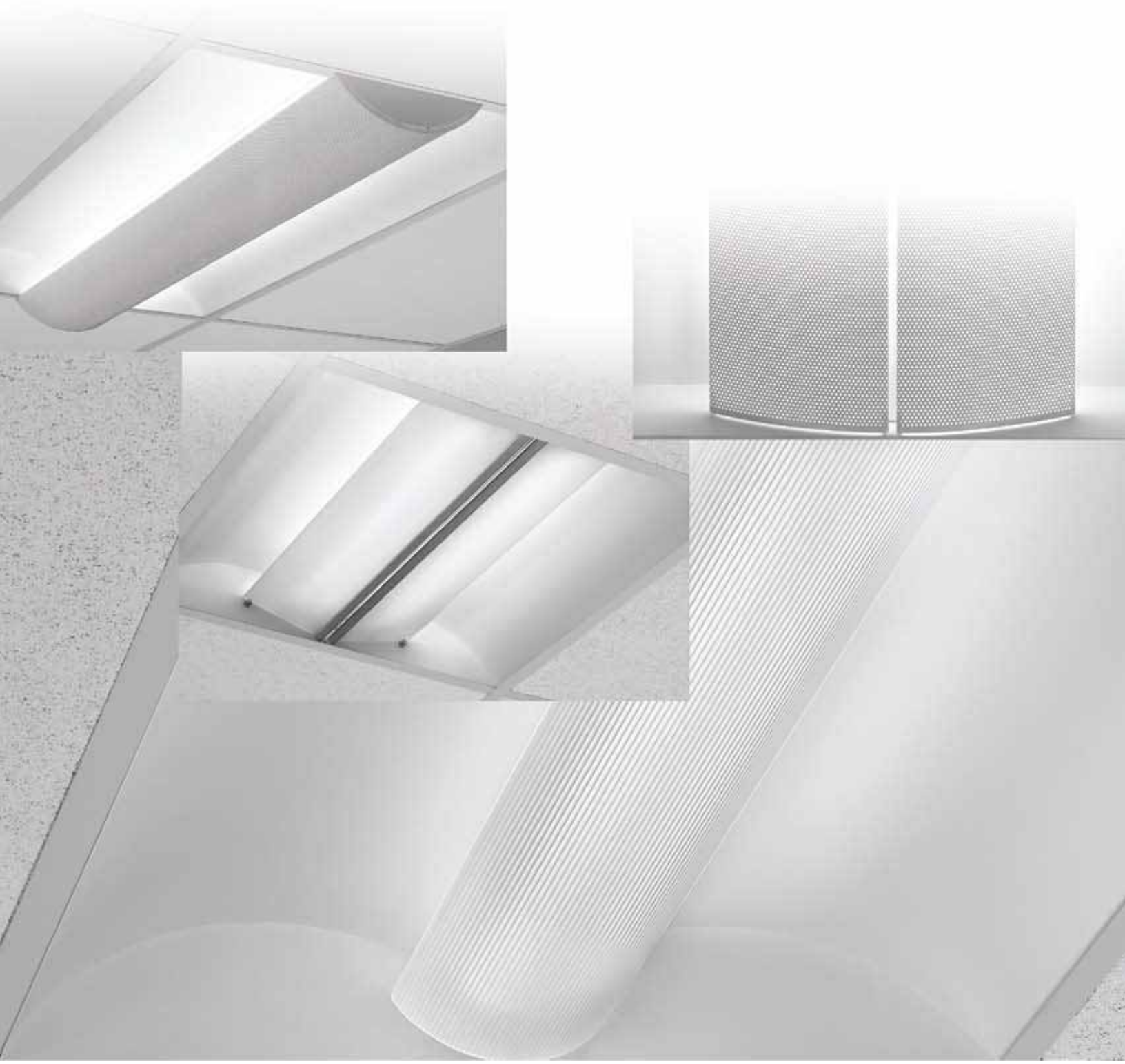
LIGHTOLIER®

Alter Concept

Reinventing Alter



Lightolier is a Philips group brand

PHILIPS

Alter Concept

Lightolier Alter... Inspiring Intelligent Expression

With its innovative designs, vibrant textures and advanced lamping and auto-dimming technologies, Alter Soft Lights offer unprecedented flexibility for creating architectural statements and visually exciting lighting solutions. Alter delivers balanced brightness throughout a space, providing specifiers and designers with unique opportunities to enhance the quality of the visual environment. Experience the freedom of a distinctive and versatile lighting approach driven by modern architecture, with the *Inspiring Intelligent Expression* of Lightolier Alter luminaires.

Reinventing Alter: A new dimension of lighting

Introducing Alter Concept…
Less bulk. Less weight.
More functionality.
More performance—up to 92.7% efficient.
And more sustainable lighting opportunities, especially in shallow and cluttered plenums.

Luminaires so practical, they could change the way energy-efficient buildings are designed.

Alter Concept brings together a new generation of low profile luminaires offering Alter hallmark aesthetics in a greener, more compact lighting package. Even pricing has been pared down! Discover Alter Concept… Less lighting hardware. More lighting value.

Contents

More than just a smaller environmental footprint

When planning lighting designs for the sustainable workplace, consider Alter Concept luminaires to achieve appealing, comfortable, productive surroundings. They combine streamlined lightweight construction, ergonomically sound capabilities and remarkable energy efficiency. In addition, they integrate well into economical lighting concepts and design strategies for sustainable buildings and high-performance spaces.

> *"We need to use our planning and design skills to help our society move from a 'throw-away' mentality to one in which we limit energy and resource use. The idea of building less is the essential concept of green design. It resonates with all the big sustainable ideas: less land, square footage, material, waste, toxicity, energy, water and cost."*
>
> ***– The Power of Less, Bill Valentine, FAIA, Chairman, HOK***

ENERGY EFFICIENCY

- **Maximum lighting performance**
  Alter luminaires are engineered to yield the highest possible luminous efficacy (lumens per watt) while producing the perfect ratio of balanced brightness, depth and efficiency.

- **Daylight Harvesting & Occupancy Detection**
  Available ULM Module includes a choice of plug'n'play, easy-to-adjust light or motion sensors offering automated lighting control and typical energy savings of 15-45% for daylight harvesting and over 30% for occupancy detection. For details, see p. 19.

- **Network Lighting Control**
  Alter Concept luminaires can be equipped with Lightolier iGEN addressable ballasts for integration into building-wide or floor-wide lighting networks.

Up to 92.7% efficiency
More lumens per watt means fewer luminaires are required in any given space. At 92.7% efficiency, Alter Concept Elegance Lens achieves superior lighting output well suited to meeting sustainability objectives and LEED requirements.

SUSTAINABLE DESIGN

- **Streamlined lightweight construction**
  With a housing depth of 3-5/8", Alter Concept luminaires are about **30% lighter** than regular Alter models with 5-1/2" housings.

- **Material-saving approach**
  Alter Concept products, smaller in size and weight, feature less fuel consumption for transportation. Also, they use considerably less steel, a recyclable material, than standard luminaires and less packaging which, incidentally is made of recycled paper.

