	On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120-480VAC
NXSW-CCT-xx	NX Digital CCT Scene Switch, 6 Buttons, 4 Presets, Raise/Lower
NXSW-SS-xx	NX Digital Scene Switch, 6 Buttons, 4 Presets, Raise/Lower
NXSW-ORLO-xx	NX Digital Switch Station, On/Raise/Lower/Off
NXSW-RL-xx	NX Digital Switch Station, 2 Buttons, Raise/Lower
NXSW-OO-xx	NX Digital Switch Station, On/Off
NXSW-TO-xx	NX Digital Switch Station, Timed-On, Pilot

Note: 'xx' = color; Black (BK), Gray (GY), Ivory (IV), Light Almond (LA), Red (RD), White (blank).

**NX USER INTERFACES**



Wall stations for personalized control of light and color



NX mobile app offers user-friendly configuration tool



Area Controller GUI provides simple and intuitive programming

Android



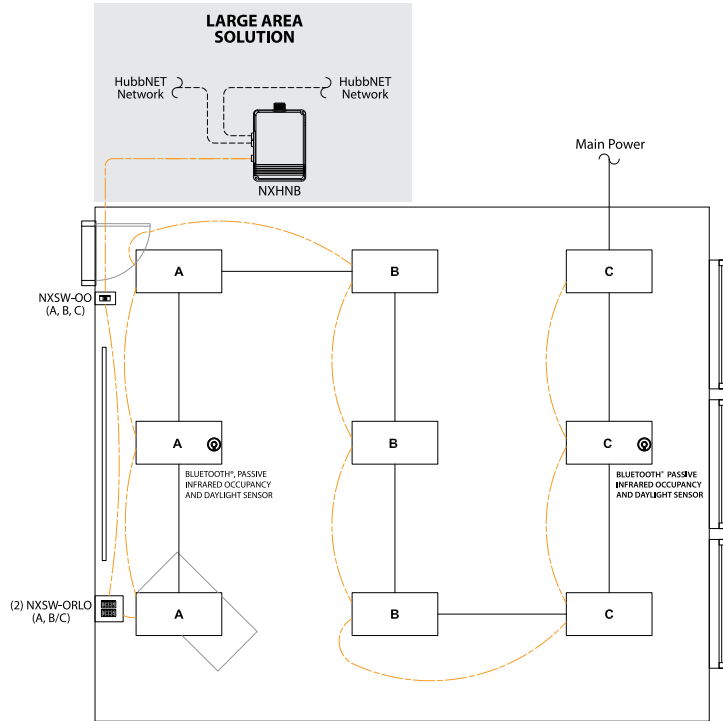
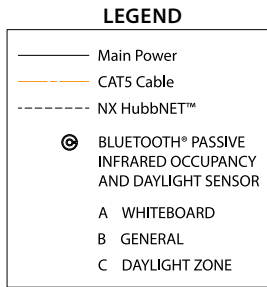
Free Bluetooth® enabled mobile app for ease of configuration

Apple

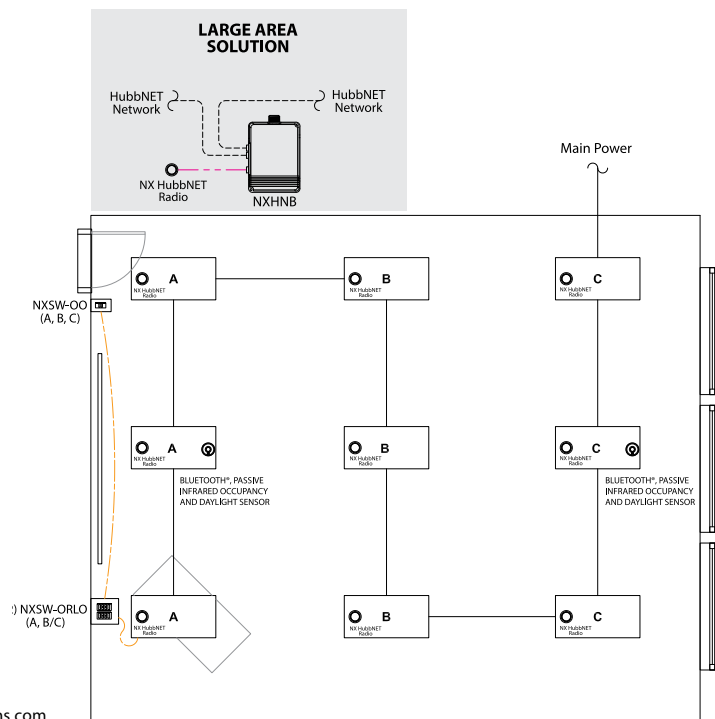
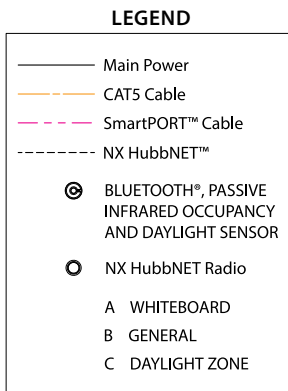


**TYPICAL NX DISTRIBUTED INTELLIGENCE™ LAYOUT FOR WIRELESS OR WIRED NETWORKED IN-FIXTURE CONTROL**

Vertical Market: Education  
Application: Classroom  
Connectivity: Wired



Vertical Market: Education  
Application: Classroom  
Connectivity: Wireless



For additional solutions possible with NX please visit [www.hubbellcontrolsolutions.com](http://www.hubbellcontrolsolutions.com) to view our Vertical Market Application Guides.

