



martinarchitectural / OUTDOOR LIGHTING

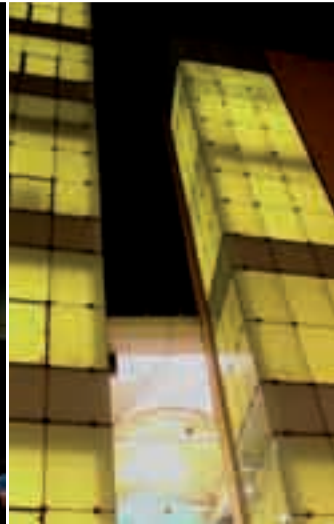
8	Exterior 1200
20	Exterior 600
30	Exterior 200
38	Inground 200
48	Cyclo IP65
56	Cyclo IP65 Directional



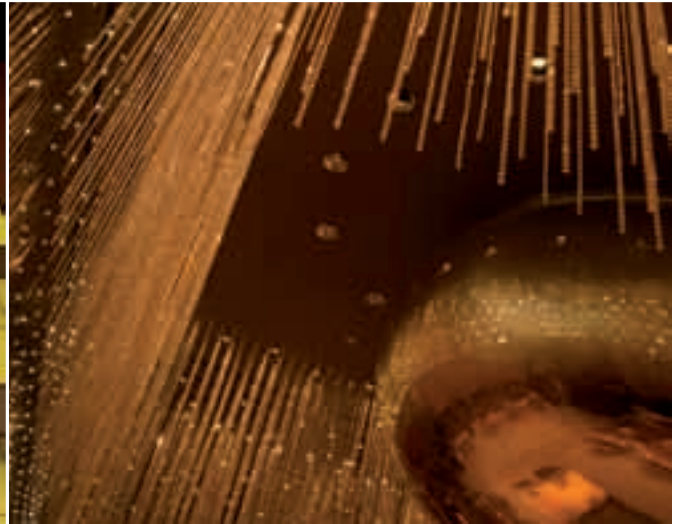
Toyota Station Pedestrian Bridge / Toyota City, Japan



Kururu Shopping Centre / Tokyo, Japan



Brulee: The Dessert Experience / New Jersey, USA



Martin Architectural is all about fresh ideas, offering a contemporary approach to architectural illumination through dynamic light.

BT Tower / London, United Kingdom

The Palms Casino Resort / Las Vegas, USA

Orange County Convention Centre / Orlando, USA



OUR PHILOSOPHY

Our involvement with theatre and stage lighting has taught us that designing with light is not just a question of lux and lumens. It taught us that light is also dynamic and magical, able to turn lifeless forms into luminous drama. In our approach to light, we have not forgotten the soft glow of dawn nor the stories told by light in the glass of Gothic cathedrals. Our desire is to continue to learn these lessons and apply them equally to the architectural stage.

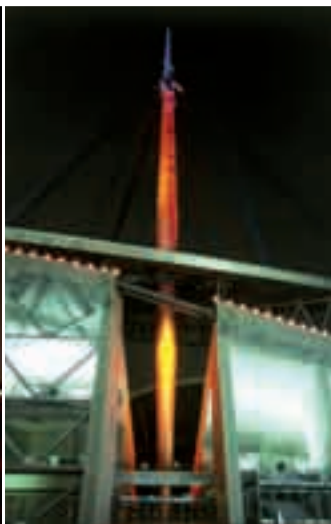
OUR CLIENTS

Martin Architectural has worked in partnership with some of the world's leading architects and lighting designers across a range of challenging projects. Martin Architectural lighting solutions can be found the world over and span a wide range of applications: outdoor, retail & display, urban, corporate, bridges & structures, sport & leisure, hotels & hospitality, art & culture, health & wellness, landscapes, private residences and more.

John Frost Bridge / Arnhem, Holland



Toyota Stadium / Toyota City, Japan



HSBC Headquarters / Hong Kong, China

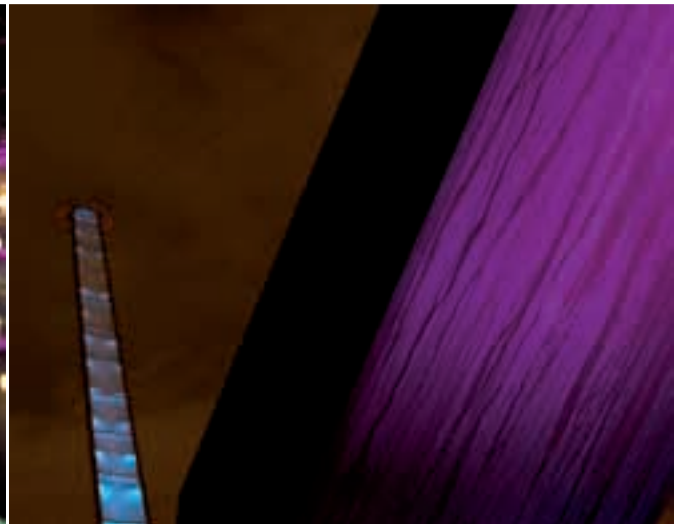


MARTIN PEOPLE

Martin is at heart, a large group of highly skilled individuals, united in their passion to find the most innovative and unique solutions to the challenge of entertainment and architectural lighting. As part of this process we realize the necessity of close communication and partnership with our markets, ensuring the relevance of our product portfolio through shared knowledge and ideas.

Chicago Bridges / Illinois, USA

Porta Diagonal / Barcelona, Spain



AWARDS AND RECOGNITION

The Martin Group has been fortunate in the recognition it has received from the lighting industry, right from the very start. Martin Architectural has been no exception to this and continues to collect awards for excellence in service and product design.

- 2005 **Lightfair: Inground 200**
Best New Product of the Year
- 2002 **PLASA: ViroStation**
Design Excellence
- 2001 **LDI: ViroStation**
Sound Product of the Year, Most Promising Prototype
- 2000 **Lightfair: MiniMAC**
Innovator Award and Roeder Award

DYNAMIC LIGHT

Light is by nature dynamic. Dynamic light - programmable light capable of reproducing the variety and drama found in nature - offers an expressive new medium for architectural projects. With careful command of brightness and colour, dynamic light allows architectural spaces to adapt to changing client needs or shifts in season and climate. Martin Architectural offers an excellent line of dynamic architectural lighting solutions, inviting you to investigate the role of luminous colour and its ability to shape the world.

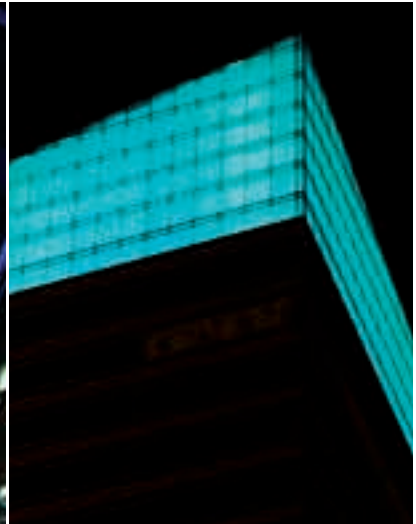
Spinnaker Tower / Portsmouth, UK



Sony Centre / Berlin, Germany



Newport Office Center VII / Jersey City, USA



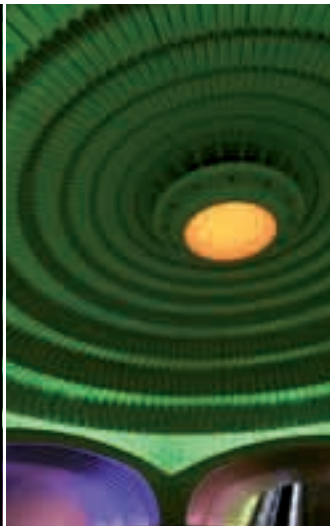
OUR FACTORY

Martin has four production plants located in Denmark, England and China, making the Martin Group one of the world's leading manufacturers of lighting equipment. Our largest facilities are located in Denmark. Inspired architecturally by the concert halls and stages we illuminate around the world, our newest factory is a high-tech, 12,500 square-metre facility geared towards the production of innovative lighting.

Torre Agbar Auditorium / Barcelona, Spain

MOA Museum of Art / Atami City, Japan

De Canapé / Gent, Belgium



SERVICE

Martin Global Services offers the highest level of service in our industry today. Installation as well as on-site service and maintenance can be provided worldwide by the Martin Global Service organization and its authorized agents. The Martin service agreement gives owners access to Martin's expertise and product knowledge in a partnership that will ensure the highest level of performance throughout the product's lifetime.

WORKING WITH MARTIN ARCHITECTURAL

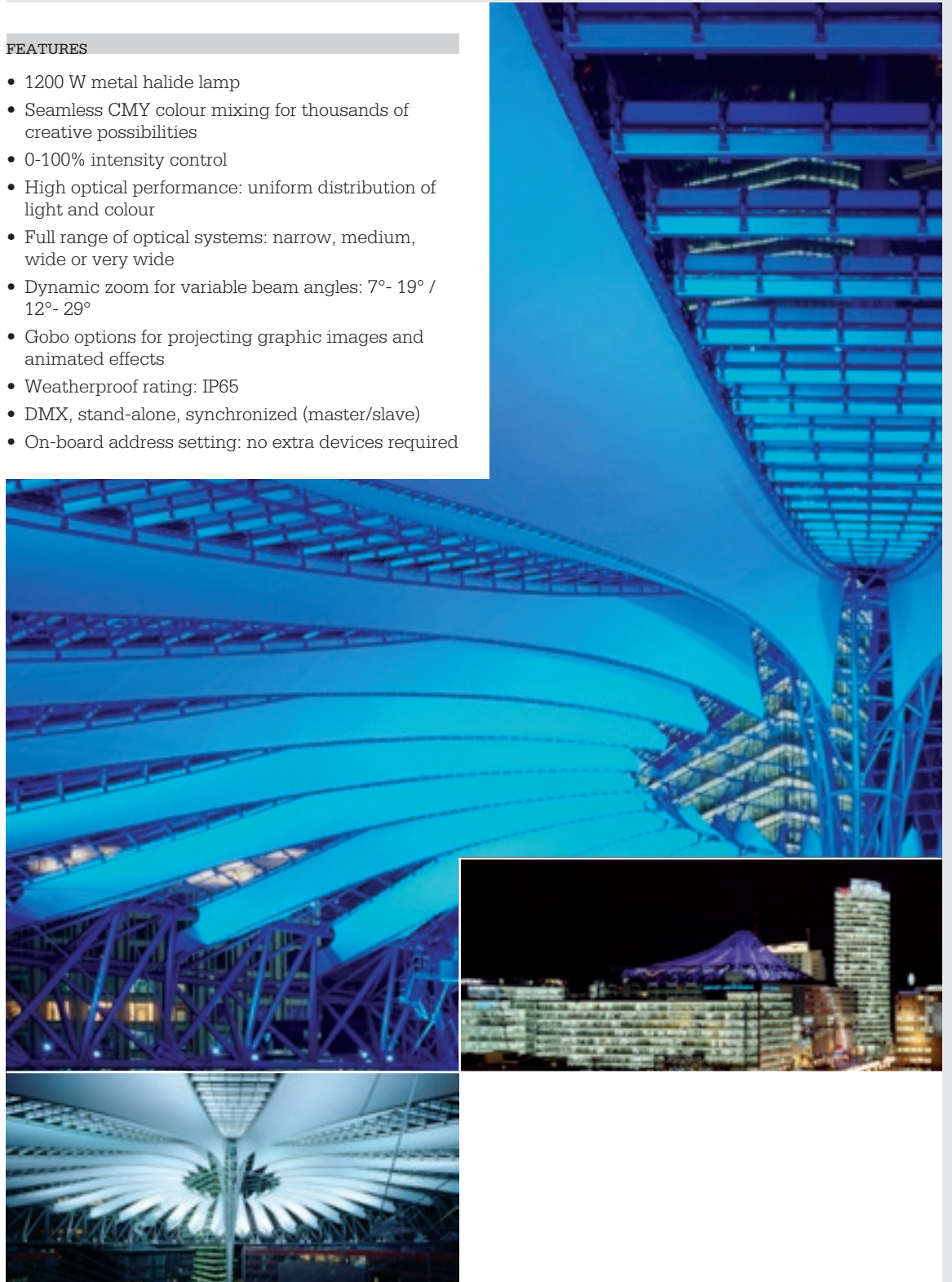
The Martin Architectural head office is located in Aarhus, Denmark, in one of the world's most renowned regions for design. The Martin family includes over 1000 employees. Whatever language of light you speak, we know someone you can talk to. Martin's worldwide distributor network guarantees immediate product availability and support. With our international partners in over 90 countries, we form our industry's most complete and capable distribution network.

Exterior 1200

Range of 1200 W luminaires designed for spectacular illumination of high-rise structures, bridges and landmark architecture.

FEATURES

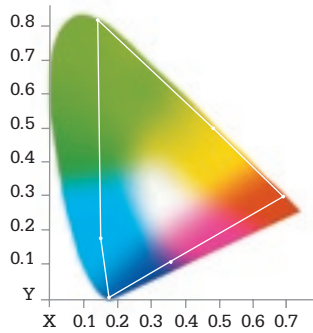
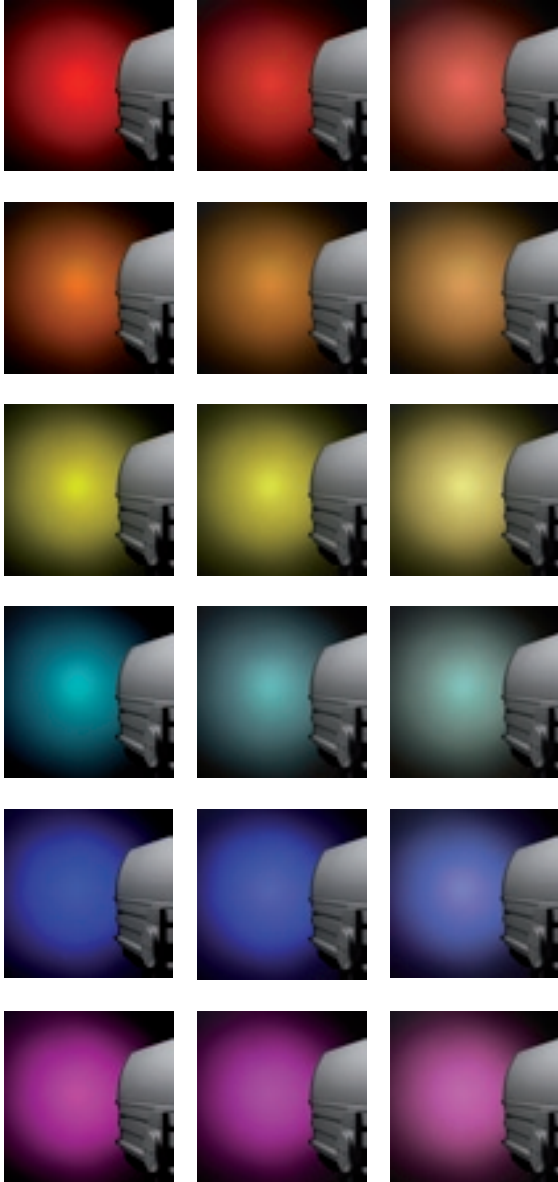
- 1200 W metal halide lamp
- Seamless CMY colour mixing for thousands of creative possibilities
- 0-100% intensity control
- High optical performance: uniform distribution of light and colour
- Full range of optical systems: narrow, medium, wide or very wide
- Dynamic zoom for variable beam angles: 7°- 19° / 12°- 29°
- Gobo options for projecting graphic images and animated effects
- Weatherproof rating: IP65
- DMX, stand-alone, synchronized (master/slave)
- On-board address setting: no extra devices required





LIMITLESS CHOICE OF COLOURS

The Exterior 1200 offers endless creative possibilities. With full colour mixing, the CMY system blends the primary colours Cyan, Magenta and Yellow to achieve a full spectrum of luminous colours. These colours, variable in hue and saturation, can be programmed to shift smoothly from shade to shade to create truly dynamic architecture. Further colour options are also provided on a four-colour wheel.



With the CMY system, the Exterior 1200 can create all the colours in the triangle above.

0-100% INTENSITY CONTROL

The ability to dim metal halide 0-100% is appreciated by designers who want balance of brightness or the ability to allow structures and landscapes to respond intelligently to the availability of natural light.



0%



20%



40%



60%



80%



100%

DISPLAY AND INTERFACE

An on-board LCD display allows diagnosis of service factors such as lamp life and other critical information. Manual control and addressing can also be performed through the display without the need for other peripheral devices.



