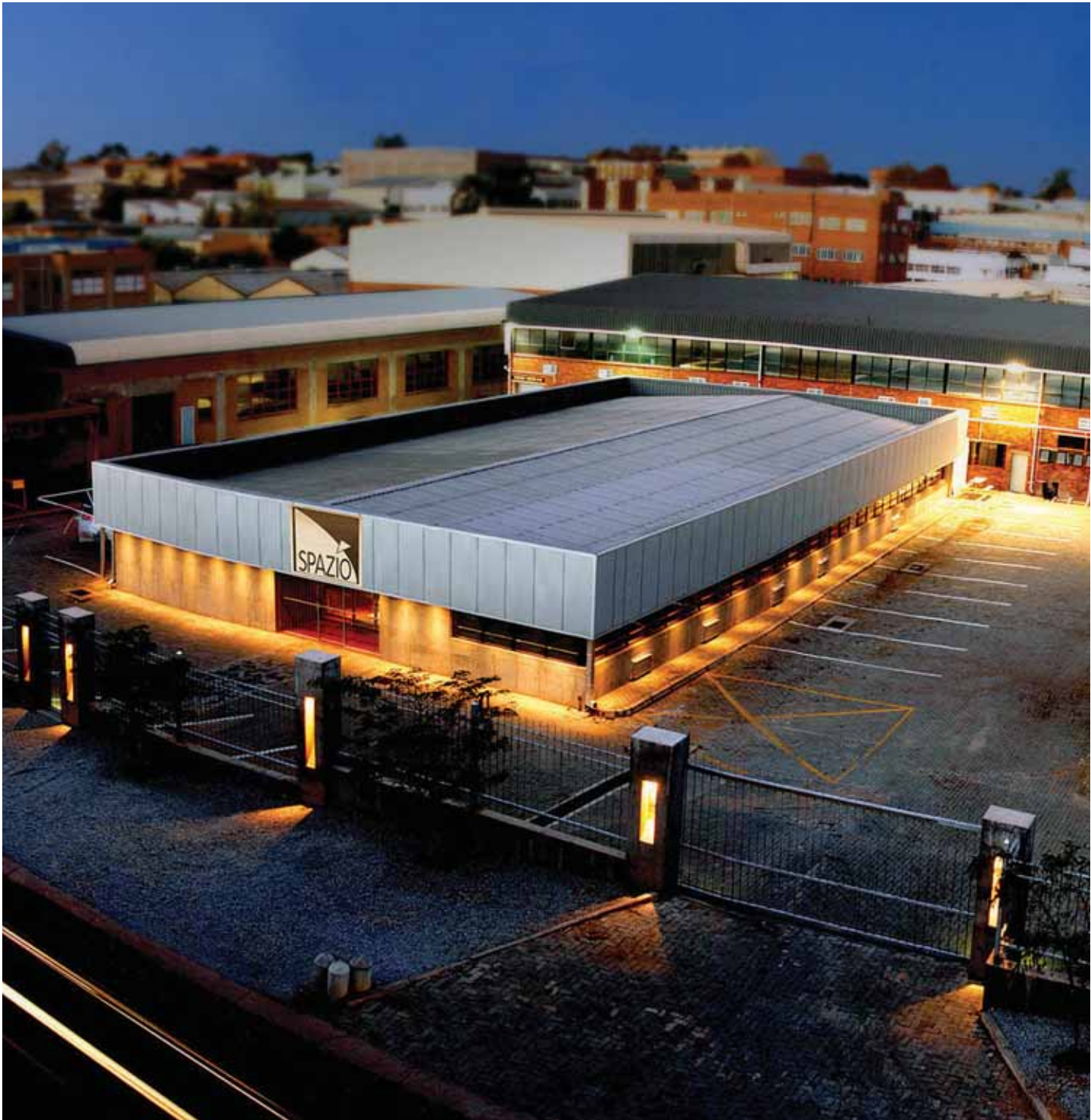


VOLUME
05
technical



Kardan Recessed Metal Halide G12

design by Spazio

SPAZIO

INTERIOR DOWNLIGHTS

Designer/Manufacturer

Product range

Product section



Product image

Project image

Detailed product description



- Recessed metal halide spot
- Body and base in die-cast aluminium
- Tilting and swivel actions (fig.1)
- Available in various lamp configurations
- Easy lamp maintenance (fig.2)
- Remote gear required
- Can be installed on normally flammable surfaces
- Class 1
- IP 20



