

AP1

Acoustic Luminaire
Frosted Lens

Pendant








BI-DIRECT
Light Distribution



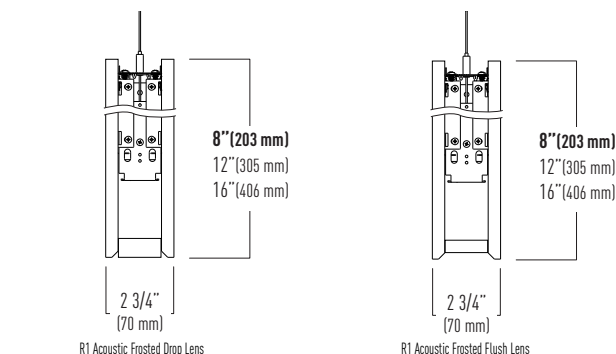
Nulite's AP1 Regolo acoustic system combines high performance LED lighting with sound absorbing PET felt to dampen noise within a space while also introducing color and texture to the ceiling plane.

- Hybrid PET felt and extruded aluminum fixture construction
- 28 PET felt color and pattern options
- Direct-indirect light distribution with optional batwing uplight
- Individual or continuous row mounting
- Tool free installation with engineered spring latch design

Standard Individual Fixture Lengths*

2' [609 mm]	
3' [914 mm]	
4' [1219 mm]	
5' [1524 mm]	
6' [1828 mm]	
7' [2133 mm]	
8' [2438 mm]	

* Dimensions represent fixture body length, add 1" for overall fixture dimension that includes both end caps



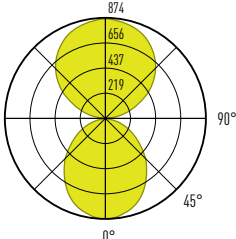
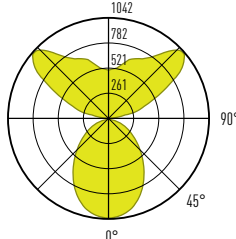
ORDERING INFORMATION / Example: AP1-8H-B-FF-O-05-05-L30-UNV-D-11-PW-T1W048.

AP1								
SERIES	FIXTURE HEIGHT	DISTRIBUTION	DIRECT SHIELDING	INDIRECT SHIELDING	LUMENS DOWN	LUMENS UP	CRI & CCT	
AP1 - Regolo Acoustic Pendant	8H - 8" (203mm) 12H - 12" (305mm) 16H - 16" (406mm)	B - Bi-Direct	FF - Frosted Flush Lens FRL - Frosted Dropped Lens (Luminous Ends)	O - Open DG - Dust Guard BW - Batwing Optic ASYM - Asymmetric Optic	03 - 300 lm/ft 05 - 500 lm/ft 08 - 800 lm/ft 10 - 1000 lm/ft	03 - 300 lm/ft 05 - 500 lm/ft 08 - 800 lm/ft 10 - 1000 lm/ft 13 - 1300 lm/ft 15 - 1500 lm/ft	L - 80 CRI H - 90 CRI	30 - 3000K 35 - 3500K 40 - 4000K

VOLTAGE	DRIVER	CIRCUITING			FELT OPTION
UNV - Universal 120 - 277V 50/60Hz 120V - 120V 277V - 277V	Dimming 0-10V D - Dim to 1% (Standard) DO - Dim to 1%, Fade to Off DO2 - Elctro Solodrive, Dim to 0% LUTRON - See options on page 2	Qty of Power Circuits 1 - 1 Power 2 - 2 Power	Qty of Control Circuits 1 - 1 Control 2 - 2 Control	Options B10 - 10 Watt Battery Pack (CEC Compliant) B15 - 15 Watt Battery Pack (CEC Compliant) GTD - Generator Transfer Device (120V or 277V) EM - Dedicated Emergency Circuit	PW - Pewter SL - Slate *See page 4 to review 26 additional colors and patterns

