

FEATURES

- Architectural styling in an edge-lit luminaire
- High efficiency acrylic lens featuring edge lit technology
- Ideal for offices, schools, medical, and public spaces
- Available in trendy matte black finish
- Stylish controls integration
- Wet location option available
- 2" overall depth, 2 1/4" with emergency battery pack option
- Surface mount kit available as an accessory
- Up to 150 lumens per watt



CONTROLS TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Extruded aluminum side and center rails, cast aluminum end caps, cold-rolled steel driver enclosure
- Acrylic light guide and diffuser with custom frost for high efficacy without pixelation
- Rail and end cap surfaces are finished after fabrication with unique formula high-reflectivity matte white paint

INSTALLATION

- An access plate is furnished with each luminaire for fast wiring access without the necessity to open the fixture or wireway
- Luminaire fits recessed exposed Grid ceilings (G); four NEC compliant T-bar clips included
- 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) accessory allows placement below ceiling plane

ELECTRICAL

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

CONTROLS

- Optional SpectraSync Tunable White solution integrates seamlessly into a variety of control systems
- 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

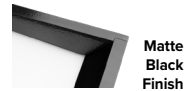
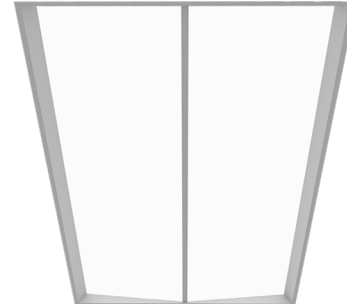
- Emergency battery pack options are California Energy Commission (CEC) Title 20 Compliant
- IC label is standard for recessed products
- All luminaires are built to UL 1598 standards, and bear appropriate cCSAus labels
- CSA certified to UL 924 standards with battery pack or DTS (Dimming Bypass Module) options
- Damp Location label standard; Wet location Listing available
- UL Sanitation certified to NSF standards

CERTIFICATIONS (CONTINUED)

- Adheres to LM79, LM80, and TM21 industry standards
- Tested in accordance with ISO 14644-1; suitable for ISO Class 5-9 positive and negative pressure clean rooms
- The DTS, Dimming Bypass Module, is for emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. See wiring diagram.
- DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Product configurations not including battery packs or controls meet federal procurement law requirements under the Trade Agreements Act (FAR 52.225-11). See [Buy America\(n\) Solutions](http://BuyAmerica(n).Solutions)

WARRANTY

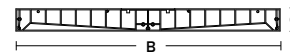
- 5 year warranty



SERVICE PROGRAMS



Typical Dimensions and Weights				
Sizes	(A) Length Inches (mm)	(B) Width Inches (mm)	(C) Height Inches (mm)	Weight lbs (kg)
2x4	47.75 (1213)	23.75 (603)	2.00 (51)	15.0 (6.8)



DATE:

LOCATION:

TYPE:

PROJECT:

CATALOG #:

Gray Shading

= Service Program
Limit of 100 Luminaries

QS15

ORDERING GUIDE

Example: VSY24-35MLHEG-EDU

VSY24				G	
Model	CRI	Color Temp	Nominal Lumens ²	Ceiling Type	Driver
VSY24 Verify 2'x4' Architectural Edge-Lit	Blank >80 9 >90	30 3000K	XWHE 2190	G Grid ³	ED 0-10V Dimming
		35 3500K	VWHE 3210		ED1 0-10V 1% Dimming
		40 4000K	MWHE 3760		EDD 0-10V Dim-to-Off
		50 5000K	LWHE 4310		LUTH Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology ⁴
		2765T 2700K-6500K SpectraSync™ Tunable White ¹	MLHE 4810		DALIP Powered by DALI ⁴
			HLHE 5650		
			VLHE 7185		
			XLHE 7905		
					U 120-277V 347 347V