- **Architectural flexibility**
  Compact and installation-friendly, Alter Concept luminaires can help reduce floor-to-floor heights and overall building elevation, while minimizing the use of energy and resources.

ERGONOMIC LIGHTING

- **Zero lamp cut-off, zero glare**
  Alter lamp shields conceal the lamp image, protecting occupants from direct glare and providing balance between reflected and direct light.

- **Balanced brightness—Ideal for facial lighting**
  Alter soft indirect lighting gently washes every surface, enabling clear recognition and interpretation of facial expressions and nonverbal communication.

Hg Proper disposal practices
Alter luminaires use fluorescent lamps that contain small amounts of mercury. Such lamps, labeled "Contains Mercury" and/or with the symbol "Hg", must be disposed of in accordance with local requirements. Information: www.lamprecycle.org.

More than just a sleeker lighting package

New Alter Concept direct-indirect luminaires include Concept Elegance and Concept SR, both of which offer exclusive features in addition to streamlined housing depths of only 3-5/8".

Alter Concept Elegance

Featuring improved Glass and Perforated Steel Shielding models, plus a new Lens version with fully enclosed lamp compartment eliminating dust accumulation, ideal for food preparation areas and hospital applications.

EXCLUSIVE FEATURES

Lower Profile: 3-5/8" vs. 5-1/2"

- 3-5/8" depth ideal for restricted ceiling space (standard Alter Classic housing: 5-1/2")
- Suited to sustainable building trend favoring less materials and shallower plenums

Cleaner Look

- Seamless design: seam-free welded forms create pure ceiling lines
- Curved top and side reflectors reveal no gaps or visual barriers
- Only Alter Concept and Alter Classic luminaires offer a seamless reflector design
- Painted after fabrication (PAF) luminaires
- New Solid-Edge lamp shield

Old version

New improved version with Solid-Edge technology and seamless design

Increased Maintenance Convenience

Tool-free access from below facilitates lamp and ballast replacements*

*Some models may require minimal disassembly prior to removing ballast.

Alter Concept

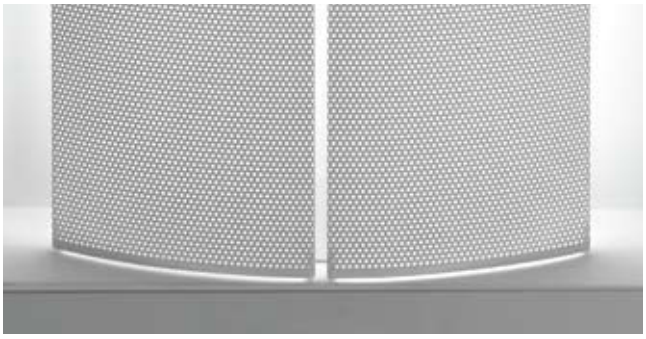
Alter Concept SR
New semi-recessed T5 and T8 versions with microperforated mesh lamp shield.

ADVANCED CHARACTERISTICS

- Lens, frosted glass and mesh shields designed to conceal lamp image, ensure soft awareness of light source
- Highly efficient reflector features low-gloss, non-yellowing Alter soft white paint finish for balanced brightness between ceiling and walls, eliminating cave effect and hot spots
- Efficient TT5, T5, T5HO and T8 lamps, and new-generation small-can ballasts
- Emergency lighting available. For details, see p. 18.

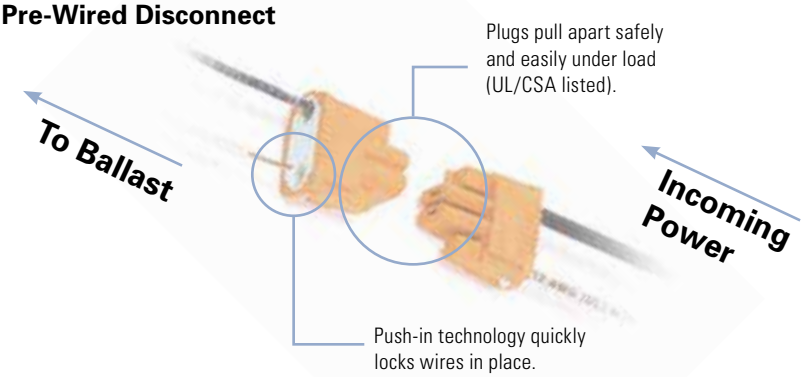
Decorative Elements
Glass versions of Alter Concept Elegance, including style-matched Alter Elegance Glass Wall, integrate richly textured architectural materials, such as frosted ridged glass and natural satin-finished metal.

New Solid-Edge lamp shield
Alter Concept models* with microperforated mesh lamp shield include new signature Solid-Edge finish for aesthetic visual appearance where shield and reflector meet.
*Except Alter Concept SR T8



Greater Affordability
Fully automated manufacturing means more cost-effective pricing.

Pre-Wired Disconnect



Since June 1, 2007, all Lightolier Alter luminaires bearing fluorescent lamps come complete with a factory installed disconnect device. This device is installed in luminaires with ballasts that operate at Universal Voltages (UNV: 120V through 277V) and dedicated 347V specifically.

Alter Concept Elegance Lens

The Concept Elegance Lens model takes lighting performance to new levels while delivering Alter's signature soft lighting effect. It features superior efficiency, seamless construction and a contoured enclosed sealed lens that is ideal for food preparation areas and hospital applications. This all-new luminaire belongs to the Alter Concept collection of sustainable lighting elements, offering cost-effective lighting in a lightweight, low-profile design ideal for shallow plenums, modern interiors and green buildings.

Features

- Efficiencies up to 92.7%
- Seamless welded form: curved top and side reflectors are formed together without any gaps or visual barriers
- Shallow design, only 3-5/8" deep for easy installation in shallow plenum
- Painted after fabrication (PAF) luminaire
- New high performance contoured lens conceals lamp image providing balance between reflected and direct light
- Enclosed and sealed lens suited to most commercial, hospital and institutional applications. Prevents light leaks. Ideal for use in high dust/germ environments (not suitable for clean room applications and other locations requiring specially approved luminaires)
- No tools required to remove lens for easy relamping and maintenance
- Fully recessed luminaire and lamp compartment
- 95% Reflective Alter soft white paint finish
- One-piece body for easy installation
- Easy access to ballast through lamp compartment
- Can be row mounted
- Fits standard 15/16" T-Grid, Slot T-Grid or drywall ceilings

Alter Concept Elegance Lens

Recessed 2' x 2' - 2' x 4'

Ordering Guide

Luminaire Type (Static)		Length	Width	Recessed Depth	Lamp Qty/Type	Wattage	Catalog Number
Alter Concept	**1**	24"	24"	3-5/8"	1-TT5	40,50,55W	**QCE2GOLOP1FT**
Elegance Lens		24"	24"	3-5/8"	2-T5HO	24W	**QCE2GOLOP224**
Enclosed Lens	**2**	48"	24"	3-5/8"	2-T5	28W	**QCE2GOLOP228**
Lamp Shield, Static		48"	24"	3-5/8"	2-T5HO	54W	**QCE2GOLOP254**