Fig. 1

Fig. 2 - Lamp Maintenance

Additional technical/
application pictograms

Kardan Recessed Metal Halide G12

INTERIOR DOWNLIGHTS

design by Spazio

SPAZIO



20
Metal
3021
3022
3023
3027
3028

31
White
3021
3022
3023

Available colour versions

Product versions

Short description

Technical Drawing (mm)



code lamp details

1 Light double tilting spot

3021/60 60° 35-150W 230V G12
3021/30 30° 35-150W 230V G12

Remote MH control gear required

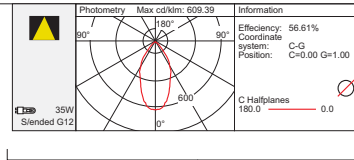
Cut Out 152 x 152

1 Light spot

3027.30 30° 35-150W 230V G12

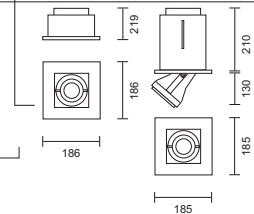
Remote MH control gear required

Cut Out 152 x 152



Basic photometric data

Product code/s



code lamp details

2 Light double tilting spot

3022/60 60° 2 x 35-150W 230V G12
3022/30 30° 2 x 35-150W 230V G12

Remote MH control gear required

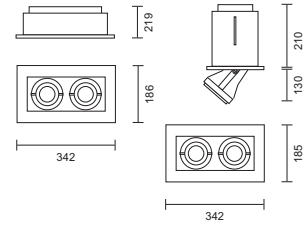
Cut Out 310 x 152

2 Light Spot

3028.30 30° 2 x 35-150W 230V G12

Remote MH control gear required

Cut Out 310 x 152



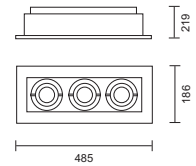
code lamp details

3 Light double tilting spot

3023/60 60° 3 x 35-150W 230V G12
3023/30 30° 3 x 35-150W 230V G12

Remote MH control gear required

Cut Out 452 x 152



Accessories



code details

Magnetic metal halide control gear

7330 35W
7331 70W
7332 150W

See transformers, gears and accessories



code details

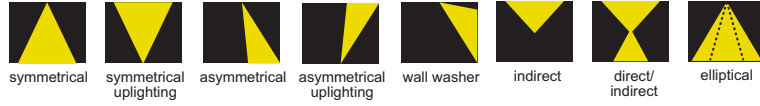
Electronic metal halide control gear with end of life protection

7338 35W
7340 70W
7342 150W

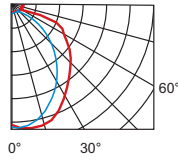
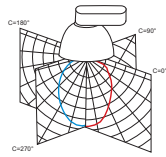
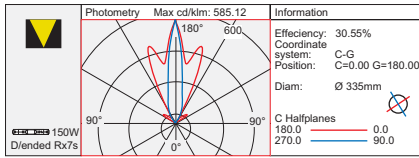
See transformers, gears and accessories

Accessories and additional components used together with main product for functionality

Lighting Distribution



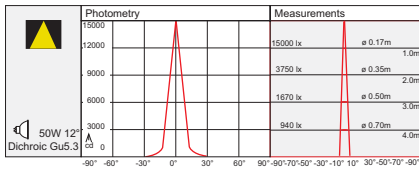
Polar Diagrams



Output angle: — 0-180° — 90° - 270°

Represents the distribution of luminous intensities on the transversal that is the C0° - 180° red line curve and longitudinal that is the C90° - 270° blue line curve with respect to the lamp.

Light Cones



The photometric graphics show the basic distribution of the light output. They should not be used for the purpose of planning a lighting system. Please feel free to ask for the Eulumdat files.

Classification of Fittings

Classification of fittings according to the electrical protection



Class I: Luminaire that needs earth connection. All parts of this type of product that might be touched and in case of defect can cause an electric shock, are connected to earth.



Class II: Luminaire that does not need earth connection. All metal parts that might, in case of defect, cause an electric shock, may not be touched.



Class III: Luminaire for low voltage use (not exceeding 24V) supplied through a safety transformer.



Coastal: Fittings suitable for coastal exterior applications as well as for reef installations.



Reef: Fittings suitable for installation in non coastal external areas only.

Classification of fittings according to the inflammability of the surfaces used in the installation



Suitable for installation on normally flammable surfaces.



Suitable for installation on furniture.