WORLDWIDE VOLTAGES

Through easy re-tapping the Exterior 1200 is compatible with all voltages from 200/208/220/230/240/250/277 V, 50/60 Hz.



OPTICAL AIMING

A fully adjustable bracket allows the luminaire to be mounted and aimed from any position.



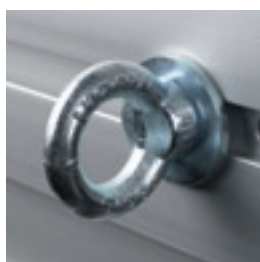
QUICK RE-LAMPING

A convenient slide-out lamp assembly provides easy access for quick re-lamping.



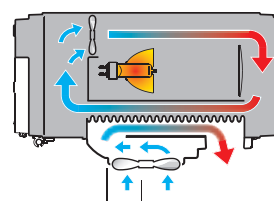
EASY INSTALLATION

Four detachable eyebolts are included to aid with lifting and installation.



HEAT EXCHANGER COOLING

A unique cooling system ensures the luminaire is reliable in even the hottest climates. Sealed air is circulated through a heat exchanger and cooled, ensuring safe operating temperatures while keeping dust and pollutants out.



Projecting textures and images using metal or glass pattern discs, (referred to as gobos) is a technique derived from the theatre to tell a story. The technique can equally be applied to the architectural stage to deliver a message or create animated images.

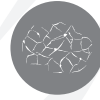


IMAGE PROJECTION

Urban spaces need night-time narratives to create environments with emotional impact. The Exterior 1200 Image Projector provides drama with illuminated textures and animated effects such as reflected water, ripples, flames, clouds, rain and snow.



A utilitarian water tower is transformed into a dramatic piece of architecture with an animated, water effect.





Location: Fields Shopping Centre, Copenhagen, Denmark / Architect: CF Møller, A/S / Designer: Collaborative

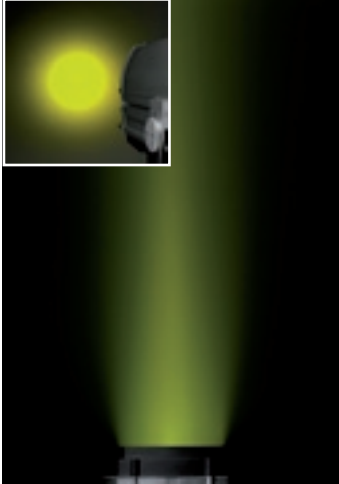


Exterior 1200 / Image Projection

OPTICAL SYSTEMS

A full range of optical systems from spot to flood allows for accurate and even illumination of large surfaces. Ellipsoidal beam shapers and other optical accessories provide optical control for pin-point illumination of columns, pylons and very tall structures.

NARROW (ZOOM: SPOT POSITION)

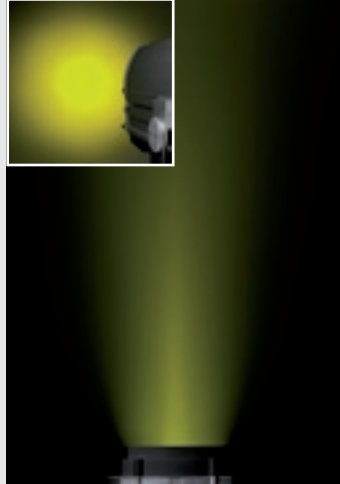


7° beam angle

m	Ø50%	7°	E [lux]
10	1.2		15330
25	3.0		2453
50	6.0		613
75	9.0		273
100	12.0		153

Efficiency: 31%
 Half-peak Ø: 0.12 × distance (m)
 Illuminance: 1533000 / distance² (lux)
 Total Output: 28900 (lumens)

NARROW (ZOOM: FLOOD POSITION)

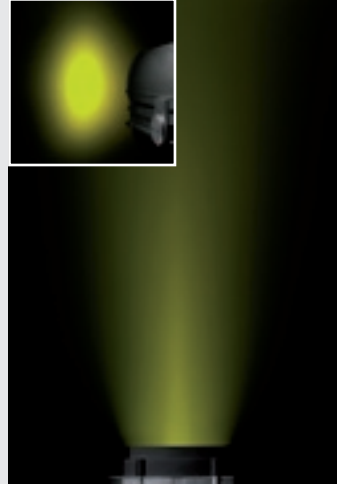


19° beam angle

m	Ø50%	19°	E [lux]
10	3.4		3320
25	8.5		531
50	17.0		133
75	25.5		59
100	34.0		33

Efficiency: 32%
 Half-peak Ø: 0.34 × distance (m)
 Illuminance: 332000 / distance² (lux)
 Total Output: 29000 (lumens)

NARROW + BEAM SHAPER

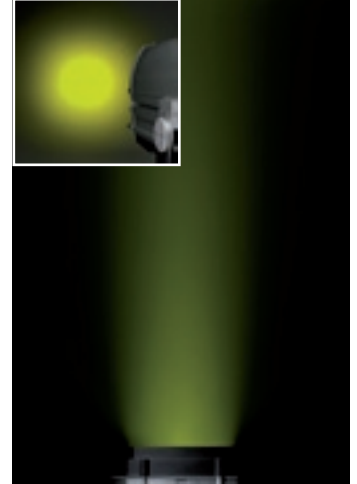


9° × 19° beam angle

m	Ø50%	C ₉₀	C ₉₀	9°	19°	E [lux]
10	1.6	3.4				10000
25	4.0	8.5				1600
50	8.0	17.0				400
75	12.0	25.5				178
100	16.0	34.0				100

Efficiency: 28%
 Half-peak Ø C₉₀: 0.16 × distance (m)
 Half-peak Ø C₉₀: 0.34 × distance (m)
 Illuminance: 1000000 / distance² (lux)
 Total Output: 26010 (lumens)

MEDIUM (ZOOM: SPOT POSITION)



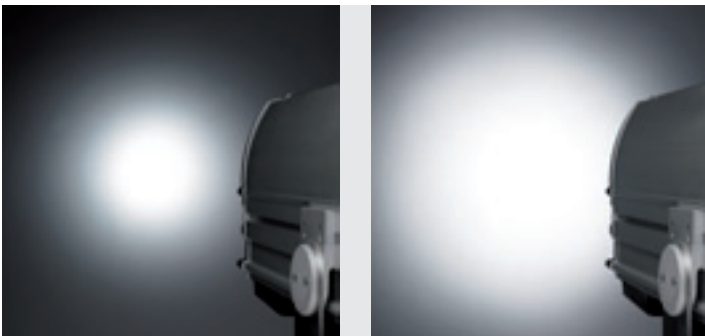
12° beam angle

m	Ø50%	12°	E [lux]
10	2.1		3110
25	5.2		498
50	10.5		124
75	15.7		55
100	21.0		31

Efficiency: 20%
 Half-peak Ø: 0.21 × distance (m)
 Illuminance: 311000 / distance² (lux)
 Total Output: 18300 (lumens)

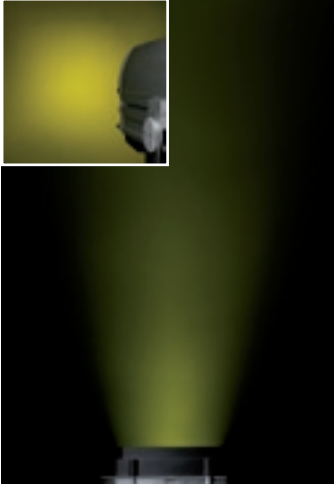
All photometric data is available electronically from www.martin.com/service

DYNAMIC ZOOM



Narrow and Medium models provide designers with a variable zoom and the possibility of varying beam angles from 7° to 19° or 12° to 29°. This offers the flexibility of re-focusing on-site in order to achieve a perfect distribution of light and colour.

MEDIUM (ZOOM: FLOOD POSITION)

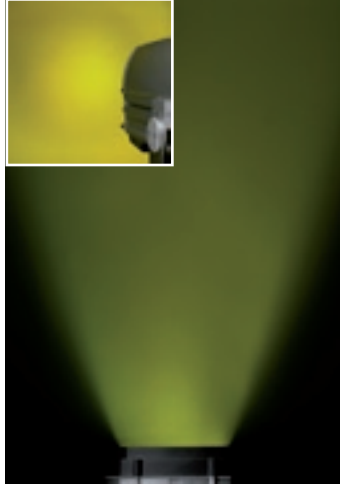


29° beam angle

m	Ø50%	29°	E [lux]
10	5.5		830
25	13.7		133
50	27.5		33
75	41.2		15
100	55.0		8

Efficiency: 28%
 Half-peak Ø: 0.55 × distance (m)
 Illuminance: 83000 / distance² (lux)
 Total Output: 26000 (lumens)

WIDE

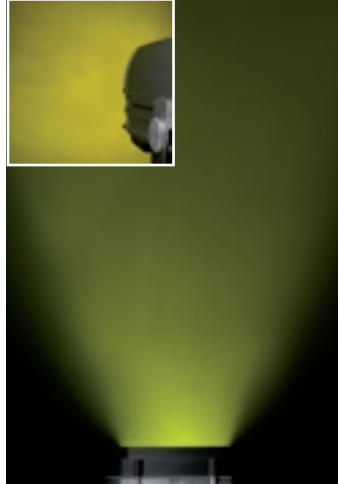


42° beam angle

m	Ø50%	42°	E [lux]
10	9.0		680
25	22.5		109
50	45.0		27
75	67.5		12
100	90.0		7

Efficiency: 33%
 Half-peak Ø: 0.9 × distance (m)
 Illuminance: 68000 / distance² (lux)
 Total Output: 30100 (lumens)

VERY WIDE



42° beam angle

m	Ø50%	42°	E [lux]
10	9.0		430
25	22.5		69
50	45.0		17
75	67.5		8
100	90.0		4

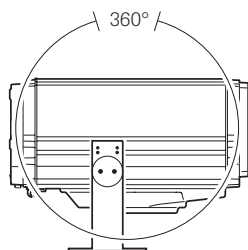
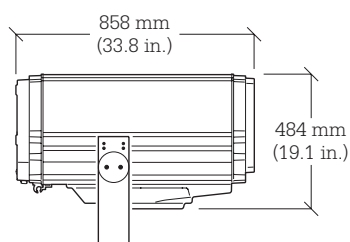
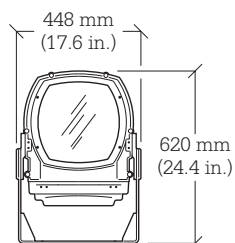
Efficiency: 33%
 Half-peak Ø: 0.9 × distance (m)
 Illuminance: 43000 / distance² (lux)
 Total Output: 30000 (lumens)

TRUE WEATHER PROTECTION



The Exterior 1200's IP65 design guarantees reliable operation in harsh, weather-beaten environments. An efficient cooling system ensures the luminaire is reliable in even the hottest climates. It is also suitable for marine and saline environments such as cruise ships and bridges and has been windload tested, an important factor for tower installations.

Exterior 1200



Orientation: Any
(air intake must face down)

SPECIFICATION

PHYSICAL

Length: 858 mm (33.8 in.)
Width including mounting yoke: 448 mm (17.6 in.)
Height including mounting yoke: 620 mm (24.4 in.)
Weight: 68 kg (149.9 lbs.)

LAMP

Type: 1200 W metal halide
Approved lamps: Philips MSD 1200
Lamp socket: G22
Control: Automatic and/or remote on/off

DYNAMIC EFFECTS

Colour mixing: Full spectrum CMY
Cyan: 0 - 100%
Magenta: 0 - 100%
Yellow: 0 - 100%
Colour wheel: Red, green, blue, CTC (as standard) + open positions
Dimmer: 0 - 100%
Zoom: 7° - 19° / 12° - 29°

CONTROL AND PROGRAMMING

Control options: DMX, stand-alone, synchronized (master/slave)
DMX channels: 8
Stand-alone trigger options: Internal timer and/or ambient light level
Stand-alone memory: 20 scenes

CONSTRUCTION

Housing: Aluminium
Finish: Clear anodized
Front glass: 6 mm (0.2 in.) anti-reflection coated
Protection factor: UL wet location, main enclosure designed to IP65

INSTALLATION

Orientation: Any (air intake must face down)
Minimum distance to combustible materials: 1 m (3.3 ft.)
Minimum distance to illuminated surfaces: 1 m (3.3 ft.)

ELECTRICAL

AC power: 200/208/220/230/240/250/277 VAC, 50/60 Hz
Main fuse: 15 AT (slow blow)
Ballast: Magnetic

THERMAL

Maximum ambient temperature (Ta): 45° C (113° F)
Maximum surface temperature, steady state, Ta=45° C: 70° C (158° F)
Cooling: Forced air, integrated air/air heat exchanger, IP65 barrier

APPROVALS

EU EMC: EN 55 015, EN 55 103-1, EN 61 000-3
EU safety: EN 60598-1, EN 61347-1
Canadian safety (pending): CSA C22.2 No. 250.0-00
US safety (pending): UL 1598



ACCESSORIES



91610081
Beam shaper lens



91611258
5500 - 4200 K CTC kit



91611257
Snoot/barndoor
extensions kit



Exterior 1200

ORDERING

EXAMPLE SPECIFICATION

Exterior 1200 Wash, Surface Mounted, Projector, IP65, Metal Halide, 1200 W, CMY, Narrow, 7-19°,
 = Exterior 1200, Wash, Narrow
 = 90504010

VARIABLES

Exterior 1200 Wash	Narrow, 7-19°
Exterior 1200 Image Projector	Medium, 12-29° Wide, 42° Very Wide, 42°



Exterior 1200 Wash

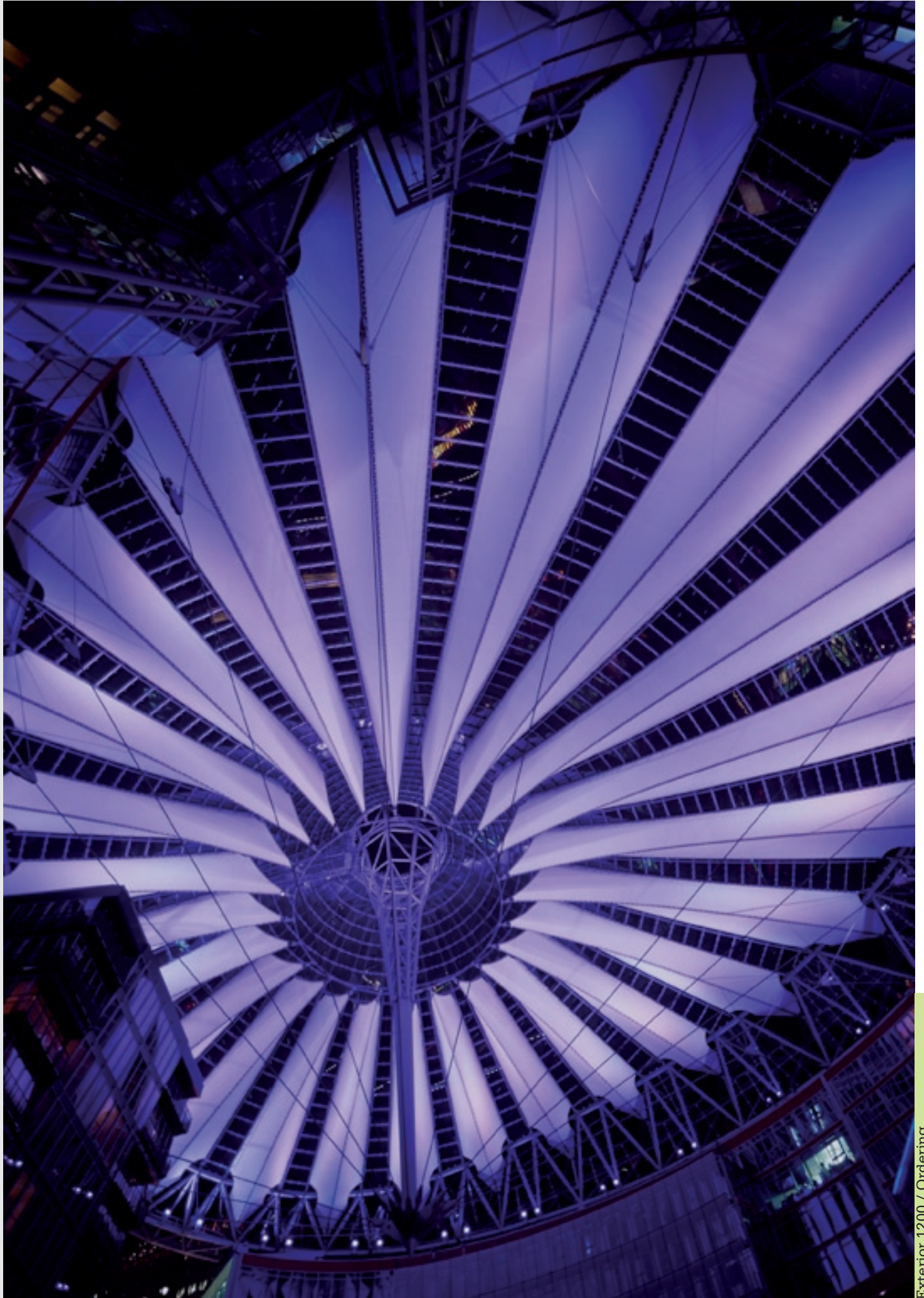
SPECIFICATION	CODE
Exterior 1200 Wash, Narrow	90504010
Exterior 1200 Wash, Medium	90504020
Exterior 1200 Wash, Wide	90504030
Exterior 1200 Wash, Very Wide	90504040