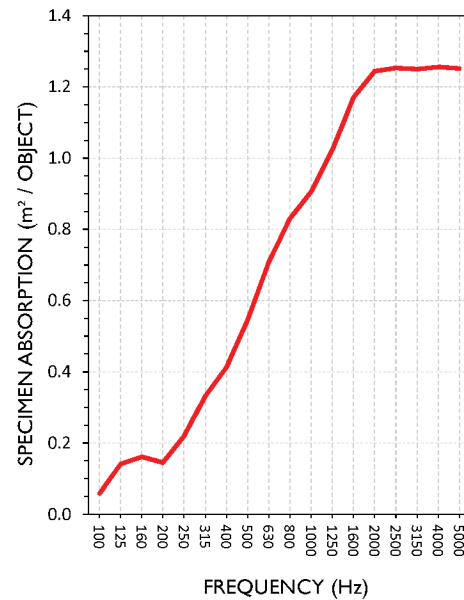
MOUNTING	OPTIONS	LINEAR ROWS
Ceiling Type T1 - Aircraft Cable to 1" Grid T9 - Aircraft Cable to 9/16" Grid TS - Aircraft Cable to Slotted Grid SR - Aircraft Cable to Structure	WLX - Wavelinx (Cooper Lighting Solutions) Integral Sensor NX - NX (Hubbel) Integral Sensor NLT - nLight (Acuity Brands) Integral Sensor LV - Vive (Lutron) Integral Sensor ENL - Enlighted Integral Sensor	2 - 24" 3 - 36" 4 - 48" 5 - 60" 6 - 72" 7 - 84" 8 - 96" XX - Specify continuous run lengths in 1' increments

PHOTOMETRICS

		Report #: ITL991025 3500K / 80 CRI 1000 lumens per ft			Report #: LLIA001906-001A 3500K / 80 CRI 1000 lumens per ft		
							
Light Direction	Light Level	Lumens per ft	Watts per ft	Lumens per watt	Lumens per ft	Watts per ft	Lumens per watt
Direct	05	500	9.42	122	500	35.5	142
Indirect	05	500			671		
		Max luminance: 15178			Max luminance: 15178		
		Max UGR: 23.5			Max UGR: 21		

