

Nelo 70L

OPEN APERTURE RECESSED DIRECT

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- Variable Intensity technology provides a range of specifiable outputs and resulting fixture wattages
- 1200 lumens max. See performance data table on page 4 for additional information
- 80 & 90 CRI (30, 35, 40K); Warm Dim (30–22K), Tunable White (27–65K & 27–50K)



CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- 2.5" x 3" nominal profile with 1.8" aperture.
- Extruded aluminum housing with machined aluminum end headers
- End caps constructed from die-formed steel.
- Patent pending ConJoin™ row mounting system
- Remote driver enclosure constructed from die-formed steel.

OPTICS

- 3 SDCM CCT consistency, 80 or 90 CRI. Tunable White and Dim to Warm options available.
- 98% High reflectance laminated reflector for soft, continuous illumination. UV stable, UL 94 V rated.
- Additional reflector seam cover blends appearance for unbroken illumination in row mount configurations.

ELECTRICAL

- Variable Intensity (VI) technology allows precise specification of fixture output/wattage. Fixture will be programmed and labeled to specification.
- LED boards and solid state constant current driver are field-serviceable from below through housing aperture.
- 1C (1 Circuit) Fixture wired for a single circuit
- Emergency Battery: 6W battery powered driver. Provides a minimum of 90 minutes of emergency lighting. Inverter-Compatible. Provided by others. Available in 4'+ fixtures

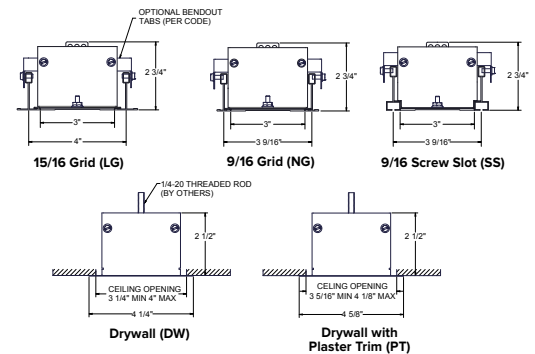
INSTALLATION

- PT Mounting: Continuous spackle trim with beaded edge fastened to housing. Spackle trim allows plaster coat up to fixture edge for clean ceiling appearance
- LG/NG/SS Mounting: Side rails provide continuous mounting, lateral spacing between T-bars and allows clearance for T-bar supporting wire. For Tegular grid mount, fixture will sit level with the T-bar
- DW Mounting: Side rails allow installation into drywall slot. Visible flange is located on all 4 sides of fixture
- Remote enclosure not rated for contact with insulation. Insulation must be no closer than 3" from remote driver enclosure

CONTROLS

- Sensors install at end of individual fixtures. For rows or additional information, contact factory.
- NX Lighting Controls provides options for standalone and networked integrated sensor with wired or wireless connectivity for NX system deployments
- SpectraSync™ Color Tuning Technology: Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants

CERTIFICATIONS



	Weight
70L-R-D	2 lbs/ft

- CSA listed for damp locations
- UL924
- IBEW
- AF of L
- This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) and Trade Agreements Act (FAR 52.225-11). See [Buy America\(n\) Solutions](#).
- Emergency Battery Backup options are California Energy Commission (CEC) Title 20 Compliant.

WARRANTY

- LED boards - 5 years
- LED drivers (standard) - 5 years
- LED drivers (Lutron) - 3 years

KEY DATA	
Lumen Range	300–1200
SDCM	3
Rated Life	L85 > 50,000 Hours
Efficacy	108–120 LPW