Exterior 1200 Image Projector



SPECIFICATION	CODE
Exterior 1200 Image Projector	Consult Martin Architectural for further details



Sony Centre, Berlin, Germany / Architect: Helmut Jahn, Murphy Jahn Inc. / Light Art: Yann Kersalé

Exterior 1200 / Ordering

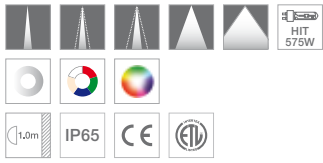
Exterior 600

The leading 575 W intelligent luminaire, designed for dynamic and creative illumination of the built and natural environments

FEATURES

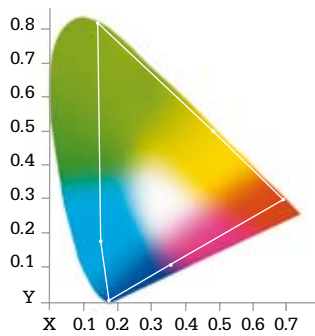
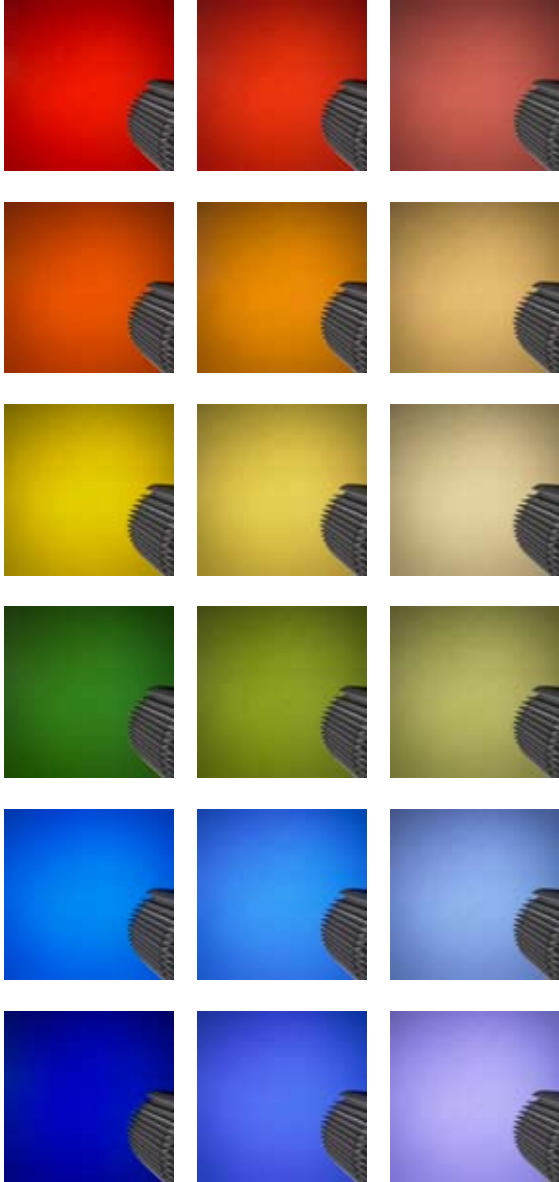
- 575 W luminaire for dynamic illumination of facades and weather-beaten environments
- 575 W metal halide lamp
- Seamless CMY colour mixing
- 0-100% intensity control
- High optical performance: uniform distribution of light and colour
- Full range of optical systems: very narrow, narrow, medium, wide or very wide
- Dynamic zoom for variable beam angles: 9°-12° / 11°-27°
- Ellipsoidal beam shaping and frost filter options
- Weatherproof rating: IP65
- DMX, stand-alone, synchronized (master/slave)
- On-board light sensor





FULL SPECTRUM CMY COLOUR MIXING

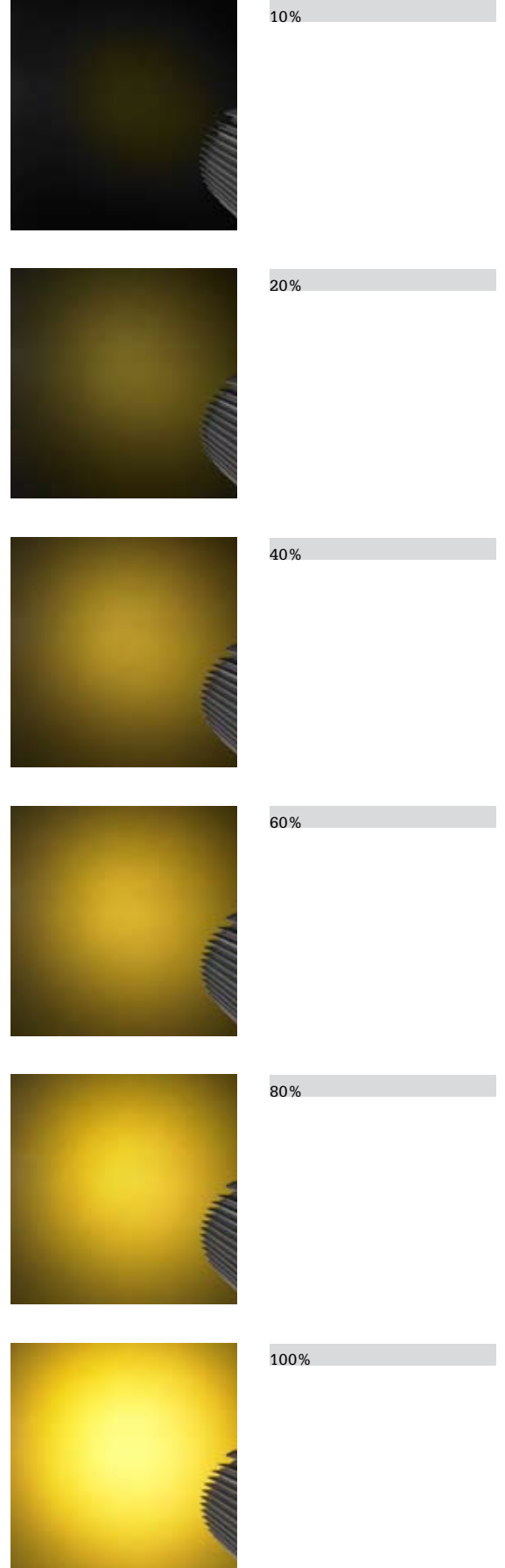
The Exterior 600 offers endless creative possibilities. With full colour mixing, the CMY system blends the primary colours Cyan, Magenta and Yellow to achieve a full spectrum of luminous colours. These colours, variable in hue and saturation, can be programmed to shift smoothly from shade to shade to create truly dynamic architecture.

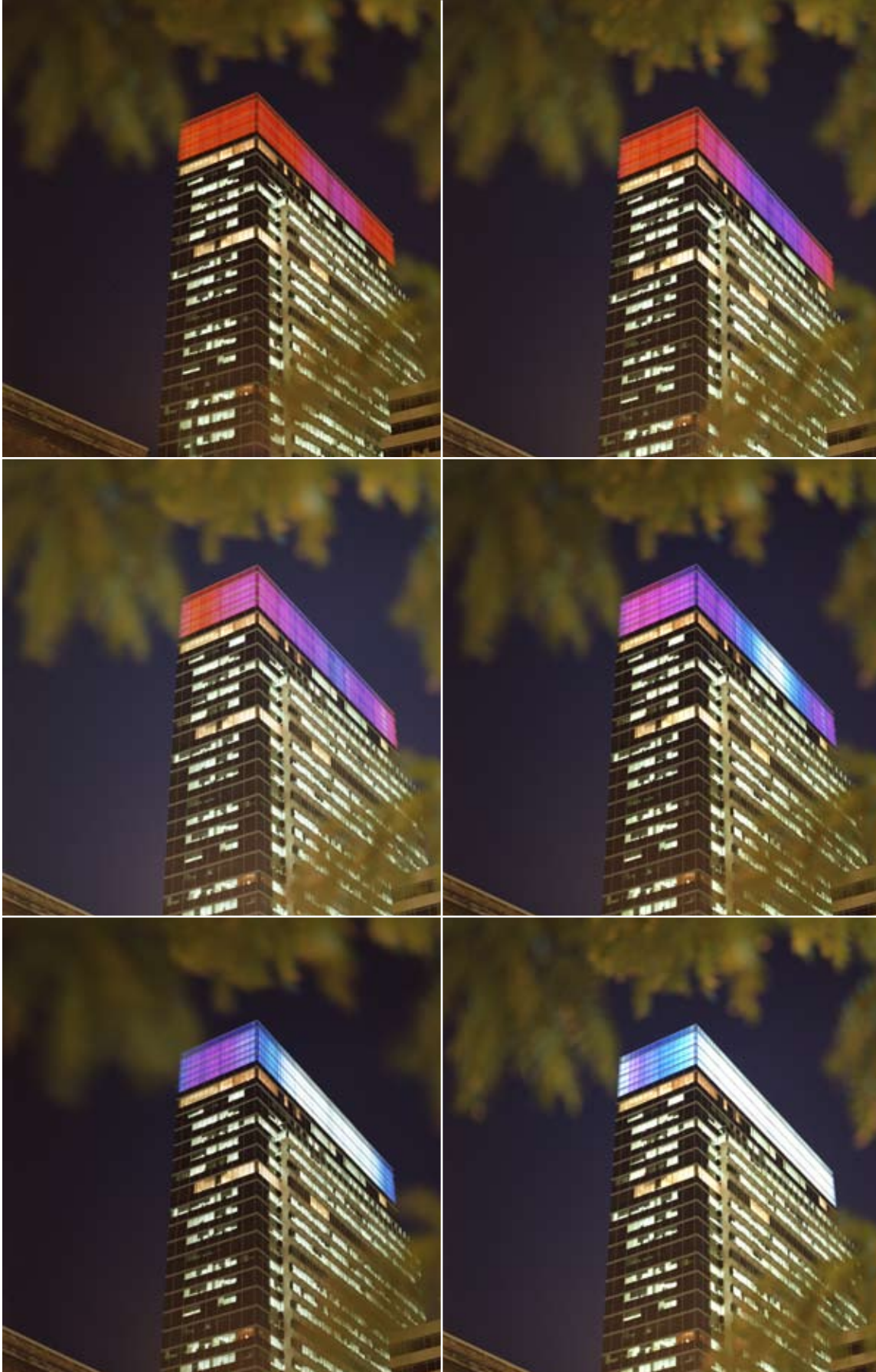


With the CMY system, the Exterior 600 can create all the colours in the triangle above.

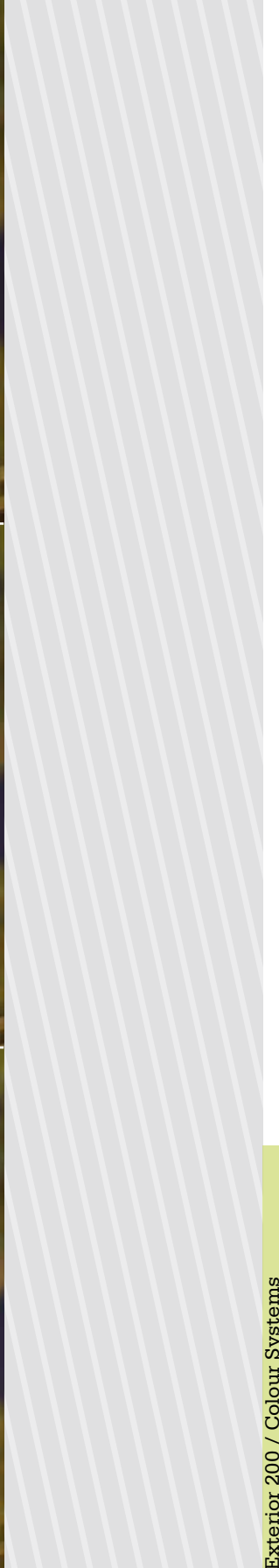
0-100% INTENSITY CONTROL

The ability to dim metal halide 0-100% is appreciated by designers who want balance of brightness or the ability to allow structures and landscapes to respond intelligently to the availability of natural light.

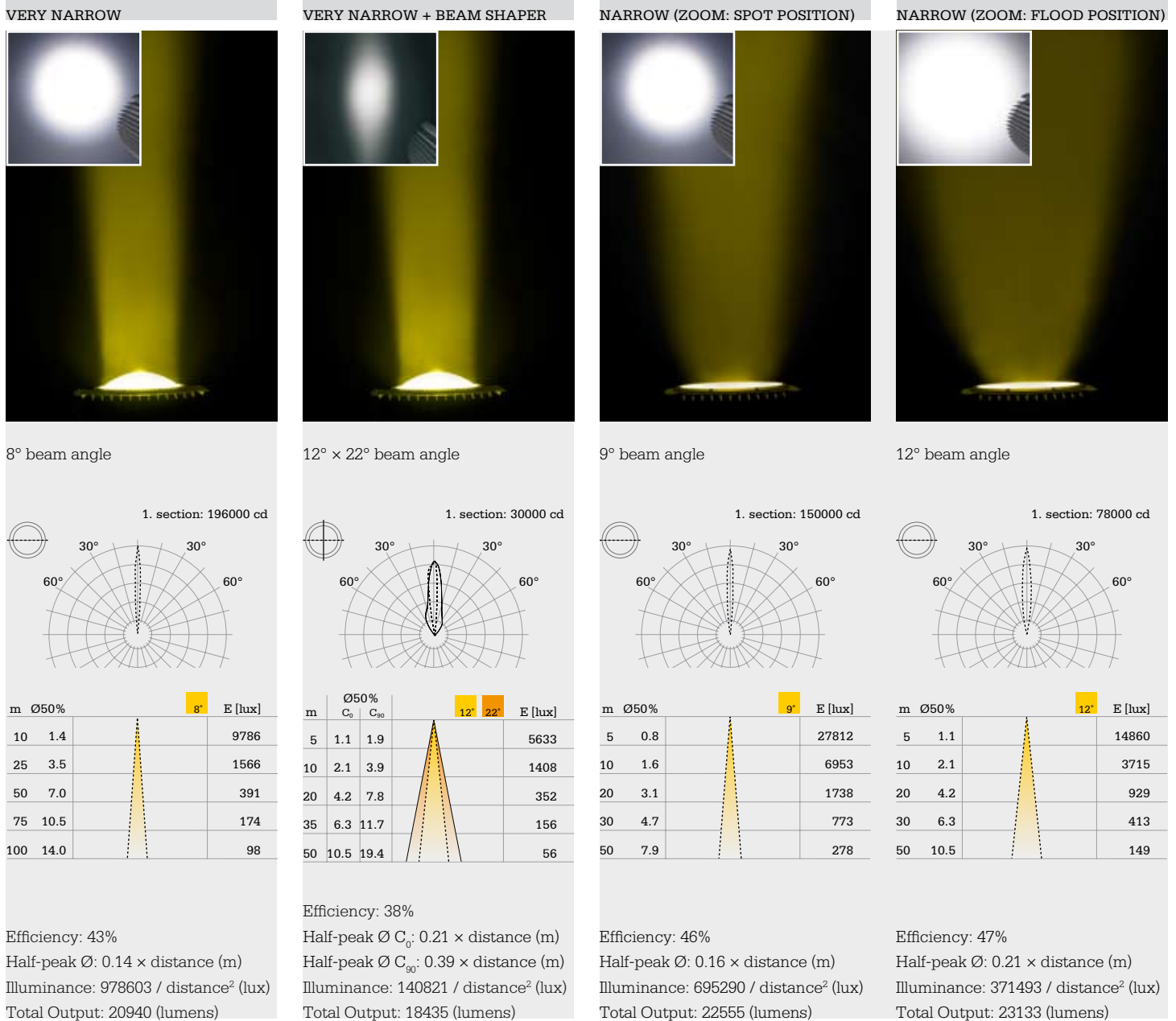




Location: Target Headquarters, Minneapolis, USA / Architect: Ellerbe Becket / Designer: Steve Pojar (3M)

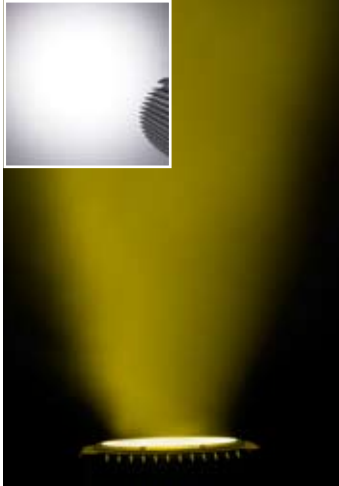


A full range of optical systems from narrow to very wide provides designers with several options for achieving even and accurate illumination of façades and structures. Ellipsoidal beam shapers and other optical accessories provide optical control for pin-point illumination of columns, pylons and very tall structures.