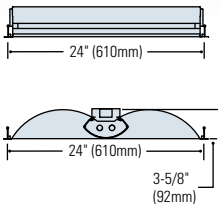
Numbering System

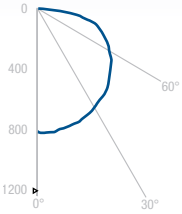
Complete Catalog Nº using template below

QCE2GOLOP224	UNV	PG	
Luminaire Basic Catalog Number: Alter Recessed Fluorescent	Voltage: 347 UNV*	Ballast: **PG:** T5/T5HO Electronic Program Start (<10% THD) **PR:** 40W Electronic TT5 Programmed Rapid Start (<10% THD) **BE:** 50W Electronic TT5 Rapid Start (<20% THD) **BF:** 55W Electronic TT5 Rapid Start (<10% THD) **DA:** Electronic TT5, T5, T5HO Program Start (<10% THD) DALI Digital Addressable Dimming **VY:** 2 lamp 28W T5 Electronic Step-Dim Programmed Rapid Start (B.F.=0.95/0.35)	Options: Add appropriate suffix See p. 18

*120/277V

1 **2' x 2' Alter Concept Elegance Lens • 2 Lamp 24 watt T5HO • QCE2GOLOP224 (Data) • Request Folio CB782**





Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.85	.81	.77
3	.70	.61	.55
5	.58	.48	.40
7	.49	.38	.31
10	.38	.28	.21

Reference Data

Efficiency	78.1%
Spacing Ratio	1.4

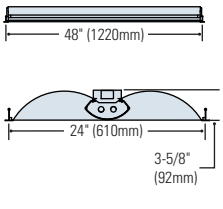
Electronic Ballast

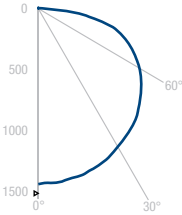
Input Watts (120V)	45.4W
Ballast Factor	1

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	35	0.7
8' x 10' (83 sq ft/luminaire)	28	0.54
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	29	0.9 5

T5HO lamp rated at 1800 lumens

2 **2' x 4' Alter Concept Elegance Lens • 2 Lamp 28 watt T5 • QCE2GOLOP228 (Data) • Request Folio CB889**





Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	1.0	.96	.91
3	.83	.72	.65
5	.69	.56	.48
7	.58	.45	.37
10	.46	.33	.28

Reference Data

Efficiency	92.7%
Spacing Ratio	1.4

Electronic Ballast

Input Watts (120V)	61.5W
Ballast Factor	1

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	60	0.95
8' x 10' (83 sq ft/luminaire)	47	0.74
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	49	1.28

T5 lamp rated at 2600 lumens

▲For more information on application notes, see p. 20

Alter Concept Elegance Glass

Concept Elegance Glass exudes soft lighting presence to bring an air of distinction to architectural decors. This luminaire family features beautifully textured glass panels, seamless construction and includes a new 2x4 version. It belongs to the Alter Concept collection of sustainable lighting elements, offering cost-effective lighting in a lightweight, low-profile design ideal for shallow plenums, modern interiors and green buildings.

Features

- Efficiencies up to 70.7%
- Seamless welded form: curved top and side reflectors are formed together without any gaps or visual barriers
- Shallow design, only 3-5/8" deep for easy installation in shallow plenum
- Painted after fabrication (PAF) luminaire
- Elegant ridged glass lamp shields on hinged aluminum extrusions swing down for easy relamping and maintenance
- Alter soft white film on inside of ridged glass conceals lamp image providing balance between reflected and direct light
- Fully recessed luminaire and lamp compartment
- 95% Reflective Alter soft white paint finish
- One-piece body for easy installation
- Easy access to ballast through lamp compartment
- Can be row mounted
- Fits standard 15/16" T-Grid, Slot T-Grid or drywall ceilings

Alter Concept Elegance Glass

Recessed 2' x 2' - 2' x 4'

Ordering Guide

Luminaire Type (Static)		Length	Width	Recessed Depth	Lamp Qty/Type	Wattage	Catalog Number
Alter Concept	**1**	24"	24"	3-5/8"	2-TT5	40,50,55W	**QCE2GGLOS2FT**
Elegance Glass		24"	24"	3-5/8"	2-T5HO	24W	**QCE2GGLOS224**
Double Glass	**2**	48"	24"	3-5/8"	2-T5	28W	**QCE2GGLOS228**
Lamp Shield, Static		48"	24"	3-5/8"	2-T5HO	54W	**QCE2GGLOS254**

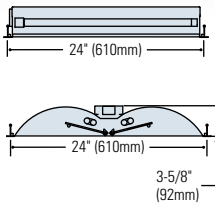
Numbering System

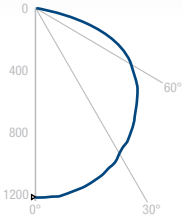
Complete Catalog Nº using template below

QCE2GGLOS2FT	UNV	SB	
Luminaire Basic Catalog Number: Alter Recessed Fluorescent	Voltage: 347 UNV*	Ballast: **PG:** T5/T5HO Electronic Program Start (<10% THD) **PR:** 40W Electronic TT5 Programmed Rapid Start (<10% THD) **BE:** 50W Electronic TT5 Rapid Start (<20% THD) **BF:** 55W Electronic TT5 Rapid Start (<10% THD) **DA:** Electronic TT5, T5, T5HO Program Start (<10% THD) DALI Digital Addressable Dimming **VY:** 2 lamp 28W T5 Electronic Step-Dim Programmed Rapid Start (B.F.=0.95/0.35)	Options: Add appropriate suffix See p. 18

*120/277V

1 2' x 2' Alter Concept Elegance Glass • 2 Lamp 40 watt TT5 • QCE2GGLOS2FT (Data) • Request Folio CB623





Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.64	.61	.59
3	.53	.48	.43
5	.45	.38	.33
7	.38	.31	.26
10	.31	.23	.18

Reference Data

Efficiency	58.2%
Spacing Ratio	1.3

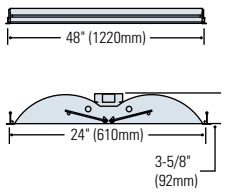
Electronic Ballast

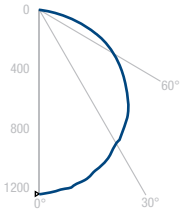
Input Watts (120V)	68.9W
Ballast Factor	0.90

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	47	1.06
8' x 10' (83 sq ft/luminaire)	37	0.83
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	40	1.44

TT5 lamp rated at 3150 lumens

2 2' x 4' Alter Concept Elegance Glass • 2 Lamp 28 watt T5 • QCE2GGLOS228 (Data) • Request Folio CD050





Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.78	.74	.72
3	.65	.58	.52
5	.54	.45	.39
7	.46	.36	.30
10	.36	.27	.21

Reference Data

Efficiency	70.7%
Spacing Ratio	1.3

Electronic Ballast

Input Watts (120V)	63.0W
Ballast Factor	1

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	47	0.97
8' x 10' (83 sq ft/luminaire)	37	0.76
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	40	1.31

T5 lamp rated at 2600 lumens

▲For more information on application notes, see p. 20

Alter Concept Elegance

Attractive Concept Elegance provides outstanding lighting design statements in offices and public spaces. This luminaire features seamless construction along with the clean look of solid-edge microperforated mesh lamp shields. It belongs to the Alter Concept collection of sustainable lighting elements, offering cost-effective lighting in a lightweight, low-profile design ideal for shallow plenums, modern interiors and green buildings.

