

Intelligent Technologies

Run Circles 'Round the Competition



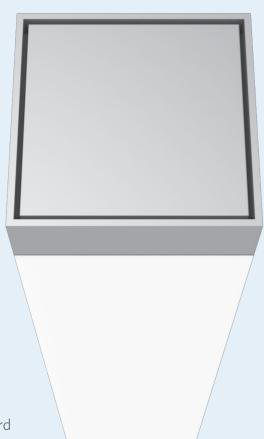
Square and Round 4 are smart luminaires. They offer the best in energy-saving LED technology and can be specified with digital technologies that boost performance and extend functionality.

True Architectural Dimming

A 0-10V digital eldoLED® driver provides smooth, seamless and flicker-free dimming to black (0.1%). Similar to incandescent dimming, this *natural dimming* attains the deepest dimming levels without dropout and without a visual flash when powering on.

eldoLED Single-circuit dimming is standard on all luminaires. Dual circuit switching, available in the suspended I/D models, allows the indirect and direct portions to be controlled separately.

These advanced dimming capabilities help save energy and prolong the life of the LED modules. More importantly, they set a new standard in architectural LED dimming whereby users can enjoy ideal illumination at any level across the spectrum for each and every lighting scenario.







Daylight Dimming & Occupancy Detection -----

Save energy with an optional, integrated nLight® sensor that provides daylight dimming and/or dual technology occupancy detection via passive infrared (motion) and Microphonics™ (sound) technologies.

Digital Lumen Management

A built-in, nLight digital lumen management option delivers constant lumen output throughout the luminaires' lifetime, extends the longevity of the LEDs and saves roughly 10% in energy use.

By intelligently maintaining light output at 80% of initial lumen output, the need to over-light spaces to compensate for lumen depreciation (as is often done with fluorescent sources) is eliminated.

System Networking

For networking with nLight system controls, the majority of Square and Round 4 luminaires can be specified with an optional, nLight nIO module pre-installed inside the luminaire housing and an accessible, topside network port that allows for easy Cat-5e "plug-and-play" connectivity.



Square I/D

Sophisticated Optics Shape the Light Fantastic



Square I/D; Square Wall I/D; Square Direct

Square and Round 4 exemplify our mantra of *Lighting for People*® by providing quality, color-consistent illumination (80+ CRI at 3000K, 3500K or 4000K) that helps keep eyes thriving.

Kind-to-the-Eyes Illumination

With reflectors and lenses designed to control and diffuse light following our proprietary Softshine® optical engineering standards, Square and Round 4 emit soft, uniform and comfortable illumination that minimizes eyestrain and fatigue.

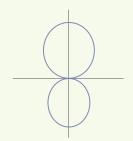
Ceiling Uniformity + Glare-Free Downlight

In both luminaires, a proprietary injection molded optic refracts light to where it is needed most. The result is indirect illumination that is flat and broad across the ceiling with no hot spots and direct illumination that cuts off high-angle glare.

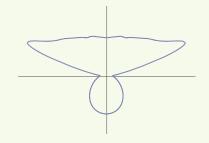


Softshine® optical engineering is a process where we actively shape and direct the light output from our luminaires to provide best-inclass distribution and visual well-being.

Competitor LED I/D



Peerless Round I/D & Square I/D



Specialized Configurations Square the Deal



Square I/D with "L" pattern connectors

Continuous Glowing Lenses

Square and Round 4 both feature fully illuminated continuous lenses that extend across the entire length of the luminaire. Made from optical-grade acrylic, the sophisticated lens not only softens light output, it hides individual LEDs from sight producing a visually pleasing, glowing band of illumination.

Illuminated Corners

On Direct, Indirect and I/D suspended models, Square and Round 4 can be configured to provide seamless "L" corner illumination where two luminaires join together.