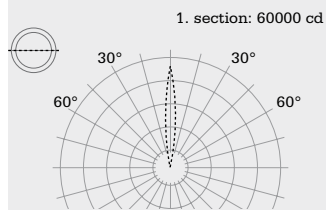


All photometric data is available electronically from www.martin.com/service

MEDIUM (ZOOM: SPOT POSITION)



11° beam angle



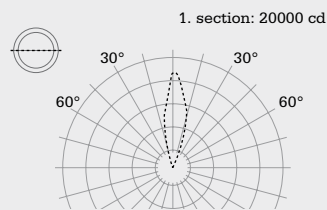
m	Ø50%	E [lux]
5	1.0	11925
10	1.9	2981
20	3.9	745
30	5.8	331
50	9.6	119

Efficiency: 40%
 Half-peak Ø: 0.19 × distance (m)
 Illuminance: 298115 / distance² (lux)
 Total Output: 19686 (lumens)

MEDIUM (ZOOM: FLOOD POSITION)



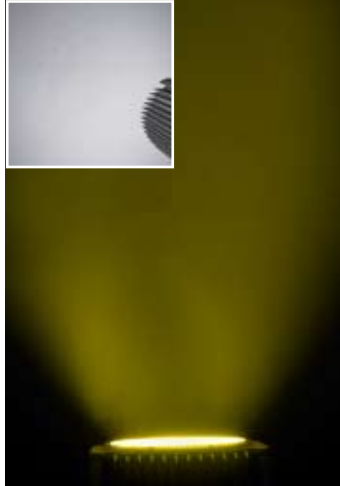
27° beam angle



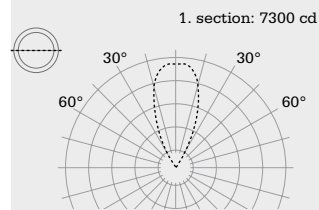
m	Ø50%	E [lux]
5	2.4	3915
10	4.8	979
20	9.6	245
30	14.4	109
50	24.0	39

Efficiency: 41%
 Half-peak Ø: 0.48 × distance (m)
 Illuminance: 97883 / distance² (lux)
 Total Output: 20296 (lumens)

WIDE



46° beam angle



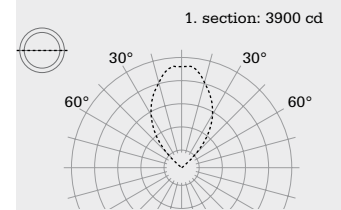
m	Ø50%	E [lux]
5	4.2	1395
10	8.5	349
20	17.0	87
30	25.5	39
50	42.4	14

Efficiency: 43%
 Half-peak Ø: 0.85 × distance (m)
 Illuminance: 34871 / distance² (lux)
 Total Output: 21240 (lumens)

VERY WIDE



65° beam angle



m	Ø50%	E [lux]
5	6.4	728
10	12.7	182
20	25.5	46
30	38.2	20
50	63.7	7

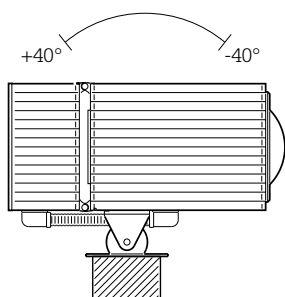
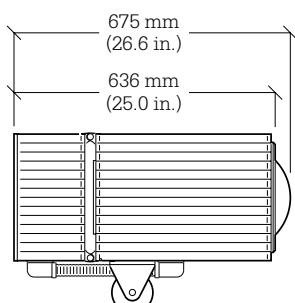
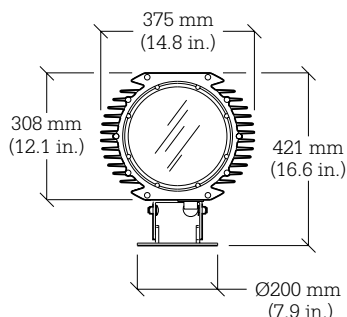
Efficiency: 41%
 Half-peak Ø: 1.27 × distance (m)
 Illuminance: 18206 / distance² (lux)
 Total Output: 20096 (lumens)

WEATHERPROOF RATING: IP65



A sturdy IP65 construction guarantees reliable operation in harsh, weather-beaten environments. Designed for all climates, the Exterior 600 is also suitable for marine and saline environments such as cruise ships and bridges.

Exterior 600



Vertical aiming
(pedestal mounted): +/- 40°

SPECIFICATION

PHYSICAL

Length: 636 mm (25.0 in.)
Width: 375 mm (14.8 in.)
Height: 421 mm (16.6 in.)
Weight: 48 kg (105.8 lbs.)

LAMP

Type: 575 W metal halide
Approved lamps: Philips MSD 575 1CT, Osram HSD 575
Lamp socket: GX 9.5
Control: Automatic and/or remote on/off

DYNAMIC EFFECTS

Colour mixing: Full spectrum CMY
Cyan: 0 - 100%
Magenta: 0 - 100%
Yellow: 0 - 100%
Colour wheel: Red, green, blue, CTC (as standard) + open positions
Dimmer: 0 - 100%
Shutter: Strobe effect variable up to 8 Hz
Frost: On/off
Zoom: 9° - 12° / 11° - 27°
Beam shaper: +/- 45° from vertical

CONTROL AND PROGRAMMING

Control options: DMX, stand-alone, synchronized (master/slave)
DMX channels: 8/9
Stand-alone trigger options: Internal timer with light level sensor
Stand-alone memory: 20 scenes

CONSTRUCTION

Housing: Aluminium
Finish: Clear anodized
Mounting bracket: 6 mm (0.2 in.) stainless steel
Front glass: 6 mm (0.2 in.) anti-reflection coated (except 12° and 100° models)
Protection factor: IP 65

INSTALLATION

Orientation: Any
Horizontal aiming: +/- 25°
Vertical aiming (pedestal mounted): +/- 40°
Minimum distance to combustible materials: 1 m (3.3 ft.)
Minimum distance to illuminated surfaces: 1 m (3.3 ft.)

ELECTRICAL

AC power: 208 V, 60 Hz / 230 V, 50 Hz / 245 V, 50 Hz / 277 V, 60 Hz

THERMAL

Maximum ambient temperature (Ta): 40° C (104° F)
Maximum surface temperature, steady state, Ta=40° C: 80° C (176° F)
Cooling: Convection

APPROVALS

EU EMC: EN 55 015, EN 55 103-1, EN 61 547
EU safety: EN 60598-2-3, EN 60598-2-5
Canadian safety: CSA C22.2 No. 166
US safety: UL1573, 4th Edition



ACCESSORIES



91610028
12° × 22° beam shaper (with very narrow model only)
Ideal for illuminating columns, pylons and tall structures



91611029
Snoot/barndoor kit

91611030
Snoot/barndoor extensions kit



91611036
5500 - 4200 K CTC kit

91611239
Safety eyebolt



Exterior 600

ORDERING

EXAMPLE SPECIFICATION

Exterior 600, Surface Mounted, Projector, IP65,
Metal Halide, 575 W, CMY, DMX, **Narrow, 9-12°**,
208 V, 60 Hz

= Exterior 600 CMY, 12°, 208 V, 60 Hz

= **90505044**

VARIABLES

Very Narrow, 8°	208 V, 60 Hz
Narrow, 9-12°	230 V, 50 Hz
Medium, 11-27°	245 V, 50 Hz
Wide, 46°	277 V, 60 Hz
Very Wide, 65°	



Exterior 600

SPECIFICATION CODE



Very Narrow, 8°

12°, 208 V, 60 Hz	90505024
12°, 230 V, 50 Hz	90505020
12°, 245 V, 50 Hz	90505022
12°, 277 V, 60 Hz	90505026



Narrow, 9-12°

18-25°, 208 V, 60 Hz	90505044
18-25°, 230 V, 50 Hz	90505040
18-25°, 245 V, 50 Hz	90505042
18-25°, 277 V, 60 Hz	90505046



Medium, 11°-27°

22-38°, 208 V, 60 Hz	90505004
22-38°, 230 V, 50 Hz	90505000
22-38°, 245 V, 50 Hz	90505002
22-38°, 277 V, 60 Hz	90505006



Wide, 46°

65°, 208 V, 60 Hz	90505064
65°, 230 V, 50 Hz	90505060
65°, 245 V, 50 Hz	90505062
65°, 277 V, 60 Hz	90505066



Very Wide, 65°

100°, 208 V, 60 Hz	90505084
100°, 230 V, 50 Hz	90505080
100°, 245 V, 50 Hz	90505082
100°, 277 V, 60 Hz	90505086



Location: Deutsche Post, Bonn, Germany / Architect: Helmut Jahn, Murphy/Jahn Inc.
Designer: Michael Rohde, L-Plan / Light Art: Yann Kersalé

Exterior 200

Programmable 150 W luminaires weatherproofed for dynamic illumination of façades, structures, water features and monuments.

FEATURES

- Intelligent 150 W luminaire weatherproofed for dynamic illumination of outdoor environments
- 150 W metal halide lamp
- Seamless CMY colour mixing
- 0-100% intensity control
- High optical performance: uniform distribution of light and colour
- Full range of optical systems: very narrow, narrow, medium, wide or very wide
- Ellipsoidal beam shaping options
- Weatherproof rating: IP65
- DMX, stand-alone, synchronized (master/slave)
- On-board light sensor



Location: Mørild Urban Regeneration, Oslo, Norway / Architect: Snehetta / Lighting Designer: Jenny Osulden



Exterior 200 Long Barrel

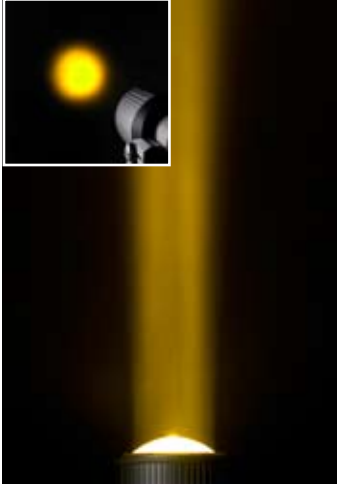


Exterior 200

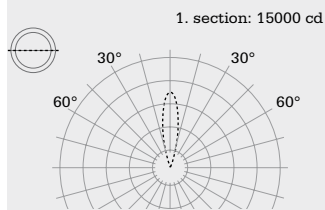


A full range of optical systems from very narrow to very wide provides versatility and accuracy in highlighting specific features or exact areas on a structure.

VERY NARROW



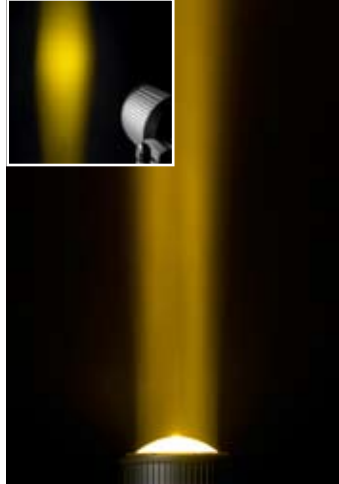
10° beam angle



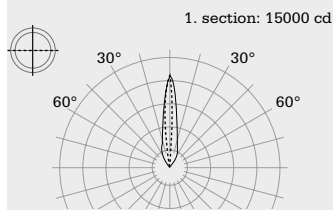
m	Ø50%	10°	E [lux]
2	0.3		27091
5	0.9		4334
10	1.7		1084
15	2.6		482
20	3.5		271

Efficiency: 28%
 Half-peak Ø: 0.17 × distance (m)
 Illuminance: 108362 / distance² (lux)
 Total Output: 3909 (lumens)

VERY NARROW + BEAM SHAPER



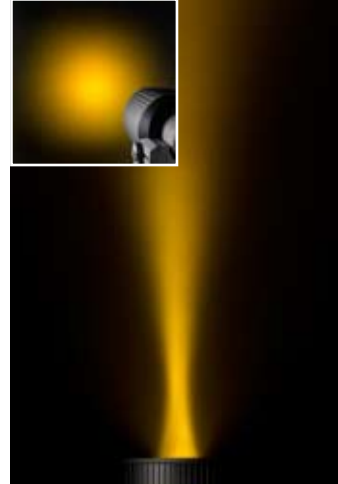
8° × 16° beam angle



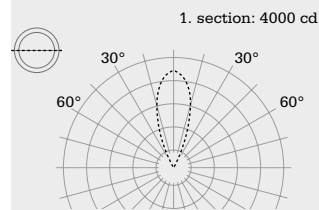
m	Ø50%		E [lux]
	C ₀	C ₉₀	
2	0.3	0.6	11425
5	0.7	1.4	1828
10	1.4	2.8	457
15	2.1	4.2	203
20	2.8	5.6	114

Efficiency: 25%
 Half-peak Ø C₀: 0.14 × distance (m)
 Half-peak Ø C₉₀: 0.28 × distance (m)
 Illuminance: 45700 / distance² (lux)
 Total Output: 3505 (lumens)

NARROW



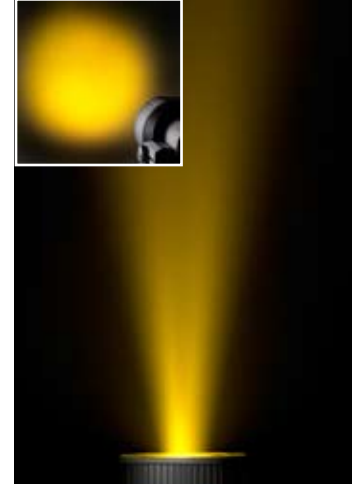
15° beam angle



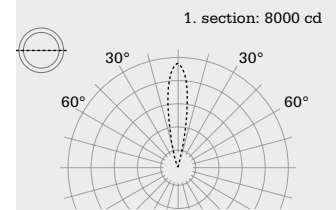
m	Ø50%	15°	E [lux]
2	0.5		16848
5	1.3		2696
10	2.6		674
15	3.9		300
20	5.3		168

Efficiency: 31%
 Half-peak Ø: 0.26 × distance (m)
 Illuminance: 67392 / distance² (lux)
 Total Output: 4338 (lumens)

MEDIUM



21° beam angle

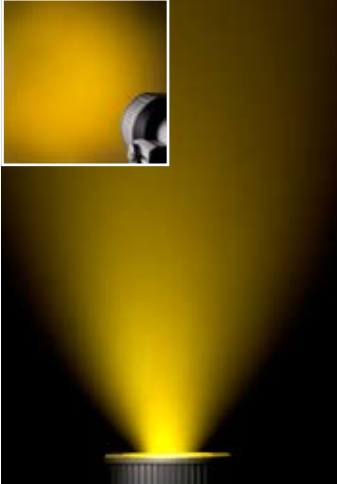


m	Ø50%	21°	E [lux]
2	0.7		9433
5	1.9		1509
10	3.7		377
15	5.6		168
20	7.4		94

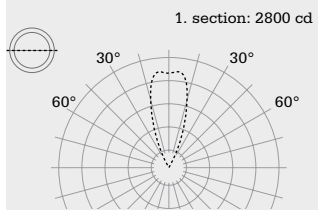
Efficiency: 38%
 Half-peak Ø: 0.37 × distance (m)
 Illuminance: 37731 / distance² (lux)
 Total Output: 5246 (lumens)