**LED**



**INTERACTIVE MENU** 

- Ordering Guide
- Product Availability Tables
- Photometric Data
- Dimensional Data

**HUBBELL CONTROL SOLUTIONS**

- SpectraSync™ Overview
- SpectraSync Product Availability Tables
- NX™ SpectraSync Solution Guide
- NX In-Fixture Solution Guide

**EXTERNAL LINKS**

- NX Distributed Intelligence Brochure
- SpectraSync Brochure

**PROJECT INFORMATION**

Project Name \_\_\_\_\_

Type \_\_\_\_\_

Catalog No. \_\_\_\_\_

Date \_\_\_\_\_

**COMPATIBLE WITH:**



**FEATURES**

- High efficiency acrylic center lens features linear prisms for high performance without pixelation
- Appropriate for offices, schools, medical, and public spaces
- High performance reflector with matte white paint standard
- 60,000 hour LEDs at L80 (up to 150,000 projected life) for reduced maintenance
- 83 CRI standard or optional 90 CRI for color sensitive applications
- HE lumen packages available
- LED modules and electrical accessible from below
- Optional architecturally styled integration of daylight and occupancy sensor(s)
- QR code traceability
- Compatible with Dual-Lite inverters
- Optional SpectraSync™ offers three modes of tunable white solutions and integrates seamlessly into a variety of control systems
- NX Distributed Intelligence™ provides options for standalone and networked integrated sensor with wired or wireless connectivity for NX system deployments
- DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations - see [www.designlights.org](http://www.designlights.org)
- Five year warranty (Terms and Conditions apply)



**LCAT24**

**CONSTRUCTION**

Luminaire housing, reflectors and end caps are die formed code gauge cold rolled steel. High transmission extruded acrylic enclosed lens features linear prisms with custom frost for high efficacy without pixelation.

**SHIELDING**

Removable lens for easy access to LED module and electrical components.

**FINISH**

All reflective surfaces are finished after fabrication with unique formula high reflectivity matte white paint for soft, uniform indirect illumination.

**INSTALLATION**

An access plate is furnished with each luminaire for fast wiring access without the necessity to open the fixture or wireway.

**IC RATING**

IC label is standard for recessed products. Note that IC label is void if product is installed on site with a combination of both battery pack plus through wiring or for air return fixtures.

**CEILING COMPATIBILITY**

Luminaire fits recessed exposed Grid ceilings (G); four integral NEC compliant T-bar clips are standard. Can be placed in Slot Grid (SG) style ceiling with regress 3/8" above ceiling plane. A Flange Kit (FK) accessory is available for recessed hard ceiling applications. Surface Mount (SM) option allows placement below ceiling plane. Cable Mount (CM) option allows suspension below ceiling plane.

**CERTIFICATION**

All luminaires are built to UL1598 and 2108 standards, and bear appropriate CSA labels. Damp location label standard. Emergency-equipped fixtures labeled UL 924 and Dry Location unless specified. Adheres to LM79, LM80, and TM21 industry standards. DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at [www.designlights.org](http://www.designlights.org). NX is available in U.S., Canada and Mexico. For other locations consult factory.

**WARRANTY**

Five year warranty (Terms and Conditions apply).

**ORDERING INFORMATION**

**EXAMPLE LCAT24-35MLG-ESDU**

**YOUR ORDER** LCAT24 - - -

LCAT		24							
MODEL	SIZE	CRI	COLOR TEMPERATURE		LUMEN OUTPUT		CEILING TYPE		SHIELDING
LCAT LED Contemporary Architectural Troffer	24 2' x 4'	Blank >80 9 >90 <sup>1</sup>	30 3000K 35 3500K 40 4000K 50 5000K	2750T 2700K-5000K SpectraSync™ Tunable White <sup>2</sup> 2765T 2700K-6500K SpectraSync™ Tunable White <sup>2</sup>	XW Extra Low Watt XWHE Extra Low Watt High Efficacy VW Very Low Watt VWHE Very Low Watt High Efficacy MW Medium Low Watt MWHE Medium Low Watt High Efficacy LW Low Watt ML Medium Lumen HL High Lumen VL Very High Lumen <sup>21</sup> XL Extra High Lumen	G Grid Lay-in <sup>3</sup> SM Surface Mount <sup>4,19</sup> CM Cable Suspended Mount <sup>4,5</sup>	Blank Curve R Rectangular		

See Product Availability Table on following pages.

AIR FUNCTION	DRIVER	VOLTAGE	OPTIONS	CONTROL OPTIONS
Blank Static A Air Return Side Slots	E Fixed Output <sup>17</sup> ED 0-10V Dimming ED1 0-10V 1% Dimming EDD 0-10V Dim-to-Dark <sup>17</sup> ESD Step Dimming <sup>6,8,17</sup> LUTH Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology <sup>6,8,17</sup> LUT5 5-Series EcoSystem LED driver <sup>6,8,17</sup> DALIP DALI P driver <sup>14,15</sup>	U 120V-277V 347 347V <sup>18</sup>	ELL14 Emergency Battery Pack Installed, 1400 Lumens <sup>18</sup> C388 3-Wire Flex <sup>20</sup> C488 4-Wire Flex <sup>20</sup> C588 5-Wire Flex <sup>20</sup> GLR Fast Blow Fuse EOR End of Row (SM and CM only. Provides end wiring access for continuous row mounting.) <sup>4</sup> INT Intermediate (SM and CM only. Provides ends with wiring access for continuous row mounting.) <sup>4</sup> CP Chicago Plenum	NXS NX, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>16,17,18</sup> NXSW NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>16,17,18,19</sup> NXWE NX Wireless Enabled <sup>16,17,18,19</sup> NXE NX Enabled, Dual SmartPorts <sup>16,17,18</sup> NXES NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>16,17,18</sup> ODPG Occupancy and Daylight Sensors w/ Grouping, Philips SNS200 <sup>8,9,16</sup> ZRE ControlScope® compatible <sup>10,16</sup> LV Lutron Vive Attached FCJS POWPAK Fixture Control (RF only) <sup>11,12,13,16</sup> LVS Lutron Vive Wireless DFCSJ-OEM-OCC In-Fixture Control with Daylight and Occupancy Sensing <sup>12,14</sup> LVR Lutron Vive Wireless DFCSJ-OEM-RF In-Fixture Control (RF only) <sup>12,14</sup>

**ACCESSORIES (ORDER SEPARATELY)**

**FK24** 2' x 4' Single Flange Kit (Shipped separately)

**CM48Y2SC3F-KIT** 48" Cable Mount Kit for 2' wide Cable Mount fixtures, 3 Wire

<sup>1</sup>Not available with HE lumen output.

<sup>2</sup>Available with ED driver and 80 CRI only, N/A with HE or XL lumen outputs. See pages 7-9 for more information.

<sup>3</sup>For drywall, order G with Flange Kit Accessory.

<sup>4</sup>Not available with Air Return (A) air function.

<sup>5</sup>Order hanger accessories separately.

<sup>6</sup>Limitations apply based on lumen packages (see Driver Table).