Other technical information relating to our products



Tilting angle of product downwards



Rotation angle of product



Cut out size



Minimum distance from any object



Electronic ballast



Electromagnetic ballast



Weight of product



Approved by the Italian Trademark Institute

Degrees of Protection

The first number identifies the protection degree against the entry of solid objects

- IP 1..** Protection against the entry of solid bodies with dimensions more than 50mm.
- IP 2..** Protection against the entry of solid bodies with dimensions more than 12mm.
- IP 3..** Protection against the entry of solid bodies with dimensions more than 2.5mm.
- IP 4..** Protection against the entry of solid bodies with dimensions more than 1mm.
- IP 5..** Protection against the entry of dust.
- IP 6..** Complete protection against the entry of dust.

The second number identifies the protection degree against the entry of liquid

- IP ..1** Protection against the vertical falling of water drops.
- IP ..2** Protection against the falling of water with a maximum inclination of 15°.
- IP ..3** Protection against rain.
- IP ..4** Protection against water sprays.
- IP ..5** Protection against water jets.
- IP ..6** Protection against big waves.
- IP ..7** Protection against the effects of limited periods of immersion.
- IP ..8** Protection against the effects of total submersion indefinitely.



- High power LED downlight
- Body made in polycarbonate with frosted polycarbonate diffuser
- Cool white (4000K) or warm white (3000K) LED lamp included and available in the following wattages: 10W, 15W, 20W
- High lumen output ranging from 800lm - 1400lm depending on lamp wattage and colour temperature
- Lamp life of 50000hrs
- Can be installed on normally flammable surfaces
- Class 2 (no need for an earthing cable)
- IP43



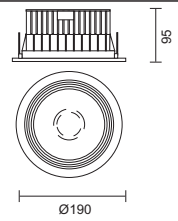
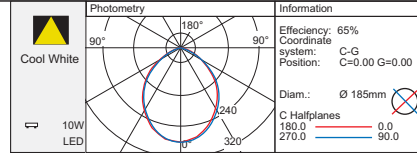
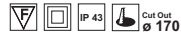


FR
White body
Frosted diffuser



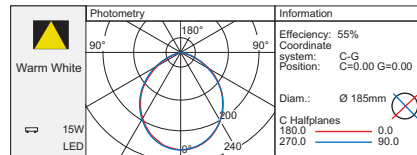
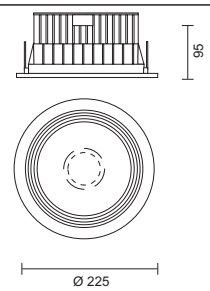
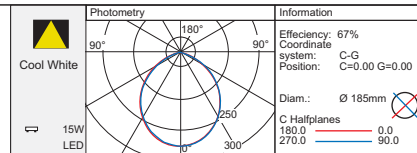
code lamp details

900/800 Lumen
Cool white
2296.10.40.FR 10W 230V 900lm
Warm White
2296.10.30.FR 10W 230V 800lm
No driver required. 50000hr lamp life.



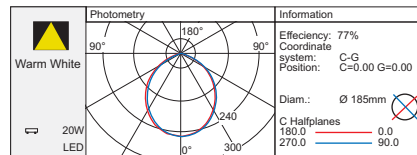
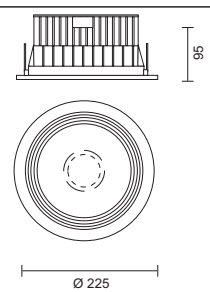
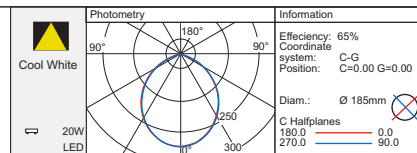
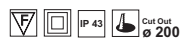
code lamp details

1200/1000 Lumen
Cool white
2296.15.40.FR 15W 230V 1200lm
Warm White
2296.15.30.FR 15W 230V 1000lm
No driver required. 50000hr lamp life.



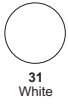
code lamp details

1400/1300 Lumen
Cool white
2296.20.40.FR 20W 230V 1400lm
Warm White
2296.20.30.FR 20W 230V 1300lm
No driver required. 50000hr lamp life.