All photometric data is available electronically from www.martin.com/service

WIDE 38°



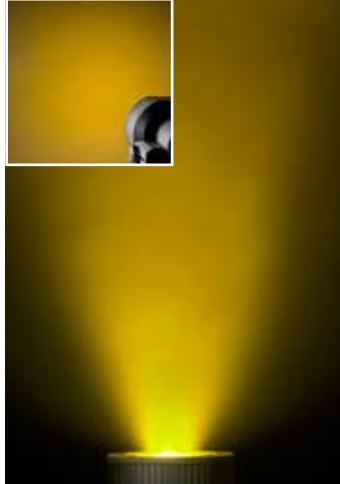
38° beam angle



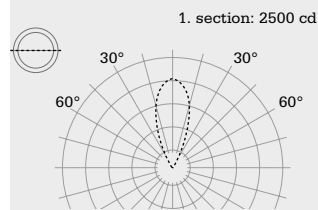
m	Ø50%	38°	E [lux]
2	1.4		3171
5	3.4		507
10	6.9		127
15	10.3		56
20	13.8		32

Efficiency: 39%
 Half-peak Ø: 0.69 × distance (m)
 Illuminance: 12684 / distance² (lux)
 Total Output: 5397 (lumens)

WIDE 42°



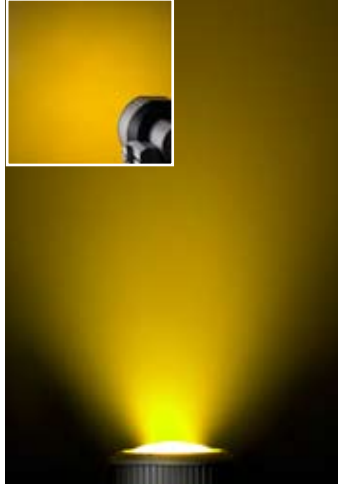
42° beam angle



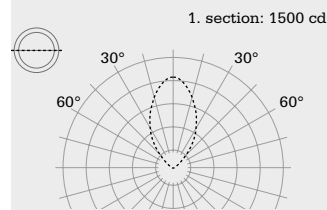
m	Ø50%	42°	E [lux]
2	1.5		2520
5	3.8		403
10	7.7		101
15	11.5		45
20	15.4		25

Efficiency: 40%
 Half-peak Ø: 0.77 × distance (m)
 Illuminance: 10078 / distance² (lux)
 Total Output: 5526 (lumens)

VERY WIDE



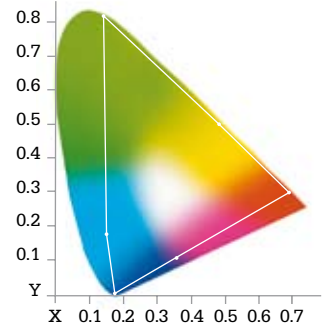
54° beam angle



m	Ø50%	54°	E [lux]
2	2.0		1573
5	5.1		252
10	10.2		63
15	15.3		28
20	20.4		16

Efficiency: 43%
 Half-peak Ø: 1.02 × distance (m)
 Illuminance: 6291 / distance² (lux)
 Total Output: 5993 (lumens)

FULL SPECTRUM CMY SYSTEM



The most advanced and versatile solution, the CMY colour system blends the primary colours Cyan, Magenta and Yellow to create a virtually limitless spectrum of luminous colours. For a beautiful effect, these colours can be programmed to shift smoothly from one shade to another.

With the CMY system, the Exterior 200 can create all the colours in the triangle.

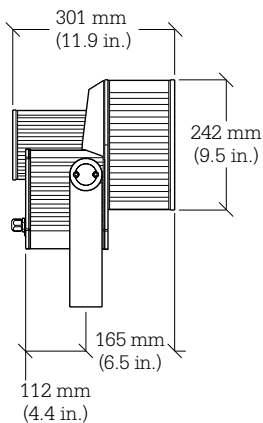
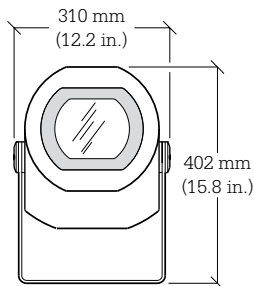
WEATHERPROOF RATING: IP65



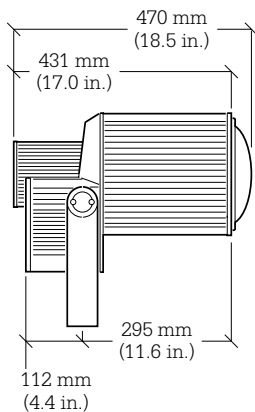
An ability to withstand dust and low pressure jets of water from all directions allows total flexibility in mounting options.

Exterior 200

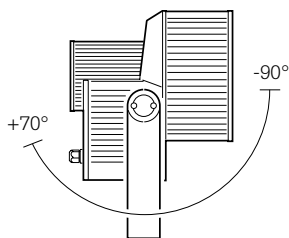
SPECIFICATION



Exterior 200



Exterior 200
Long Barrel



Vertical aiming +70°/-90°

PHYSICAL

Length: 301 mm (11.9 in.)
 Width: 310 mm (12.2 in.)
 Height: 402 mm (15.8 in.)
 Weight: 15 kg (33.1 lbs.)
 Length (10° and 15° models): 431 mm (17.0 in.)
 Width (10° and 15° models): 310 mm (12.2 in.)
 Height (10° and 15° models): 402 mm (15.8 in.)
 Weight (10° and 15° models): 16.6 kg (36.6 lbs.)

LAMP

Type: 150 W metal halide
 Approved lamps: Philips CDM-SA/T 150, GE CMH 150, Osram HSD 150/70
 Lamp socket: G12
 Control: Automatic and/or remote on/off

DYNAMIC EFFECTS

Colour mixing: Full spectrum CMY
 Cyan: 0 - 100%
 Magenta: 0 - 100%
 Yellow: 0 - 100%
 Dimmer: 0 - 100%

CONTROL AND PROGRAMMING

Control options: DMX, stand-alone, master/slave
 DMX channels: 7
 Stand-alone trigger options: Internal timer and/or ambient light level
 Stand-alone memory: 20 scenes

CONSTRUCTION

Housing: Aluminium
 Finish: Clear anodized
 Mounting bracket: 8 mm (0.3 in.) anodized aluminium
 Front glass: 6 mm (0.2 in.) anti-reflection coated
 Protection factor: IP 65

INSTALLATION

Orientation: Any
 Horizontal aiming: +/-45°
 Vertical aiming: +70°/-90°
 Minimum distance to combustible materials: 1 m (3.3 ft.)
 Minimum distance to illuminated surfaces: 0.5 m (1.6 ft.)

ELECTRICAL

AC power: 208 V, 60 Hz / 230 V, 50 Hz / 245 V, 50 Hz

THERMAL

Maximum ambient temperature (Ta): 40° C (104° F)
 Maximum surface temperature, steady state, Ta=40° C: 90° C (194° F)
 Cooling: Convection

APPROVALS

EU EMC: EN 55 015, EN 55 103-1, EN 61 547
 EU safety: EN 60598-2-3, EN 60598-2-5
 Canadian safety: CSA C22.2 No. 166
 US safety: UL1573, 4th Edition



ACCESSORIES



91610028

8° × 16° beam shaper lens for very narrow option
Ideal for illuminating columns, pylons and tall structures



91611031

Snoot/bamdoor kit



91611032

Snoot/bamdoor extensions kit



91611239

Safety eyebolt



Exterior 200

ORDERING

EXAMPLE SPECIFICATION

Exterior 200, Surface Mounted, Projector, IP65, Metal Halide, 150 W, CMY, DMX, Medium, 21°, 208 V, 60 Hz

= Exterior 200, 34°, 208 V, 60 Hz

= 90509048

VARIABLES

Exterior 200 Long Barrel	Very Narrow, 10°	208 V, 60 Hz
	Narrow, 15°	230 V, 50 Hz 245 V, 50 Hz
Exterior 200	Medium, 21°	
	Wide, 38°	
	Wide, 42°	
	Very Wide, 54°	



Exterior 200 Long Barrel

SPECIFICATION CODE



Very Narrow, 10°

VN, 208 V, 60 Hz	90509024
VN, 230 V, 50 Hz	90509020
VN, 245 V, 50 Hz	90509022



Narrow, 15°

N, 208 V, 60 Hz	90509044
N, 230 V, 50 Hz	90509040
N, 245 V, 50 Hz	90509042



Exterior 200

SPECIFICATION CODE



Medium, 21°

M, 208 V, 60 Hz	90509048
M, 230 V, 50 Hz	90509045
M, 245 V, 50 Hz	90509047



Wide, 38°

W38, 208 V, 60 Hz	90509004
W38, 230 V, 50 Hz	90509000
W38, 245 V, 50 Hz	90509002



Wide, 42°

W42, 208 V, 60 Hz	90509011
W42, 230 V, 50 Hz	90509009
W42, 245 V, 50 Hz	90509010



Very Wide, 54°

VW, 208 V, 60 Hz	90509084
VW, 230 V, 50 Hz	90509080
VW, 245 V, 50 Hz	90509082



Location: Aluminium Centre, Netherlands / Architect: Micha de Haas / Photography © Willem Franke

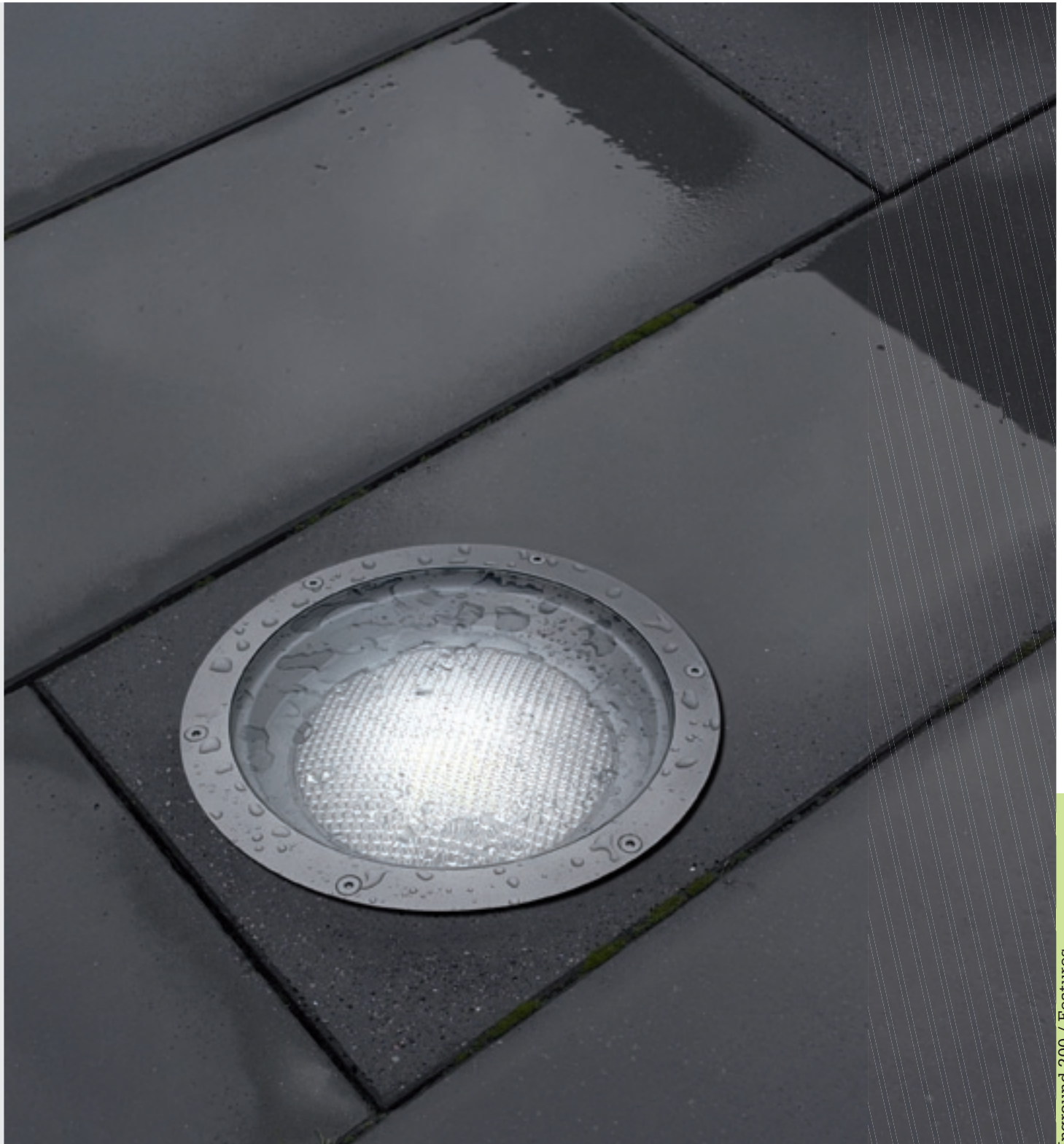
Inground 200

The benefits of dynamic light and discreet buried installation combined in a simple, easy-to-use system of programmable 150 W luminaires.

FEATURES

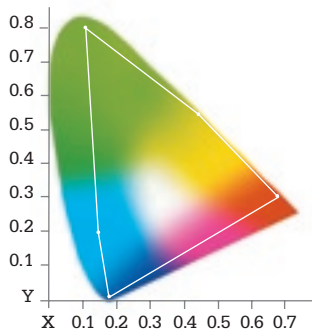
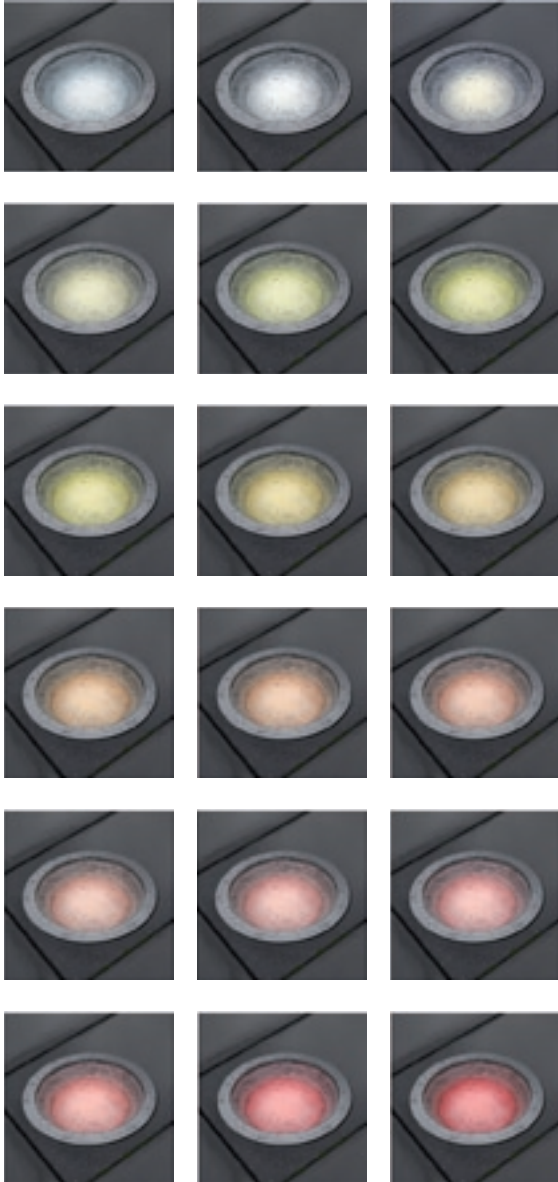
- Buried uplight for dramatic illumination of facades, landscapes or interiors
- 150 W metal halide lamp
- Choice of 3 colour systems: Single-colour, 6-colour or Full Spectrum CMY
- 0-100% intensity control
- High optical performance: uniform distribution of light and colour
- Choice of optical systems: medium, wide, very wide or wallwash
- Weatherproof rating: IP65 and IP67
- Full drive-over capability
- Low surface temperature for installation in pedestrian areas
- Extensive range of optical accessories
- DMX, stand-alone, synchronized (master/slave)





FULL SPECTRUM CMY SYSTEM

The most advanced and versatile solution, the CMY colour system blends the primary colours Cyan, Magenta and Yellow to create a virtually limitless spectrum of luminous colours. For a beautiful effect, these colours can be programmed to shift smoothly from one shade to another.