Options	Control Options ¹⁰
ELL14 10W Emergency Battery Pack (CEC Title 20 compliant) Installed ^{4, 5, 6}	<u>NX Lighting Controls</u>
ELL14ST Emergency Battery Pack, 1400 Lumens, Self Test ^{4, 5, 6}	<u>Networked Wireless</u>
ELL14H2 Emergency Battery Pack, 2-Hour Run Time ^{4, 5, 6, 7}	NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ^{11, 12, 13}
DTS Dimming Bypass Module ^{4, 6, 8}	NXWSM NX Networked Wireless Enabled Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming ^{11, 13}
C388 3-Wire Flex	<u>Networked Wired</u>
C488 4-Wire Flex	NXE NX Wired Dual RJ45 SmartPORTS, without Sensor ^{11, 12, 13}
C588 5-Wire Flex	NXESM NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming ^{11, 12, 13}
C688 6-Wire Flex	<u>Independent Control</u>
GLR Fast Blow Fuse	NXCS NX Connect NXC-WIZ20 Wireless Indoor Occupancy and Photocell Sensor ^{4, 14, 15, 16, 18}
CP Chicago Plenum	<u>Other Lighting Controls</u>
WL Wet Location ⁹	<u>Networked Wireless</u>
MB Matte Black Finish	LVR Lutron Vive Wireless DFCSJ-OEM-RF In-Fixture Control (RF only) ^{4, 16, 17, 18}
	LVS Lutron Vive Wireless DFCSJ-OEM-OCC In-Fixture Control with Daylight and Occupancy Sensing ^{4, 16, 17, 18}
	AWNRLutron Athena Integral Fixture Control A-WN-DO1-RF-WH (RF only) ^{4, 13, 16, 19}
	AWNS Lutron Athena Integral Fixture Control A-WN-DO1-OCC-WH with Daylight and Occupancy Sensing ^{4, 13, 16}
	<u>Independent Control</u>
	ODPG Occupancy and Daylight Sensors w/ Grouping, Philips EasySense SNS200 ^{4, 16, 18}

ACCESSORY ORDERING GUIDE

Accessories
<input type="checkbox"/> FK24 2' x 4' Single Flange Kit (Shipped separately)
<input type="checkbox"/> KIT-VSY24 SM VSY Surface Mount Kit (2'x4')

- Notes:

 - Available with ED driver and 80 CRI only. Not available with VLHE or XLHE lumen package
 - 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
 - To determine lumen output in emergency mode, multiply the battery pack wattage by the fixture lumens per watt (LPW)
 - For compatibility with Dual-Lite Litegear inverters, contact lighting representative
 - Not available for use in Canada
 - For emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. See wiring diagram.
 - Not available with Surface Mount Kit, Controls or Emergency Battery Pack
- All Controls**

¹⁰ Minimum ambient temperature: 0°C (32°F)

NX Lighting Controls Options

 - NX combined with SpectraSync is not available in 347V
 - Not compatible with Surface Mount Kit
 - Not available with LUTH or DALIP driver options
 - 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 Lighting Controls Options

 - Not available with SpectraSync
 - Vive is a trademark of Lutron Electronics Co., Inc.
 - Only available with DALIP driver option
 - When installing in a hard ceiling application room side mounting is suggested, please consult factory

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

DELIVERED LUMENS

PRODUCT AVAILABILITY 80 CRI			
LUMEN PACKAGE	LUMENS	INPUT WATTS	LPW
VSY24-30XWHE	2138	18	121
VSY24-35XWHE	2192	18	124
VSY24-40XWHE	2228	18	126
VSY24-50XWHE	2366	18	135
VSY24-30VWHE	3135	25	124
VSY24-35VWHE	3212	25	128
VSY24-40VWHE	3267	25	130
VSY24-50VWHE	3267	25	130
VSY24-30MWHE	3670	29	125
VSY24-35MWHE	3760	29	128
VSY24-40MWHE	3824	29	131
VSY24-50MWHE	3824	29	131
VSY24-30LWHE	4204	33	126
VSY24-35LWHE	4308	33	129
VSY24-40LWHE	4381	33	131
VSY24-50LWHE	4381	33	131
VSY24-30MLHE	4696	37	128
VSY24-35MLHE	4812	37	131
VSY24-40MLHE	4893	37	133
VSY24-50MLHE	4893	37	133
VSY24-30HLHE	5513	38	143
VSY24-35HLHE	5648	38	147
VSY24-40HLHE	5744	38	149
VSY24-50HLHE	5744	38	149
VSY24-30VLHE	7017	49	144
VSY24-35VLHE	7185	49	147
VSY24-40VLHE	7309	49	150
VSY24-50VLHE	7309	49	150
VSY24-30XLHE	7711	60	129
VSY24-35XLHE	7904	60	132
VSY24-40XLHE	8035	60	134
VSY24-50XLHE	8035	60	140

PROJECTED LUMEN MAINTENANCE

Calculation Method	Ambient Temp	25,000 hrs	50,000 hrs	60,000 hrs *
TM-21-11	25C/77F	0.94	0.89	0.87
TM-21-21	25C/77F	0.94	0.88	0.86

* 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.

DATE:

LOCATION:






TYPE:

PROJECT:

CATALOG #:

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 Factory Passcode: HubbN3T!	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

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

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



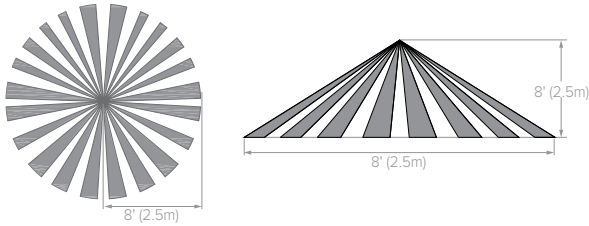
The NX Connect mobile App is a free to use mobile application for programming a NX Connect System. The mobile App allows you to discover, configure and share your NX Connect system.