- Fluorescent high bay
- Body made in steel with bright aluminium reflector
- Acrylic diffuser available separately
- Utilises 54W T5 Fluorescent lamps and includes electronic ballast
- Available in a 4 and 6 lamp option
- A motion sensor option is also available on request
- The fitting can also be suspended using the bracket and cable accessories
- Can be installed on normally flammable surfaces
- Class 1
- Dimmable versions available on request



code lamp details

4 Light option (T5)

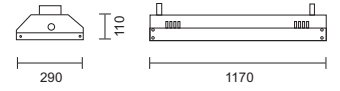
7840.454 4 x 54W 230V G5

Dimmable options

7840.454D 1-10V dimming

7840.454DD Digital dimming

Includes electronic ballast



6 Light option (T5)

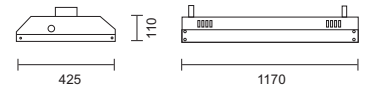
7840.654 6 x 54W 230V G5

Dimmable options

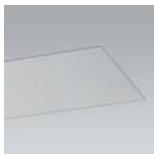
7840.654D 1-10V dimming

7840.654DD Digital dimming

Includes electronic ballast



Accessories



code details

Acrylic diffuser

7840.454.AD 4 X 54W

7840.654.AD 6 X 54W



code details

Motion sensor

ZZ.7840.MS



code details

Set of 2 brackets for P2000 trunking

7840.BRKT



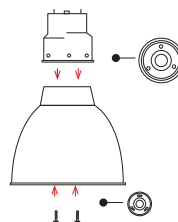
code details

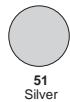
Suspension kit

SUSP-5



- Economic high bay
- The gear housing is made in anodised aluminium with a spun aluminium reflector (sold separately)
- It is available in 250 and 400 watt lamps for both metal halide and mercury vapour
- Can be installed on normally flammable surfaces
- Class 1
- IP20



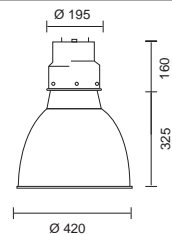


code lamp details

Eco control gear

- 7900.250MH** 250W MH+HPS E40
- 7900.400MH** 400W MH+HPS E40
- 7900.250MV** 250W MV E40
- 7900.400MV** 250W MV E40

Suspension cable not included



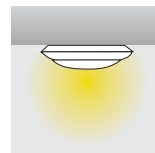
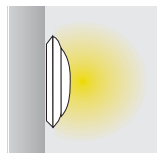
Ø420 Spun aluminium reflector

XX/6616/01





- Outdoor bulkheads
- Body made in polycarbonate with opal polycarbonate diffuser
- Utilises compact fluorescent lamps
- Available in round and oval
- Stainless steel screws
- Rubber gasket
- Can be installed on normally flammable surfaces
- Class 2
- IP 66





code lamp details

Aida plain

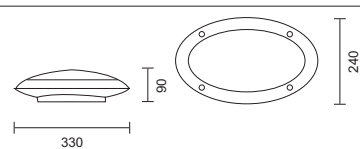
4508.1.123 23W 230V E27



code lamp details

Alma plain

4509.1.123 23W 230V E27





- Interior/exterior wall range
- Body in turned aluminium with clear glass diffuser
- For use with 230V dichroics
- Available in two options
 - Large
 - Small
- Can be installed on normally flammable surfaces
- Class 1
- IP 54



51
Matt Grey



31
White
9341



code lamp details

Small option

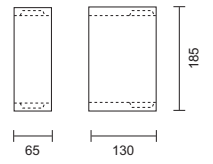
9340 35W 230V Gu10

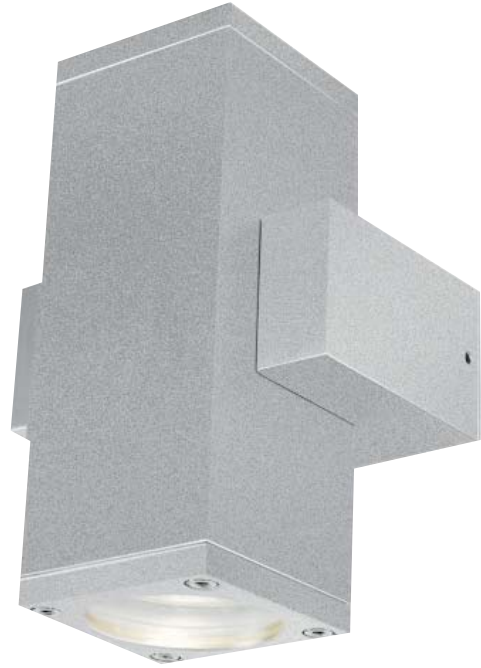


code lamp details

Large option

9341 2 x 35W 230V Gu10





- Dichroic wall lights
- Body in turned aluminium with a clear glass diffuser
- Sealed using allen key screws on the Frisk fitting and a screw off diffuser on the Fresh fitting
- Can be installed on normally flammable surfaces
- Class 1
- IP 54