<sup>7</sup>For compatibility with Dual-Lite LiteGear® inverters, contact Hubbell Lighting Representative.

<sup>8</sup>Not available in 347V.

<sup>9</sup>Only available with 0-10V Dimming (ED) Driver Option.

<sup>10</sup>Registered trademark of Daintree Networks, used by permission.

<sup>11</sup>Not available with E, ESD, LUTH or LUT5.

<sup>12</sup>VIVE is a trademark of Lutron Electronics Co., Inc.

<sup>13</sup>Installations controlled solely by the Lutron Pico controller require accessing the LV (Lutron FCJS) module for commissioning after the circuit has been energized.

<sup>14</sup>LVS and LVR only available with DALIP.

<sup>15</sup>DALIP only available with LVS and LVR Control Options.

**NX In-Fixture Control Options:**

<sup>16</sup>NX controls can only be used with NX Sensor options.

<sup>17</sup>NX is available with ED and ED1 drivers only.

<sup>18</sup>NX combined with Spectrasync is not available in 347V.

<sup>19</sup>NXSW and NXWE cannot be used with surface mount versions.

<sup>20</sup>For NX control and Flex Wire together, consult factory.

<sup>21</sup>NX control function not available with VL lumen output.

For questions about configuration options, contact Hubbell Representative.

**DRIVER AVAILABILITY TABLE**

	XW	XWHE	VW	VWHE	MW	MWHE	LW	ML	HL	VL	XL
E	X	X	X	X	X	X	X	X	X	X	X
ED	X	X	X	X	X	X	X	X	X	X	X
ED1	X	X	X	X	X	X	X	X	X	X	X
EDD			X	X	X	X	X	X	X		
ESD	X	X	X	X	X	X	X	X	X	X	X
LUT5	X		X		X		X	X	X		
LUTH	X		X		X		X	X	X		
347	X		X		X		X	X	X		X

Product Availability 80 CRI					Product Availability 90 CRI				
Lumen Package	Shielding	Lumens	Input Watts	LPW	Lumen Package	Shielding	Lumens	Input Watts	LPW
LCAT24-30XW	Curve	2341	19	123	LCAT24-930XW	Curve	2142	20	106
LCAT24-30XWx-R	Rectangle	2601	20	128	LCAT24-930XWx-R	Rectangle	2212	20	109
LCAT24-30XWHE	Curve	2458	19	129					
LCAT24-30XWHEx-R	Rectangle	2555	20	128					
LCAT24-35XW	Curve	2424	19	127	LCAT24-935XW	Curve	2187	20	108
LCAT24-35XWx-R	Rectangle	2690	20	133	LCAT24-935XWx-R	Rectangle	2259	20	111
LCAT24-35XWHE	Curve	2542	19	134					
LCAT24-35XWHEx-R	Rectangle	2642	20	132					
LCAT24-40XW	Curve	2458	19	129	LCAT24-940XW	Curve	2234	20	110
LCAT24-40XWx-R	Rectangle	2732	20	135	LCAT24-940XWx-R	Rectangle	2308	20	114
LCAT24-40XWHE	Curve	2581	19	136					
LCAT24-40XWHEx-R	Rectangle	2683	20	134					
LCAT24-50XW	Curve	2524	19	132	LCAT24-950XW	Curve	2380	20.3	117
LCAT24-50XWx-R	Rectangle	2805	20	138	LCAT24-950XWx-R	Rectangle	2458	20.3	121
LCAT24-50XWHE	Curve	2650	19	139					
LCAT24-50XWHEx-R	Rectangle	2754	20	138					
LCAT24-30VW	Curve	3124	28	113	LCAT24-930VW	Curve	2655	28	96
LCAT24-30VWx-R	Rectangle	3224	28	114	LCAT24-930VWx-R	Rectangle	2740	28	97
LCAT24-30VWHE	Curve	3310	27	123					
LCAT24-30VWHEx-R	Rectangle	3280	26	126					
LCAT24-35VW	Curve	3217	28	117	LCAT24-935VW	Curve	2717	28	98
LCAT24-35VWx-R	Rectangle	3334	28	118	LCAT24-935VWx-R	Rectangle	2799	28	99
LCAT24-35VWHE	Curve	3409	27	126					
LCAT24-35VWHEx-R	Rectangle	3391	26	130					
LCAT24-40VW	Curve	3267	28	118	LCAT24-940VW	Curve	2780	28	101
LCAT24-40VWx-R	Rectangle	3386	28	120	LCAT24-940VWx-R	Rectangle	2859	28	101
LCAT24-40VWHE	Curve	3462	27	128					
LCAT24-40VWHEx-R	Rectangle	3443	26	132					
LCAT24-50VW	Curve	3558	28	129	LCAT24-950VW	Curve	2936	28	106
LCAT24-50VWx-R	Rectangle	3476	28	123	LCAT24-950VWx-R	Rectangle	3045	28	108
LCAT24-50VWHE	Curve	3770	27	140					
LCAT24-50VWHEx-R	Rectangle	3535	26	136					
LCAT24-30MW	Curve	3363	30	111	LCAT24-930MW	Curve	2859	30	95
LCAT24-30MWx-R	Rectangle	3472	30	115	LCAT24-930MWx-R	Rectangle	2953	30	98
LCAT24-30MWHE	Curve	3717	31	120					
LCAT24-30MWHEx-R	Rectangle	3660	29	126					
LCAT24-35MW	Curve	3464	30	115	LCAT24-935MW	Curve	2926	30	97
LCAT24-35MWx-R	Rectangle	3590	30	119	LCAT24-935MWx-R	Rectangle	3015	30	100
LCAT24-35MWHE	Curve	3829	31	124					
LCAT24-35MWHEx-R	Rectangle	3785	29	131					
LCAT24-40MW	Curve	3518	30	116	LCAT24-940MW	Curve	2993	30	99
LCAT24-40MWx-R	Rectangle	3646	30	121	LCAT24-940MWx-R	Rectangle	3080	30	102
LCAT24-40MWHE	Curve	3888	31	125					
LCAT24-40MWHEx-R	Rectangle	3843	29	133					
LCAT24-50MW	Curve	3831	30	127	LCAT24-950MW	Curve	3161	30	105
LCAT24-50MWx-R	Rectangle	3744	30	124	LCAT24-950MWx-R	Rectangle	3280	30	109
LCAT24-50MWHE	Curve	4234	31	137					
LCAT24-50MWHEx-R	Rectangle	3946	29	136					

