

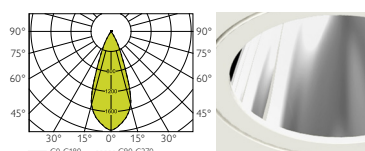
ENLIT

# ASTRO

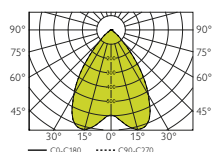
## 070



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,5 kg



Astro 070 40deg 1000lm



Astro 070 70deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

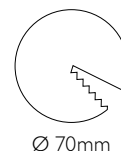
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 70° beam angle, providing ambient to dramatic effects

### ELECTRICAL EQUIPMENT

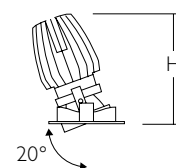
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- CGA - clear glass



Ø 70mm



Type	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 070 LED 400lm	6	35W halogen	83	118
ASTRO 070 LED 500lm	7	50W halogen	118	118
ASTRO 070 LED 700lm	12	75W halogen	118	118
ASTRO 070 LED 1000lm	18	100W halogen	118	118
ASTRO 070 LED 1300lm	21	2x18W TC-DEL	118	118

CODE	TYPE	specification	cct	ldc	cri	control gear	colour	accessories
AS100000LE00400	ASTRO 070 LED 400lm		2700K	10°*	80+	ECG	biela	M3h
AS100000LE00500	ASTRO 070 LED 500lm		3000K	40°	98	DIM 1-10V	matný nikel	HLA
AS100000LE00700	ASTRO 070 LED 700lm		3500K*	70°		DSI		SLA
AS100000LE01000	ASTRO 070 LED 1000lm		4000K			DALI		CGA
AS100000LE01300	ASTRO 070 LED 1300lm							BAF

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

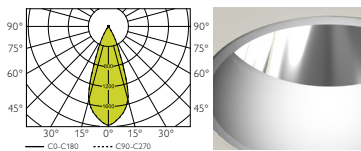
## 070 SOFT



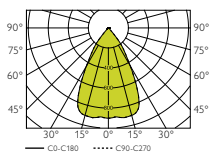
Small recessed downlight with deep set reflector. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR. Small cut out for halogen replacement.

Utilising coil springs the Astro 070 allows easy installation in a wide range of ceilings (1-40mm) and helps prevent damage to soft ceiling surfaces.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,5 kg



Astro 070 SOFT 40deg 1000lm



Astro 070 SOFT 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

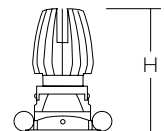
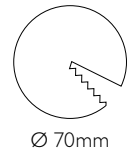
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 60° beam angle, providing ambient to dramatic effects. Glare control secondary reflector.

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- CGA - clear glass
- RSLA - ribbed spreading lens



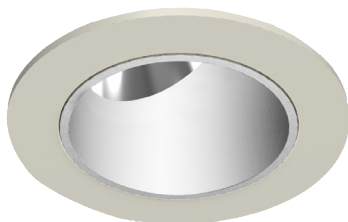
Type	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 070 SOFT LED 400lm	6	35W halogen	96	132
ASTRO 070 SOFT LED 500lm	7	50W halogen	132	132
ASTRO 070 SOFT LED 700lm	12	75W halogen	132	132
ASTRO 070 SOFT LED 1000lm	18	100W halogen	132	132
ASTRO 070 SOFT LED 1300lm	21	2x18W TC-DEL	132	132

CODE	TYPE	specification	cct	ldc	cri	control gear	colour	accessories
AS10S000LE00400	ASTRO 070 SOFT LED 400lm		2700K	10°*	80+	ECG	white	M3h
AS10S000LE00500	ASTRO 070 SOFT LED 500lm		3000K	40°	98	DIM 1-10V	matt nickell	HLA
AS10S000LE00700	ASTRO 070 SOFT LED 700lm		3500K*	60°		DSI		SLA
AS10S000LE01000	ASTRO 070 SOFT LED 1000lm		4000K			DALI		CGA
AS10S000LE01300	ASTRO 070 SOFT LED 1300lm							RSLA

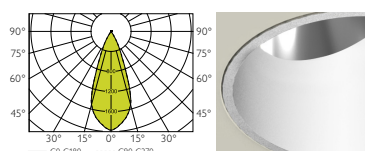
\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

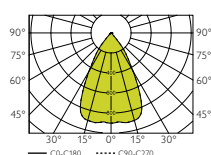
## 070 SOFT WASHER



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,5 kg



Astro 070 SOFT WASHER 40deg 1000lm



Astro 070 SOFT WASHER 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

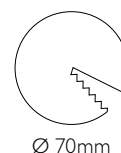
- RSA – specular asymmetric reflector made of polished aluminium, available in 10°, 40° and 60° beam angle, providing ambient to dramatic effects.
- Glare control secondary reflector with fixed 30° angle.

### ELECTRICAL EQUIPMENT

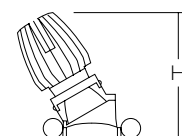
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- CGA - clear glass
- RSLA - ribbed spreading lens



Ø 70mm



Type	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 070 SOFT WASHER LED 400lm	6	35W halogen	105	132
ASTRO 070 SOFT WASHER LED 500lm	7	50W halogen	132	132
ASTRO 070 SOFT WASHER LED 700lm	12	75W halogen	132	132
ASTRO 070 SOFT WASHER LED 1000lm	18	100W halogen	132	132
ASTRO 070 SOFT WASHER LED 1300lm	21	2x18W TC-DEL	132	132

CODE	TYPE	SPECIFICATION				
		cct	ldc	cri	control gear	colour
AS10SW00LE00400	ASTRO 070 SOFT WASHER LED 400lm	2700K	10°*	80+	ECG	white
AS10SW00LE00500	ASTRO 070 SOFT WASHER LED 500lm	3000K	40°	98	DIM 1-10V	matt nickel
AS10SW00LE00700	ASTRO 070 SOFT WASHER LED 700lm	3500K*	60°		DSI	
AS10SW00LE01000	ASTRO 070 SOFT WASHER LED 1000lm	4000K			DALI	
AS10SW00LE01300	ASTRO 070 SOFT WASHER LED 1300lm					

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

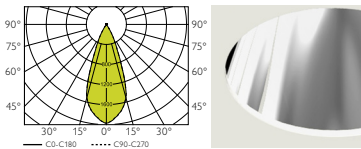


# ASTRO

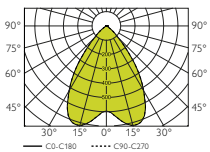
## 070 IP54



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP54
Weight	0,5 kg



Astro 070 IP54 40deg 1000lm



Astro 070 IP54 70deg 1000lm

Small recessed sealed downlight. IP54 to ceiling for wet room applications. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR. Small cut out for halogen replacement.

Utilising coil springs the Astro 070 allows easy installation in a wide range of ceilings (1-40mm) and helps prevent damage to soft ceiling surfaces.

Applications: bathrooms, swimming pools, corridors, restaurants, kitchens, residential areas, shops, hotels, bars.

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

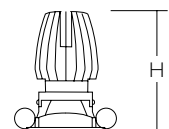
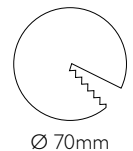
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 70° beam angle, providing ambient to dramatic effects

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens



Type	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 070 IP54 LED 400lm	6	35W halogen	86	121
ASTRO 070 IP54 LED 500lm	7	50W halogen	121	121
ASTRO 070 IP54 LED 700lm	12	75W halogen	121	121
ASTRO 070 IP54 LED 1000lm	18	100W halogen	121	121
ASTRO 070 IP54 LED 1300lm	21	2x18W TC-DEL	121	121

CODE	TYPE	specification	cct	ldc	cri	control gear	colour	accessories
AS10IP54LE00400	ASTRO 070 IP54 LED 400lm		2700K	10°*	80+	ECG	white	M3h
AS10IP54LE00500	ASTRO 070 IP54 LED 500lm		3000K	40°	98	DIM 1-10V	matt nickel	HLA
AS10IP54LE00700	ASTRO 070 IP54 LED 700lm		3500K*	70°		DSI		SLA
AS10IP54LE01000	ASTRO 070 IP54 LED 1000lm		4000K			DALI		CGA
AS10IP54LE01300	ASTRO 070 IP54 LED 1300lm							BAF

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

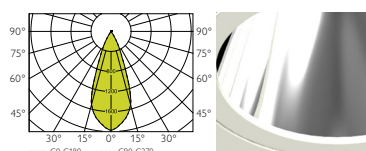
## 070 SQUARE



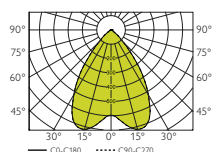
Small square tiltable (20°) recessed downlight. Quality die cast construction with prewired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR. Cool running allowing safe and simple tilt action. Small cut out for halogen replacement.