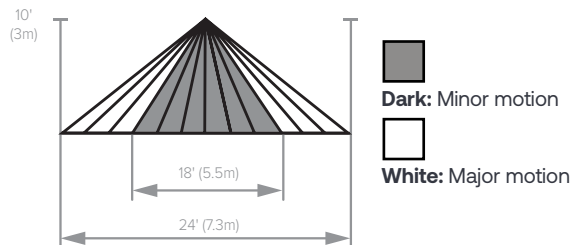
Apple iOS

COVERAGE PATTERNS

NXWSM/NXESM (NXSMP2-SMI SENSOR)



NXCS (NXC-WIZ20 SENSOR)



DATE:






LOCATION:

TYPE:

PROJECT:

CATALOG #:

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	ODPG	Occupancy sensing, daylight harvesting and task tuning in one device. ¹	-	✓	-	✓	✓	✓	✓ ³		SNS200
	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. ²	✓	✓	✓	-	-	✓	-		DFCSJ-OEM-RF
	LVS		✓	✓	✓	✓	-	✓	-		DFCSJ-OEM-OCC
	AWNDR	The Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system. ³	✓	✓	✓	-	-	✓	✓		A-WN-D01-RF-WH
	AWNS		✓	✓	✓	✓	✓	✓	-		A-WN-D01-OCC-WH

1 Philips MasterConnect App required for field configuration.
2 Lutron Vive Hub required to enable Networking, Grouping and Scheduling.
3 Lutron Athena Hub required to enable Networking, Grouping and Scheduling.

Philips EasySense Controls (ODPG option) & Accessories:



- Occupancy sensing, daylight harvesting, task tuning and grouping in one device
- Standalone control or grouping to wireless switches¹
- Uses Philips field apps for on site commissioning²
- Ability to create scenes for various room configurations
- Cost-effective solution for energy-savings and code-compliance strategies
- DLC® Qualified: Listed on the QPL for Networked Lighting Controls. Please refer to the DLC website for specific product qualifications at www.designlights.org

1 Wireless switches only compatible with ODPG Philips EasySense
2 Requires android device or IR dongle.

DATE:	LOCATION:
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SPECTRASync™ COLOR TUNING TECHNOLOGY

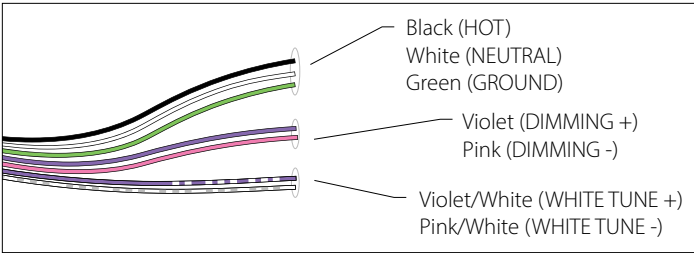
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



SPECTRASync COLOR TUNING TECHNOLOGY		
Mode	Kelvin Range	Description
Tunable White	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

SpectraSync Tunable White

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

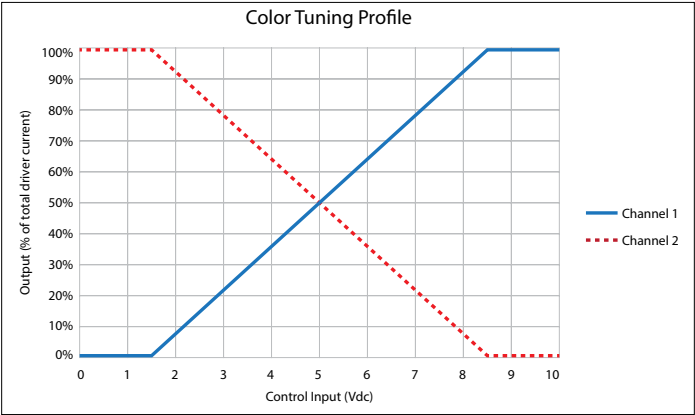


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and grey/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

Controller Manufacturer Data

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

- NX Lighting Controls Room Controller (NXRC) and In-fixture Controllers (NXFM)
- Lutron: DVTv, 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 NX SpectraSync technical sheet.