Product Availability 80 CRI					Product Availability 90 CRI				
Lumen Package	Shielding	Lumens	Input Watts	LPW	Lumen Package	Shielding	Lumens	Input Watts	LPW
LCAT24-30LW	Curve	4268	36	118	LCAT24-930LW	Curve	3628	36	100
LCAT24-30LWx-R	Rectangle	4420	36	122	LCAT24-930LWx-R	Rectangle	3759	36	104
LCAT24-35LW	Curve	4396	36	122	LCAT24-935LW	Curve	3713	36	103
LCAT24-35LWx-R	Rectangle	4570	36	127	LCAT24-935LWx-R	Rectangle	3838	36	106
LCAT24-40LW	Curve	4465	36	124	LCAT24-940LW	Curve	3798	36	105
LCAT24-40LWx-R	Rectangle	4642	36	129	LCAT24-940LWx-R	Rectangle	3920	36	109
LCAT24-50LW	Curve	4861	36	135	LCAT24-950LW	Curve	4012	36	111
LCAT24-50LWx-R	Rectangle	4766	36	132	LCAT24-950LWx-R	Rectangle	4175	36	116
LCAT24-30ML	Curve	4771	39	123	LCAT24-930ML	Curve	4055	39	105
LCAT24-30MLx-R	Rectangle	4923	39	127	LCAT24-930MLx-R	Rectangle	4186	39	108
LCAT24-35ML	Curve	4914	39	127	LCAT24-935ML	Curve	4150	39	107
LCAT24-35MLx-R	Rectangle	5091	39	131	LCAT24-935MLx-R	Rectangle	4274	39	110
LCAT24-40ML	Curve	4990	39	129	LCAT24-940ML	Curve	4246	39	109
LCAT24-40MLx-R	Rectangle	5170	39	133	LCAT24-940MLx-R	Rectangle	4366	39	113
LCAT24-50ML	Curve	5434	39	140	LCAT24-950ML	Curve	4484	39	116
LCAT24-50MLx-R	Rectangle	5308	39	137	LCAT24-950MLx-R	Rectangle	4651	39	120
LCAT24-30HL	Curve	5443	44	124	LCAT24-930HL	Curve	4810	43	112
LCAT24-30HLx-R	Rectangle	5533	43	128	LCAT24-930HLx-R	Rectangle	4704	43	109
LCAT24-35HL	Curve	5606	44	127	LCAT24-935HL	Curve	4913	43	114
LCAT24-35HLx-R	Rectangle	5721	43	133	LCAT24-935HLx-R	Rectangle	4803	43	111
LCAT24-40HL	Curve	5694	44	129	LCAT24-940HL	Curve	5019	43	116
LCAT24-40HLx-R	Rectangle	5810	43	135	LCAT24-940HLx-R	Rectangle	4907	43	114
LCAT24-50HL	Curve	6200	44	141	LCAT24-950HL	Curve	5346	43	124
LCAT24-50HLx-R	Rectangle	5966	43	138	LCAT24-950HLx-R	Rectangle	5227	43	121
LCAT24-30VL	Curve	6999	59	119	LCAT24-930VL	Curve	5883	58	102
LCAT24-30VLx-R	Rectangle	6952	58	121	LCAT24-930VLx-R	Rectangle	5912	58	103
LCAT24-35VL	Curve	7209	59	122	LCAT24-935VL	Curve	6007	58	104
LCAT24-35VLx-R	Rectangle	7189	58	125	LCAT24-935VLx-R	Rectangle	6036	58	105
LCAT24-40VL	Curve	7321	59	124	LCAT24-940VL	Curve	6136	58	107
LCAT24-40VLx-R	Rectangle	7301	58	127	LCAT24-940VLx-R	Rectangle	6166	58	107
LCAT24-50VL	Curve	7972	59	135	LCAT24-950VL	Curve	6537	58	114
LCAT24-50VLx-R	Rectangle	7496	58	130	LCAT24-950VLx-R	Rectangle	6568	58	114
LCAT24-30XL	Curve	8168	74	111	LCAT24-930XL	Curve	7058	75	95
LCAT24-30XLx-R	Rectangle	8112	75	109	LCAT24-930XLx-R	Rectangle	6895	75	92
LCAT24-35XL	Curve	8412	74	114	LCAT24-935XL	Curve	7207	75	97
LCAT24-35XLx-R	Rectangle	8388	75	112	LCAT24-935XLx-R	Rectangle	7043	75	94
LCAT24-40XL	Curve	8547	74	116	LCAT24-940XL	Curve	7362	75	99
LCAT24-40XLx-R	Rectangle	8519	75	114	LCAT24-940XLx-R	Rectangle	7194	75	96
LCAT24-50XL	Curve	9304	74	126	LCAT24-950XL	Curve	7842	75	105
LCAT24-50XLx-R	Rectangle	8747	75	117	LCAT24-950XLx-R	Rectangle	7664	75	103

Test 16519 Test Date 6/13/2016

**PHOTOMETRIC DATA**

**LUMINAIRE DATA**

Luminaire	LCAT24-35LWG-EU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	Xi040C110V054BST1
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4396
Watts	36.10
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.22 90° = 1.32
Luminous Opening in Feet	Length: 3.92 Width: 1.92 Height: 0.00

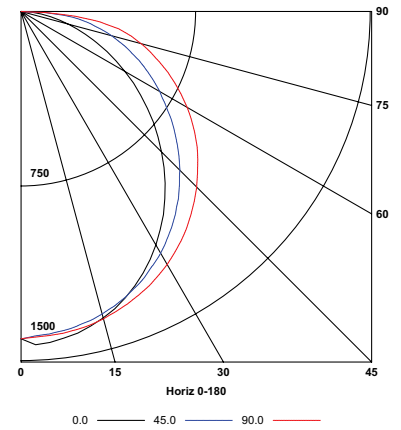
**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt.
0-30	1098	25.0	25.0
0-40	1804	41.0	41.0
0-60	3240	73.7	73.7
0-90	4396	100.0	100.0
0-180	4396	100.0	100.0

**ENERGY DATA**

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	122
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$1.97 based on 3000 hrs. and \$0.08 per KWH