Utilising coil springs the Astro 070 allows easy installation in a wide range of ceilings (1-40mm) and helps prevent damage to soft ceiling surfaces.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,5 kg



Astro 070 SQUARE 40deg 1000lm



Astro 070 SQUARE 70deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

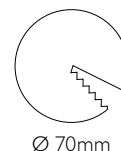
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 70° beam angle, providing ambient to dramatic effects

### ELECTRICAL EQUIPMENT

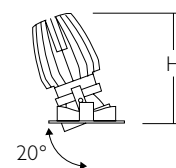
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- CGA - clear glass



Ø 70mm



Type	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 070 SQUARE LED 400lm	6	35W halogen	83	118
ASTRO 070 SQUARE LED 500lm	7	50W halogen	118	118
ASTRO 070 SQUARE LED 700lm	12	75W halogen	118	118
ASTRO 070 SQUARE LED 1000lm	18	100W halogen	118	118
ASTRO 070 SQUARE LED 1300lm	21	2x18W TC-DEL	118	118

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS10SQ00LE00400	ASTRO 070 SQUARE LED 400lm	2700K	10°*	80+	ECG	white	M3h
AS10SQ00LE00500	ASTRO 070 SQUARE LED 500lm	3000K	40°	98	DIM 1-10V	matt nickel	HLA
AS10SQ00LE00700	ASTRO 070 SQUARE LED 700lm	3500K*	70°		DSI		SLA
AS10SQ00LE01000	ASTRO 070 SQUARE LED 1000lm	4000K			DALI		CGA
AS10SQ00LE01300	ASTRO 070 SQUARE LED 1300lm						BAF

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

## 070 SQUARE SOFT

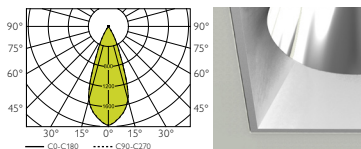


Small square recessed downlight with deep set reflector. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

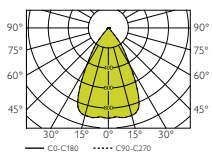
Small cut out for halogen replacement.

Utilising coil springs the Astro 070 allows easy installation in a wide range of ceilings (1-40mm) and helps prevent damage to soft ceiling surfaces.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,5 kg



Astro 070 SQUARE SOFT 40deg 1000lm



Astro 070 SQUARE SOFT 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

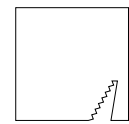
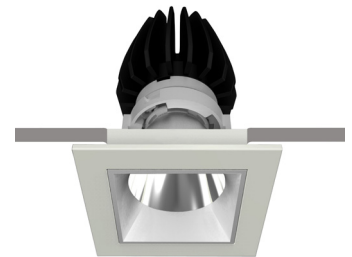
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 60° beam angle, providing ambient to dramatic effects. Glare control secondary reflector.

### ELECTRICAL EQUIPMENT

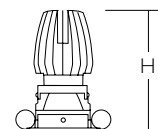
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- CGA - clear glass



72 x 72mm



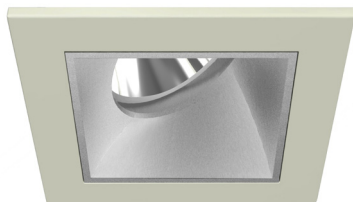
Type	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 070 SQUARE SOFT LED 400lm	6	35W halogen	96	132
ASTRO 070 SQUARE SOFT LED 500lm	7	50W halogen	132	132
ASTRO 070 SQUARE SOFT LED 700lm	12	75W halogen	132	132
ASTRO 070 SQUARE SOFT LED 1000lm	18	100W halogen	132	132
ASTRO 070 SQUARE SOFT LED 1300lm	21	2x18W TC-DEL	132	132

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS10SQS0LE00400	ASTRO 070 SQUARE SOFT LED 400lm	2700K	10°*	80+	ECG	white	M3h
AS10SQS0LE00500	ASTRO 070 SQUARE SOFT LED 500lm	3000K	40°	98	DIM 1-10V	matt nickel	HLA
AS10SQS0LE00700	ASTRO 070 SQUARE SOFT LED 700lm	3500K*	60°		DSI		SLA
AS10SQS0LE01000	ASTRO 070 SQUARE SOFT LED 1000lm	4000K			DALI		CGA
AS10SQS0LE01300	ASTRO 070 SQUARE SOFT LED 1300lm						

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

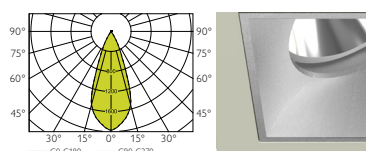
## 070 SQUARE SOFT WASHER



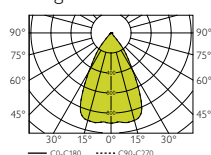
Small square recessed downlight with deep set fixed angle reflector. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR. Small cut out for halogen replacement.

Utilising coil springs the Astro 070 allows easy installation in a wide range of ceilings (1-40mm) and helps prevent damage to soft ceiling surfaces

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,5 kg



Astro 070 SQUARE SOFT WASHER  
40deg 1000lm



Astro 070 SQUARE SOFT WASHER  
60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

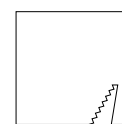
- RSA – specular asymmetric reflector made of polished aluminium, available in 10°, 40° and 60° beam angle, providing ambient to dramatic effects. Glare control secondary reflector with fixed 30° angle.

### ELECTRICAL EQUIPMENT

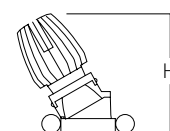
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- CGA - clear glass
- RSLA - ribbed spreading lens



72 x 72mm



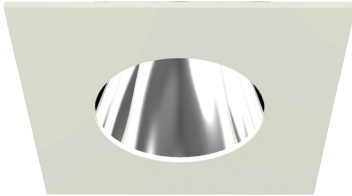
Type	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 070 SQUARE SOFT WASHER LED 400lm	6	35W halogen	105	132
ASTRO 070 SQUARE SOFT WASHER LED 500lm	7	50W halogen	132	132
ASTRO 070 SQUARE SOFT WASHER LED 700lm	12	75W halogen	132	132
ASTRO 070 SQUARE SOFT WASHER LED 1000lm	18	100W halogen	132	132
ASTRO 070 SQUARE SOFT WASHER LED 1300lm	21	2x18W TC-DEL	132	132

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS10SQSWLE00400	ASTRO 070 SQUARE SOFT WASHER LED 400lm	2700K	10°*	80+	ECG	white	M3h
AS10SQSWLE00500	ASTRO 070 SQUARE SOFT WASHER LED 500lm	3000K	40°	98	DIM 1-10V	matt nickel	HLA
AS10SQSWLE00700	ASTRO 070 SQUARE SOFT WASHER LED 700lm	3500K*	60°		DSI		SLA
AS10SQSWLE01000	ASTRO 070 SQUARE SOFT WASHER LED 1000lm	4000K			DALI		CGA
AS10SQSWLE01300	ASTRO 070 SQUARE SOFT WASHER LED 1300lm						RSLA

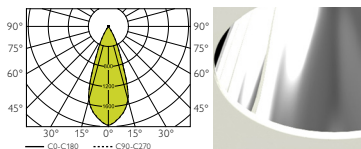
\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

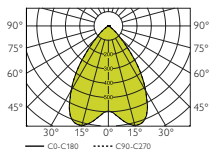
## 070 SQUARE IP54



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP54
Weight	0,5 kg



Astro 070 SQUARE IP54 40deg 1000lm



Astro 070 SQUARE IP54 70deg 1000lm

Small square recessed sealed downlight. IP54 to ceiling for wet room applications. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR. Small cut out for halogen replacement.

Utilising coil springs the Astro 070 allows easy installation in a wide range of ceilings (1-40mm) and helps prevent damage to soft ceiling surfaces.

Applications: bathrooms, swimming pools, corridors, restaurants, kitchens, residential areas, shops, hotels, bars.

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

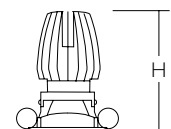
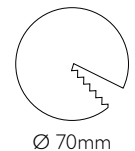
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 70° beam angle, providing ambient to dramatic effects

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens



Type	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 070 SQUARE IP54 LED 400lm	6	35W halogen	86	121
ASTRO 070 SQUARE IP54 LED 500lm	7	50W halogen	121	121
ASTRO 070 SQUARE IP54 LED 700lm	12	75W halogen	121	121
ASTRO 070 SQUARE IP54 LED 1000lm	18	100W halogen	121	121
ASTRO 070 SQUARE IP54 LED 1300lm	21	2x18W TC-DEL	121	121

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS10SQIPLE00400	ASTRO 070 SQUARE IP54 LED 400lm	2700K	10°*	80+	ECG	white	M3h
AS10SQIPLE00500	ASTRO 070 SQUARE IP54 LED 500lm	3000K	40°	98	DIM 1-10V	matt nickel	HLA
AS10SQIPLE00700	ASTRO 070 SQUARE IP54 LED 700lm	3500K*	70°		DSI		SLA
AS10SQIPLE01000	ASTRO 070 SQUARE IP54 LED 1000lm	4000K			DALI		BAF
AS10SQIPLE01300	ASTRO 070 SQUARE IP54 LED 1300lm						

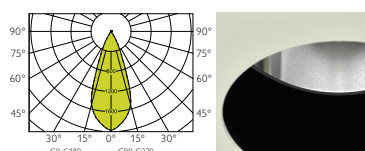
\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

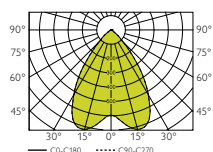
## 090



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 090 40deg 1000lm



Astro 090 70deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

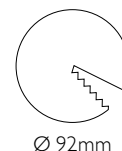
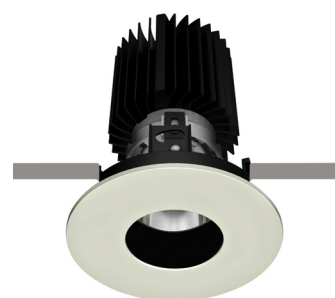
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 70° beam angle, providing ambient to dramatic effects. Black glare control baffle.