ORDERING GUIDE

CATALOG #

Example: 70L-NG-D-8-08-C1-35K-D030-D01-1C-UNV-EG

Series	Ceiling Type	Distribution	Row Length (In Feet)	Max Length in Row	Finish/Color ¹		
70L Nelo	DW Drywall	D Direct	—' Enter in foot increments	02 2', 609mm	C1 Matte White (Default)		
	PT Drywall with Plaster Trim			03 3', 914mm	C2 Textured Matte White		
	LG 1 ⁵ / ₁₆ " Grid			04 4', 1219mm	C3 Light Silver		
	NG 3 ¹ / ₈ " Grid			05 5', 1524mm	C4 Machined Aluminum		
	SS 3 ¹ / ₈ " Screw Slot or Tegular			06 6', 1829mm	C5 Carbon Black		
				08 8', 2438mm	C6 Textured Camera Black		
					CC Custom Color		

CCT/CRI ²	Direct Output/ft	Driver	Circuiting	Voltage	Enclosure Mounting
30K 3000K, 80 CRI	D030 300 (Min) to	D01 1% Dimming, 0–10V	1C 1 Circuit	UNV 120–277V	ED Drywall & Other
30K9 3000K, 90 CRI		D05 5% Dimming, 0–10V ³		347 347V ⁴	EG Grid
35K 3500K, 80 CRI	D120 1200 (Max)	LEC Hi-Lume 1% EcoSystem			
35K9 3500K, 90 CRI		NDM Non-Dimming			
40K 4000K, 80 CRI					
40K9 4000K, 90 CRI					
2230TD 2200K–3000K SpectraSync™ Dim-to-Warm					
2750T 2700K–5000K SpectraSync™ Tunable White					
2765T 2700K–6500K SpectraSync™ Tunable White					

Nightlight ⁵	Emergency ⁶	Thru-Wiring	Control Options ⁴
NL Nightlight Circuit Required. Enter quantity.	EF 6W Emergency Battery Backup. Enter quantity. (CEC Title 20 Compliant)	W1 No Thru-Wire. W2 Provide Normal and NL/EF Thru-Wiring W3 Provide Normal Thru-Wiring Only	<div><div>NX Networked – Wired</div><div>NXE NXE NXERM NXERM</div><div>NX Networked – Wireless</div><div>NXW NXW NXWRM NXWRM</div><div>Sensors</div><div>BTSL BTSL</div></div> <div>NX Wired Dual RJ45 SmartPORTS, without Sensor^{7,8} NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming^{7,8} NX Networked Wireless Radio Module NXRM2 and Bluetooth® Programming, without Sensor^{7,8} NX Networked Wireless Enabled Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming^{7,8} Bluetooth® Programmable, BTSMP-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens⁷</div>

Notes:

1 Visit currentlighting.com/litecontrol for details.

2 SpectraSync must be ordered with D05 driver option

3 Must be ordered with SpectraSync options

4 Additional lead time may be applicable. Contact factory.

5 2NL = 2 nightlight circuits/row. Available in 4'+ fixtures.

6 2EF = 2 Emergency batteries/row. See Details for restrictions. Provides a minimum of 90 minutes of emergency lighting. Inverter-Compatible. Provided by others. Available in 4'+ fixtures. 8' available LH & RH.

7 Not available for row mounting. Only available with 0-10V Driver options. Contact factory for Length restrictions.

8 Refer to NX Integrated Controls Reference Table for Functionality of Options.






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CONTROLS OPTIONS AND FUNCTIONALITY



Control Option Ordering Logic & Description		Control Option Functionality										Control Option Components		
		Sensor	Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth® App Programming	Sensor Height			
NX Wired	NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor	N/A	✓	✓	✓	–	–	✓	✓	Requires NXBTC dongle ¹	–		NXDSP
	NXERM	NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming	NXSMP2-LMI	✓	✓	✓	✓	✓	✓	✓		Max: 12'	 	NXSMP2-LMI NXDSP
NX Wireless	NXWRM	NX Networked Wireless Enabled Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming	NXSMP2-LMI	✓	✓	✓	✓	✓	✓	✓		Max: 12'		NXSMP2-LMI
	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth® Programming, without Sensor	N/A	✓	✓	✓	–	–	✓	✓	✓	–		NXRM2-H

¹ NXBTC needs to be plugged into an available NX SmartPort™ on the fixture network

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

CONTROLS OPTIONS AND FUNCTIONALITY (CONTINUED)

SPECTRASYN™ 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.