Stairway Luminaires

To easily meet code requirements and save energy when lighting stairway environments, choose a Wall Stairway luminaire. These luminaires, available in both I/D and Direct distributions, come with an embedded nLight occupancy detection sensor that is preprogrammed to remain at either 10% or 50% illumination when the stairway is unoccupied and brighten to 100% illumination once occupancy is detected.



Round 4 Wall Stairway I/D



Round 4 Aisle/Stack I/D

Aisle/Stack Luminaires

Uniformly illuminate vertical surfaces on both sides of 3' to 7' aisles with Aisle Stack I/D and Direct models. These luminaires have specially designed optics that evenly direct light in an inverted "V" down library stacks, grocery shelves and other displays.

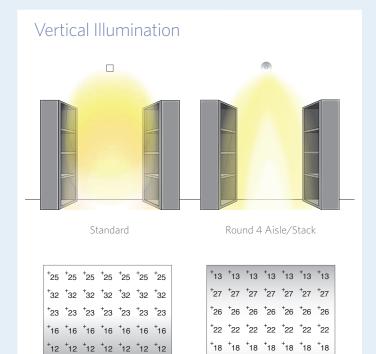
With this unique Aisle/Stack optic (ASO), please note a linear shadowing effect appears down the center of the lens as shown.

Lens Comparison





Square and Round 4 Aisle/Stack Direct



+9 +9 +9 +9 +9 +9

⁺14 ⁺14 ⁺14 ⁺14 ⁺14 ⁺14

⁺12 ⁺12 ⁺12 ⁺12 ⁺12 ⁺12 ⁺12

3' Aisle	Standard 20W	Square/Round ASO LO	Square/Round ASO HI	IES RP-1
Average illumination on face of stack	24 fc	22 / 22 fc	42 / 42 fc	
Min. illumination @ 1' above floor	8.7 fc	10 /10 fc	20 / 19 fc	≥10 fc
Uniformity (max:min between 1'- 7' AFF)	4.5:1	3.2:1	3.2:1 / 3.5:1	<5.0:1

7' Aisle	Standard 40W	Square/Round ASO HI
Average illumination on face of stack	27 fc	22 / 23 fc
Min. illumination @ 1' above floor	15 fc	17 fc / 17 fc
Uniformity (max:min between 1'- 7' AFF)	2.6:1	1.6:1 / 1.6:1

Calculation Notes:

Suspension length for 3' aisle is 8.5'; 7' aisle is 9.5'

- 80/50/20 ceiling/walls/floor reflectance
- 3500k
- .85 LLF (light loss factor) includes:
 .87 LLD (lamp lumen depreciation)*
 .98 RSDD (room surface dirt depreciation)
 and LDD (luminaire dirt depreciation)

*LLD for LEDs is based on approximation of lumens at mean life (see Key Resources page on website for details)