### ELECTRICAL EQUIPMENT

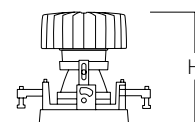
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- RSLA - ribbed spreading lens



Ø 92mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 090 LED 400lm	400	6	35W halogen	109
ASTRO 090 LED 500lm	500	7	50W halogen	109
ASTRO 090 LED 700lm	700	12	75W halogen	109
ASTRO 090 LED 1000lm	1000	18	100W halogen	109
ASTRO 090 LED 1300lm	1300	21	2x18W TC-DEL	109

CODE	TYPE	SPECIFICATION				
		cct	ldc	cri	control gear	accessories
AS200000LE00400	ASTRO 090 LED 400lm	2700K	10°*	80+	ECG	M3h
AS200000LE00500	ASTRO 090 LED 500lm	3000K	40°	98	DIM 1-10V	HLA
AS200000LE00700	ASTRO 090 LED 700lm	3500K*	70°		DSI	SLA
AS200000LE01000	ASTRO 090 LED 1000lm	4000K			DALI	RSLA
AS200000LE01300	ASTRO 090 LED 1300lm					CGA

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

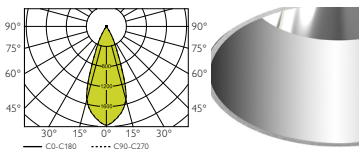
## 090 TRIMLESS



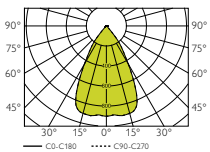
Trimless recessed downlight with deep set reflector. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR. Supplied with skim bead.

Utilising retractable suspension arms, the ASTRO 090 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 090 TRIMLESS 40deg 1000lm



Astro 090 TRIMLESS 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

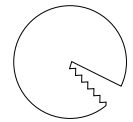
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 60° beam angle, providing ambient to dramatic effects. Glare control secondary reflector.

### ELECTRICAL EQUIPMENT

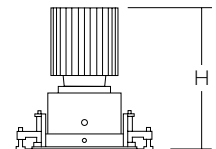
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- RSLA - ribbed spreading lens
- CGA - clear glass



Ø 112mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 090 TRIMLESS LED 400lm	400	6	35W halogen	147
ASTRO 090 TRIMLESS LED 500lm	500	7	50W halogen	147
ASTRO 090 TRIMLESS LED 700lm	700	12	75W halogen	147
ASTRO 090 TRIMLESS LED 1000lm	1000	18	100W halogen	147
ASTRO 090 TRIMLESS LED 1300lm	1300	21	2x18W TC-DEL	147

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS20TRM0LE00400	ASTRO 090 TRIMLESS LED 400lm	2700K	10°*	80+	ECG	white	M3h
AS20TRM0LE00500	ASTRO 090 TRIMLESS LED 500lm	3000K	40°	98	DIM 1-10V		HLA
AS20TRM0LE00700	ASTRO 090 TRIMLESS LED 700lm	3500K*	70°		DSI		SLA
AS20TRM0LE01000	ASTRO 090 TRIMLESS LED 1000lm	4000K			DALI		RSLA
AS20TRM0LE01300	ASTRO 090 TRIMLESS LED 1300lm						CGA

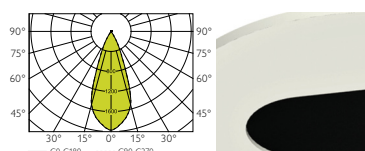
\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

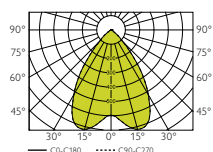
## 090 WASHER



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 090 WASHER 40deg 1000lm



Astro 090 WASHER 70deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

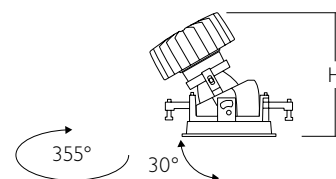
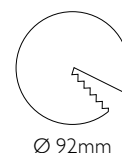
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 60° beam angle, providing ambient to dramatic effects. Black glare control baffle.

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- RSLA - ribbed spreading lens



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 090 WASHER LED 400lm	400	6	35W halogen	125
ASTRO 090 WASHER LED 500lm	500	7	50W halogen	125
ASTRO 090 WASHER LED 700lm	700	12	75W halogen	125
ASTRO 090 WASHER LED 1000lm	1000	18	100W halogen	125
ASTRO 090 WASHER LED 1300lm	1300	21	2x18W TC-DEL	125

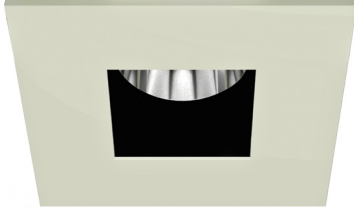
CODE	TYPE	SPECIFICATION				
		cct	ldc	cri	control gear	accessories
AS20W000LE00400	ASTRO 090 WASHER LED 400lm	2700K	10°*	80+	ECG	M3h
AS20W000LE00500	ASTRO 090 WASHER LED 500lm	3000K	40°	98	DIM 1-10V	HLA
AS20W000LE00700	ASTRO 090 WASHER LED 700lm	3500K*	70°		DSI	SLA
AS20W000LE01000	ASTRO 090 WASHER LED 1000lm	4000K			DALI	RSLA
AS20W000LE01300	ASTRO 090 WASHER LED 1300lm					

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm



# ASTRO

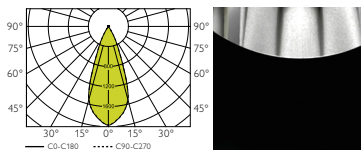
## 090 SQUARE



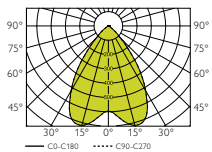
Low glare square recessed downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Utilising retractable suspension arms, the ASTRO 090 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 090 SQUARE 40deg 1000lm



Astro 090 SQUARE 70deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

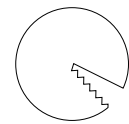
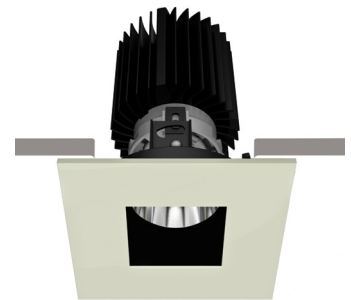
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 40° and 70° beam angle, providing ambient to dramatic effects. Black glare control baffle.

### ELECTRICAL EQUIPMENT

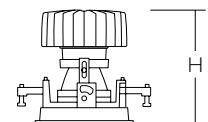
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- RSLA - ribbed spreading lens



Ø 92mm



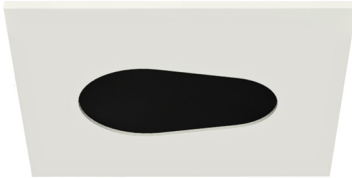
Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 090 SQUARE LED 400lm	400	6	35W halogen	109
ASTRO 090 SQUARE LED 500lm	500	7	50W halogen	109
ASTRO 090 SQUARE LED 700lm	700	12	75W halogen	109
ASTRO 090 SQUARE LED 1000lm	1000	18	100W halogen	109
ASTRO 090 SQUARE LED 1300lm	1300	21	2x18W TC-DEL	109

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS20SQ00LE00400	ASTRO 090 SQUARE LED 400lm	2700K	10°*	80+	ECG	white	M3h
AS20SQ00LE00500	ASTRO 090 SQUARE LED 500lm	3000K	40°	98	DIM 1-10V		HLA
AS20SQ00LE00700	ASTRO 090 SQUARE LED 700lm	3500K*	70°		DSI		SLA
AS20SQ00LE01000	ASTRO 090 SQUARE LED 1000lm	4000K			DALI		RSLA
AS20SQ00LE01300	ASTRO 090 SQUARE LED 1300lm						

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

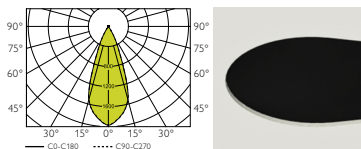
## 090 SQUARE WASHER



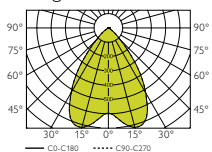
Low glare square adjustable (30°/355°) recessed downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Utilising retractable suspension arms, the ASTRO 090 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 090 SQUARE WASHER  
40deg 1000lm



Astro 090 SQUARE WASHER  
70deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

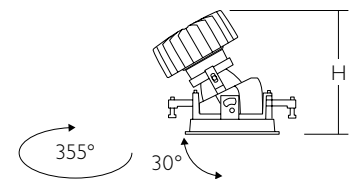
- RSA – specular asymmetric reflector made of polished aluminium, available in 10°, 40° and 70° beam angle, providing ambient to dramatic effects. Black glare control baffle.