*UGR and luminance values are from light level (08) 800 lumens per ft

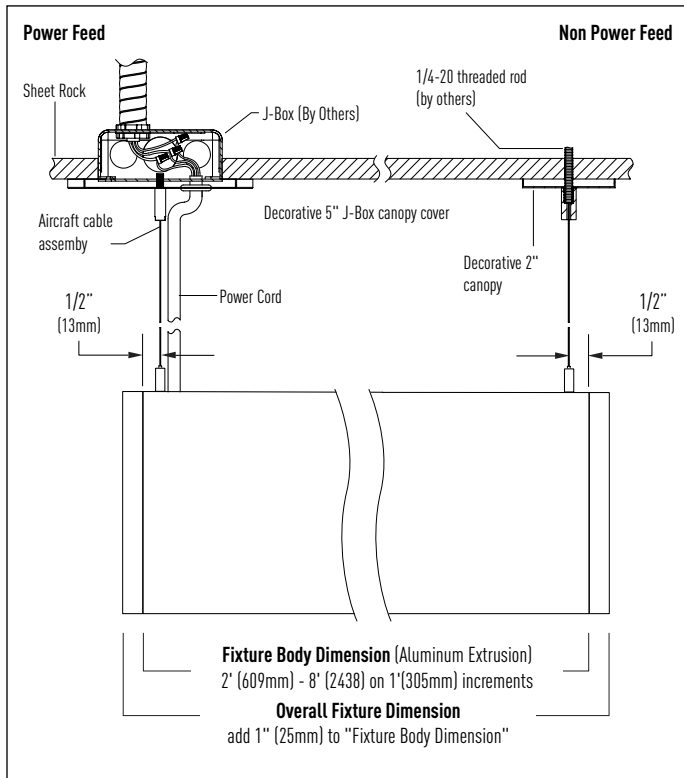
ACOUSTIC PERFORMANCE



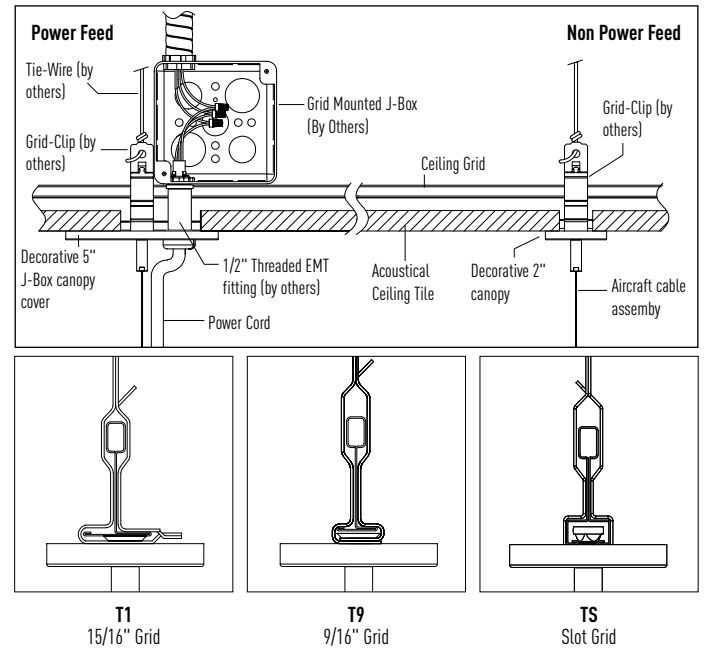
DRIVER INFORMATION

NULITE CAT#	DRIVER MANUFACTURER / SERIES	DIMMING / CONTROL PROTOCOL	DIM RANGE	NOTES/ DESCRIPTION
D	Signify Xitanium, Osram OTI	0-10v	100% - 1%	Standard Nulite driver, base fixture price
D0	Signify Xitanium, Osram OTI	0-10v	100%- 1% (Steps from 1% to 0% or OFF)	Standard Nulite driver, base fixture price
D02	Eldoled Solodrive	0-10v	100% - 0%	Logarithmic Dimming Curve
L11	Lutron Hi-Lume Premier (PEQ0E) Max lumen package 03	0-10v	100% - 0.1%	Hi-Lume Premier 0.1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
L15	Lutron Hi-Lume Series (LDE1)	0-10v	100% - 1%	Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
ELE	Eldoled Ecodrive	DALI	100% - 1%	Logarithmic Dimming Curve
ELS	Eldoled Solodrive	DALI	100% - 0%	Logarithmic Dimming Curve

Inaccessible Ceilings (Sheet Rock Typical)