Delivered Lumens, SpectraSync™

Lumen Output	Watts	2700		3000		3500		4000		5000		6500	
		Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
XWHE	18	2046	116	2138	121	2192	124	2228	126	3267	135	3177	122
VWHE	25	3000	119	3135	124	3212	128	3267	130	3267	130	3177	126
MWHE	29	3512	120	3670	125	3760	128	3824	131	3824	131	3719	127
LWHE	33	4023	121	4204	126	4308	129	4381	131	4381	131	4260	128
MLHE	37	4494	122	4696	128	4812	131	4893	133	4893	133	4893	133
HLHE	38	5275	137	5513	143	5648	147	5744	149	5744	149	5586	145

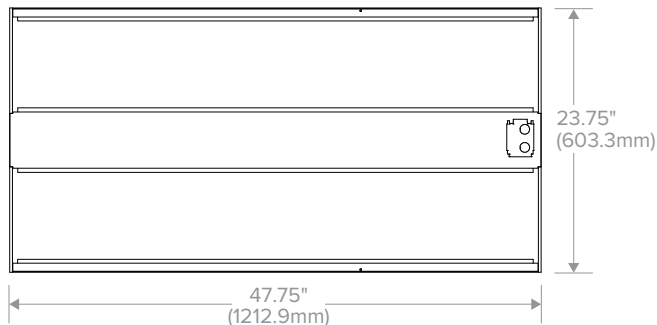
VSY24

VERIFY™ 2'X4' ARCHITECTURAL EDGE-LIT

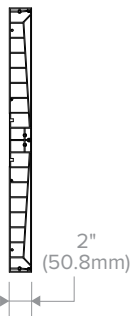
DIMENSIONS

GRID

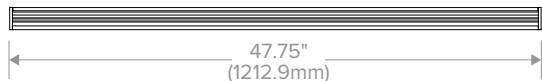
Top view



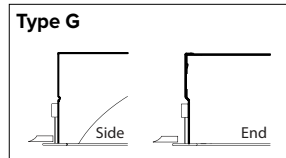
Front view



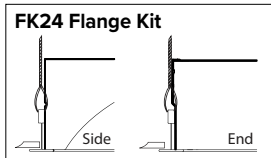
Side view



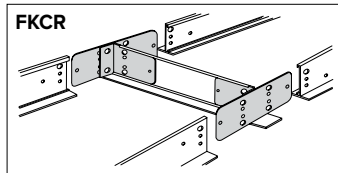
CEILING COMPATIBILITY



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.



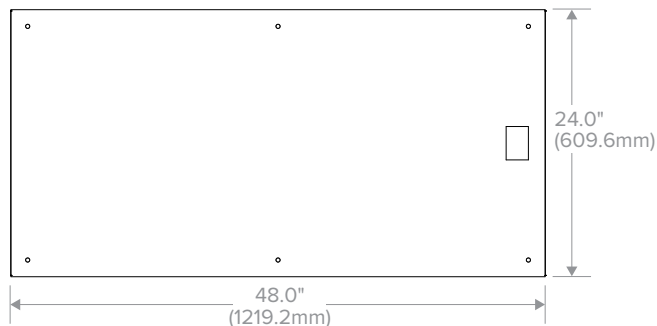
For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:
Width 24³/₈", Length [48" × (# in row)] + 3¹/₈".
Example: (48" × 2) + 3¹/₈" = 96³/₈"

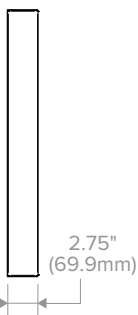
Flange kit cut out dimension for single unit only: 24³/₈" × 48³/₈"

SURFACE MOUNT

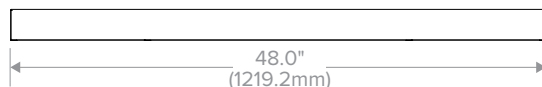
Top view



Front view



Side view



DATE:	LOCATION:
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PHOTOMETRY

VSY24-35MLHE-EDU

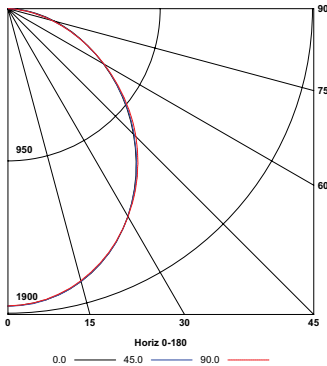
LUMINAIRE DATA

Test No.	19.01133
Description	Recessed Architectural Edge-Lit 2' x 4' LED with Acrylic Diffuser
Delivered Lumens	4812
Watts	36.69
Efficacy	131
Mounting	Recessed
Spacing Criterion	0° = 1.20 90° = 1.20

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-30	1409	29.3
0-40	2271	47.2
0-60	3875	80.5
0-90	4812	100
0-180	4812	100

POLAR GRAPH



DTS WIRING DIAGRAM (0-10V DIMMING DRIVER SHOWN)