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- SLA - softening lens
- RSLA - ribbed spreading lens



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 090 SQUARE WASHER LED 400lm	400	6	35W halogen	125
ASTRO 090 SQUARE WASHER LED 500lm	500	7	50W halogen	125
ASTRO 090 SQUARE WASHER LED 700lm	700	12	75W halogen	125
ASTRO 090 SQUARE WASHER LED 1000lm	1000	18	100W halogen	125
ASTRO 090 SQUARE WASHER LED 1300lm	1300	21	2x18W TC-DEL	125

CODE	TYPE	SPECIFICATION				
		cct	ldc	cri	control gear	accessories
AS20SQW0LE00400	ASTRO 090 SQUARE WASHER LED 400lm	2700K	10°*	80+	ECG	M3h
AS20SQW0LE00500	ASTRO 090 SQUARE WASHER LED 500lm	3000K	40°	98	DIM 1-10V	HLA
AS20SQW0LE00700	ASTRO 090 SQUARE WASHER LED 700lm	3500K*	70°		DSI	SLA
AS20SQW0LE01000	ASTRO 090 SQUARE WASHER LED 1000lm	4000K			DALI	RSLA
AS20SQW0LE01300	ASTRO 090 SQUARE WASHER LED 1300lm					

\*LDC 10° only for 500lm  
\*3500K for 1000 and 1300lm

# ASTRO

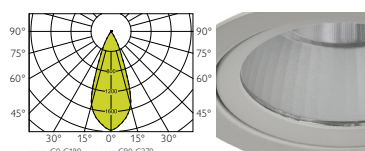
## 100 OPEN



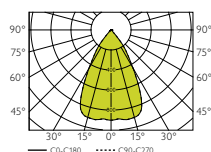
Fixed recessed downlight with deep set reflector. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Two steel springs ensures for the ASTRO 100 quick and secure installation in a wide range of ceiling types.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 100 OPEN 40deg 1000lm



Astro 100 OPEN 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

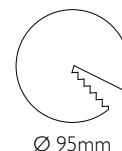
- RSS – specular symmetric reflector made of polished aluminium, available in medium 40° and wide 60° beam angle. Glare control secondary reflector. Decorative range of accessories.

### ELECTRICAL EQUIPMENT

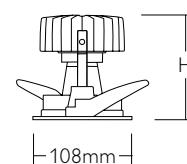
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Ø 95mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 100 OPEN LED 400lm	400	6	35W halogen	115
ASTRO 100 OPEN LED 700lm	700	12	75W halogen	115
ASTRO 100 OPEN LED 1000lm	1000	18	100W halogen	115
ASTRO 100 OPEN LED 1300lm	1300	21	2x18W TC-DEL	115

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS30OP00LE00400	ASTRO 100 OPEN LED 400lm	2700K	40°	80+	ECG	white	M3h
AS30OP00LE00700	ASTRO 100 OPEN LED 700lm	3000K	60°	98	DIM 1-10V	black	
AS30OP00LE01000	ASTRO 100 OPEN LED 1000lm	3500K*			DSI	matt nickel	
AS30OP00LE01300	ASTRO 100 OPEN LED 1300lm	4000K			DALI	gold	

\*3500K for 1000 a 1300lm

# ASTRO

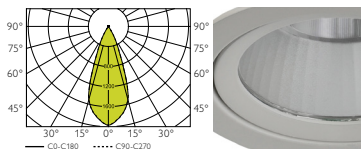
## 100 CLEAR



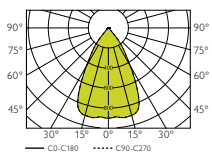
Fixed recessed downlight with deep set reflector covered with clear protective glass. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Two steel springs ensures for the ASTRO 100 quick and secure installation in a wide range of ceiling types.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 100 CLEAR 40deg 1000lm



Astro 100 CLEAR 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

- RSS – specular symmetric reflector made of polished aluminium, available in medium 40° and wide 60° beam angle. Glare control secondary reflector. Decorative range of accessories.

### ELECTRICAL EQUIPMENT

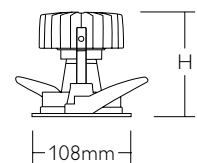
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Ø 95mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 100 CLEAR LED 400lm	400	6	35W halogen	115
ASTRO 100 CLEAR LED 700lm	700	12	75W halogen	115
ASTRO 100 CLEAR LED 1000lm	1000	18	100W halogen	115
ASTRO 100 CLEAR LED 1300lm	1300	21	2x18W TC-DEL	115

CODE	TYPE	SPECIFICATION				
		cct	ldc	cri	control gear	colour
AS30CL00LE00400	ASTRO 100 CLEAR LED 400lm	2700K	40°	80+	ECG	white
AS30CL00LE00700	ASTRO 100 CLEAR LED 700lm	3000K	60°	98	DIM 1-10V	black
AS30CL00LE01000	ASTRO 100 CLEAR LED 1000lm	3500K*			DSI	matt nickel
AS30CL00LE01300	ASTRO 100 CLEAR LED 1300lm	4000K			DALI	gold

\*3500K for 1000 and 1300lm

# ASTRO

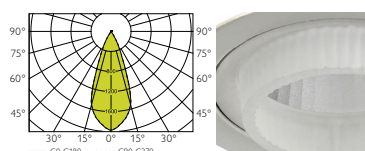
## 100 GLASS



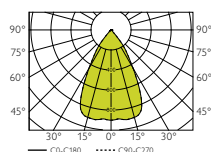
Fixed recessed downlight with deep set reflector covered with frosted cylindrical glass. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Two steel springs ensures for the ASTRO 100 quick and secure installation in a wide range of ceiling types.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 100 GLASS 40deg 1000lm



Astro 100 GLASS 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

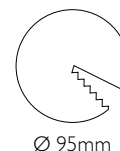
- RSS – specular symmetric reflector made of polished aluminium, available in medium 40° and wide 60° beam angle. Glare control secondary reflector. Decorative range of accessories.

### ELECTRICAL EQUIPMENT

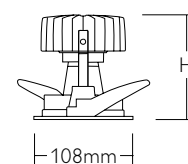
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Ø 95mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 100 GLASS LED 400lm	400	6	35W halogen	115
ASTRO 100 GLASS LED 700lm	700	12	75W halogen	115
ASTRO 100 GLASS LED 1000lm	1000	18	100W halogen	115
ASTRO 100 GLASS LED 1300lm	1300	21	2x18W TC-DEL	115

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS30GL00LE00400	ASTRO 100 GLASS LED 400lm	2700K	40°	80+	ECG	white	M3h
AS30GL00LE00700	ASTRO 100 GLASS LED 700lm	3000K	60°	98	DIM 1-10V	black	
AS30GL00LE01000	ASTRO 100 GLASS LED 1000lm	3500K*			DSI	matt nickel	
AS30GL00LE01300	ASTRO 100 GLASS LED 1300lm	4000K			DALI	gold	

\*3500K for 1000 and 1300lm

# ASTRO

## 100 DROP

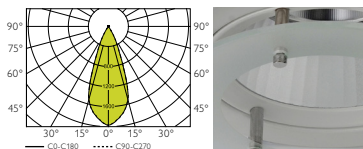


Fixed recessed downlight with deep set reflector covered with floating glass with frosted etched ring. Quality die cast construction with pre wired non-dimmable driver.

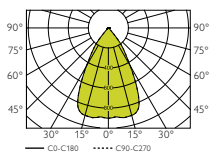
Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Two steel springs ensures for the ASTRO 100 quick and secure installation in a wide range of ceiling types.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 100 DROP 40deg 1000lm



Astro 100 DROP 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

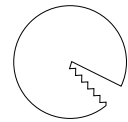
- RSS – specular symmetric reflector made of polished aluminium, available in medium 40° and wide 60° beam angle. Glare control secondary reflector. Decorative range of accessories.

### ELECTRICAL EQUIPMENT

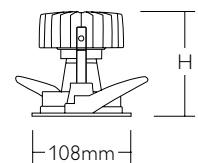
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Ø 95mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 100 DROP LED 400lm	400	6	35W halogen	115
ASTRO 100 DROP LED 700lm	700	12	75W halogen	115
ASTRO 100 DROP LED 1000lm	1000	18	100W halogen	115
ASTRO 100 DROP LED 1300lm	1300	21	2x18W TC-DEL	115

CODE	TYPE	SPECIFICATION	cct	ldc	cri	control gear	colour	accessories
AS30DROPLE00400	ASTRO 100 DROP LED 400lm		2700K	40°	80+	ECG	white	M3h
AS30DROPLE00700	ASTRO 100 DROP LED 700lm		3000K	60°	98	DIM 1-10V	black	
AS30DROPLE01000	ASTRO 100 DROP LED 1000lm		3500K*			DSI	matt nickel	
AS30DROPLE01300	ASTRO 100 DROP LED 1300lm		4000K			DALI	gold	

\*3500K for 1000 and 1300lm

# ASTRO

## 100 ADJUSTABLE

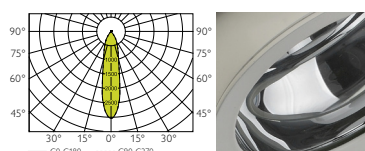


High output fully adjustable (28°/355°) downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications.

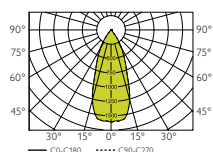
Cool running allowing safe and simple rotation and tilt. Zero UV or IR.