The Right Light in All the Right Places

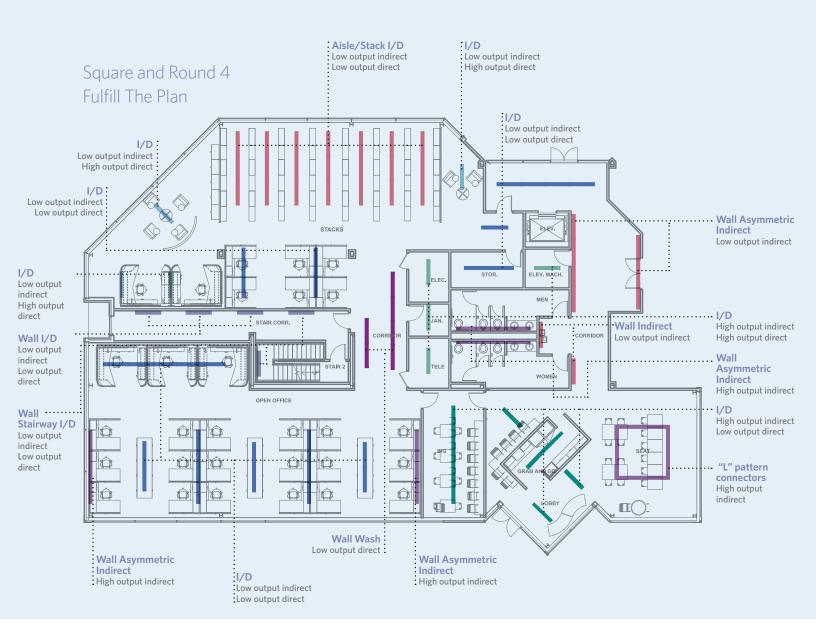


Single Design Vocabulary

With suspended, wall and surface models available with indirect, direct, I/D distributions as well as with special aisle/stack and stairway optics, Square and Round 4 luminaires are well-suited for a wide variety of interior applications.

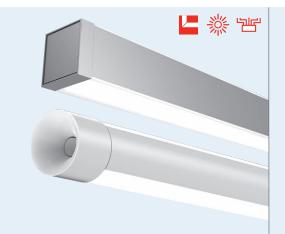
In other words, you'll find both operational and aesthetic harmony across each family enabling you to conveniently deliver both consistency and versatility from one product suite throughout your lighting project.

Square Indirect-Direct; Square Surface Direct



Area: 5328 ft² Lighting Power Density: 0.85 W/ft²

Shape Your Space Suspended, Wall & Surface







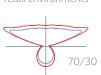
I/D

SQM4

RD4M4

APPLICATIONS

open offices, classrooms, hallways, private offices, meeting rooms, reception areas, hospitality areas, retail environments





Indirect

SQM1

RD4M1

APPLICATIONS

open offices, hallways, private offices, meeting rooms, reception areas, boardrooms



Direct

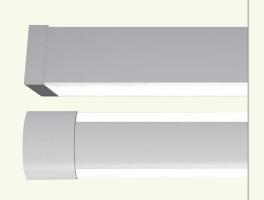
SQMS

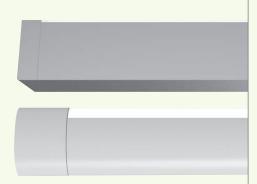
RD4MS

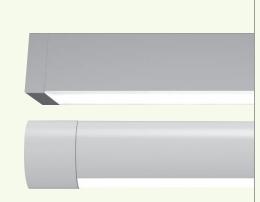
APPLICATIONS

open offices, classrooms, hallways, private offices, meeting rooms, reception areas, hospitality areas, retail environments









Wall Asymmetric I/D

SQW4

RD4W4

APPLICATIONS private offices, hallways



OPTION KEY SQUARE ROUND



SQW1

APPLICATIONS

private offices, hallways

Wall Asymmetric Indirect

RD4W1

Sensor

Integrated nLight sensor available for daylight dimming and/or occupancy detection.

Wall Direct

SQWS

RD4WS

APPLICATIONS private offices, hallways





Pre-installed network module available for "plug-and-play" connectivity with nLight system controls.



Wall-Wash

SQMW

RD4MW

APPLICATIONS reception areas, cafes, art galleries, hallways





Aisle/Stack I/D or Direct

SQMS ASO RD4MS ASO SQM4 ASO RD4M4 ASO

APPLICATIONS

library stacks, grocery stores, hallways, retail aisles







SQWS STW RD4WS STW SQW4 STW RD4W4 STW

APPLICATIONS stairways, entryways











Surface

SQMS S (Direct)

SQMW S (Wall-Wash)

APPLICATIONS reception areas, cafes, art galleries, hallways





Suspended I/D, Wall Asymmetric I/D

Suspended if D, Wall Asymmetric if D						
	LO/LO	HI/LO	LO/HI	HI/HI		
Indirect Output	Low	High	Low	High		
Direct Output	Low	Low	High	High		
Total Delivered Lumens*	3500	5150	4850	6500		
Distribution Percentage Up/Down	50/50	70/30	30/70	50/50		
Total Watts*	40	60	60	80		