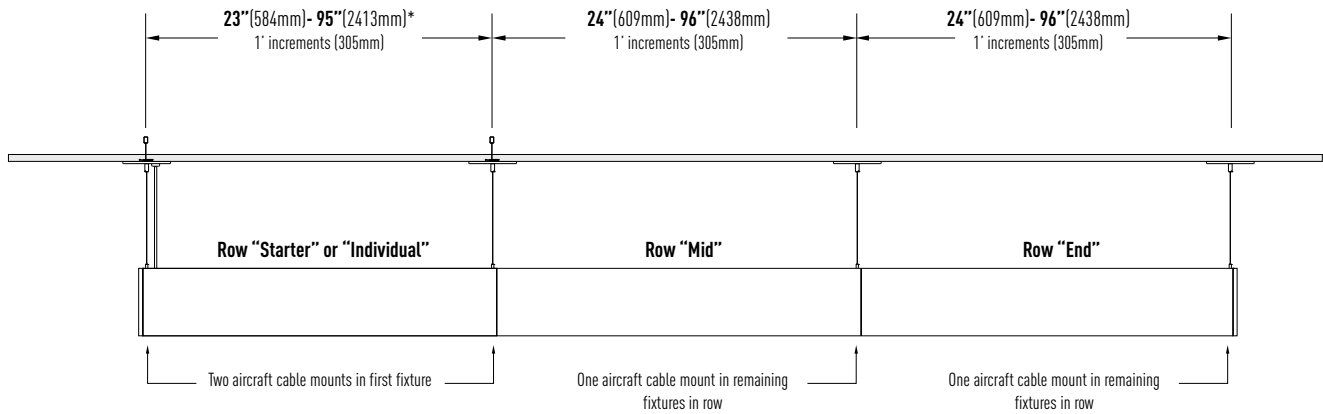


Acoustical Tile Grid Ceilings



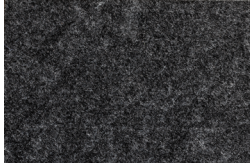
ROW LAYOUT DETAILS

REFERENCE DIMENSIONS FOR AIRCRAFT CABLE FIXTURE SUSPENSION MOUNTS



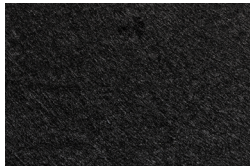
ACOUSTIC MATERIAL COLORS

STANDARD COLORS AND PATTERNS


PW - Pewter

SL - Slate

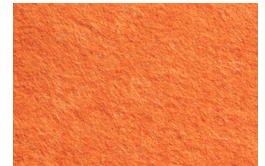
PREMIUM COLORS AND PATTERNS


TA - Tar

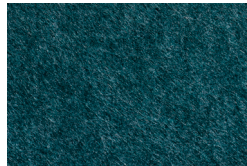
PB - Pebble

CH - Chambray

SK - Sky

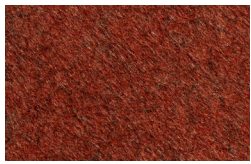
FL - Fossil

MN - Mandarin

CB - Cobalt

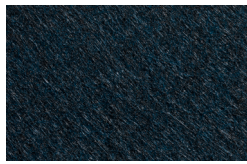
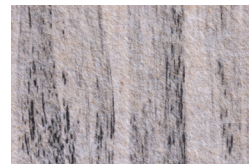
GG - Greige

MA - Malachite

GR - Grass

SN - Sunshine

CD - Cadet

BR - Brick

OL - Olive

OC - Ochre

MD - Midnight

EU - Eucalyptus

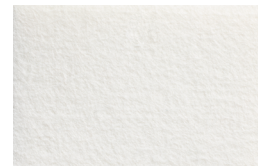
IB - Ironbark

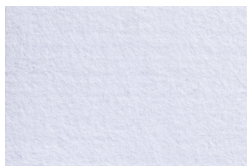
MR - Merbau

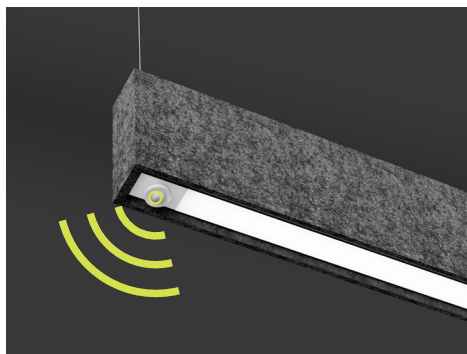
SG - Spotted Gum

BA - Bark

EC - Ecru

LN - Linen

IV - Ivory

SM - Smoke

FR - Frost



OEM Connected Lighting Partners

Nulite has formed strategic partnerships with premier OEM suppliers of smart lighting control platforms. Nulite's focus is primarily on embedded fixture level smart sensors and power supplies ensuring system operability and code compliance.

Benefits of an OEM Supplier

- **Factory trained and certified to assemble and test product operability prior to shipment**
- **Authorized to purchase components, inventory on hand for shorter lead times compared to non-partners**
- **UL listed as an entire fixture assembly**

Wavelinx (WLX)

Cooper Lighting Solutions

[LEARN MORE](#)

Integral Fixture Sensors

Item Description	OEM Part #	Integral Sensor Options						Nulite Compatible Product Lines											
		0-10v Dimming Control	DALI Dimming Control	IP rated (Outdoor)	Wireless Control	Daylight Harvesting	Occupancy Sensing	LA Series	Regolo 1	Regolo 2	Regolo 4	Regolo 6	RZ4	RXT	Pixie	Sottile	Tavo	Sero	Qub
Wavelinx Ambient Integrated Sensor, 8-15ft (2.4-4.6m)	OEM-WAA	●			●	●	●	●	●	●	●	●							
Wavelinx Industrial Mount Sensor, White, up to 40ft (4.5 - 12.2m)	OEM-SWPD3-WH	●		●	●	●	●												●
Wavelinx Outdoor Fixture	OEM-SWPD5-WH/BK/BZ	●	●	●	●	●	●							●					

Additional Notes:

- Nulite is OEM certified and authorized to purchase and install Wavelinx components into their luminaires. All products are fully tested at the Nulite factory and each product ships with UL compliance.
- **Ordering Example:** Nulite Catalog #: AP1-8H-B-FF-O-05-05-L30-UNV-D-11-PW-T1W048. This catalog designation merely identifies luminaires that require Wavelinx compatible integral fixture sensors. Additional hardware such as power packs and wiring harnesses are often required to operate sensors and offer compatibility to the overall control system. Nulite will coordinate with Wavelinx on these items and build into the price accordingly.
- Nulite's standard 0-10v LED drivers are Signify Xitanium Series, and Osram Optotronic Series

nLight (NL)