Two steel springs ensures for the ASTRO 100 quick and secure installation in a wide range of ceiling types

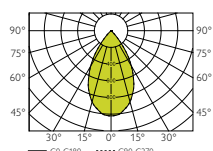
Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,7 kg



Astro 100 ADJUSTABLE 20deg 1000lm



Astro 100 ADJUSTABLE 40deg 1000lm



Astro 100 ADJUSTABLE 60deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

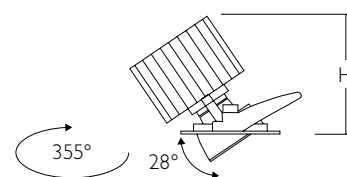
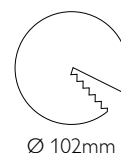
- RSS – specular symmetric reflector made of polished aluminium, available in narrow 20°, medium 40° and wide 60° beam angle. Protective clear glass.

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 100 ADJUSTABLE LED 400lm	400	6	35W halogen	102	102
ASTRO 100 ADJUSTABLE LED 700lm	700	12	75W halogen	102	102
ASTRO 100 ADJUSTABLE LED 1000lm	1000	18	100W halogen	102	102
ASTRO 100 ADJUSTABLE LED 1300lm	1300	21	2x18W TC-DEL	102	134
ASTRO 100 ADJUSTABLE LED 2000lm	2000	36	2x26W TC-DEL	134	134

CODE	TYPE	SPECIFICATION				
		cct	ldc	cri	control gear	colour
AS30ADJ0LE00400	ASTRO 100 ADJUSTABLE LED 400lm	2700K	20°	80+	ECG	white
AS30ADJ0LE00700	ASTRO 100 ADJUSTABLE LED 700lm	3000K	40°	98	DIM 1-10V	black
AS30ADJ0LE01000	ASTRO 100 ADJUSTABLE LED 1000lm	3500K*	60°		DSI	matt nickel
AS30ADJ0LE01300	ASTRO 100 ADJUSTABLE LED 1300lm	4000K			DALI	gold
AS30ADJ0LE02000	ASTRO 100 ADJUSTABLE LED 2000lm					

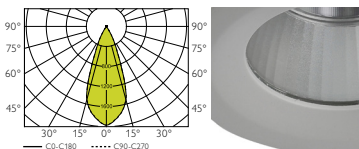
\*3500K for 1000 and 1300lm

# ASTRO

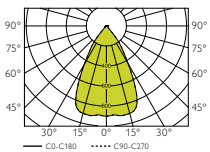
## 100 IP54



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP54
Weight	1 kg



Astro 100 IP54 40deg 1000lm



Astro 100 IP54 60deg 1000lm

Sealed recessed downlight with deep set reflector. IP54 to ceiling for wet room applications. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Two steel springs ensures for the ASTRO 100 quick and secure installation in a wide range of ceiling types.

Applications: bathrooms, swimming pools, corridors, restaurants, kitchens, residential areas, shops, hotels, bars..

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

- RSS – specular symmetric reflector made of polished aluminium, available in medium 40° and wide 60° beam angle. Glare control secondary reflector.

### ELECTRICAL EQUIPMENT

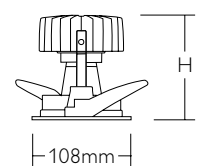
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Ø 95mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 100 IP54 LED 400lm	400	6	35W halogen	115
ASTRO 100 IP54 LED 700lm	700	12	75W halogen	115
ASTRO 100 IP54 LED 1000lm	1000	18	100W halogen	115
ASTRO 100 IP54 LED 1300lm	1300	21	2x18W TC-DEL	115

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS30IP54LE00400	ASTRO 100 IP54 LED 400lm	2700K	40°	80+	ECG	white	M3h
AS30IP54LE00700	ASTRO 100 IP54 LED 700lm	3000K	60°	98	DIM 1-10V	black	
AS30IP54LE01000	ASTRO 100 IP54 LED 1000lm	3500K*			DSI	matt nickel	
AS30IP54LE01300	ASTRO 100 IP54 LED 1300lm	4000K			DALI	gold	

\*3500K for 1000 and 1300lm

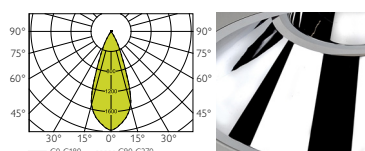


# ASTRO

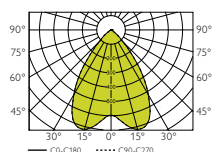
## 120



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,8 kg



Astro 120 40deg 1000lm



Astro 120 70deg 1000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

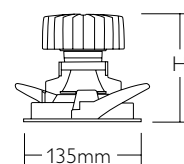
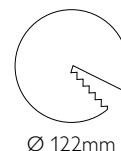
- RSS – specular symmetric reflector made of polished aluminium, available in 40° and 70° beam angle

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 120 LED 400lm	400	6	35W halogen	113	113
ASTRO 120 LED 700lm	700	12	75W halogen	113	145
ASTRO 120 LED 1000lm	1000	18	100W halogen	113	145
ASTRO 120 LED 1300lm	1300	21	2x18W TC-DEL	113	145
ASTRO 120 LED 2000lm	2000	36	2x26W TC-DEL	145	145

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS400000LE00400	ASTRO 120 LED 400lm	2700K	40°	80+	ECG	white	M3h
AS400000LE00700	ASTRO 120 LED 700lm	3000K	70°	98	DIM 1-10V		
AS400000LE01000	ASTRO 120 LED 1000lm	3500K*			DSI		
AS400000LE01300	ASTRO 120 LED 1300lm	4000K			DALI		
AS400000LE02000	ASTRO 120 LED 2000lm						

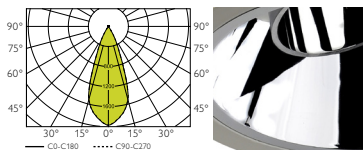
\*3500K for 1000 and 1300lm

# ASTRO

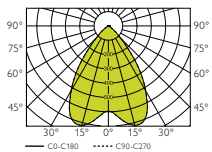
## 120 WASHER



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	0,8 kg



Astro 120 WASHER 40deg 1000lm



Astro 120 WASHER 70deg 1000lm

Adjustable wallwasher (30°/355°). Reduced glare with darklight appearance. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications.

Cool running allowing safe and simple rotation and tilt. Zero UV or IR. Ideal replacement for compact fluorescent, halogen and metal halide lamps.

Two steel springs ensures for the ASTRO 120 quick and secure installation in a wide range of ceiling types.

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

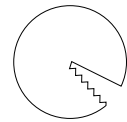
- RSA - specular asymmetric reflector made of polished aluminium, available in 40° and 70° beam angle.

### ELECTRICAL EQUIPMENT

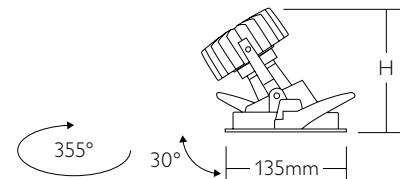
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- HLA - honeycomb louvre
- SLA - softening lens
- RSLA - ribbed spreading lens



Ø 122mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm) CRI80	H (mm) CRI98
ASTRO 120 WASHER LED 400lm	400	6	35W halogen	130	130
ASTRO 120 WASHER LED 700lm	700	12	75W halogen	130	130
ASTRO 120 WASHER LED 1000lm	1000	18	100W halogen	130	164
ASTRO 120 WASHER LED 1300lm	1300	21	2x18W TC-DEL	130	164
ASTRO 120 WASHER LED 2000lm	2000	36	2x26W TC-DEL	164	164

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS40W000LE00400	ASTRO 120 WASHER LED 400lm	2700K	40°	80+	ECG	white	M3h
AS40W000LE00700	ASTRO 120 WASHER LED 700lm	3000K	70°	98	DIM 1-10V		HLA
AS40W000LE01000	ASTRO 120 WASHER LED 1000lm	3500K*			DSI		SLA
AS40W000LE01300	ASTRO 120 WASHER LED 1300lm	4000K			DALI		RSGA
AS40W000LE02000	ASTRO 120 WASHER LED 2000lm						

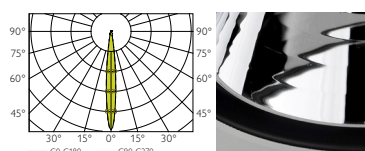
\*3500K for 1000 and 1300lm

# ASTRO

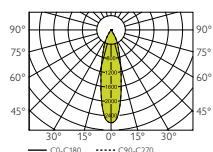
## 200



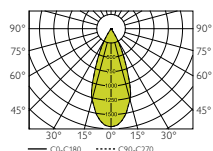
Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	1 kg



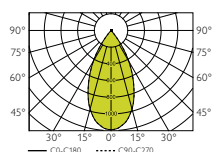
Astro 200 10deg 2000lm



Astro 200 25deg 2000lm



Astro 200 40deg 2000lm



Astro 200 50deg 2000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

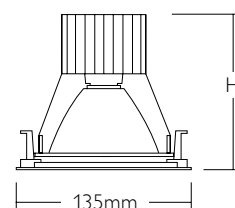
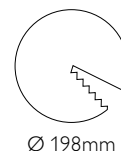
- RSS – specular symmetric reflector made of polished aluminium, available in 10°, 25°, 40° and 50° beam angle