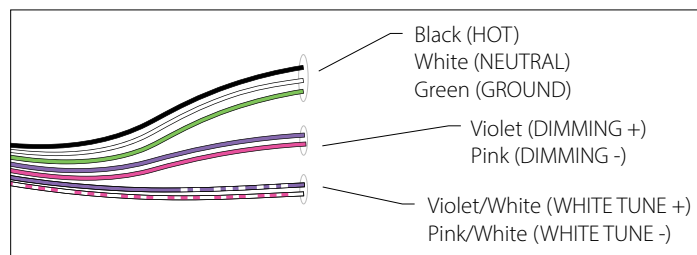
SPECTRASYN Color tuning technology		
Mode	Kelvin Range	Description
Dim to Warm	2200K–3000K	Mimics the familiar warning effect that occurs with traditional incandescent sources as they are dimmed
Tunable White	2700K–5000K 2700K–6500K	Offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space
Scheduled White	2700K-5000K 2700K-6500K	Mimics the rhythm of natural light or follows an alternative user-defined schedule throughout the day enhancing an occupant's mood and well-being

SPECTRASYN TUNABLE WHITE

Available in two options: 2750T (2700K–5000K) or 2765T (2700K–6500K).

Requires two 0–10V controllers, one for intensity and one for CCT.

Minimum 5% dimming.

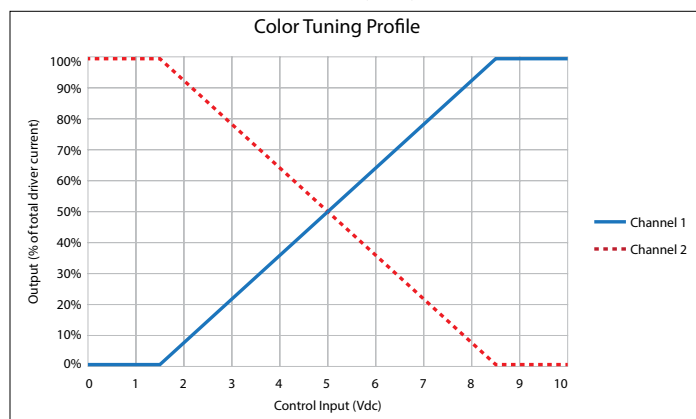


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and pink/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

CONTROLLER MANUFACTURER DATA

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

- Current: NX Lighting Controls Room Controllers (NXRCFX2) and In-fixture Controllers (NXFM2)
- 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 SpectraSync technical sheet.

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PERFORMANCE DATA TABLE

The table below shows the delivered lumens for the various lumen outputs. Use this chart in connection with the output multiplier capability to deliver any output required.

Nomenclature	Lumens/Ft	W/Ft	Efficacy
D030 (min)	300	2.8	108
D035	350	3.2	110
D040	400	3.5	115
D045	450	3.9	116
D050	500	4.2	118
D055	550	4.7	117
D060	600	5.1	118
D065	650	5.5	118
D070	700	5.8	120
D075	750	6.3	118
D080	800	6.7	119
D085	850	7.2	117
D090	900	7.8	116
D095	950	8.3	115
D100	1000	8.7	115
D105	1050	9.1	116
D110	1100	9.6	115
D115	1150	10.1	114
D120 (max)	1200	10.5	114

OUTPUT RESTRICTIONS

Driver options listed below are not available for the output and length as shown.