With the CMY system, the Inground 200 can create all the colours in the triangle above.

0-100% INTENSITY CONTROL

The unique ability to dim metal halide 0-100% is appreciated by designers who want balance of brightness or the ability to allow structures and landscapes to respond intelligently to the availability of natural light.



What's your favourite colour?

SINGLE COLOUR SYSTEM

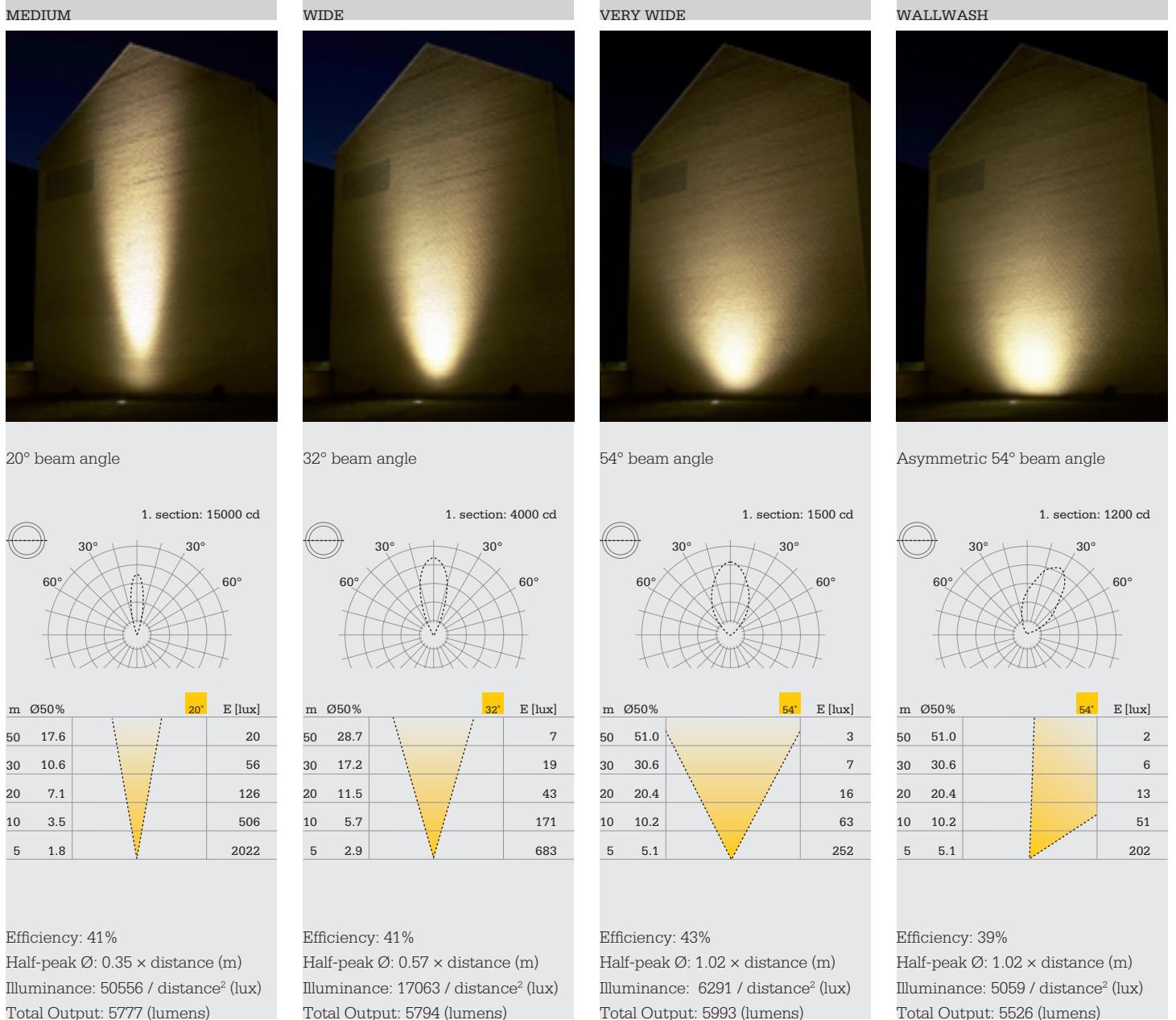
The simplest means to creating a colourful lighting scheme, the single colour system lets you choose a single static colour from our collection of forty dichroic filters or have your own special colour customized.

SIX COLOUR SYSTEM

The 6-colour system is a programmable colour-changing system for dynamic lighting applications. It offers a selectable palette of up to six colours. Choose one of our ready-made colour schemes or consult us to create your own. A palette of five primary colours is included as standard.

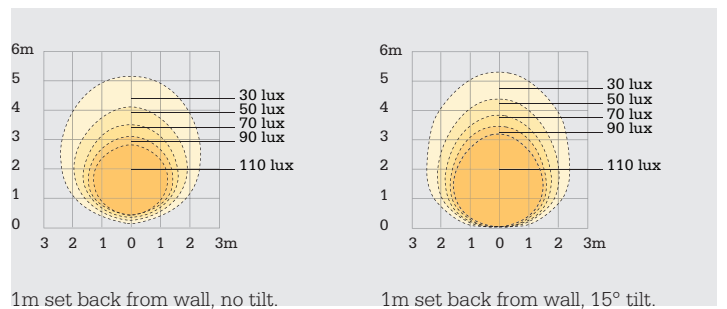
SPOTLESS ILLUMINATION

The award-winning Inground Series was born out of our drive to provide better lighting solutions. The result of our commitment is a full range of optical solutions that includes a patent-pending wallwash system for spotless illumination of walls and surfaces.



All photometric data is available electronically from www.martin.com/service

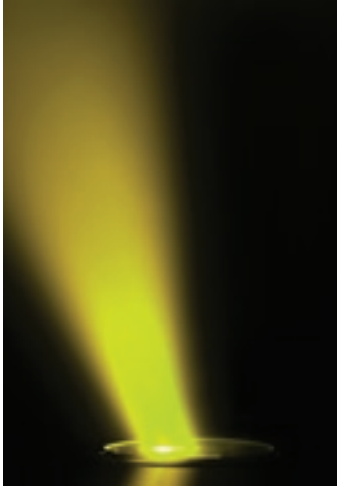
WALLWASH



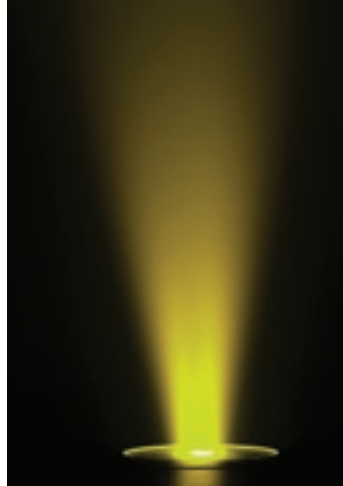
EASY AIMING

An adjustable lamp frame allows for 360 degrees rotation and +/- 15 degrees tilt. This compensates for variations in terrain and allows precise optical aiming. A locking mechanism secures the designer's aiming position even after lamp replacement.

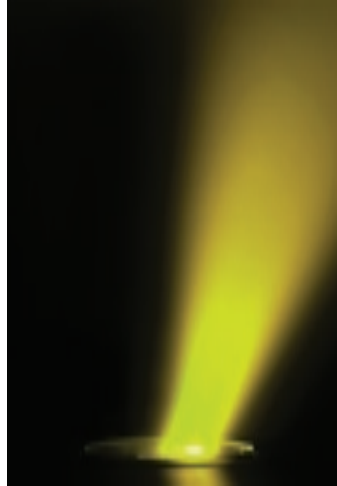
TILT +15°



TILT 0°



TILT -15°



LOW SURFACE TEMPERATURE



Thermal protection reduces the surface temperature, allowing for safe installation in applications near pedestrians or delicate planting. Surface temperatures are typically below 80°C.

DRIVE-OVER CAPABILITY



Manufactured from marine-grade steel and clear tempered glass, the Inground 200 is designed to withstand loads of 5 metric tonnes. For drive-over applications, the luminaire must be sleeve mounted and installed in concrete. Download the Installation Guide from martin.com

BEVELLED EDGE



Sits slightly raised with elegant trimming.

STRAIGHT EDGE



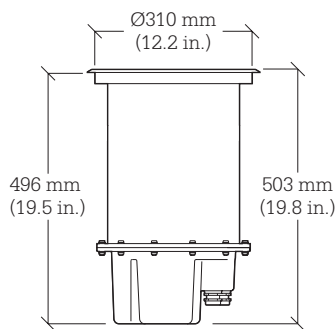
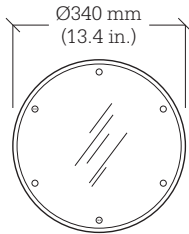
For flush mounting giving a smooth uninterrupted surface.

WEATHERPROOF RATING: IP65/67

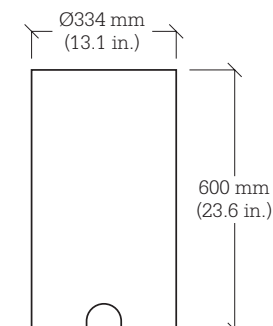
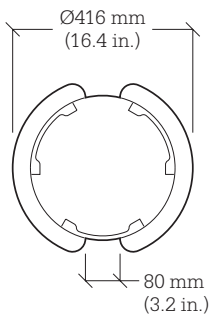


Designed to the highest quality, the Inground Series is weatherproofed to withstand the constant exposure to rain, heat and frost. An IP 65/67 rating guarantees safe and reliable operation in all weathers.

Inground 200



Inground 200



Installation Sleeve

SPECIFICATION

PHYSICAL

Height: 496 mm (19.5 in.)
 Trim ring outer diameter: 340 mm (13.4 in.)
 Trim ring thickness: 7 mm (0.3 in.)
 Housing top flange outer Ø: 310 mm (12.2 in.)
 Weight: 20 kg (44.1 lbs.)
 Weight resistance (in installation sleeve with stable groundwork): 5000 kg
 Front glass weight resistance (load from pneumatic tire): 5000 kg

Installation Sleeve

Installation sleeve height: 600 mm (23.6 in.)
 Installation sleeve tube external Ø: 330 mm (13.1 in.)
 Installation sleeve base flange external Ø: 410 mm (16.4 in.)

LAMP

Type: 150 W metal halide
 Approved lamps: Philips CDM SA/T 150 W/942, Philips CDM-T 150 W/830, Osram HCI-T 150 W/WDL, Osram HCI-T 150 W/NDL
 Lamp socket: G12
 Control: Automatic and/or remote on/off

DYNAMIC EFFECTS [Inground 200 CMY]

Colour mixing: Full spectrum CMY
 Cyan: 0 - 100%
 Magenta: 0 - 100%
 Yellow: 0 - 100%
 Dimmer: 0 - 100%

DYNAMIC EFFECTS [Inground 200 Six Colour]

Colour wheel: Six colours - red, orange, yellow, green, blue (as standard) + white (open)
 Dimmer: 0 - 100%

CONTROL AND PROGRAMMING [Inground 200 Six Colour and CMY models]

Control options: DMX, stand-alone, synchronized (master/slave)
 DMX channels: 6 (CMY models), 4 (Six Colour models)
 Stand-alone trigger options: Internal timer
 Stand-alone memory: 20 scenes

CONSTRUCTION

Housing: Aluminium
 Finish: Black anodized
 Trim ring: Various options available
 Installation sleeve: Acid-resistant stainless steel
 Protection factor: IP 65/67

INSTALLATION

Orientation: Uplight
 Minimum distance to combustible materials: 1 m (3.3 ft.)
 Minimum distance to illuminated surfaces: 0.5 m (1.6 ft.)

ELECTRICAL

AC power: 120 / 210 / 277 VAC nominal, 60 Hz / 230 VAC nominal, 50 Hz

THERMAL

Maximum ambient temperature (Ta): 40°C (104° F)
 Maximum surface temperature, steady state, Ta=40° C: 80°C (176° F)
 Cooling: Internal fan, conduction via installation site fill material

APPROVALS

EU EMC: EN 55 015, EN 55 103-1, EN 61 547
 EU safety: EN 60598-2-5
 Canadian safety: CSA C22.2 No. 250.0-00
 US safety: UL 1598



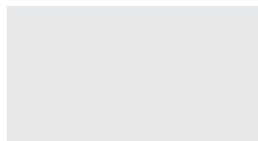
ACCESSORIES



91611194
Installation sleeve
bevelled mount



91611215
Installation sleeve
flush mount



91611237
40 kg rinsed, dried sand
for installation



91611202
Anti-glare kit, medium
configuration (ring louver)



91611197
Anti-glare kit, wallwash
configuration



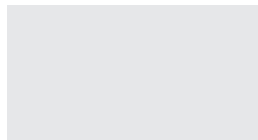
91611238
Anti-skid frontglass
(circular etched)



91611198
Anti-skid frontglass
(design etched)



91611207
Beam shaper module



91611200
Tamperproof trim ring
screw set with key



91611209
Rock guard kit, aluminium



91611208
Rock guard kit,brass



91611199
Rock guard kit,
stainless steel



91611211
Trim ring kit, bevelled,
brass



91611210
Trim ring kit, bevelled,
aluminium



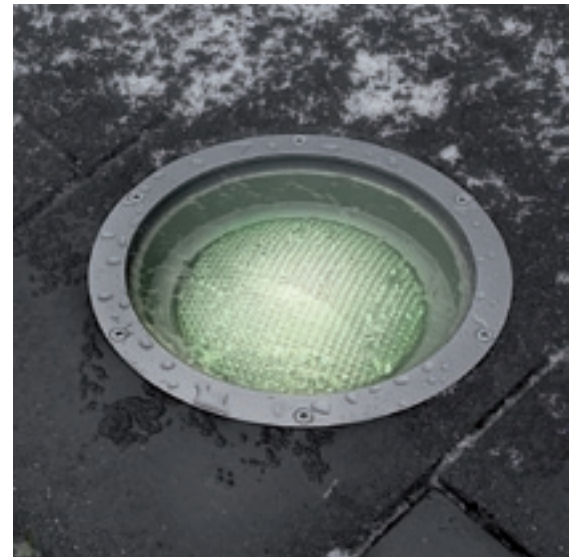
91611213
Trim ring kit, flush mount,
aluminium



91611214
Trim ring kit, flush mount,
brass



91611212
Trim ring kit, flush mount,
stainless steel



Inground 200

ORDERING

EXAMPLE SPECIFICATION

Inground 200, Ground Recessed, IP67 / IP65,
Metal Halide, 150 W, Uplight, **Single Colour Filter,**
Medium, 20°, 210 V, 60 Hz, **Bevelled Trim Ring**

= Inground 200 Single Colour, M, 210 V, 60 Hz, B

= **90508444**

VARIABLES

Single Colour Filter	Medium, 20°	210 V, 60 Hz	Bevelled Trim Ring
Six Colours	Wide, 32°	230 V, 50 Hz	Straight Trim Ring
CMY	Very Wide, 54°	277 V, 60 Hz	
	Wallwash, 54°		

KEY

B = Bevelled Trim Ring
S = Straight Trim Ring



Inground 200 Single Colour

SPECIFICATION CODE



Medium, 20°	
M, 210 V, 60 Hz, B	90508444
M, 210 V, 60 Hz, S	90507444
M, 230 V, 50 Hz, B	90508440
M, 230 V, 50 Hz, S	90507440
M, 277 V, 60 Hz, B	90508446
M, 277 V, 60 Hz, S	90507446



Wide, 32°	
W, 210 V, 60 Hz, B	90508424
W, 210 V, 60 Hz, S	90507424
W, 230 V, 50 Hz, B	90508420
W, 230 V, 50 Hz, S	90507420
W, 277 V, 60 Hz, B	90508426
W, 277 V, 60 Hz, S	90507426



Very Wide, 54°	
VW, 210 V, 60 Hz, B	90508404
VW, 210 V, 60 Hz, S	90507404
VW, 230 V, 50 Hz, B	90508400
VW, 230 V, 50 Hz, S	90507400
VW, 277 V, 60 Hz, B	90508406
VW, 277 V, 60 Hz, S	90507406



Wallwash, 54°	
WW, 210 V, 60 Hz, B	90508414
WW, 210 V, 60 Hz, S	90507414
WW, 230 V, 50 Hz, B	90508410
WW, 230 V, 50 Hz, S	90507410
WW, 277 V, 60 Hz, B	90508416
WW, 277 V, 60 Hz, S	90507416