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- CGAIP44 - IP44 cover glass
- HLA – honeycomb louvre
- RSGA – extension bezel



Type	Luminous flux (lm)	System power(W)	Equivalent	H (mm)
ASTRO 200 LED 700lm	700	12	75W halogen	181
ASTRO 200 LED 1000lm	1000	18	100W halogen	181
ASTRO 200 LED 1300lm	1300	21	2x18W TC-DEL	181
ASTRO 200 LED 2000lm	2000	36	2x26W TC-DEL	181
ASTRO 200 LED 3000lm	3000	45	2x32W TC-DEL	181

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS500000LE00700	ASTRO 200 LED 700lm	2700K	10°	80+	ECG	white	M3h
AS500000LE01000	ASTRO 200 LED 1000lm	3000K	25°	98	DIM 1-10V		HLA
AS500000LE01300	ASTRO 200 LED 1300lm	3500K*	40°		DSI		RSGA
AS500000LE02000	ASTRO 200 LED 2000lm	4000K	50°		DALI		CGAIP44
AS500000LE03000	ASTRO 200 LED 3000lm						

\*3500K only for 700lm

# ASTRO

## 200 FACET

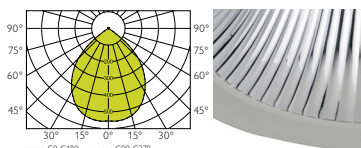


High output fixed downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Ideal replacement for compact fluorescent and metal halide lamps.

Utilising retractable suspension arms, the ASTRO 200 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	1 kg



Astro 200 FACET 3000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

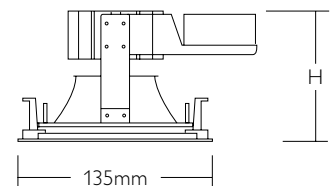
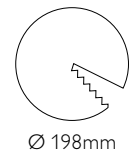
- RFS – facet symmetric reflector made of faced aluminium, available in wide 80° beam angle

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- CGAIP44 - IP44 cover glass
- HLA – honeycomb louvre
- RSGA – extension bezel



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 200 FACET LED 1250lm	1250	13	2x18W TC-DEL	138
ASTRO 200 FACET LED 1700lm	1700	20	2x18W TC-DEL	138
ASTRO 200 FACET LED 2250lm	2250	28	2x26W TC-DEL	138
ASTRO 200 FACET LED 3000lm	3000	42	2x32W TC-DEL	138
ASTRO 200 FACET LED 4000lm	4000	60	70W HI	138

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS50FAC0LE01250	ASTRO 200 FACET LED 1250lm	2700K	80°	80+	ECG	white	M3h
AS50FAC0LE01700	ASTRO 200 FACET LED 1700lm	3000K		98	DIM 1-10V		HLA
AS50FAC0LE02250	ASTRO 200 FACET LED 2250lm	3500K*			DSI		CGA IP44
AS50FAC0LE03000	ASTRO 200 FACET LED 3000lm	4000K			DALI		AB
AS50FAC0LE04000	ASTRO 200 FACET LED 4000lm						

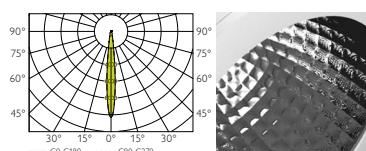
\*3500K only for 700lm

# ASTRO

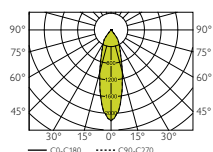
## 200 ADJUSTABLE



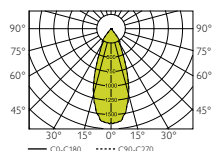
Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	1 kg



Astro 200 ADJUSTABLE 15deg 2000lm



Astro 200 ADJUSTABLE 28deg 2000lm



Astro 200 ADJUSTABLE 40deg 2000lm

Fully adjustable (40°/355°) scoop downlight. High output with passive heat sink. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Cool running allowing safe and simple rotation and tilt. Zero UV or IR. Ideal replacement for metal halide lamps.

Utilising retractable suspension arms, the ASTRO 200 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Applications: shops, shelf lighting, galleries, museums, corridors, restaurants, residential areas, meeting rooms, showrooms, hotels, bars.

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

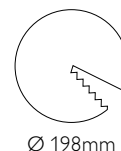
- RFS – facet symmetric reflector made of faced aluminium, available in 15°, 28° and 40° beam angle. Protective clear glass

### ELECTRICAL EQUIPMENT

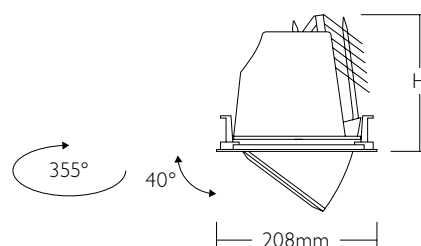
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- RSGA – extension bezel



Ø 198mm



Type	Lumious flux (lm)	System power (W)	Equivalent	H (mm)
ASTRO 200 ADJUSTABLE LED 700lm	700	12	75W halogen	176
ASTRO 200 ADJUSTABLE LED 1000lm	1000	18	100W halogen	176
ASTRO 200 ADJUSTABLE LED 1300lm	1300	21	20W HI	176
ASTRO 200 ADJUSTABLE LED 2000lm	2000	36	35W HI	176
ASTRO 200 ADJUSTABLE LED 3000lm	3000	45	50W HI	176

CODE	TYPE	SPECIFICATION				
		cct	ldc	cri	control gear	colour
AS50ADJ0LE00700	ASTRO 200 ADJUSTABLE LED 700lm	2700K	15°	80+	ECG	white
AS50ADJ0LE01000	ASTRO 200 ADJUSTABLE LED 1000lm	3000K	28°	98	DIM 1-10V	black
AS50ADJ0LE01300	ASTRO 200 ADJUSTABLE LED 1300lm	3500K*	40°		DSI	
AS50ADJ0LE02000	ASTRO 200 ADJUSTABLE LED 2000lm	4000K			DALI	
AS50ADJ0LE03000	ASTRO 200 ADJUSTABLE LED 3000lm					

\*3500K only for 700lm

# ASTRO

## 200 SQUARE

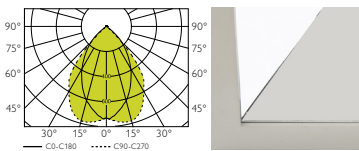


High output fixed downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Ideal replacement for compact fluorescent and metal halide lamps.

Utilising retractable suspension arms, the ASTRO 200 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Lamp	LED
Cooling	PASSIVE
Class	I
Krytie	IP20
Hmotnosť	1 kg



Astro 200 SQUARE 3000lm

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

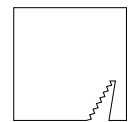
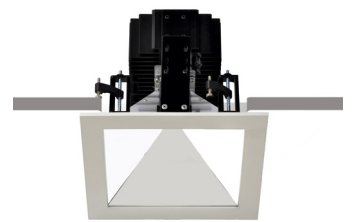
- RSS – square symmetric reflector made of polished aluminium, available in wide 60° beam angle

### ELECTRICAL EQUIPMENT

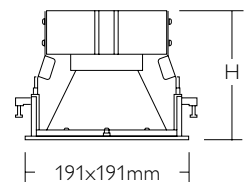
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- CGAIP44 - IP44 cover glass



176 x 176mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm) CRI 98
ASTRO 200 SQUARE LED 1250lm	1250	13	2x18W TC-DEL	152
ASTRO 200 SQUARE LED 1700lm	1700	20	2x18W TC-DEL	152
ASTRO 200 SQUARE LED 2250lm	2250	28	2x26W TC-DEL	152
ASTRO 200 SQUARE LED 3000lm	3000	42	2x32W TC-DEL	152
ASTRO 200 SQUARE LED 4000lm	4000	60	70W HI	152

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS50SQ00LE01250	ASTRO 200 SQUARE LED 1250lm	3000K	60°	80+	ECG	white	M3h
AS50SQ00LE01700	ASTRO 200 SQUARE LED 1700lm	3500K*		98	DIM 1-10V		CGA IP44
AS50SQ00LE02250	ASTRO 200 SQUARE LED 2250lm	4000K			DSI		LA
AS50SQ00LE03000	ASTRO 200 SQUARE LED 3000lm				DALI		
AS50SQ00LE04000	ASTRO 200 SQUARE LED 4000lm						

\*3500K only for 700lm

# ASTRO

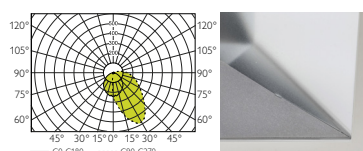
## 200 ASYMMETRIC



High output fixed asymmetric downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR. Ideal replacement for compact fluorescent and metal halide lamps.