Features

- Efficiencies up to 67.9%
- Seamless welded form: curved top and side reflectors are formed together without any gaps or visual barriers
- Shallow design, only 3-5/8" deep for easy installation in shallow plenum
- Painted after fabrication (PAF) luminaire
- New Solid-Edge swing-down microperforated lamp shield for easy relamping and maintenance
- Alter soft white film on inside of mesh conceals lamp image providing balance between reflected and direct light
- Fully recessed luminaire and lamp compartment
- 95% Reflective Alter soft white paint finish
- One-piece body for easy installation
- Easy access to ballast through lamp compartment
- Can be row mounted
- Fits standard 15/16" T-Grid, Slot T-Grid or drywall ceilings

Alter Concept Elegance

Recessed 2' x 2' - 2' x 4'

Ordering Guide

Luminaire Type (Static)		Length	Width	Recessed Depth Qty/Type	Lamp	Wattage	Catalog Number
Alter Concept Elegance Microperforated Mesh Lamp Shield, Static	1	24"	24"	3-5/8"	2-TT5	40,50,55W	**QCE2GPFOS2FT**
		24"	24"	3-5/8"	2-T5HO	24W	**QCE2GPFOS224**
	2	48"	24"	3-5/8"	2-T5	28W	**QCE2GPFOS228**
		48"	24"	3-5/8"	3-T5	28W	**QCE2GPFOP328****
		48"	24"	3-5/8"	2-T5HO	54W	**QCE2GPFOS254**

** 3-lamp combination only available with one-piece lamp shield

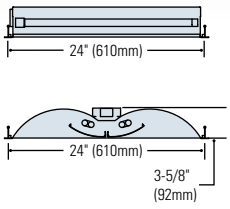
Numbering System

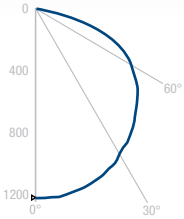
Complete Catalog N° using template below

QCE2GPFOS2FT	UNV	SB	
Luminaire Basic Catalog Number: Alter Recessed Fluorescent	Voltage: 347 UNV*	Ballast: **PG:** T5/T5HO Electronic Program Start (<10% THD) **PR:** 40W Electronic TT5 Programmed Rapid Start (<10% THD) **BE:** 50W Electronic TT5 Rapid Start (<20% THD) **BF:** 55W Electronic TT5 Rapid Start (<10% THD) **DA:** Electronic TT5, T5, T5HO Program Start (<10% THD) DALI Digital Addressable Dimming **VY:** 2 lamp 28W T5 Electronic Step-Dim Programmed Rapid Start (B.F.=0.95/0.35)	Options: Add appropriate suffix See p. 18

*120/277V

1 2' x 2' Alter Concept Elegance • 2 Lamp 40 watt TT5 • QCE2GPFOS2FT (Data) • Request Folio CB727





Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.61	.59	.57
3	.51	.46	.41
5	.43	.36	.31
7	.37	.29	.24
10	.29	.22	.17

Reference Data

Efficiency	56.0%
Spacing Ratio	1.3

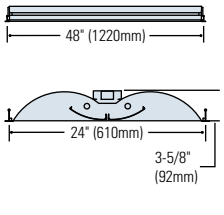
Electronic Ballast

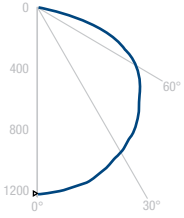
Input Watts (120V)	68.5W
Ballast Factor	0.90

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	45	1.06
8' x 10' (83 sq ft/luminaire)	36	0.82
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	39	1.43

TT5 lamp rated at 3150 lumens

2 2' x 4' Alter Concept Elegance • 2 Lamp 28 watt T5 • QCE2GPFOS228 (Data) • Request Folio CD076





Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.74	.71	.69
3	.62	.55	.50
5	.52	.43	.37
7	.44	.34	.28
10	.34	.25	.19

Reference Data

Efficiency	67.9%
Spacing Ratio	1.3

Electronic Ballast

Input Watts (120V)	65.0W
Ballast Factor	1

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	45	1.00
8' x 10' (83 sq ft/luminaire)	35	0.78
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	38	1.35

T5 lamp rated at 2600 lumens

▲For more information on application notes, see p. 20

Alter Concept SR T5

Subtle presence at the ceiling line and classy styling make Concept SR T5 a visually pleasing option for halls, corridors and other spaces. This all-new semi-recessed luminaire features seamless construction along with the clean look of solid-edge microperforated mesh lamp shields. It belongs to the Alter Concept collection of sustainable lighting elements, offering cost-effective lighting in a lightweight, low-profile design ideal for shallow plenums, modern interiors and green buildings.

Features

- Efficiencies up to 77.5%
- Seamless welded form: curved top and side reflectors are formed together without any gaps or visual barriers
- Shallow design, only 3-5/8" deep for easy installation in shallow plenum
- Painted after fabrication (PAF) luminaire
- New Solid-Edge swing-down microperforated lamp shield for easy relamping and maintenance
- Alter soft white film on inside of mesh conceals lamp image providing balance between reflected and direct light
- Semi-recessed luminaire and lamp compartment
- 95% Reflective Alter soft white paint finish
- One-piece body for easy installation
- Easy access to ballast through lamp compartment
- Can be row mounted
- Fits standard 15/16" T-Grid, Slot T-Grid or drywall ceilings

Alter Concept SR T5

Semi-Recessed 2' x 2' - 2' x 4'

Ordering Guide

Luminaire Type (Static)		Length	Width	Recessed Depth	Lamp Qty/Type	Wattage	Catalog Number
Alter Concept SR T5	**1**	24"	24"	3-5/8"	2-TT5	40,50,55W	**QCH2GPFOS2FT**
Microperforated Mesh		24"	24"	3-5/8"	2-T5HO	24W	**QCH2GPFOS224**
Lamp Shield, Static		24"	24"	3-5/8"	3-T5HO	24W	**QCH2GPFOP324****
	2	48"	24"	3-5/8"	2-T5	28W	**QCH2GPFOS228**
		48"	24"	3-5/8"	3-T5	28W	**QCH2GPFOP328****
		48"	24"	3-5/8"	2-T5HO	54W	**QCH2GPFOS254**

**3-lamp combination only available with one-piece lamp shield

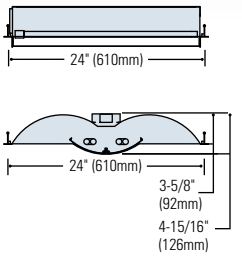
Numbering System

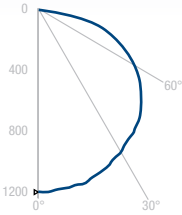
Complete Catalog Nº using template below