**INDOOR CANDELA PLOT**



Test 16522 Test Date 7/27/2016

**LUMINAIRE DATA**

Luminaire	LCAT24-35MLG-EU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	Xi040C110V054BST1
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	4914
Watts	38.80
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.22 90° = 1.30
Luminous Opening in Feet	Length: 3.92 Width: 1.92 Height: 0.00

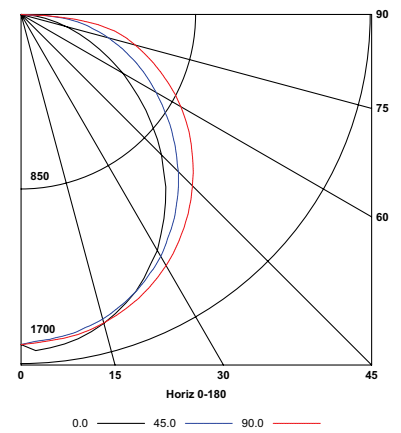
**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt.
0-30	1250	25.4	25.4
0-40	2049	41.7	41.7
0-60	3648	74.2	74.2
0-90	4914	100.0	100.0
0-180	4914	100.0	100.0

**ENERGY DATA**

Total Luminaire Efficiency	100.0%
Total Lumens per Watt	127
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$1.90 based on 3000 hrs. and \$0.08 per KWH

**INDOOR CANDELA PLOT**



Test 16525 Test Date 8/25/2016

**LUMINAIRE DATA**

Luminaire	LCAT24-35HLG-EU LCAT Led Architectural Troffer, Recessed Architectural 2 x 4 led with frosted linear prism lens
Ballast	Xi054C150V054BST1
Ballast Factor	1.00
Lamp	LED
Fixture Lumens	5607
Watts	44.00
Mounting	Recessed
Shielding Angle	0° = 90 90° = 90
Spacing Criterion	0° = 1.22 90° = 1.31
Luminous Opening in Feet	Length: 1.75 Width: 1.83 Height: 0.00

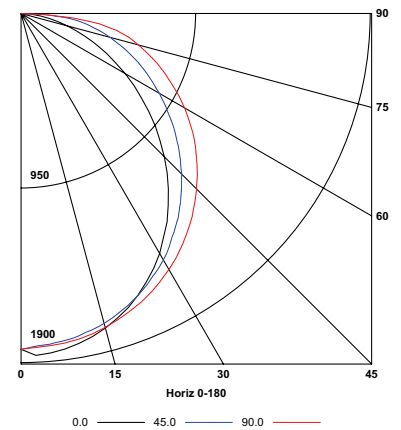
**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt.
0-30	1422	25.4	25.4
0-40	2333	41.6	41.6
0-60	4161	74.2	74.5
0-90	5607	100.0	100.0
0-180	5607	100.0	100.0

**ENERGY DATA**

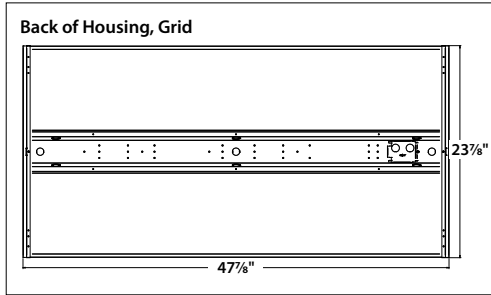
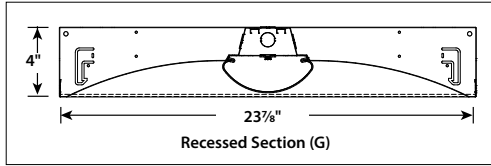
Total Luminaire Efficiency	100.0%
Total Lumens per Watt	127
IESNA RP-1-2004 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$1.89 based on 3000 hrs. and \$0.08 per KWH

**INDOOR CANDELA PLOT**

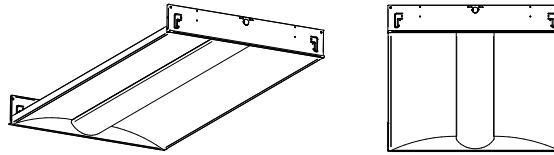




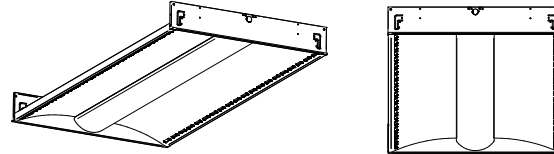
**DIMENSIONAL DATA — GRID**



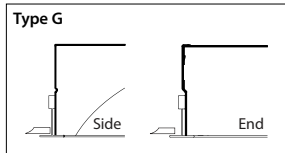
**GRID, STATIC**



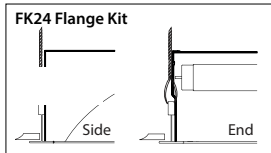
**GRID, AIR RETURN**



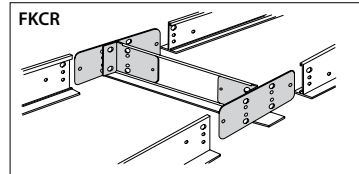
**CEILING COMPATIBILITY**



For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.



For hard ceiling applications, order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.



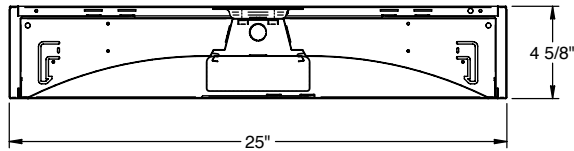
For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:  
Width 24 3/8", Length [48" x (# in row)] + 3/8"  
Example: (48" x 2) + 3/8" = 96 3/8"

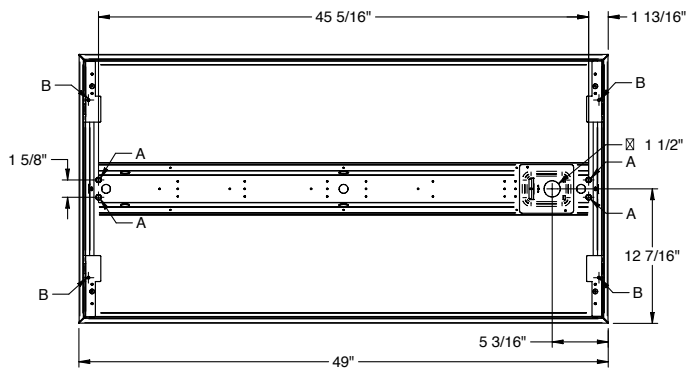
**Flange kit cut out dimension for single unit only: 24 3/8" x 48 3/8"**

**DIMENSIONAL DATA — SURFACE MOUNT OR CABLE MOUNT, STATIC ONLY**

Surface Section (SM) – Image shown with rectangular lens



Back of Housing, Surface Mount (SM) and Cable Mount (CM)



**Surface Mount:**

Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock-outs, 3/8", provided in center channel as indicated at left, marked A.