Utilising retractable suspension arms, the ASTRO 200 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	1 kg



ASTRO 200 ASYMMETRIC

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

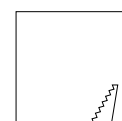
- RSA – specular asymmetric reflector made of polished aluminium

### ELECTRICAL EQUIPMENT

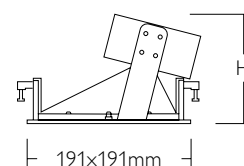
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- CGAIP44 - IP44 cover glass



176 x 176mm

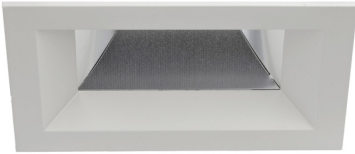


Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm) CRI 98
ASTRO 200 ASYMMETRIC LED 1250lm	1250	13	2x18W TC-DEL	140
ASTRO 200 ASYMMETRIC LED 1700lm	1700	20	2x18W TC-DEL	140
ASTRO 200 ASYMMETRIC LED 2250lm	2250	28	2x26W TC-DEL	140
ASTRO 200 ASYMMETRIC LED 3000lm	3000	42	2x32W TC-DEL	140
ASTRO 200 ASYMMETRIC LED 4000lm	4000	60	70W HI	140

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS50ASYMLE01250	ASTRO 200 ASYMMETRIC LED 1250lm	3000K		80+	ECG	white	M3h
AS50ASYMLE01700	ASTRO 200 ASYMMETRIC LED 1700lm	3500K		98	DIM 1-10V		CGA IP44
AS50ASYMLE02250	ASTRO 200 ASYMMETRIC LED 2250lm	4000K			DSI		LA
AS50ASYMLE03000	ASTRO 200 ASYMMETRIC LED 3000lm				DALI		
AS50ASYMLE04000	ASTRO 200 ASYMMETRIC LED 4000lm						

# ASTRO

## 200 RECTANGLE

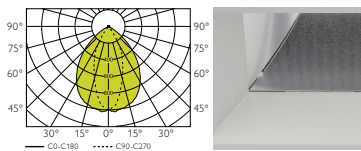


High output fixed downlight with deep set reflector. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Ideal replacement for compact fluorescent and metal halide lamps.

Utilising retractable suspension arms, the ASTRO 200 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	1 kg



Astro 200 RECTANGLE

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

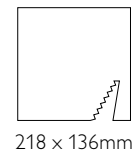
- RSS – specular symmetric reflector made of polished aluminium, available in wide 70° beam angle

### ELECTRICAL EQUIPMENT

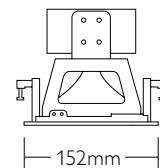
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

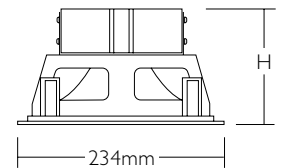
- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- CGAIP44 - IP44 cover glass



218 x 136mm



152mm



234mm

Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm) CRI 98
ASTRO 200 RECTANGLE LED 1250lm	1250	13	2x18W TC-DEL	138
ASTRO 200 RECTANGLE LED 1700lm	1700	20	2x18W TC-DEL	138
ASTRO 200 RECTANGLE LED 2250lm	2250	28	2x26W TC-DEL	138
ASTRO 200 RECTANGLE LED 3000lm	3000	42	2x32W TC-DEL	138
ASTRO 200 RECTANGLE LED 4000lm	4000	60	70W HI	138

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS50RECOLE01250	ASTRO 200 RECTANGLE LED 1250lm	3000K	70°	80+	ECG	white	M3h
AS50RECOLE01700	ASTRO 200 RECTANGLE LED 1700lm	3500K		98	DIM 1-10V		CGA IP44
AS50RECOLE02250	ASTRO 200 RECTANGLE LED 2250lm	4000K			DSI		LA
AS50RECOLE03000	ASTRO 200 RECTANGLE LED 3000lm				DALI		
AS50RECOLE04000	ASTRO 200 RECTANGLE LED 4000lm						



# ASTRO

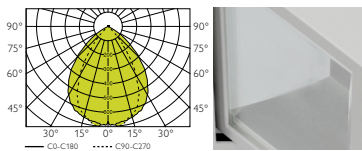
## 200 RECTANGLE ADJUSTABLE



High output tiltable (45°) recessed wallwasher. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Cool running allowing safe and simple tilt. Zero UV or IR. Ideal replacement for metal halide lamps.

Utilising retractable suspension arms, the ASTRO 200 fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	1 kg



Astro 200 RECTANGLE ADJUSTABLE

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

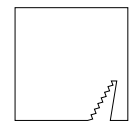
- RSS – specular symmetric reflector made of polished aluminium, available in wide 70° beam angle

### ELECTRICAL EQUIPMENT

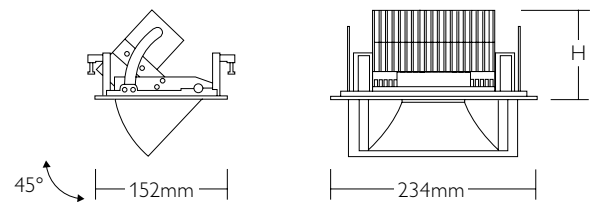
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with emergency unit (3h)
- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- CGAIP44 - IP44 cover glass



218 x 136mm



Type	Luminous flux (lm)	System power (W)	Equivalent	H (mm) CRI 98
ASTRO 200 RECTANGLE ADJUSTABLE LED 1250lm	1250	13	2x18W TC-DEL	111
ASTRO 200 RECTANGLE ADJUSTABLE LED 1700lm	1700	20	2x18W TC-DEL	111
ASTRO 200 RECTANGLE ADJUSTABLE LED 2250lm	2250	28	2x26W TC-DEL	111
ASTRO 200 RECTANGLE ADJUSTABLE LED 3000lm	3000	42	2x32W TC-DEL	111
ASTRO 200 RECTANGLE ADJUSTABLE LED 4000lm	4000	60	70W HI	111

CODE	TYPE	SPECIFICATION					
		cct	ldc	cri	control gear	colour	accessories
AS50RADJLE01250	ASTRO 200 RECTANGLE ADJUSTABLE LED 1250lm	3000K	70°	80+	ECG	white	M3h
AS50RADJLE01700	ASTRO 200 RECTANGLE ADJUSTABLE LED 1700lm	3500K		98	DIM 1-10V		
AS50RADJLE02250	ASTRO 200 RECTANGLE ADJUSTABLE LED 2250lm	4000K			DSI		
AS50RADJLE03000	ASTRO 200 RECTANGLE ADJUSTABLE LED 3000lm				DALI		
AS50RADJLE04000	ASTRO 200 RECTANGLE ADJUSTABLE LED 4000lm						

# ASTRO

## OPTIONAL EQUIPMENT

HLA



### HONEYCOMB LOUVRE

Limit the spread of light only to straight direction and avoid the glare by side view at reflector.

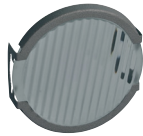
SLA



### SOFTENING LENS

Lens makes the light beam more diffused and soften the transition from illuminated surface to dark surrounding.

RLSA



### RIBBED SPREADING LENS

This type of optics creates little asymmetrical distribution of luminous flux. It extends the light beam in one axis, while keeping the same beam angle in the other axis.  
By horizontal orientation of ribs optics create vertical elliptical footprint and vice-versa.

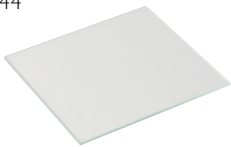
CGA



### CLEAR GLASS

Cover of optical system prevents from dust and from smudges on reflector caused by fingerprints.  
Advantage from the point of long-time operation – luminaire keeps its constant photometric characteristics.  
Easy maintenance – enough to clean dust from the cover in periodic intervals.

CGAIP44



### IP44 COVER GLASS

Increased protection of the optical system against ingress of objects and splashing water.  
Intended for demanding environment.

RSKA



### EXTENSION BEZEL

Accessory that extends the bezel to a cutout range of 210mm to 240mm.  
Available for Astro 200, Astro 200 Adjustable and Astro 200 Facet.



CARDEX

# CARDEX

## Flexible lighting system with variable lamp arrangement

The family of recessed, square gimbal downlights CARDEX is employing state of the art LED technology. It is the only LED product that not only guarantees a minimum five years life time, but also guarantees the quantity and quality of the light during the initial 5 year period. With wide range of optical systems and extra high colour rendering index CRI 98 for selected versions, CARDEX products represents the first choice technology for lighting professionals.



CARDEX 11



CARDEX 12



CARDEX 13



CARDEX 22



CARDEX 11 TRIMLESS

### GENERAL CHARACTERISTICS

- guarantee of minimum five years life time
- guarantee of no noticeable colour shift after 5 years operation
- guarantee of maximum 5% lumen loss across the installation after 5 years
- True Colour Elite – for applications, where colour rendering is paramount, selected versions are optionally available with LED modules with extra high colour rendering index CRI 98
- ideal replacement for halogen and metal halide lamps
- zero UV and IR radiation
- different beam angles
- available in 2700K, 3000K, 3500K a 4000K versions
- trimless option available for all versions - luminaire without visible outer frame



MADE IN EU

# CARDEX

## 11

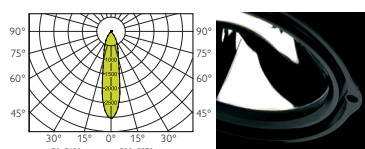


Square gimbal (30°) recessed downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

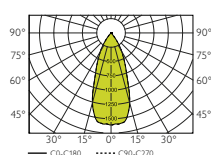
Cool running allows safe and simple aiming with a lockable tilt mechanism. Ideal replacement for halogen and metal halide lamps. Trimless option with skim bead.