QCH2GPFOS2FT	UNV	SB	
Luminaire Basic Catalog Number: Alter Semi-Recessed Direct/Indirect Fluorescent	Voltage: 347 UNV*	Ballast: **PG:** T5/T5HO Electronic Program Start (<10% THD) **PR:** 40W Electronic TT5 Programmed Rapid Start (<10% THD) **BE:** 50W Electronic TT5 Rapid Start (<20% THD) **BF:** 55W Electronic TT5 Rapid Start (<10% THD) **DA:** Electronic TT5, T5, T5HO Program Start (<10% THD) DALI Digital Addressable Dimming **VY:** 2 lamp 28W T5 Electronic Step-Dim Programmed Rapid Start (B.F.=0.95/0.35)	Options: Add appropriate suffix See p. 18

*120/277V

1 **2' x 2' Alter Concept SR T5 • 2 Lamp 40 watt TT5 • QCH2GPFOS2FT (Data) • Request Folio CB634**





Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.63	.61	.58
3	.53	.47	.42
5	.45	.37	.32
7	.38	.30	.25
10	.30	.22	.17

Reference Data

Efficiency	58.2%
Spacing Ratio	1.3

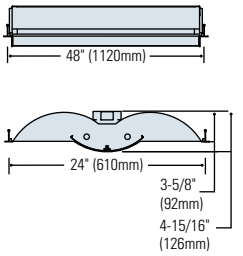
Electronic Ballast

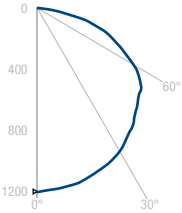
Input Watts (120V)	70.7W
Ballast Factor	0.90

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	47	1.09
8' x 10' (83 sq ft/luminaire)	37	0.85
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	39	1.47

TT5 lamp rated at 3150 lumens

2 **2' x 4' Alter Concept SR T5 • 2 Lamp 28 watt T5 • QCH2GPFOS228 (Data) • Request Folio CD079**





Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.78	.75	.72
3	.65	.57	.51
5	.54	.45	.38
7	.45	.36	.29
10	.36	.26	.20

Reference Data

Efficiency	71.4%
Spacing Ratio	1.3

Electronic Ballast

Input Watts (120V)	67.5W
Ballast Factor	1

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	47	1.04
8' x 10' (83 sq ft/luminaire)	37	0.81
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	39	1.41

T5 lamp rated at 2600 lumens

▲For more information on application notes, see p. 20

Alter Concept SR T8

Subtle presence at the ceiling line and classy styling make Concept SR T8 a visually pleasing option for halls, corridors and other spaces. This all-new semi-recessed luminaire features T8 affordability and seamless construction, along with the clean look of microperforated mesh lamp shields. It belongs to the Alter Concept collection of sustainable lighting elements, offering cost-effective lighting in a lightweight, low-profile design ideal for shallow plenums, modern interiors and green buildings.

Features

- Efficiencies up to 70.5%
- Seamless welded form: curved top and side reflectors are formed together without any gaps or visual barriers
- Painted after fabrication (PAF) luminaire
- Cost-effective T8 solution with shallow design, only 3-5/8" deep for easy installation in shallow plenum
- One-piece swing-down microperforated lamp shield for easy relamping and maintenance
- Alter soft white film on inside of mesh conceals lamp image providing balance between reflected and direct light
- Semi-recessed luminaire and lamp compartment
- 95% Reflective Alter soft white paint finish
- One-piece body for easy installation
- Easy access to ballast through lamp compartment
- Not suitable for row mounting
- Fits standard 15/16" T-Grid, Slot T-Grid or drywall ceilings

Alter Concept SR T8

Semi-Recessed 2' x 2' - 2' x 4'

Ordering Guide

Luminaire Type (Static)		Length	Width	Recessed Depth	Lamp Qty/Type	Wattage	Catalog Number
Alter Concept SR T8 Microperforated Mesh Lamp Shield, Static	1	24"	24"	3-5/8"	2-T8	17W	**QCJ2GPFOP217**
	2	48"	24"	3-5/8"	2-T8	32W	**QCJ2GPFOP232**
		48"	24"	3-5/8"	3-T8	32W	**QCJ2GPFOP332**

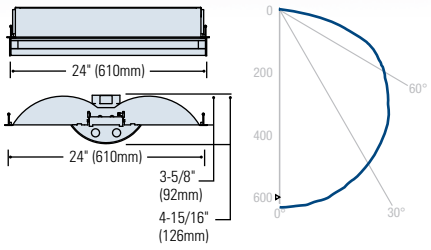
Numbering System

Complete Catalog Nº using template below

QCJ2GPFOP217	UNV	HI	
Luminaire Basic Catalog Number: Alter Semi-Recessed Fluorescent	Voltage: 347 UNV*	Ballast: **SO:** Electronic T8 Instant Start (<20% THD) **RO:** Electronic T8 Rapid Start (<10% THD) **HI:** Electronic T8 Instant Start (<10% THD) **O3:** 3 lamp Electronic T8 Instant Start (<20% THD) **H3:** 3 lamp Electronic T8 Instant Start (<10% THD) **DA:** Electronic T8 Program Start (<10% THD) DALI Digital Addressable Dimming **V2:** 1 or 2 lamp 32W T8 Electronic Step-Dim Rapid Start (B.F.=0.88/0.30)	Options: Add appropriate suffix See p. 18

*120/277V

1 **2' x 2' Alter Concept SR T8 • 2 Lamp 17 watt T8 • QCJ2GPFOP217 (Data) • Request Folio CD103**



Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.75	.71	.68
3	.62	.55	.49
5	.52	.43	.36
7	.44	.34	.28
10	.34	.29	.19

Reference Data

Efficiency	68.6%
Spacing Ratio	1.3

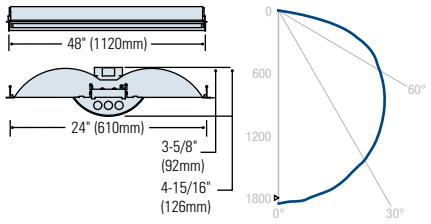
Electronic Ballast

Input Watts (120V)	31.2W
Ballast Factor	0.91

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	24	0.48
8' x 10' (83 sq ft/luminaire)	19	0.37
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	20	0.65

T8 lamp rated at 1400 lumens

2 **2' x 4' Alter Concept SR T8 • 3 Lamp 32 watt T8 • QCJ2GPFOP332 (Data) • Request Folio CB928**



Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.77	.73	.70
3	.63	.56	.50
5	.53	.44	.37
7	.45	.35	.29
10	.35	.25	.20