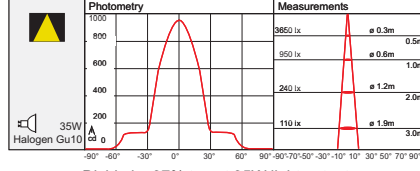
51
European Grey
Fresh bi

51
Matt Grey
Frisk twice

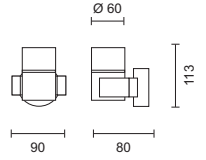


code lamp details
Fresh bi aluminium dichroic wall light

9238 35W 230V Gu10

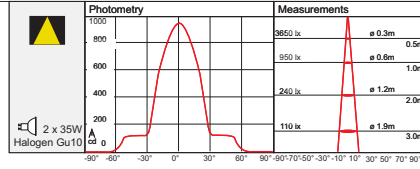


Divide by 37% to get 35W light output

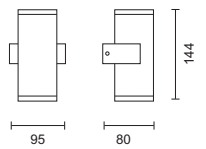


code lamp details
Frisk twice aluminium dichroic wall light

9257 2 x 35W 230V Gu10



Divide by 37% to get 35W light output





- Range of exterior pole tops
- Body made in acrylic
- For use with compact fluorescent lamps
- Includes gallery
- Can be installed on normally flammable surfaces
- Class 2
- IP 44



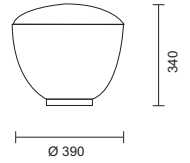
White/
Black



code lamp details

Hatrick pole top

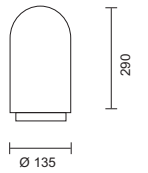
1012/390 25W 230V E27



code lamp details

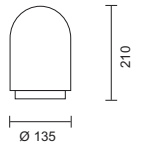
Peta pole top H290

1013/290 20W 230V E27



Peta pole top H210

1013/210 15W 230V E27



Accessories



code details

Pole base

160900



code details

Various arms

125001 Standard arm
125002 Large arm



code details

Wall top base

119001



code details

PVC 1m pole

160902



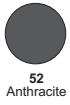
code details

Aluminium poles in black

160100 1m
160120 1.2m
160150 1.5m
160250 2.5m
160300 3m
160400 4m



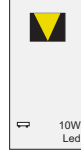
- LED Floodlight range
- Body in die-cast aluminium with glass diffuser and bright reflector
- Sealed with a rubber gasket and stainless steel screws
- High power LED available in both warm white (3000K) and cool white (4000K) light
- Includes led driver
- Fully adjustable
- Can be installed on normally flammable surfaces
- Class 1
- IP 65



code lamp details

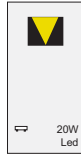
10W - 1000lm
4634.10.30 10W LED Warm white
4634.10.40 10W LED Cool white

Complete with led driver



20W - 2000lm
4634.20.30 20W LED Warm white
4634.20.40 20W LED Cool white

Complete with led driver



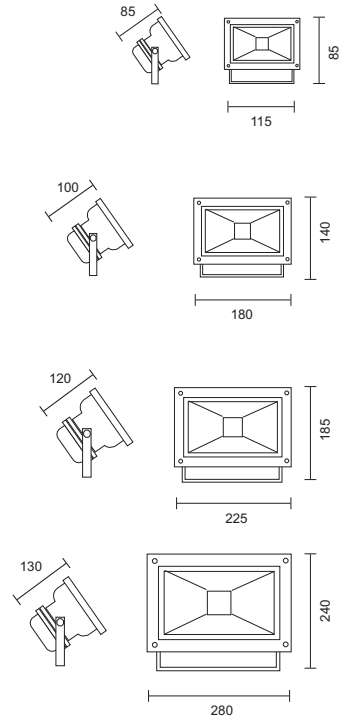
30W - 3000lm
4634.30.30 30W LED Warm white
4634.30.40 30W LED Cool white

Complete with led driver



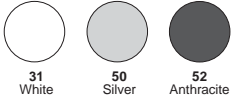
50W - 5000lm
4634.50.30 50W LED Warm white
4634.50.40 50W LED Cool white