**Cable Mount:**

Order CM ceiling type. Use CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide CM trim fixtures. Mounting holes are provided in diagonal straps shown at left, marked B.

\* For Cable Mount a 2" x 3" access plate with (4) 7/8" KOs provided in place of Mounting Collar shown.

**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

## SPECTRASYNCTM COLOR TUNING TECHNOLOGY

Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync Color Tuning Technologies.

### Dim to Warm

Dim to Warm mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed. (Available with 2200K-3000K)

### Tunable White

Tunable White offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors, or the aesthetics of the space. (Available with 2700K-5000K or 2700K-6500K)

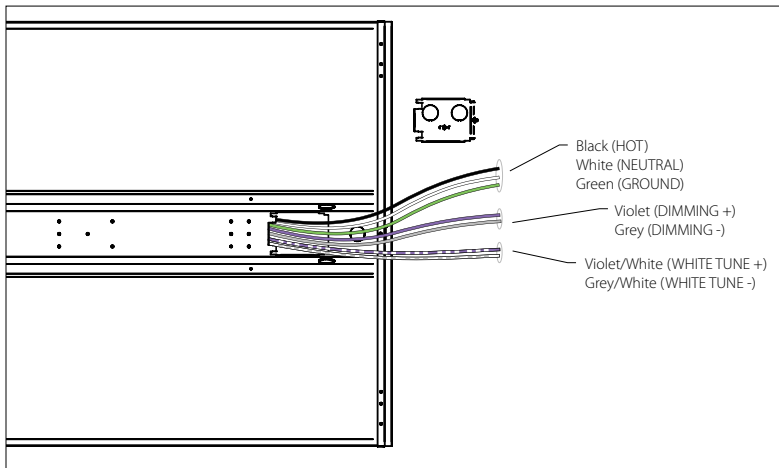
### Scheduled White

Scheduled White creates an environment that mimics the rhythms of natural light throughout the day, enhancing occupant's mood and well-being. (Available with 2700K-5000K or 2700K-6500K)

## SPECTRASYNCTUNABLE WHITE

### 2750T OR 2765T- SPECTRASYNCTUNABLE WHITE, 2700K-5000K OR 2700K-6500K

Requires (2) 0-10V controllers, (1) for intensity and (1) for CCT. Minimum 5% dimming.



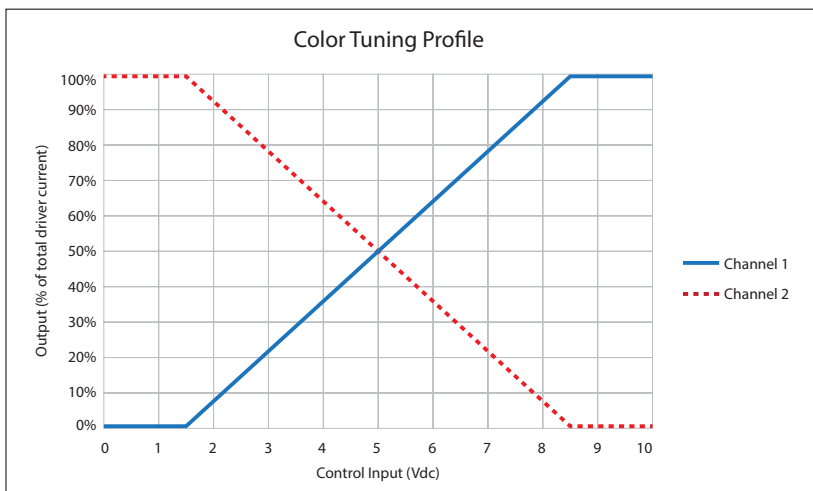
SpectraSync tunable white luminaires are provided with (2) 0-10V circuits. The violet and grey circuit is for wiring to any qualified 0-10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0-10V controller for tunable white CCT control.

## CONTROLLER MANUFACTURER DATA



### Suggested controllers to be used with SpectraSync:

SpectraSync tunable white was designed to be used with sinking style dimmers (provided by others) and is compatible with:

- Hubbell Control Solutions (HCS): NX Distributed Intelligence Room Controllers (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DDTV, DVSTV, and NFTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



To enable scheduling and for use with NX wall control preset stations please refer to Hubbell Control Solutions NX SpectraSync technical sheet.

Shielding	Lumen Output	Watts	2700		3000		3500		4000		5000		6500	
			Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
Curve 	XW	19	2240	117	2341	123	2383	125	2414	126	2493	131	2456	129
	VW	28	2990	108	3124	113	3180	115	3221	117	3327	121	3277	119
	MW	30	3218	107	3363	111	3424	113	3467	115	3582	119	3528	117
	LW	36	4084	113	4268	118	4345	120	4400	122	4545	126	4477	124
	ML	39	4566	118	4771	123	4857	125	4919	127	5081	131	5005	129
	HL	44	5209	118	5443	124	5541	126	5612	128	5797	132	5710	130
	VL	59	6698	114	6999	119	7125	121	7216	122	7454	126	7342	124
Rectangle 	XW	20	2489	123	2601	128	2648	130	2682	132	2770	136	2728	134
	VW	28	3085	109	3224	114	3282	116	3324	118	3434	122	3382	120
	MW	30	3323	110	3472	115	3534	117	3580	119	3698	122	3642	121
	LW	36	4230	117	4420	122	4500	125	4557	126	4707	130	4637	128
	ML	39	4711	121	4923	127	5012	129	5076	131	5243	135	5164	133
	HL	43	5295	123	5533	128	5633	131	5705	132	5893	137	5804	135
	VL	58	6653	116	6952	121	7077	123	7168	125	7404	129	7293	127

**NX™ SOLUTION GUIDE FOR SPECTRASync™ COLOR TUNING TECHNOLOGY**

When paired with SpectraSync™ enabled luminaires, NX Distributed Intelligence lighting control delivers a comprehensive color control solution, simplifying setup and code compliance through self-configuration and an optional Bluetooth® interface with mobile application.