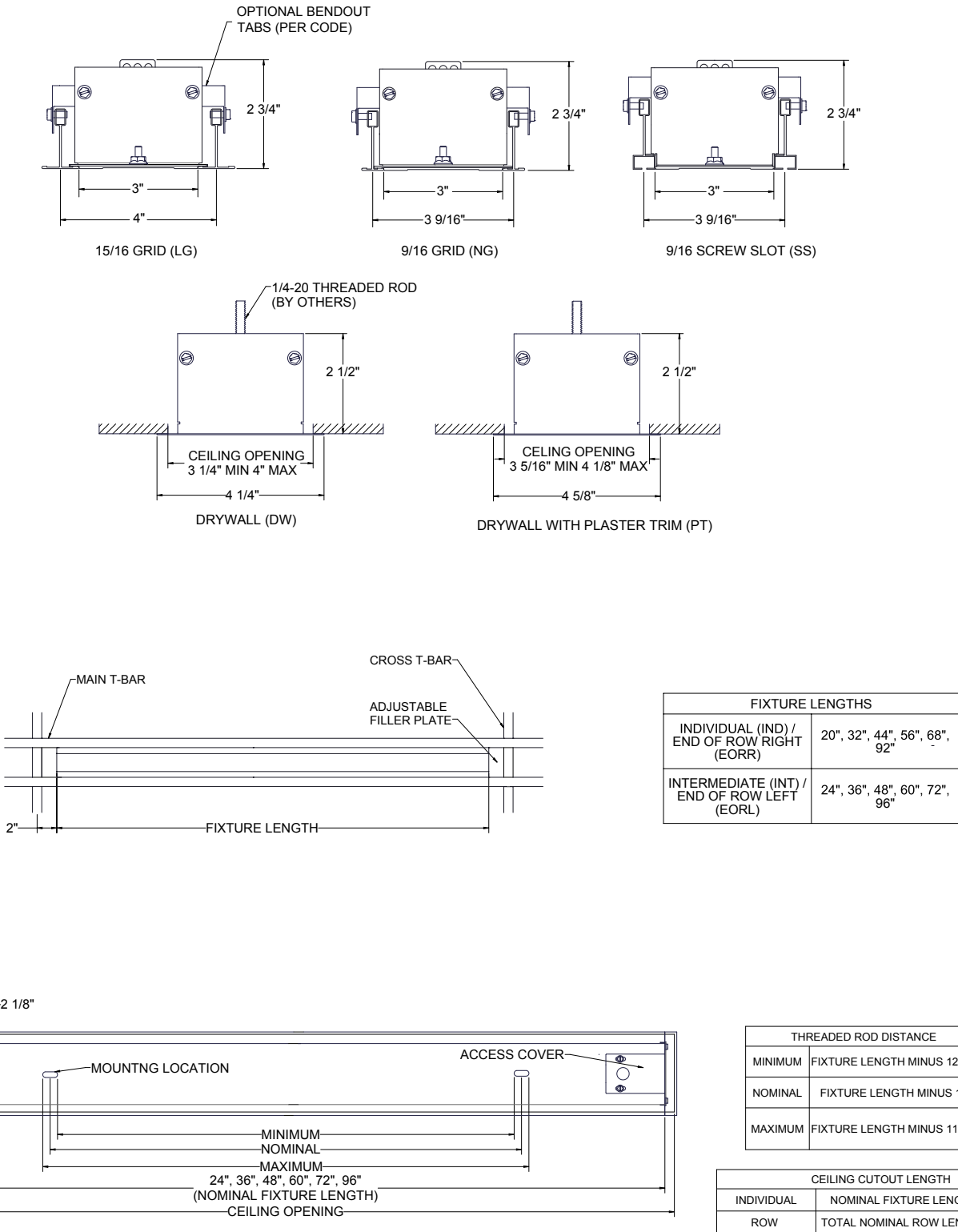
LENGTH	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
70L (Direct)																			
All	347V D01, D05 Not Available										D05 + NX, 347 D01 Not Available								
	347 + NX Not Available						347 + NX Not Available												

OUTPUT MULTIPLIER TABLE

Photometrics for the 70L are published here at a nominal 3500K temperature. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