Reference Data

Efficiency	70.5%
Spacing Ratio	1.3

Electronic Ballast

Input Watts (120V)	90.7W
Ballast Factor	1.00

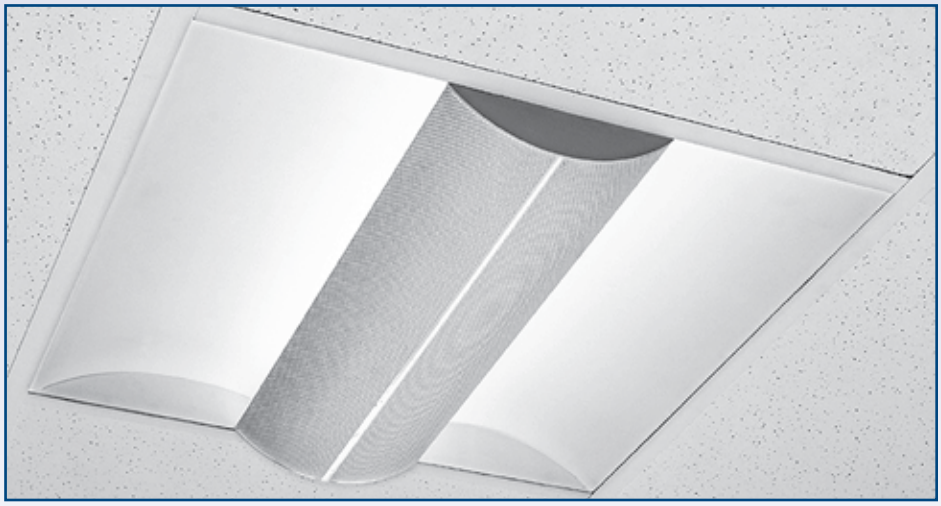
Luminaire Spacing	FC*▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	79	1.40
8' x 10' (83 sq ft/luminaire)	62	1.09
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	65	1.89

T8 lamp rated at 2950 lumens

*Use 2-lamp or 3-lamp model with a low-watt ballast (BF<0.8) to reduce light levels and W/FT^2 (ballast suffix L3)

▲For more information on application notes, see p. 20

Alter Slim SR



This family of slimly profiled luminaires adds beauty and visual interest to the ceiling. With its gently curved architectural details, Alter Slim SR blends into the ceiling perspective. For balanced brightness applications where plenum depth is limited.
The optional Alter acrylic plate element brings visual appeal to the ceiling line (see p. 18).

Features

- Efficiencies up to 68.6%
- Shallow design, only 2-1/4" deep for easy installation in shallow plenum (3-9/16" for 1' x 4' version)
- Swing-down microperforated lamp shield for easy relamping and maintenance
- Alter soft white film on inside of mesh conceals lamp image providing balance between reflected and direct light
- Semi-recessed luminaire and lamp compartment
- 95% Reflective Alter soft white paint finish
- One-piece body for easy installation
- Can be row mounted
- Fits standard 15/16" T-Grid, 9/16" slim T-Grid and drywall ceilings

Alter Slim SR

Semi-Recessed 2' x 2' - 2' x 4' - 1' x 4'

Ordering Guide

Luminaire Type (Static)		Length	Width	Recessed Depth	Lamp Qty/Type	Wattage	Catalog Number
Alter Slim SR Microperforated Mesh White Lamp Shield, Static	1	24"	24"	2-1/4"	1-TT5	40,50,55W	**QVH2GPFOS1FT**
		24"	24"	2-1/4"	2-TT5	40,50,55W	**QVH2GPFOS2FT**
	2	48"	24"	2-1/4"	2-TT5	40,50,55W	**QVH2GPFOS2FL**
		48"	24"	2-1/4"	4-TT5	40,50,55W	**QVH2GPFOS4FT**
		48"	24"	2-1/4"	2-T5	28W	**QVH2GPFOS228**
		48"	24"	2-1/4"	3-T5	28W	**QVH2GPFOS328**
		48"	24"	2-1/4"	2-T5HO	54W	**QVH2GPFOS254**
		48"	24"	2-1/4"	3-T5HO	54W	**QVH2GPFOS354**
	3	48"	12"	3-9/16"	2-TT5	40,50,55W	**QVH1GPFOS2FT**
		48"	12"	3-9/16"	2-T5	28W	**QVH1GPFOS228**
		48"	12"	3-9/16"	2-T5HO	54W	**QVH1GPFOS254**

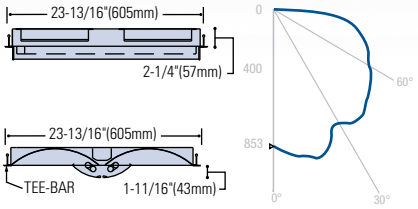
Numbering System

Complete Catalog Nº using template below

QVH2GPFOS2FT	120	SB	
Luminaire Basic Catalog Number: Alter Semi-Recessed	Voltage: 347 UNV*	Ballast: **PG:** T5/T5HO Electronic Program Start (<10% THD) **PR:** 40W Electronic TT5 Programmed Rapid Start (<10% THD) **BE:** 50W Electronic TT5 Rapid Start (<20% THD) **BF:** 55W Electronic TT5 Rapid Start (<10% THD) **DA:** Electronic TT5, T5, T5HO Program Start (<10% THD) DALI Digital Addressable Dimming **VY:** 2 lamp 28W T5 Electronic Step-Dim Programmed Rapid Start (B.F.=0.95/0.35)	Options: Add appropriate suffix See p. 18

*120/277V

1 2' x 2' Alter Slim SR • 2 Lamp 40 watt TT5 • QVH2GPFOS2FT (Data) • Request Folio C7651



Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.56	.53	.51
3	.46	.40	.35
5	.39	.32	.27
7	.33	.25	.20
10	.26	.19	.14

Reference Data

Efficiency	52.6%
Spacing Ratio	1.5

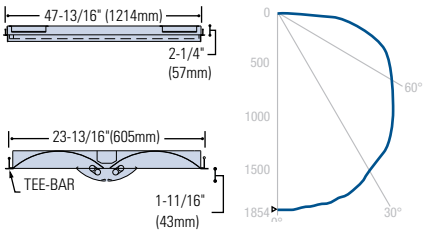
Electronic Ballast

Input Watts (120V)	67.0W
Ballast Factor	0.85

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	41	1.10
8' x 10' (83 sq ft/luminaire)	32	0.85
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	33	1.48

TT5 lamp rated at 3150 lumens

2 2' x 4' Alter Slim SR • 4 Lamp 40 watt TT5 • QVH2GPFOS4FT (Data) • Request Folio C8232



Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.54	.51	.49
3	.44	.38	.34
5	.37	.30	.25
7	.32	.24	.20
10	.25	.19	.14

Reference Data

Efficiency	51.1%
Spacing Ratio	1.4

Electronic Ballast

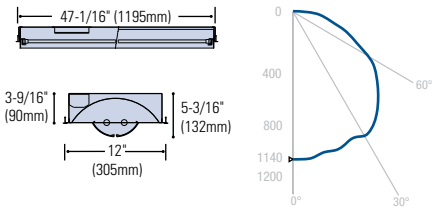
Input Watts (120V)	129.8W
Ballast Factor	0.88