Complete with led driver





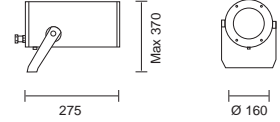
- Metal halide spot
- Body made in die-cast aluminium with tempered glass diffuser and 60° reflector
- Utilises single ended metal halide G12 Lamps
- Available for 35W, 70W and 150W lamps and includes gear
- The bracket is 90° adjustable and attached to the fitting with stainless steel allen key type screws
- The following accessories are also available for the Powerspot:
 - Louvre
 - 30° Narrow beam reflector
- Can be installed on normally flammable surfaces
- Class 1
- IP66



code lamp details

35W Metal halide
4632.35 35W 230V G12

Includes metal halide gear



70W Metal halide
4632.70 70W 230V G12

Includes metal halide gear



150W Metal halide
4632.150 150W 230V G12

Includes metal halide gear



Accessories

code details
30° Narrow beam reflector
4632/reflector












































code details
Louvre
4632/louvre



Lamp Index

SPAZIO

*Measured in Candelas

lamp type	unit	watts	volts	base	lumens
INCANDESCENT	 Golf Ball	40/60	230	E14/E27	415/640
	 Incandescent	40/60/100	230	E27	425/720/1360
	 Candle	40/60	230	E14	415/670
	 JDD	40	230	E14	420
	 PAR 38	60/80/120	230-240	E27	*3400/5400/9300 @ 12°
	 PAR SPOTS R 50/63/80	40/60/100	230	E14/E27	*430(30°) / 960(30°) / 2000(80°)
PAR SPOTS	 PAR 56	300	230	Gx16d	*40000(15°) / 22000(25°) / 9000(40°)
<hr/>					
HALOGEN	 Twistline	50	220	Gu10	*800(40°)
	 Dichroic	35/50	12	Gu5.3	*1100/1800 @ 38°
	 Capsule	20	12	G4	600
	 Capsule	35-50	12	Gy6.35	930
	 AR 111	50	12	G53	2200/5000/9500
	 Leuci	150	230	E14	*50 000(4°) / 3500(24°)
	 G9 Capsule	25/40/50/60/75	230	G9	850
<hr/>					
METAL HALIDE	 HCl-T	70/150	230	G12	5200/13 000
	 HQI-T	250/400	230	E40	19 000/35 000
	 HQI-TS	70/150/250	230	Rx7s	5000/11 000/20 000
	 HQI-E	70/250/400	230	E27/E40	5500/19 000/32 000
	 CDM-Tm	20	230	PGJ-5	1650
<hr/>					
LINEAR FLUORESCENT	 Seamless (T5)	24/39/54	230	G5	1750/3100/4450
	 T16 (T5)	8	230	G5	450
	 T16 (T5)	14	230	G5	1270(25°) / 1350(35°)
	 T16 (T5)	21	230	G5	1970(25°) / 2100(35°)
	 T16 (T5)	28	230	G5	2720(25°) / 2900(35°)
	 T16 (T5)	35	230	G5	3290(25°) / 3650(35°)
	 T26 (T8)	15	230	G13	950
	 T26 (T8)	18	230	G13	1150
	 T26 (T8)	30	230	G13	2350
	 T26 (T8)	36	230	G13	2850
 T26 (T8)	58	230	G13	4600	
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COMPACT FLUORESCENT	 PL-S	7/9/11	230	G23	400/600/900
	 PL-D	10/13/18/26	230	G24d-1/2/3	600/1200/1800
	 PL-DE	10/13/18/26	230	G24q-1/2/3	600/1200/1800
	 PL-L	18/24/36	230	2G11	1200/1800/2900
	 PL-L	55	230	2G11	4800
	 PL-EL	11/15/23	230	E27	600/900/1500
	 SQUARE	16	230	2D	1050
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HIGH PRESSURE SODIUM	 NAV-T	250/400	230	E40	28 000/48 000
	 NAV-E	250/400	230	E40	27 000/48 000
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MERCURY VAPOUR	 HQL	80/125	230	E27	4300/6200
	 HQL	250/400	230	E40	12 700/22 000



**JOHANNESBURG
HEAD OFFICE**
52 Andries Street
Wynberg / Sandton

Tel: +27 11 555 5555
Fax: +27 11 555 5544

CAPE TOWN OFFICE
105 Buitenkant Street
C a p e T o w n

Tel: +27 21 461 0061
Fax: +27 21 461 0063

Email: info@spazio.co.za
Web: www.spazio.co.za