CCT	80 CRI	90 CRI
3000K	0.98	0.85
3500K	1	0.88
4000K	1.03	0.9

DIMENSIONS



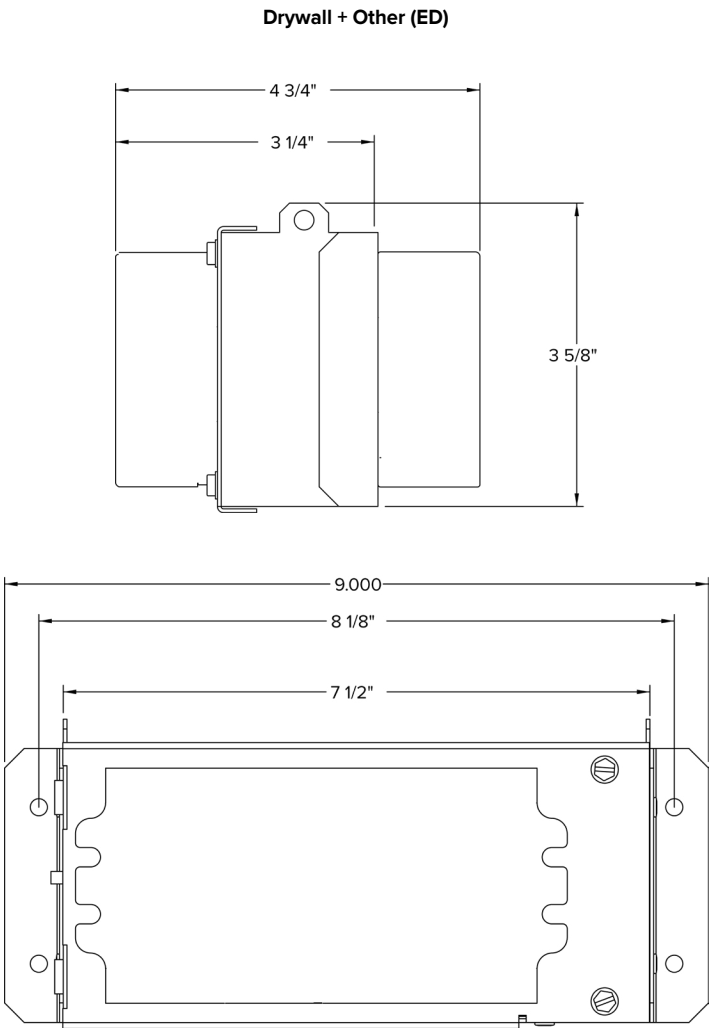
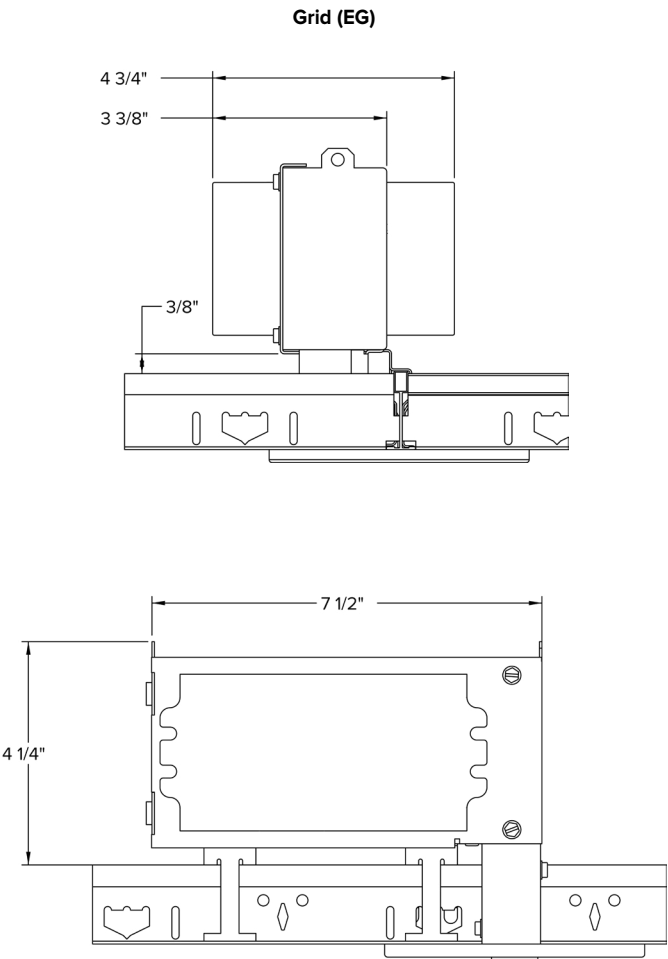
DIMENSIONS (CONTINUED)