Luminaire Spacing	FC*▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	80	2.00
8' x 10' (83 sq ft/luminaire)	62	1.56
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	64	2.70

TT5 lamp rated at 3150 lumens

*Use 2-lamp T5 model (QVH2GPFOS228) to reduce light levels and W/FT²

3 1' x 4' Alter Slim SR • 2 Lamp 28 watt T5 • QVH1GPFOS228 (Data) • Request Folio CA811



Coefficient of Utilization

RF	20%	RC	80%
RW	70	50	30
RCR			
1	.75	.72	.69
3	.62	.55	.50
5	.52	.43	.37
7	.44	.34	.28
10	.34	.25	.19

Reference Data

Efficiency	68.5%
Spacing Ratio	1.4

Electronic Ballast

Input Watts (120V)	66.1W
Ballast Factor	1.00

Luminaire Spacing	FC▲	W/Sq FT
50' x 70' x 8.5' Space		
8' x 8' (64 sq ft/luminaire)	45	1.02
8' x 10' (83 sq ft/luminaire)	36	0.79
12' x 16' x 8.5' Space		
6' x 8' (48 sq ft/luminaire)	38	1.38

T5 lamp rated at 2600 lumens

▲For more information on application notes, see p. 20

OPTIONS

Ceiling compatibility for G type luminaires

Alter Concept products
Housing flanges designed for flush-to-ceiling luminaire installation on standard and slot T grid ceilings.

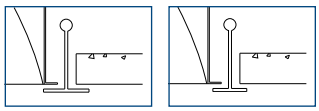
Not suited for flush mounting on slim T-grids.

Same luminaire sits flush with the face of standard or slot T-grid ceilings.

Standard T (15/16")

Exposed Slot T

Alter Slim SR
Suited for installation on standard and slim T grid ceilings. Not suited for mounting on slot T-Grid ceilings.



Drop-Down Visual Element

Compatible only with Alter Slim SR models. Optional clear polished acrylic drop-down visual element with projected color face. Substitute acrylic suffix in place of open slot.

e.g. QVH2GPF**OS** (OS = Open Slot)
QVH2GPF**GR** (GR = Red Acrylic)

Suffix: **GC** (GC = Clear), **GB** (GB = Blue), **GG** (GG = Green), **GR** (GR = Red).

For other colors or special orders (custom signage), consult your Lightolier representative. Available only on:

Alter Slim SR 2x2 (except for 1-lamp TT5) Page 16
Alter Slim SR 2x4 (except for 2-lamp TT5) Page 16
Alter Slim SR 1x4 (except for 2-lamp TT5) Page 16

Internal Fast-Blow Fusing

Suffix **F** (Canada) or **GLR** (USA) in options box. Consult your Lightolier representative for availability of slow-blow fusing.

Emergency Lighting System

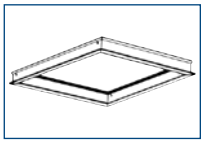
Add appropriate suffix in option box:
T8/TT5 models – Canada: Suffix **O**
T5/T5HO models - Canada: Suffix **E**
T8/TT5/T5/T5HO models - USA: Suffix **EM**
Factory installed emergency power battery pack with charger and inverter, concealed in luminaire channel. Upon loss of AC power, operates one fluorescent lamp at 20% light output for 90 minutes. 120V, 277V, 347V versions available.

Note: 2x2 Alter Concept luminaires equipped with Emergency Lighting are 5-1/4" deep. 2x4 versions with double-switching are 5-1/4" deep while regular 2x4 versions (1 ballast) are 3-5/8" deep.

ACCESSORIES

Drywall Kit

Extruded aluminum with mitered corners. For use in ceilings requiring flanges. Not for continuous row mounting. Order separately according to luminaire size:



Luminaire	Cat. No.	Dimensions for opening
1x4	FK91X4	12-5/8" x 48-5/8"
2x2	FK92X2	24-5/8" x 24-5/8"
2x4	FK92X4	24-5/8" x 48-5/8"

Dust and Germ Guard

Highly resistant polycarbonate shield hermetically seals the ceiling opening. Heavy duty gasket and 18-gauge steel mounting frame for effective inner ceiling protection against dust and germs. Only available on fully recessed luminaires. Installs on all 1x4, 2x2 and 2x4 T-grid ceilings.
Order separately according to luminaire size:

Luminaire	Cat. No.
1x4	QVS14DG
2x2	QVS22DG
2x4	QVS24DG

Hold-Down Clips

Four clips required per luminaire. Suited to standard 15/16" and slot T grid ceilings.
Can also be used for row-mounting applications.
Order separately: catalog no. **QVS-HD**. (Kit bag contains 4 clips).

THE ULM MODULE*

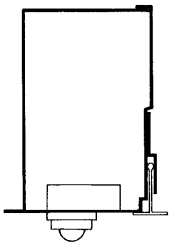
The Universal Light and Motion (ULM) Module accessory offers substantial energy savings with a choice of two sensors, namely a light sensor for daylight harvesting and a motion sensor for occupancy detection. Its clean design blends in nicely with the ceiling system and luminaire. The ULM Module can be used with any Lightolier recessed fluorescent luminaire.

ULM Module with light sensor shown here with Alter Concept Elegance.

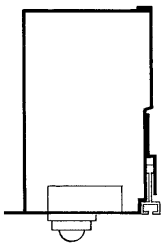
ULM Module Benefits

- 15-45% energy savings for Daylight Harvesting
- Over 30% energy savings for Occupancy Detection
- Plug'n'Play (virtually no commissioning) and easy adjustments
- Ability to control small network of luminaires (see Ordering Guide)
- Easy Installation – No power pack and/or wiring required

Easy Installation



The ULM Module clamps to the ceiling T-bar and then the luminaire is dropped into place. Compatible with standard 15/16" T and slot T-grid ceilings. Plug-in quick connectors included.



Housing encloses electrical connections—line or low voltage. Tile is notched and dropped into place.

Occupancy Detection

People are frequently away from their desk (about 35% of core hours). The ULM Module uses a passive infrared motion sensor to typically deliver 30% savings in lighting energy consumption, which is consistent with industry estimates. A 2001 study found that occupancy-based energy savings in a private office range from 28% to 38%, depending on sensor time delay.[2]

Factory preset: 15-minute delay (mid setpoint)
Available Range: 30 seconds to 30 minutes
Adjustability: Rotation of trimpot using screwdriver
Coverage: 18 ft. diameter/300 sq. ft. (360° mounted at 8')

Daylight Harvesting

Why use electrical energy for lighting when daylight will do? The ULM Module provides a simple yet effective solution to harvest natural light in window-adjacent locations. Energy savings vary widely—from 15% to 45%—depending on location, season, orientation and other factors related to building design. According to the Lighting Controls Association, a continuous-dimming daylighting system, such as the ULM Module light sensor, can typically reduce lighting energy consumption by 30% to 40% when a building's architecture properly integrates daylight as a primary light source.[1]

Automatic dimming – As daylight increases, the Module's light sensor compensates for 50% of incoming natural light by dimming artificial light output on a relative scale. This is performed gradually to prevent distracting changes in light levels. Dimming continues until the minimum light output (1.5V) is reached. For example, with factory settings, normal conditions and 1000 lux/90 fc of additional daylight, the luminaire is dimmed to a minimum light output of about 3%. Optimal results are achieved through proper installation. Consult your Lightolier representative for full details.