Acuity Brands

[LEARN MORE](#)

Integral Fixture Sensors

Item Description	OEM Part #	Integral Sensor Options							Nulite Compatible Product Lines											
		0-10v Dimming Control	DALI Dimming Control	0-10v LEDcode*	DALI LEDcode*	IP rated (Outdoor)	Wireless Control	Daylight Harvesting	Occupancy Sensing	LA Series	Regolo 1	Regolo 2	Regolo 4	Regolo 6	RZ4	RXT	Pixie	Sottile	Tavo	Sero
Indoor Embedded 360° Motion Sensor	MSD PDT 7**	●					●	●	●	●	●	●	●	●						
Fixture embedded smartsensor	RES7	●		●			●	●	●	●	●	●	●	●						
Passive infrared occupancy sensor	nES7	●						●	●	●	●	●	●	●						
Dimming Photocell	nES ADCX	●						●		●	●	●	●	●						
nLight AIR Outdoor 360° Embedded Motion Sensor	rMSOD	●		●			●	●	●							●				
Fixture embedded smartsensor for challenging environments	rSBG	●		●		●	●	●	●							●				●
nLight AIR Fixture Mount Sensor	rLSXR	●				●	●	●	●											●

Additional Notes:

- Nulite is authorized to purchase and install nLight components into their luminaires. All products are fully tested at the Nulite factory and each product ships with UL compliance.
- **Ordering Example:** Nulite Catalog #: AP1-8H-B-FF-O-05-05-L30-UNV-D-11-PW-T1W048. This catalog designation merely identifies luminaires that require NX compatible integral fixture sensors. Additional hardware such as power packs and wiring harnesses are often required to operate sensors and offer compatibility to the overall control system. Nulite will coordinate with nLight on these items and build into the price accordingly.
- *Proprietary Acuity Brands LEDcode drivers are required for nLight system programming and operation.
- ****The MSD PDT 7 is Nulite's standard wired integral fixture sensor**

OEM Connected Lighting Partners

NX (NX)

Distributed Intelligence
Hubbell

[LEARN MORE](#)

Integral Fixture Sensors

Item Description	OEM Part #	0-10v	DALI ID	IP rating	Wireless	Daylight	Occupancy	LA Series	Regolo 1	Regolo 2	Regolo 3	Regolo 4	RZ4	RXT	Pixie	Sottile	Tavo	Sero	Qub	Bounce	INT
HubbNET Radio Module	NXRM-H	●			●			●	●	●	●	●									
Low Mount Indoor Sensor Module	NXSM-P-LMI	●			●	●	●	●	●	●	●	●									
OMNI Indoor/Outdoor Sensor Module	NXSM-P-OMNI-0	●		●	●	●	●							●							
Slide Mount Indoor Sensor Module	NXSM-P-SMI	●			●	●	●	●	●	●	●	●									
Low Mount Indoor/Outdoor Sensor Module	NXSM-P-LM0	●		●	●	●	●							●							
Low Mount Indoor/Outdoor Sensor Module, Aisle Lens	NXSM-P-LM0-4	●		●	●	●	●							●							
High Mount Indoor/Outdoor Sensor Module	NXSM-P-HM0	●		●	●	●	●														
High Mount Indoor/Outdoor Sensor Module, Aisle Lens	NXSM-P-HM0-4	●		●	●	●	●														

Additional Notes:

- Nulite is an OEM certified nX partner and authorized to purchase and install NX components into their luminaires. All products are fully tested at the Nulite factory and each product ships with UL compliance.
- Ordering Example:** Nulite Catalog #: AP1-8H-B-FF-0-05-05-L30-UNV-D-11-PW-T1W048. This catalog designation merely identifies luminaires that require NX compatible integral fixture sensors. Additional hardware such as power packs and wiring harnesses are often required to operate sensors and offer compatibility to the overall control system. Nulite will coordinate with the Hubbell on these items and build into the price accordingly.
- Nulite's standard 0-10v LED drivers are Signify Xitanium Series, and Osram Optotronic Series
- **The MSD PDT 7 is Nulite's standard wired integral fixture sensor**

Enlighted (Enl)