- Complete control solutions using SpectraSync color tuning technology
- Device auto-configuration and plug-n-play connectivity
- Intuitive app interface and user-friendly wall stations

NX™ Distributed Intelligence Accessories for SpectraSync Control	
CATALOG NUMBER	DESCRIPTOR
NXAC-120	NX Area Controller, NEMA 1, HubbNET, BACnet™, 120 Volt
NXHNB	NX Network Bridge Module
NXRC-2RD-UNV	NX Room Controller, 2 Relay, 0-10V Dimming, Universal Voltage
NXSW-CCT-xx	NX Digital CCT Scene Switch, 6 Buttons, 4 Presets, Raise/Lower
NXSW-SS-xx	NX Digital Scene Switch, 6 Buttons, 4 Presets, Raise/Lower
NXSW-ORLO-xx	NX Digital Switch Station, On/Raise/Lower/Off
NXSW-RL-xx	NX Digital Switch Station, 2 Buttons, Raise/Lower
NXSW-OO-xx	NX Digital Switch Station, On/Off
NXSW-TO-xx	NX Digital Switch Station, Timed-On, Pilot

Order as separate catalog number. Visit [www.hubbellcontrolsolutions.com](http://www.hubbellcontrolsolutions.com)

Note: 'xx' = color; Black (BK), Gray (GY), Ivory (IV), Light Almond (LA), Red (RD), White (blank).

**NX USER INTERFACES**



Wall stations for personalized control of light and color



NX mobile app offers user-friendly configuration tool



Area Controller GUI provides simple and intuitive programming

Android

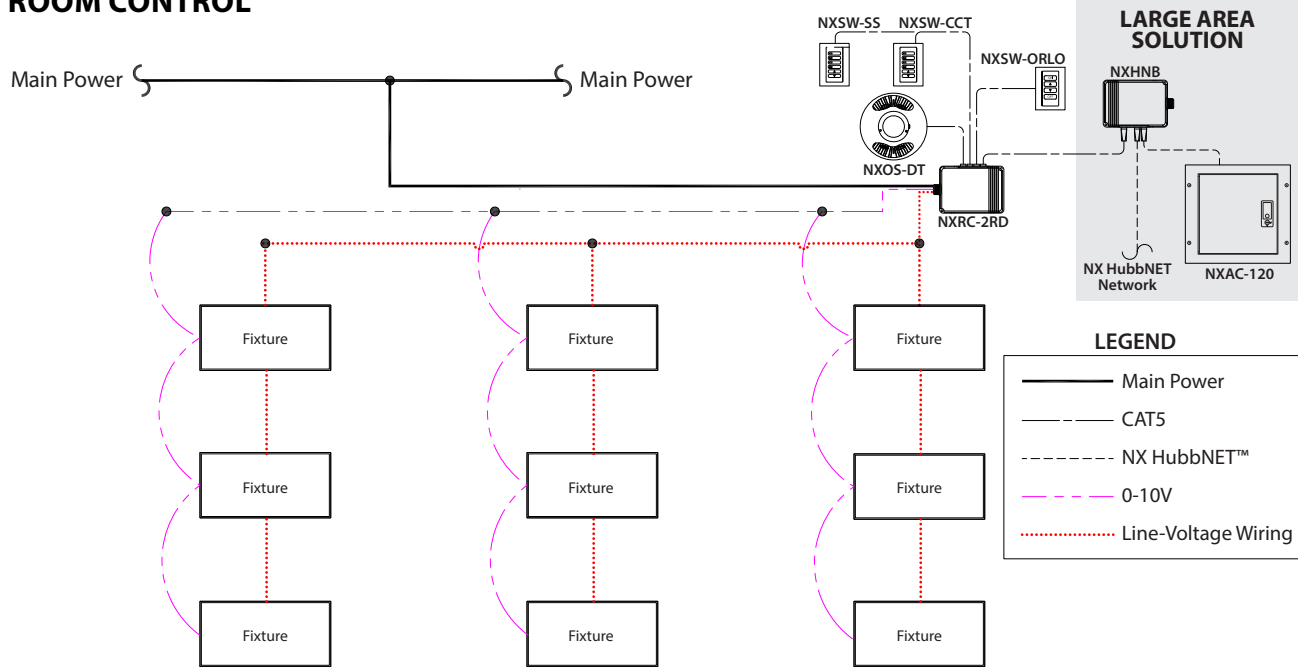


Free Bluetooth® enabled mobile app for ease of configuration

Apple



**TYPICAL NX DISTRIBUTED INTELLIGENCE™ LAYOUT FOR STAND-ALONE OR NETWORKED ROOM CONTROL**



**NX DISTRIBUTED INTELLIGENCE™ IN-FIXTURE SOLUTION GUIDE**

NX Distributed Intelligence enables Hubbell's portfolio of commercial, industrial and architectural luminaires to further reduce energy consumption and total cost of ownership for simple to complex control environments.

NX-enabled luminaires provides you the breadth and flexibility to address all your project requirements today and in the future. For a complete list of luminaires with integrated NX options please visit our website.

NX Distributed Intelligence™ In-Fixture Options			
NX CONTROL OPTIONS	DESCRIPTOR	CONNECTIVITY	APPLICATION SPACE
NXSP14F	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14'	Standalone	Both
NXSPL	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, Low Mount	Standalone	Indoor
NXOS	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, OMNI	Standalone	Indoor
NXS	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting	Standalone	Indoor
NXSPH	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, High Mount	Standalone	Indoor
NXSP30F	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30'	Standalone	Outdoor
NXEPL	NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting, Low Mount	Wired	Indoor
NXE	NX Enabled, Dual SmartPorts	Wired	Indoor
NXEOS	NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting, OMNI	Wired	Indoor
NXES	NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting	Wired	Indoor
NXESPH	NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting, High Mount	Wired	Indoor
NXSPW14F	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14'	Wireless	Both
NXWE	NX Wireless Enabled	Wireless	Both
NXSPWL	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, Low Mount	Wireless	Indoor
NXOSW	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, OMNI	Wireless	Indoor
NXSPWH	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, High Mount	Wireless	Indoor
NXSW	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting	Wireless	Indoor
NXSPW30F	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 30'	Wireless	Outdoor

Visit [www.hubbellcontrolsolutions.com](http://www.hubbellcontrolsolutions.com) for additional information on the NX platform. For information on NX options available with specific Hubbell Lighting luminaires please reference specification sheets.