Uplight Lumen Packages

Low = 1850 delivered lumens*, 20W High = 3500 delivered lumens*, 40W

Downlight Lumen Packages

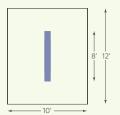
Low = 1650 delivered lumens*, 20W High = 3000 delivered lumens*, 40W

* nominal per 4'

Go Figure! Know the Numbers

Open Office		SQUARE / ROUND	Average Illuminance @ Workplane	Ceiling Uniformity (max:min)	Lighting Power Density (W/ft²)
32' 40'	Ceiling Height 9' Row Spacing 10' (6 rows) Suspension 18"	Square I/D LO/LO / Round I/D LO/LO	50 / 45 fc	4.7:1 / 6.0:1	0.76 / 0.75
60'					
32' 40'	Ceiling Height 9' Row Spacing 12' (5 rows) Suspension 18"	Square I/D LO/LO / Round I/D LO/LO	44/38 fc	6.8:1 / 9.2:1	0.63 / 0.62
60'					
	Ceiling Height 12' Row Spacing 12'	Square I/D LO/LO / Round I/D LO/LO	40/36 fc	4.6:1 / 6.2:1	0.63 / 0.62
32' 40'	(5 rows) Suspension 24"	Square Direct HI / Round Direct HI	42 / 42 fc	2.1:1 / 2.2:1	0.66 / 0.67
60.					
	Ceiling Height 12' Row Spacing 16'	Square I/D HI/LO / Round I/D HI/LO	45 / 40 fc	6.6:1 / 9.9:1	0.81 / 0.79
32' 40'	(4 rows) Suspension 24"	Square I/D LO/LO / Round I/D LO/LO	32 / 28 fc	5.7:1 / 9	0.51 / 0.50
		Square I/D LO/HI / Round I/D LO/HI	49 / 43	4.9:1 / 5.6:1	0.79 / 0.80
60'					
	Ceiling Height 15' Row Spacing 20'	Square I/D HI/LO / Round I/D HI/LO	31 / 28 fc	5.6:1 / 7.5:1	0.61 / 0.60
32' 40'	(3 rows) Suspension 36"	Square I/D LO/LO / Round I/D LO/LO	42 / 39 fc	4.8:1 / 6.0:1	0.82 / 0.80
	Suspension 36"	Square I/D LO/HI / Round I/D LO/HI	33 / 31 fc	4.3:1 / 4.7:1	0.60 / 0.59
60′		IES RP-1 =	>30 fc	< 10.0:1	

Private Office

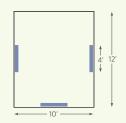


Typical private office 10' x 12' x 9' 80/50/20

SQUARE I/D / ROUND I/D 18" Suspension

Up/Down	Illuminance	(max:min)	Lighting Power Density (W/ft²)
HI/LO	29 / 25 fc	3.8 / 3.7:1	1.0
LO/HI	32 / 29 fc	3.3 / 3.0:1	1.0

Private Office



Typical private office 10' x 12' x 9' 80/50/20

SQUARE WALL I/D $\Big/$ ROUND WALL I/D

Up/Down	Illuminance	Uniformity (max:min)	Lighting Power Density (W/ft²)
HI/LO	32 / 26 fc	2.9 / 3.6:1	1.0



Round 4 I/D



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VALIDATION

IES-79 Tested CSU/CSA Listed FCC Part 15 Certified





WARRANTY

Five-year limited warranty covers luminaire construction, LED light engine, eldoLED driver and optional nLight control and sensor devices. Terms and conditions apply.



LIGHTING FACTS

Lighting Facts labels have been issued from the U.S. Department of Energy. These labels can be found on the spec sheets for each specific luminaire.





Peerless 360° Total System Integration with controls, sensors, optics, and drivers all manufactured by Acuity Brands. Single-source, 5-year limited warranty covers all components and construction.

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