REMOTE ENCLOSURE

Drivers for this product must be remote-mounted in an accessible location. Remote driver enclosure not intended for contact with insulation (IC). Insulation must be minimum 3" from drivers and enclosure, in all directions. Driver enclosure is die formed galvanized steel rated for 25°C ambient. Driver enclosures are configured to Grid Mount (EG) or Drywall & Other (ED). When grid ceiling mount, enclosure attaches to the T-Bar with factory installed caddy clips. For drywall (or other) mount applications, driver enclosure configured with mounting holes to secure to blocking (by others).

Every fixture section will come with at minimum (1) driver enclosure, and at minimum (1) factory installed Class 2 feed cord. Plenum rated cable (by others) required between enclosure and feed cord. See tables below.

See installation instructions for additional information.



Max Mounting Distance*	
Wire Gauge	Distance (Ft.)
18	33
16	53
14	84
12	134

Enclosure Size & Count	
2	Indirect/Direct with Emergency (EF)
1	All other configurations

*Mounting distance shown is total between luminaire and remote enclosure.

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PHOTOMETRY

70L-X-D-4-CX-35K-D120-ECC

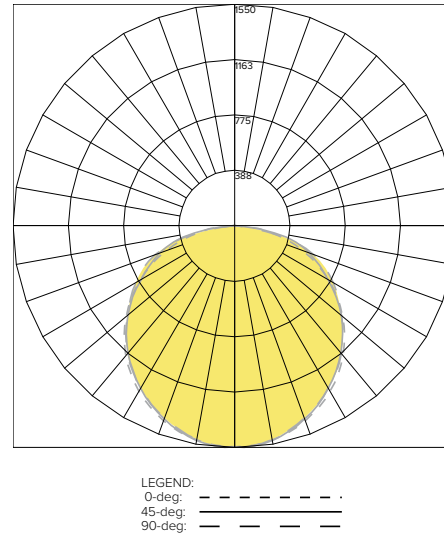
LUMINAIRE DATA

Test No.	Scaled from P21.01220
Description	70L Nelo Closed End Cap Direct
Delivered Lumens	4800
Watts	42W
Efficacy	114

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1981.83	41.3
0-60	3591.8	74.8
0-90	4800	100
0-180	4800	100

POLAR GRAPH



ADDITIONAL INFORMATION

DIMMING OPTIONS

D01	100%– 1% dimming range. Fixture will be wired for low voltage 0–10V dimming control.
D05	100%–5% dimming range, Fixture will be wired for low voltage 0–10V dimming control. Only applicable if either 2230TD, 2750T or 2765T is selected.
LEC	Hi-Lume 1% EcoSystem LED Driver with Soft-On, Fade-to-Black dimming technology.
NDM	Non-dimming. Fixture will be wired for fixed light output.

Rated Life

Tested in accordance to LM79-2008 & derived from EPA TM-21 calculator

L70: >54,000 (calculated per TM-21 extrapolated curve)

L70: 110000 (reported per TM-21/LM80 6x's limitation)

L85: >50000 (calculated per TM-21 extrapolated curve)

L85: 50500 (reported per TM-21/LM80 6x's limitation)

Rated Life (Driver)

Standard = 100,000 hours

Lutron = 50,000 hours

70L-R-D WITH NXWRM WIRELESS CONTROL OPTION