NX Distributed Intelligence™ Accessories	
CATALOG NO.	DESCRIPTOR
NXAC-120	NX Area Controller, NEMA 1, HubbNET, BACnet, 120 Volt
NXHNB	NX Network Bridge Module
NXRC-2RD-UNV	NX Room Controller, 2 Relay, 0 - 10V Dimming, Power Monitoring, Universal Voltage
NXOFM-1R1D-UNV	On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120-480VAC
NXSW-CCT-xx	NX Digital CCT Scene Switch, 6 Buttons, 4 Presets, Raise/Lower
NXSW-SS-xx	NX Digital Scene Switch, 6 Buttons, 4 Presets, Raise/Lower
NXSW-ORLO-xx	NX Digital Switch Station, On/Raise/Lower/Off
NXSW-RL-xx	NX Digital Switch Station, 2 Buttons, Raise/Lower
NXSW-OO-xx	NX Digital Switch Station, On/Off
NXSW-TO-xx	NX Digital Switch Station, Timed-On, Pilot

Note: 'xx' = color; Black (BK), Gray (GY), Ivory (IV), Light Almond (LA), Red (RD), White (blank).

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Wall stations for personalized control of light and color



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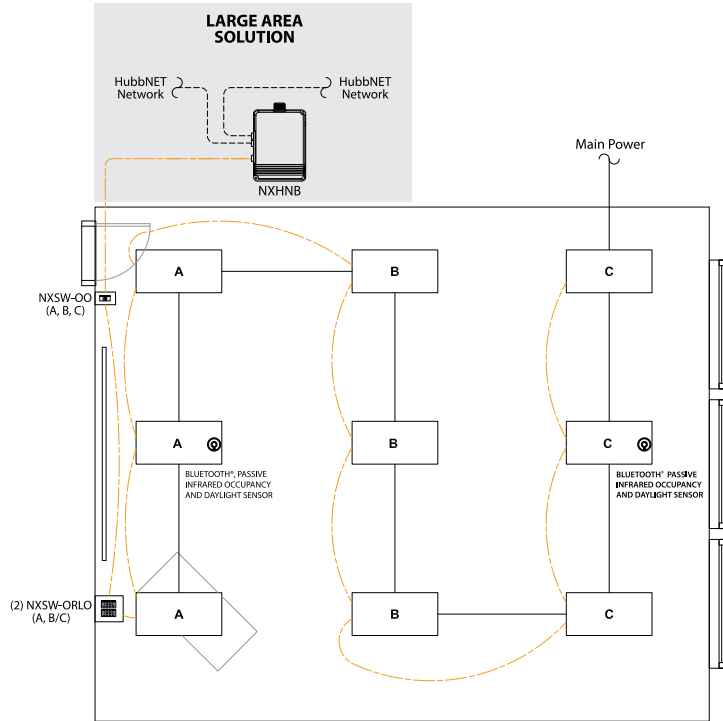
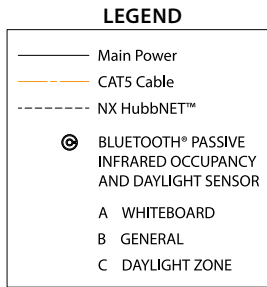
Free Bluetooth® enabled mobile app for ease of configuration

Apple

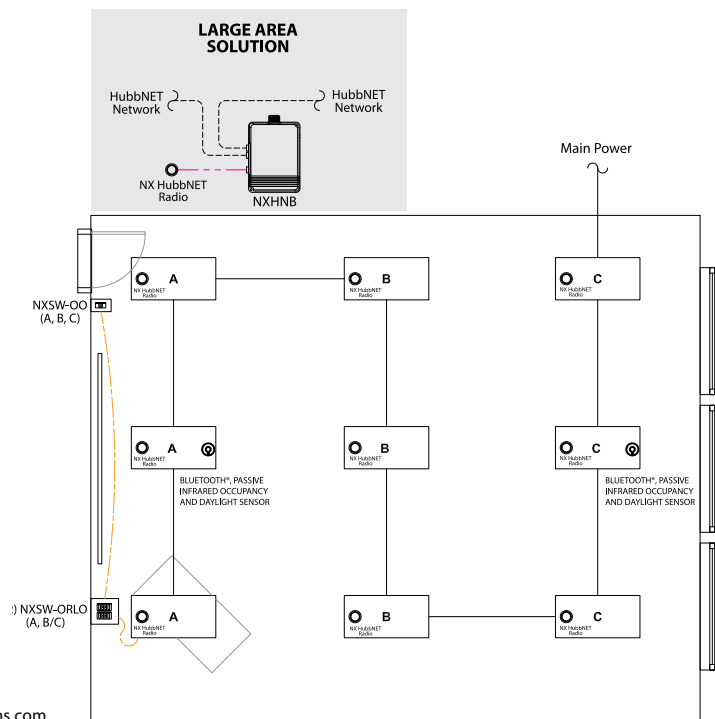
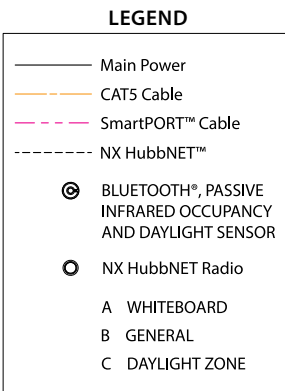


**TYPICAL NX DISTRIBUTED INTELLIGENCE™ LAYOUT FOR WIRELESS OR WIRED NETWORKED IN-FIXTURE CONTROL**

Vertical Market: Education  
Application: Classroom  
Connectivity: Wired



Vertical Market: Education  
Application: Classroom  
Connectivity: Wireless



For additional solutions possible with NX please visit [www.hubbellcontrolsolutions.com](http://www.hubbellcontrolsolutions.com) to view our Vertical Market Application Guides.