A Siemens Company

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Integral Fixture Sensors

Item Description	OEM Part #	Integral Sensor Options																			
		0-10v	DALI D	IP rated	Wireless	Daylight	Occupancy	LA Series	Regolo 1	Regolo 2	Regolo 4	Regolo 6	RZ4	RXT	Pixie	Sottile	Tavo	Sero	Qub	Bounce	INT
MicroSensor, 2-wire Adaptor	KIT-SU-5E-D-*		●		●	●	●	●	●	●	●	●									
High Bay Sensor, 2-wire	SU-5S-2W-H-*		●		●	●	●														
Ruggedized High Bay, 2-wire, White	SU-5S-2W-HRW-*		●	●	●	●	●														
Ruggedized Low Bay, 2-wire, White	SU-5S-2W-LRW-*		●	●	●	●	●							●							

Additional Notes:

- Nulite is OEM certified and authorized to purchase and install Enlighted components into their luminaires. All products are fully tested at the factory and each product ships with UL compliance.
- Ordering Example:** Nulite Catalog #: AP1-8H-B-FF-0-05-05-L30-UNV-D-11-PW-T1W048. This catalog designation merely identifies luminaires that require Enlighted compatible integral fixture sensors. Additional hardware such as power packs and wiring harnesses are often required to operate sensors and offer compatibility to the overall control system. Nulite will coordinate with the Enlighted on these items and build into the price accordingly.
- Standard eldoLED Solodrive DALI drivers with integral power supply will be supplied with Enlighted enabled luminaires

Vive (LV)

Lutron

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Integral Fixture Sensors

Item Description	OEM Part #	Integral Sensor Options																			
		0-10v	DALI Dimming Control	IP rated (Outdoor)	Wireless Control	Daylight Harvesting	Occupancy Sensing	LA Series	Regolo 1	Regolo 2	Regolo 4	Regolo 6	RZ4	RXT	Pixie	Sottile	Tavo	Sero	Qub	Bounce	INT
Vive Integral Fixture Control with Sensor	DFCSJ-OEM-OCC		●		●	●	●	●	●	●	●	●									
Vive Integral Fixture Control (RF only)	DFCSJ-OEM-RF		●		●			●	●	●	●	●									

Additional Notes:

- Nulite is OEM certified and authorized to purchase and install Lutron components into their luminaires. All products are fully tested at the Nulite factory and each product ships with UL compliance.
- Ordering Example:** Nulite Catalog #: AP1-8H-B-FF-0-05-05-L30-UNV-D-11-PW-T1W048. This catalog designation merely identifies luminaires that require Lutron compatible integral fixture sensors. Additional hardware such as power packs and wiring harnesses are often required to operate sensors and offer compatibility to the overall control system. Nulite will coordinate with the Lutron on these items and build into the price accordingly.
- Standard eldoLED Solodrive DALI drivers with integral power supply will be supplied with Enlighted enabled luminaires
- Recommended drivers for DFCSJ-OEM-OCC: Lutron Ecosystem, Osram Dexas DALI drivers, or Signify Xitanium DALI drivers
- **The MSD PDT 7 is Nulite's standard wired integral fixture sensor**

PRODUCT SPECIFICATIONS AND INFORMATION

HOUSING CONSTRUCTION

Fixture body is constructed of powder coat painted extruded aluminum, formed sheet metal internal bracketing and sound absorbing recycled polyester (PET) felt. Captive joining mechanism is a combination die formed sheet metal and zinc plated spring steel. All hardware is stainless steel.

LED LENS ASSEMBLY

Replaceable one-piece optical assembly is comprised of an LED PCBA AND AN EXTRUDED acrylic lens and reflector assembly. Available CCT's are 3000K, 3500K, and 4000K. Also available CRI's are 80 or 90.