Factory preset: 500 lux/45 footcandles (mid setpoint), assuming normal conditions (standard reflectances (80/50/20), ceiling heights (8'-10') and 2.5' work surfaces)

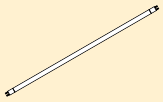
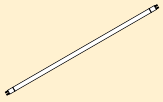
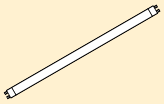
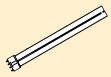
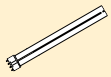
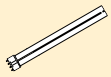
Available Range: 1/3 to 3 times the factory preset
Adjustability: Hand rotation of diaphragm
Optimal Positioning Tips: 6' to10' from window • At least 5' between sensors • Over surfaces with average reflectivity

Ordering Guide

Catalog No.	Sensors	Ballast Required	Network Size	Voltage
ULM-EZ	Light	0-10 VDC Dimming	Up to 20 dimming ballasts	120/277V
ULM-WS1	Motion (PIR)	Standard (24VDC transformer included)	Up to 13 luminaires (Alter Concept Elegance Lens: QCE2GOLOP228@120V)†	120/277V

* Patent Pending
[1] "Why Do Daylight Harvesting Projects Succeed or Fail?", 2006 – Lighting Controls Association.
[2] Demand Reduction and Energy Savings Using Occupancy Sensors study, 2001 – National Electrical Manufacturers Association (NEMA).
† Maximum sensor capacity: 800W@120V and 1200W@277V, depending on luminaire input watts.

Lamp Data Chart

Lamp Wattage		Lamp Manufacturer	Model # (add color temperature desired in space ____)	Rated Life* (hours)	Initial Lumens at 25°C	Common Commercial/Institutionnal Applications Color Temperatures (°K)	CRI	Maximum Overall Length inches (mm)
24		PHILIPS	**F24T5/8__/HO/ALTO**	20000	1800	**3000, 3500, 4100**	85	22.2" (563.2mm)
T5 High		GE	**F24W/T5/8__/ECO**	30000	1750	**3000, 3500, 4100**	85	22.2" (563.2mm)
Output		OSRAM Sylvania	**FP24/8__/HO/ECO**	20000	1750	**3000, 3500, 4100**	85	22.2" (563.2mm)
28		PHILIPS	**F28T5/8__/ALTO**	20000	2600	**3000, 3500, 4100**	85	45.8" (1163.2mm)
T5 High		GE	**F28W/T5/8__/ECO**	30000	2640	**3000, 3500, 4100**	85	45.8" (1163.2mm)
Efficiency		OSRAM Sylvania	**FP28/8__/ECO**	20000	2600	**3000, 3500, 4100**	85	45.8" (1163.2mm)
54		PHILIPS	**F54T5/8__/HO/ALTO**	25000	4500	**3000, 3500, 4100**	85	45.8" (1163.2mm)
T5 High		GE	**F54W/T5/8__/ECO**	30000	4460	**3000, 3500, 4100**	85	45.8" (1163.2mm)
Output		OSRAM Sylvania	**FP54/HO/8__/ECO**	25000	4450	**3000, 3500, 4100**	85	45.8" (1163.2mm)
17		PHILIPS	**F17T8/TL8__/ALTO**	24000	1400	**3000, 3500, 4100**	85	23.8" (604mm)
T8		GE	**F17T8/SPX__/ECO**	15000	1350	**3000, 3500, 4100**	86	23.8" (604mm)
		OSRAM Sylvania	**FO17/8__/ECO**	15000	1350	**3000, 3500, 4100**	82	23.8" (604mm)
32		PHILIPS	**F32T8/TL8__/ALTO**	24000	2950	**3000, 3500, 4100**	85	47.8" (1213.6mm)
T8		GE	**F32T8/SPX__/ECO**	20000	2950	**3000, 3500, 4100**	86	47.8" (1213.6mm)
		OSRAM Sylvania	**FO32/8__/ECO**	24000	2950	**3000, 3500, 4100**	85	47.8" (1213.6mm)
40		PHILIPS	**PL-L 40W/8__/4P/RS/IS**	20000	3300	**3000, 3500, 4100**	82	22.5" (571.5mm)
TT5		GE	**F40/30BX/SPX__**	20000	3150	**3000, 3500, 4100**	82	22.5" (571.5mm)
		OSRAM Sylvania	**FT40DL/8__/RS/ECO**	20000	3150	**3000, 3500, 4100**	82	22.6" (573mm)
50		PHILIPS	**PL-L 50W/8__/4P/RS**	20000	4300	**3000, 3500, 4100**	82	22.5" (571.5mm)
TT5		GE	**F50BX/SPX__RS**	14000	4000	**3000, 3500, 4100**	82	22.5" (571.5mm)
		OSRAM Sylvania	**FT50DL/8__/RS/ECO**	14000	4300	**3000, 3500, 4100**	82	22.6" (573mm)
55		PHILIPS	**PL-L 55W/8__/4P/RS**	10000	4800	**3000, 3500, 4100**	82	21.3" (541.6mm)
TT5		GE	**F55BX/SPX__**	10000	4800	**3000, 3500, 4100**	82	20.7" (525.7mm)
		OSRAM Sylvania	**FT55DL/8__/ECO**	12000	4800	**3000, 3500, 4100**	82	21.1" (535mm)

LAMP CHART IS TO BE USED AS A GUIDE ONLY. LAMP MANUFACTURER DATA AT TIME OF PUBLICATION.
CHECK LAMP MANUFACTURER DATA FOR OTHER MODEL ENQUIRIES AND/OR EXACT SPECIFICATIONS.

*Rated average life under specified test conditions with lamps turned off and restarted no more frequently than once every 3 operating hours.
Rating based on Program Start ballast for T5/T5HO, Instant Start for T8 and Rapid Start for TT5 lamps.

Application Notes

Results based on: Average footcandles maintained, total Light Loss Factor (L.L.F.)=0.82 Reflectances: 80% Ceiling (white acoustical tile), 50% Wall (off-white paint), 20% Floor (medium grey carpet). RE835 T8 lamps rated at 2950 lumens, RE835 TT5 lamps rated at 3150 lumens, RE835 T5 lamps rated at 2600 lumens & RE835 T5HO lamps rated at 4500 lumens. 1' x 1' calculation grid at 30" from finished floor.

Results may vary.

Calculations have been performed according to IESNA & CIE standards and good practice. Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Product Index

Lightolier is a Philips group brand

631 Airport Road
Fall River, MA 02720
Phone (508) 679-8131
Fax (508) 674-4710
www.lightolier.com

3015 Louis-Amos
Lachine, QC H8T 1C4
Phone (514) 636-0670
www.canlyte.com

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Hg Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled "Contains Mercury" and/or with the symbol "Hg." Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org.

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