Inground Six Colours

SPECIFICATION CODE



Medium, 20°	
M, 210 V, 60 Hz, B	90508244
M, 210 V, 60 Hz, S	90507244
M, 230 V, 50 Hz, B	90508240
M, 230 V, 50 Hz, S	90507240
M, 277 V, 60 Hz, B	90508246
M, 277 V, 60 Hz, S	90507246



Wide, 32°	
W, 210 V, 60 Hz, B	90508224
W, 210 V, 60 Hz, S	90507224
W, 230 V, 50 Hz, B	90508220
W, 230 V, 50 Hz, S	90507220
W, 277 V, 60 Hz, B	90508226
W, 277 V, 60 Hz, S	90507226



Very Wide, 54°	
VW, 210 V, 60 Hz, B	90508204
VW, 210 V, 60 Hz, S	90507204
VW, 230 V, 50 Hz, B	90508200
VW, 230 V, 50 Hz, S	90507200
VW, 277 V, 60 Hz, B	90508206
VW, 277 V, 60 Hz, S	90507206



Wallwash, 54°	
WW, 210 V, 60 Hz, B	90508214
WW, 210 V, 60 Hz, S	90507214
WW, 230 V, 50 Hz, B	90508210
WW, 230 V, 50 Hz, S	90507210
WW, 277 V, 60 Hz, B	90508216
WW, 277 V, 60 Hz, S	90507216



Inground 200 CMY

SPECIFICATION CODE



Medium, 20°	
M, 210 V, 60 Hz, B	90508044
M, 210 V, 60 Hz, S	90507044
M, 230 V, 50 Hz, B	90508040
M, 230 V, 50 Hz, S	90507040
M, 277 V, 60 Hz, B	90508046
M, 277 V, 60 Hz, S	90507046




Wide, 32°	
W, 210 V, 60 Hz, B	90508024
W, 210 V, 60 Hz, S	90507024
W, 230 V, 50 Hz, B	90508020
W, 230 V, 50 Hz, S	90507020
W, 277 V, 60 Hz, B	90508026
W, 277 V, 60 Hz, S	90507026



Very Wide, 54°	
VW, 210 V, 60 Hz, B	90508004
VW, 210 V, 60 Hz, S	90507004
VW, 230 V, 50 Hz, B	90508000
VW, 230 V, 50 Hz, S	90507000
VW, 277 V, 60 Hz, B	90508006
VW, 277 V, 60 Hz, S	90507006



Wallwash, 54°	
WW, 210 V, 60 Hz, B	90508014
WW, 210 V, 60 Hz, S	90507014
WW, 230 V, 50 Hz, B	90508010
WW, 230 V, 50 Hz, S	90507010
WW, 277 V, 60 Hz, B	90508016
WW, 277 V, 60 Hz, S	90507016



A wallwash optical system guarantees even, broad illumination of walls and vertical surfaces. Uniform light distribution starts at ground level.

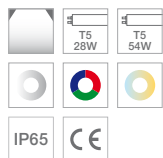
Cyclo IP65

The Cyclo IP65 offers a competitive solution for dynamic outdoor illumination of façades, structures and bridges, with a slim linear design based on RGB and white fluorescent T5 tubes.

FEATURES

- Fluorescent colour changing luminaires for exterior applications
- Choice of wattage: 28 W or 54 W T5 fluorescent tubes
- RGB + W colour mixing, variable colour temperature
- 0-100% intensity control
- Choice of 2-, 3- or 4-tube versions
- Long lamp life (20,000 hrs)
- Weatherproof rating: IP65
- Choice of opal or clear front covers
- DMX or Analogue versions





Cyclo 02, DMX, 54 W, Opal



Cyclo 04, Analogue, 28 W, Clear

FLUORESCENT COLOUR MIXING

Cyclo luminaires can be programmed to generate smooth variations in light and colour, as well as 'daylight' changes in colour temperature from warm to cool white. This is achieved by combining T5 fluorescent tubes in red, green, blue and white in a process known as additive colour mixing. Each tube is electronically dimmable from 0-100%.



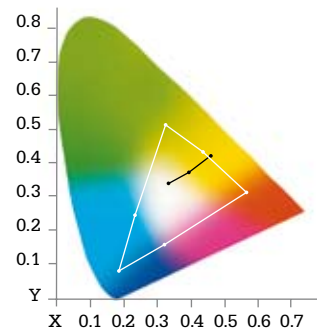
DYNAMIC LIGHT

Light is by nature dynamic. Dynamic light - artificial light capable of reproducing the variety and drama found in nature - offers a new medium for architectural projects. With careful command of brightness and colour, dynamic light allows architectural spaces to adapt to changing client needs or changes in season and climate.

KEY

Black line = Cyclo 02

White line = Cyclo 03/04



CYCLO 02

Recreate the dynamics of daylight with shifting shades of white. Cyclo 02 models are supplied with two white T5 tubes rated at 2700 and 6000 Kelvin to allow colour temperature control from warm white to cool white. Models are available in 28 W and 54 W versions.

CYCLO 03

Useful for decorative colour effects in outdoor environments, the Cyclo 03 uses RGB colour mixing to generate coloured and white light. Models are supplied with red, green and blue T5 tubes and are available in 28 W or 54 W versions.

CYCLO 04

With an additional cool white 4000 Kelvin tube, Cyclo 04 models offer extended colour control and an enhanced white light quality. Models are supplied with four 28 W tubes: red, green, blue and cool white, allowing RGB + W additive colour mixing.



CHOICE OF CLEAR OR OPAL FRONT COVERS

Cyclo IP65s are available with either clear or opal front covers. When illuminating a surface from a close mounting position, an opal front cover provides the advantage of improved colour diffusion, although typically resulting in a 20% loss of light output. All front covers are interchangeable and available as accessories.

WEATHERPROOF RATING: IP65

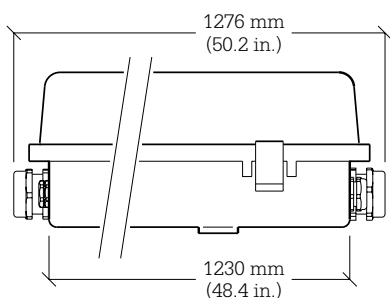
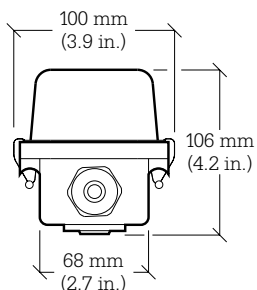


A tried and tested IP65-protected design guarantees reliable operation in wet weather.

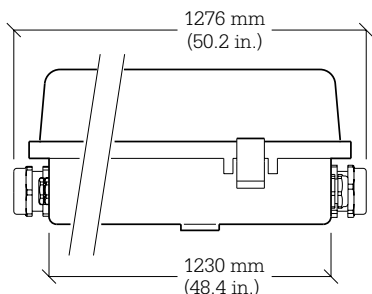
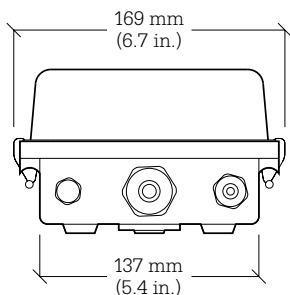


Cyclo IP65

SPECIFICATION



Cyclo 02
Cyclo 03 (28 W)



Cyclo 03 (54 W)
Cyclo 04

CYCLO IP65 02

PHYSICAL

Length: 1276 mm (50.2 in.)
Width: 100 mm (3.9 in.)
Height: 106 mm (4.2 in.)
Weight: 3.8 kg (8.4 lbs.)

LAMP

Type: T5 fluorescent tubes
Approved lamps: Osram T5 28 W HE (28 W models),
Osram T5 54 W HO (54 W models)
Lamp socket: G5

DYNAMIC EFFECTS

Colour temperature control: 2700 - 6000 K
continuous mixing

CONTROL AND PROGRAMMING

Control options: Analogue 1-10 V
Dimmer channels required per independently
controlled Cyclo group: 2

CYCLO IP65 02 DMX

PHYSICAL

Length: 1276 mm (50.2 in.)
Width: 100 mm (3.9 in.)
Height: 106 mm (4.2 in.)
Weight: 4.4 kg (8.4 lbs.)

LAMP

Type: T5 fluorescent tubes
Approved lamps: Osram T5 28 W HE (28 W models),
Osram T5 54 W HO (54 W models)
Lamp socket: G5

DYNAMIC EFFECTS

Colour temperature control: 2700 - 6000 K
continuous mixing

CONTROL AND PROGRAMMING

Control options: DMX, stand-alone, synchronized
(master/slave)
DMX channels: 2
DMX address setting: DIP switch
Stand-alone and master/slave programming:
DIP switch

CYCLO IP65 03

PHYSICAL

Length: 1276 mm (50.2 in.)
Width: 100 mm (3.9 in.) (28 W model)
Width: 169 mm (6.7 in.) (54 W model)
Height: 106 mm (4.2 in.)
Weight: 4.3 kg (9.5 lbs.) (28 W model)
Weight: 6.4 kg (14.1 lbs.) (54 W model)

LAMP

Type: T5 fluorescent tubes
Approved lamps: Osram T5 28 W HE (28 W models),
Osram T5 54 W HO (54 W models)
Lamp socket: G5

DYNAMIC EFFECTS

Colour mixing: RGB
Red: 0 - 100%
Green: 0 - 100%
Blue: 0 - 100%

CONTROL AND PROGRAMMING

Control options: Analogue 1-10 V
Control via 516 Converter: 16 channels
Dimmer channels required per independently
controlled Cyclo group: 3
Number of Cyclos per group (fixtures wired in
series): 1-10

CYCLO IP65 03 DMX

PHYSICAL

Length: 1276 mm (50.2 in.)
Width: 100 mm (3.9 in.) (28 W model)
Width: 169 mm (6.7 in.) (54 W model)
Height: 106 mm (4.2 in.)
Weight: 5.0 kg (11.0 lbs.) (28 W model)
Weight: 6.7 kg (14.8 lbs.) (54 W model)

LAMP

Type: T5 fluorescent tubes
Approved lamps: Osram T5 28 W HE (28 W models),
Osram T5 54 W HO (54 W tube models)
Lamp socket: G5

DYNAMIC EFFECTS

Colour mixing: RGB
Red: 0 - 100%
Green: 0 - 100%
Blue: 0 - 100%

CONTROL AND PROGRAMMING

Control options: DMX, stand-alone, synchronized
(master/slave)
DMX channels: 3
DMX address setting: DIP switch
Stand-alone and master/slave programming:
DIP switch

CYCLO IP65 04

PHYSICAL

Length: 1276 mm (50.2 in.)
Width: 169 mm (6.7 in.)
Height: 106 mm (4.2 in.)
Weight: 5.8 kg (12.8 lbs.)

LAMP

Type: T5 fluorescent tubes
Approved lamps: Osram T5 28 W HE (28 W models),
Osram T5 54 W HO (54 W models)
Lamp socket: G5

DYNAMIC EFFECTS

Colour mixing: RGBW
Red: 0 - 100%
Green: 0 - 100%
Blue: 0 - 100%
Cool white (4000 K): 0 - 100%

CONTROL AND PROGRAMMING

Control options: Analogue 1-10 V
Control via 516 Converter: 16 channels
Dimmer channels required per independently
controlled Cyclo group: 3
Number of Cyclos per group (fixtures wired in
series): 1-10

CYCLO IP65 04 DMX

PHYSICAL

Length: 1276 mm (50.2 in.)
Width: 169 mm (6.7 in.)
Height: 106 mm (4.2 in.)
Weight: 7.2 kg (15.9 lbs.)

LAMP

Type: T5 fluorescent tubes
Approved lamps: Osram T5 28 W HE (28 W models),
Osram T5 54 W HO (54 W models)
Lamp socket: G5

DYNAMIC EFFECTS

Colour mixing: RGB
Red: 0 - 100%
Green: 0 - 100%
Blue: 0 - 100%

CONTROL AND PROGRAMMING

Control options: DMX, stand-alone, synchronized
(master/slave)
DMX channels: 4
DMX address setting: DIP switch
Stand-alone and master/slave programming:
DIP switch

GENERAL (APPLICABLE TO ALL)

CONSTRUCTION

Housing: Polyester-reinforced composite
Front cover: Unbreakable polycarbonate
Colour: Cream
Protection factor: IP 65

INSTALLATION

Orientation: Any
Minimum free space around fixture: 25 mm (1.0 in.)
Mounting points: Surface mount, wire suspension,
90° tilt mounting bracket (available as accessory)

ELECTRICAL

AC power: 198-240 V, 50/60 Hz

THERMAL

Maximum ambient temperature (Ta): 40° C (104° F)
Minimum ambient temperature: -20° C (-4° F)
Cooling: Convection

APPROVALS

EU EMC: EN 60598-1, EN 60598-2
EU safety: EN 60555-3, EN 55015



ACCESSORIES



91611232
Mounting bracket,
90° tilt-adjustable,
stainless steel 100 mm
(requires two per fixture)



91611233
Mounting bracket,
90° tilt-adjustable,
stainless steel 169 mm
(requires two per fixture)



91611228
Clear front cover
100 mm



91611230
Clear front cover
169 mm



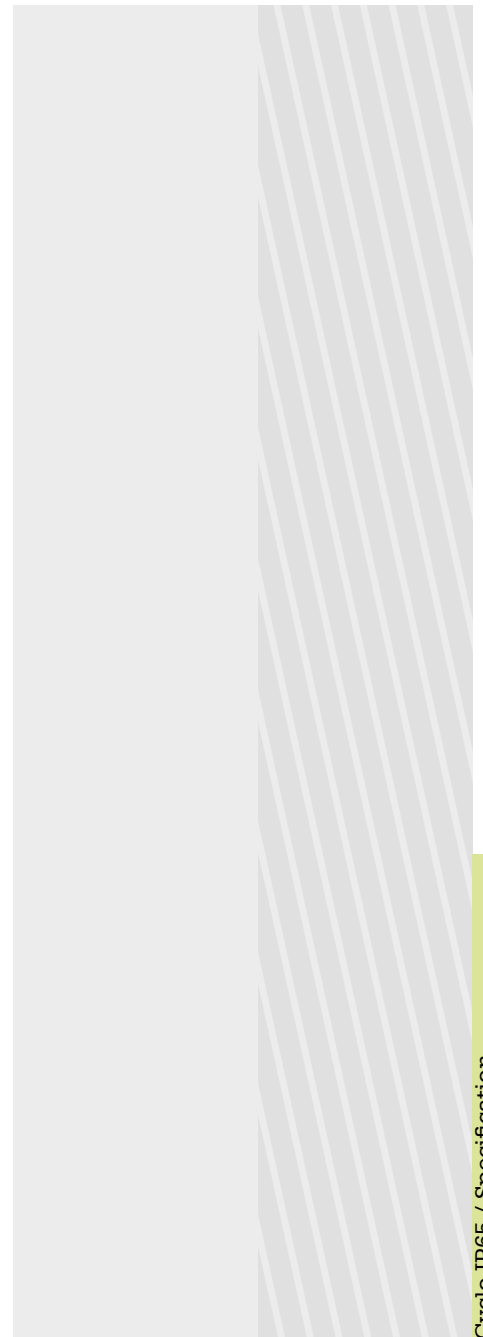
91611229
Opal front cover
100 mm



91611231
Opal front cover
169 mm



04150308
DMX termination resistor



Cyclo IP65

ORDERING

EXAMPLE SPECIFICATION

Cyclo IP65 02, T5 Fluorescent, Surface Mounted, IP65, Variable Colour Temperature, 28 W, DMX, 230 V, 50 Hz, Clear Front Cover

= Cyclo 02, IP65, 28 W, Clear Front Cover

= **90561000**

VARIABLES

Variable Colour Temperature	28 W	Analog	Clear Front Cover
RGB	54 W	DMX	Opal Front Cover
RGB + W			

KEY

C = Clear Front Cover
O = Opal Front Cover



28 W models



54 W models



Cyclo IP65 02
Variable Colour Temperature

SPECIFICATION	CODE
---------------	------

DMX

28 W, 230 V, C	90561000
28 W, 230 V, O	90561001
54 W, 230 V, C	90561720
54 W, 230 V, O	90561721

Analogue

28 W, 230 V, C	90561100
28 W, 230 V, O	90561101
54 W, 230 V, C	90560720
54 W, 230 V, O	90560721



Cyclo IP65 03
RGB

SPECIFICATION	CODE
---------------	------

DMX

28 W, 230 V, C	90562000
28 W, 230 V, O	90562001
54 W, 230 V, C	90565000
54 W, 230 V, O	90565001

Analogue

28 W, 230 V, C	90562100
28 W, 230 V, O	90562101
54 W, 230 V, C	90565100
54 W, 230 V, O	90565101



Cyclo IP65 04
RGB + W

SPECIFICATION	CODE
---------------	------

DMX

28 W, 230 V, C	90563000
28 W, 230 V, O	90563001

Analogue

28 W, 230 V, C	90563100
28 W, 230 V, O	90563101



Location: Fields Shopping Centre, Copenhagen, Denmark / Architect: CF Møller, A/S / Designer: Collaborative

Cyclo IP65 / Ordering

Cyclo IP65 Directional

Weatherproofed for outdoor illumination of façades, structures and landscapes. Slim linear design and excellent optical performance based on RGB and white T5 fluorescent tubes.