STANDARD DIMMING LED DRIVERS

Standard constant current integral electronic 0-10v dimming input. Two standard driver options are available. Option **D** dims to 1% and option **DO** dims to 0% or OFF (the final 1 percent is a "step"). Both options are the same price and representative of the base fixture price. Options **D** and **DO** ship with 5 wires (Line Voltage- Black and White wires, Low Voltage- Purple and Pink wires, Ground- Green wire)

DALI DRIVERS

Standard constant current DALI drivers available in either a dim to 1% (**ELE**) or dim to 0% (**ELS**). DALI fixtures ship with 5 wires (Line Voltage- Black and White wires, Low Voltage- Purple and Pink wires, Ground- Green wire)

LIGHT OUTPUT

For bi-direct luminaires you must specify "direct" light output and "indirect" light output and the factory will tune or program each lighting channel. Available nominal direct and direct-indirect light outputs are (**03**) 300 lms/ft, (**05**) 500 lms/ft, and (**08**) 800 lms/ft. Each circuit or channel may be independently controlled and this can be specified in "circuiting" within the ordering information. Specifying a "2-2" enables independent dimming control of each channel.

CIRCUITING

Each luminaire may have up to 2 line voltage (Power) circuits and 2 low voltage (control) circuits. Two power circuits are required for independent control of uplight and downlight in bi-direct luminaires, and low voltage control circuits are for independent dimming of each circuit.

Examples:

- **"1-1"** - 1 power circuit (Line Voltage) and 1 control circuit (Low Voltage) > 5 wires total (1 Black Wire "Hot", 1 White Wire "Neutral", 1 Green Wire "Ground", and 2 low voltage control wires, 1 Pink wire and 1 purple wire)
- **"2-2"** - 2 power circuits (Line Voltage) and 1 control circuit (Low Voltage) > 9 wires total (2 Black Wires "Hot", 2 White Wires "Neutral", 1 Green Wire "Ground", and 4 low voltage control wires, 2 Pink wires and 2 purple wires)

BATTERY PACKS

Recyclable Ni-Cad battery pack, battery run time is 90 minutes. Recharge time of 24 hours. 6W or 10W battery packs are available. To calculate Battery Lumen Output, multiply luminaire efficacy by battery wattage. (example: 120 lms/watt (**120**) x **B10** Battery Wattage (**10**) = **1200** lumens of egress illumination for 90 minutes.) Battery option not available in fixtures less than 4', and other limitations apply, consult factory. Entire "direct" fixture housing is energized by battery for lengths up to 5'. Half of direct fixture is energized by battery for 6' - 8' housing lengths. Emergency or night light circuit available (requires additional power circuit). Battery fixtures ship with an additional orange "constant hot" wire.

GENERATOR TRANSFER DEVICES

The GTD emergency lighting control device senses the loss of normal power and switches the AC driver input power connection to an unswitched, generator (or central inverter) supplied lighting circuit. GTD fixtures ship with 3 additional wires (orange wire "constant hot", black-red wire "generator hot", white-red wire "generator neutral").

FIXTURE FINISHES

Fixture Internal Body

The R1A internal fixture body will be painted white with the exception R1A fixtures having black baffle optics, these fixture bodies will be painted black.

Mounting Hardware Canopies

Mounting hardware canopies are available in black or white consult factory for custom colors.

Acoustical Felt Material

Felt fixture material is available in two standard colors Pewter (**PW**), or Slate (**SL**). There are an additional 26 color options on page 4, consult factory for lead time and availability.

INSTALLATION AND MOUNTING

The R1A is designed to be pendant mounted by aircraft suspension cable in individual, continuous rows. The R1A may be specified to mount to acoustical grid ceilings, sheet rock, and structural ceiling surfaces. Refer to installation instructions at www.nulite-lighting.com for details.

FIXTURE LENGTHS - LINEAR ROWS

Standard fixture lengths for individual or continuous row mounting are available in exact 1'(305mm) increments from 2' (610mm) to 8' (2438mm). Consult factory for custom lengths, limitations apply.

WARRANTY

5-year limited warranty on LED and driver from date of shipment. Refer to the full warranty details on www.nulite-lighting.com/products/184.

WEIGHT

Fixtures are 2.7 lbs/ft, Driver box weights vary, consult factory.

APPROVALS

ETL listed, conforms to UL Standard 1598 / 8750 and CSA Standard C22.2, indoor dry/damp locations.

TESTING PROTOCOLS AND DATA

All of Nulite's LED components have been tested under **LM-80** guidelines insuring 6000 hours of luminous flux data. Additionally Nulite can supply **LM-79** data on all luminaires. This data includes luminous flux, electrical power, efficiency, chromaticity as well as the diffusion of luminous intensity.

LUMEN MAINTENANCE

90% of initial light output (L90) at 100,000+ hours, 70% of initial light output (L70) at 200,000+ hours.