FEATURES

- Fluorescent colour changing luminaires for exterior applications
- High output: 54 W T5 fluorescent tubes
- RGB + W colour mixing
- 0-100% intensity control
- Choice of 3- or 4-tube versions
- Long lamp life (20,000 hrs)
- High optical performance: uniform light distribution
- Weatherproof rating: IP65
- DMX, stand-alone, synchronized (master/slave)





Cyclo IP65 Directional, T5 54 W





FLUORESCENT COLOUR CHANGING LUMINAIRES

T5 fluorescent tubes uniformly maintain a beautifully even colour spread throughout their long lifespan.

LONG LAMP LIFE (20,000 HOURS)

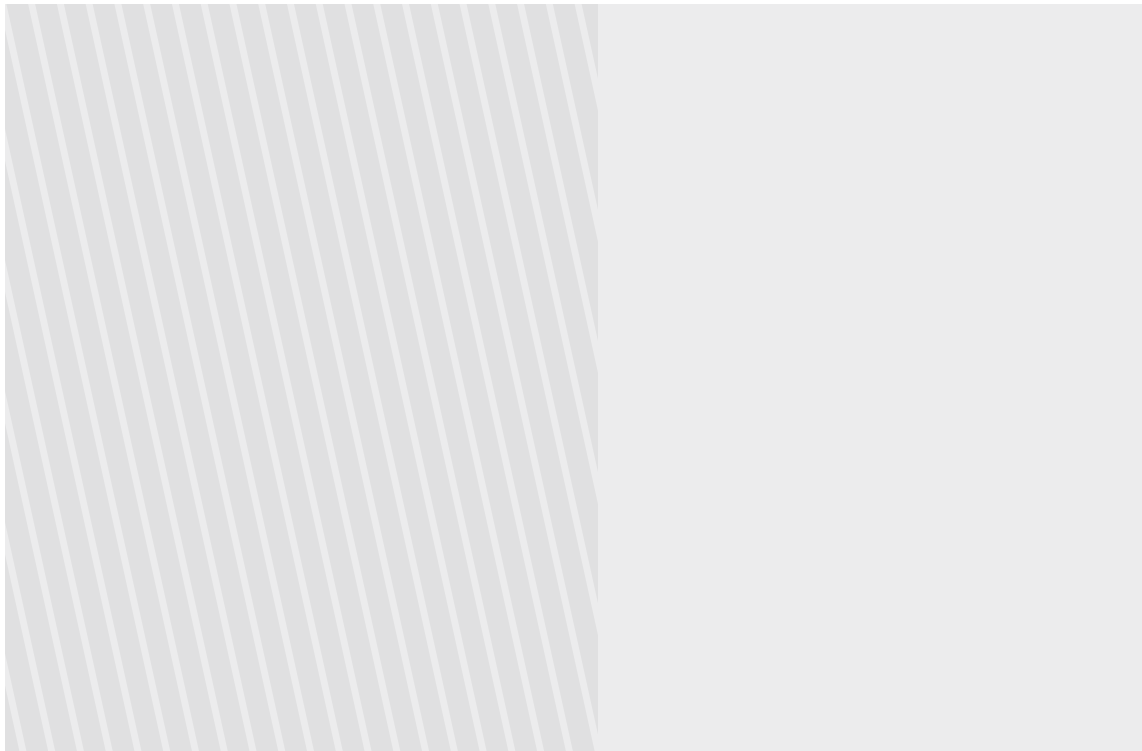
The extended lifespan of fluorescent makes it the ideal source for challenging installations where access might be complex. The consistency of output over its lifespan also ensures a smooth even distribution of colour throughout.



WEATHERPROOF RATING: IP65



A tried and tested IP65-protected design guarantees reliable operation in wet weather.

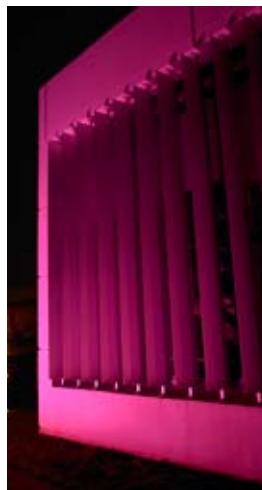


DYNAMIC LIGHT

Light is by nature dynamic. Dynamic light, artificial light capable of reproducing the variety and drama found in nature, offers a new medium for architectural projects. With careful command of brightness and colour, dynamic light allows architectural spaces to adapt to changing client needs or changes in season and climate.

RGB COLOUR MIXING

Through combining three dimmable T5 fluorescent lamps in the primary colours red, green and blue in a process known as additive colour mixing you can create natural daylight shifts and dynamic colour effects. With an additional cool white 4000 Kelvin tube, Cyclo 04 models offer extended colour control and an enhanced white light quality.



Cyclo IP65 Directional / Benefits

Cyclo IP65 Directional

SPECIFICATION

CYCLO IP65 DIRECTIONAL, T5 54 W

PHYSICAL

Length: 1257 mm (49.5 in.)
Width: 149 mm (5.9 in.)
Height: 230 mm (9.1 in.)
Weight: 22 kg (48.5 lbs.)

LAMP

Type: 54 W T5 fluorescent tubes
Approved lamps: Osram T5 HO 54 W

DYNAMIC EFFECTS

Colour mixing: RGB (03 models), RGBW (04 models)
Red: 0 - 100%
Green: 0 - 100%
Blue: 0 - 100%
Cool white (4000 K): 0 - 100% (04 models)

CONTROL AND PROGRAMMING

Control options: DMX, stand-alone, synchronized (master/slave)
DMX channels: 3 (03 models) or 4 (04 models)
DMX address setting: DIP switch
Stand-alone and master/slave programming: DIP switch

CONSTRUCTION

Housing: Aluminium
Finish: Clear anodized
Reflector(s): High specular 99.9% aluminium
Protection factor: IP 65

INSTALLATION

Orientation: Any
Minimum free space: 25 mm (1.0 in.)

ELECTRICAL

AC power: 100-120/200-240 VAC nominal, 50/60 Hz
Main fuse: 1 AT (03 models), 2 AT (04 models)

THERMAL

Maximum ambient temperature (Ta): 40° C (104° F)
Cooling: Convection

APPROVALS

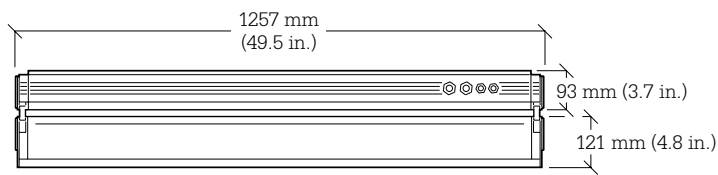
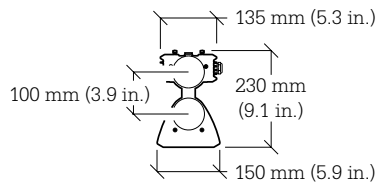
EU safety: EN 60598-1, EN 60598-2
EU EMC: EN 60555-3, EN 55015



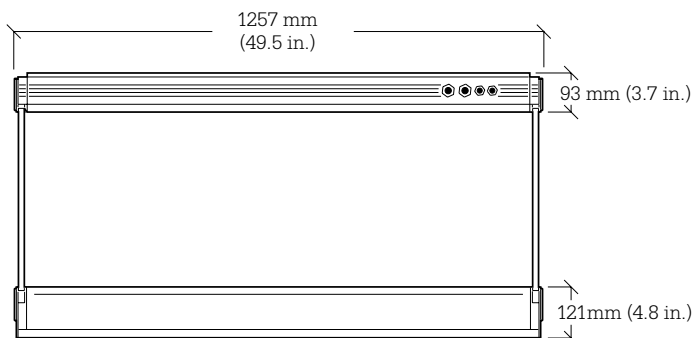
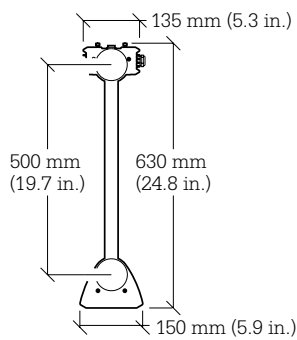
ACCESSORIES



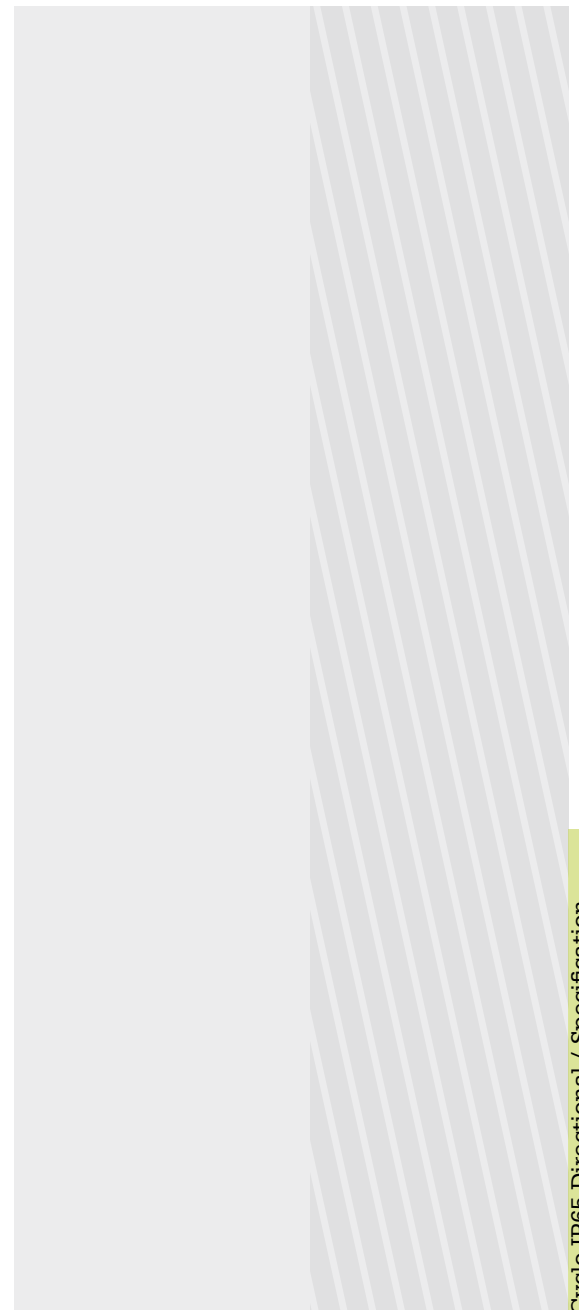
04150308
DMX termination resistor



Cyclo IP65 Directional, T5 54 W



Cyclo IP65 Directional, T5 54 W
Long arm versions available on request



Cyclo IP65 Directional

ORDERING

EXAMPLE SPECIFICATION

Cyclo IP65 03 Directional, Surface Mounted, IP65, RGB, T5 Fluorescent, 54 W, 120 V

= Cyclo IP65 03 Directional, 120 V

= **90566810**

VARIABLES

RGB	T5 54 W	120 V
RGB + W		230 V
White	PL 80 W HIT 150 W	



Cyclo IP65 Directional,
T5

SPECIFICATION CODE



03 Directional, RGB

120 V **90566810**

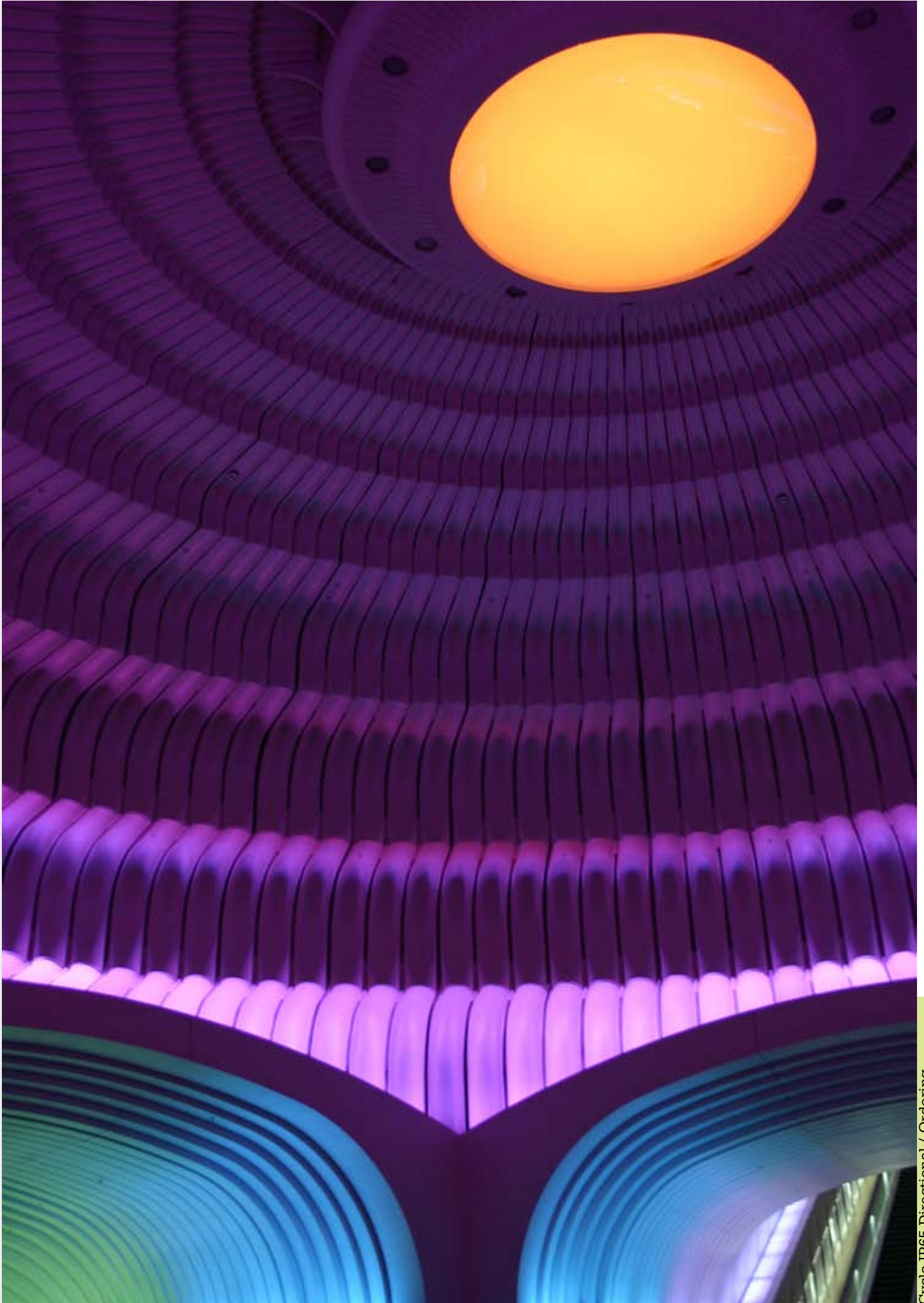
230 V **90566010**



04 Directional, RGB + W

120 V **90567810**

230 V **90567010**



Location: MOA Museum of Art, Atami, Japan / Design: Toshihimi Yanase, Tokyo Butai Showmei Co., Ltd. / Photography © Kohei Take

Cyclo IP65 Directional / Ordering

OUR FACTORY

Martin has four production plants located in Denmark, England and China, making the Martin Group one of the world's leading manufacturers of lighting equipment.

Our largest facilities are located in Denmark. Inspired architecturally by the concert halls and stages we illuminate around the world, our newest factory is a high-tech, 12,500 square-metre facility geared towards the production of innovative lighting.



The Happy Factory, Denmark

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