Utilising retractable suspension arms, the CARDEX fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

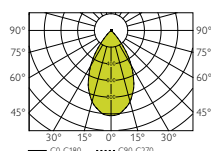
Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	1 kg



CARDEX 11 20deg



CARDEX 11 40deg



CARDEX 11 60deg

### INSTALLATION TYPE

- R – recessed luminaire
- TM – trimless, recessed luminaire without visible frame

### OPTICAL SYSTEM

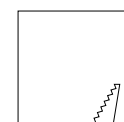
- RSS – specular symmetric reflector made of polished aluminium, available in 20°, 40° and 60° beam angle, providing ambient to dramatic effects

### ELECTRICAL EQUIPMENT

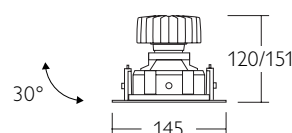
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- wired with emergency unit (3h)
- SC – snoot
- HLC – honeycomb louvre
- SLC – softening lens
- CGC – clear glass
- WIB – white inner body and rings
- TM – trimless version



134 x 134mm



Type	Luminous flux (lm)	Power (W) CRI80	Equivalent
CARDEX 11 R LED 700lm	700lm	12	75W halogen
CARDEX 11 R LED 1000lm	1000lm	18	100W halogen
CARDEX 11 R LED 1300lm	1300lm	21	20W HI
CARDEX 11 R LED 2000lm	2000lm	36	35W HI

### CODE TYPE

CA00R000LE00700	CARDEX 11 R LED 700lm
CA00R000LE01000	CARDEX 11 R LED 1000lm
CA00R000LE01300	CARDEX 11 R LED 1300lm
CA00R000LE02000	CARDEX 11 R LED 2000lm
CA00TM00LE00700	CARDEX 11 TM LED 700lm
CA00TM00LE01000	CARDEX 11 TM LED 1000lm
CA00TM00LE01300	CARDEX 11 TM LED 1300lm
CA00TM00LE02000	CARDEX 11 TM LED 2000lm

### SPECIFICATION

cct	optics	cri	control gear	colour	accessories
2700K	20°	80+	ECG	white	M 3h
3000K	40°	98	DIM 1-10V	matt nickel	SC
3500K*	60°		DSI		HLC
4000K			DALI		SLC
					CGC
					WIB

\*3500K for 1000lm and 1300lm

# CARDEX

## 12

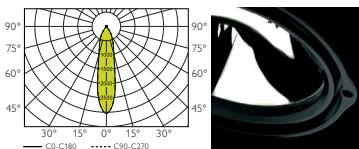


Twin gimbal (30°) recessed downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

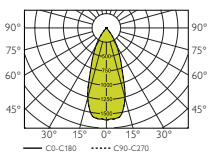
Cool running allows safe and simple aiming with a lockable tilt mechanism. Ideal replacement for halogen and metal halide lamps. Trimless option with skim bead.

Utilising retractable suspension arms, the CARDEX fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

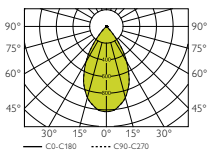
Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	2 kg



CARDEX 12 20deg



CARDEX 12 40deg



CARDEX 12 60deg

### INSTALLATION TYPE

- R – recessed luminaire
- TM – trimless, recessed luminaire without visible frame

### OPTICAL SYSTEM

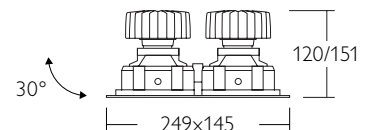
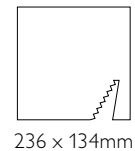
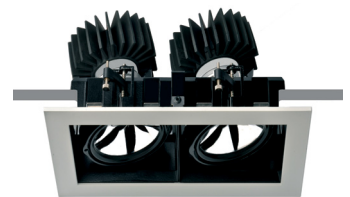
- RSS – specular symmetric reflector made of polished aluminium, available in 20°, 40° and 60° beam angle, providing ambient to dramatic effects

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- wired with emergency unit (3h)
- SC – snoot
- HLC – honeycomb louvre
- SLC – softening lens
- CGC – clear glass
- WIB – white inner body and rings
- TM – trimless version



Type	Luminous flux (lm)	Power (W) CRI80	Equivalent
CARDEX 12 R LED 700lm	2x700lm	24	2x75W halogen
CARDEX 12 R LED 1000lm	2x1000lm	36	2x100W halogen
CARDEX 12 R LED 1300lm	2x1300lm	42	2x20W HI
CARDEX 12 R LED 2000lm	2x2000lm	72	2x35W HI

CODE	TYPE	specification	cct	optics	cri	control gear	colour	accessories
CA10R000LE00700	CARDEX 12 R LED 700lm		2700K	20°	80+	ECG	white	M 3h
CA10R000LE01000	CARDEX 12 R LED 1000lm		3000K	40°	98	DIM 1-10V	matt nickel	SC
CA10R000LE01300	CARDEX 12 R LED 1300lm		3500K*	60°		DSI		HLC
CA10R000LE02000	CARDEX 12 R LED 2000lm		4000K			DALI		SLC
CA10TM00LE00700	CARDEX 12 TM LED 700lm							CGC
CA10TM00LE01000	CARDEX 12 TM LED 1000lm							WIB
CA10TM00LE01300	CARDEX 12 TM LED 1300lm							
CA10TM00LE02000	CARDEX 12 TM LED 2000lm							

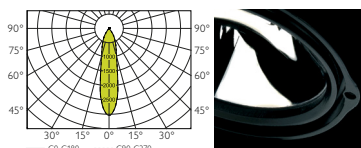
\*3500K for 1000lm and 1300lm

# CARDEX

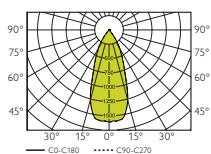
## 13



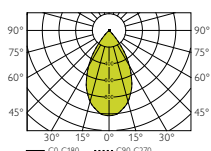
Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	3 kg



CARDEX 13 20deg



CARDEX 13 40deg



CARDEX 13 60deg

Triple gimbal (30°) recessed downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

Cool running allows safe and simple aiming with a lockable tilt mechanism. Ideal replacement for halogen and metal halide lamps. Trimless option with skim bead.

Utilising retractable suspension arms, the CARDEX fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

### INSTALLATION TYPE

- R – recessed luminaire
- TM – trimless, recessed luminaire without visible frame

### OPTICAL SYSTEM

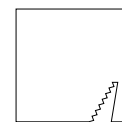
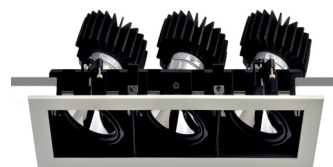
- RSS – specular symmetric reflector made of polished aluminium, available in 20°, 40° and 60° beam angle, providing ambient to dramatic effects

### ELECTRICAL EQUIPMENT

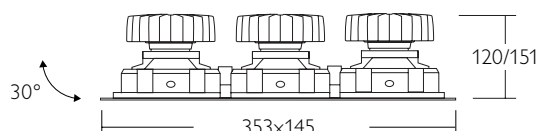
- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- wired with emergency unit (3h)
- SC – snoot
- HLC – honeycomb louvre
- SLC – softening lens
- CGC – clear glass
- WIB – white inner body and rings
- TM – trimless version



332 x 134mm



Type	Luminous flux (lm)	Power (W) CRI80	Equivalent
CARDEX 13 R LED 700lm	3x700lm	36	3x75W halogen
CARDEX 13 R LED 1000lm	3x1000lm	54	3x100W halogen
CARDEX 13 R LED 1300lm	3x1300lm	63	3x20W HI
CARDEX 13 R LED 2000lm	3x2000lm	108	3x35W HI

CODE	TYPE	specification	cct	optics	cri	control gear	colour	accessories
CA20R000LE00700	CARDEX 13 R LED 700lm		2700K	20°	80+	ECG	white	M 3h
CA20R000LE01000	CARDEX 13 R LED 1000lm		3000K	40°	98	DIM 1-10V	matt nickel	SC
CA20R000LE01300	CARDEX 13 R LED 1300lm		3500K*	60°		DSI		HLC
CA20R000LE02000	CARDEX 13 R LED 2000lm		4000K			DALI		SLC
CA20TM000LE00700	CARDEX 13 TM LED 700lm							CGC
CA20TM000LE01000	CARDEX 13 TM LED 1000lm							WIB
CA20TM000LE01300	CARDEX 13 TM LED 1300lm							
CA20TM000LE02000	CARDEX 13 TM LED 2000lm							

\*3500K for 1000lm and 1300lm



# CARDEX

## 22

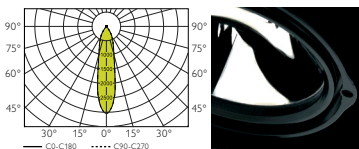


Quad gimbal (30°) recessed downlight. Quality die cast construction with pre wired non-dimmable driver. Available in CRI 98 True Colour Elite where colour rendering is paramount or CRI 80+ for general lighting applications. Zero UV or IR.

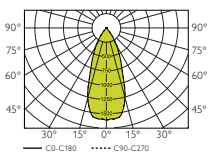
Cool running allows safe and simple aiming with a lockable tilt mechanism. Ideal replacement for halogen and metal halide lamps. Trimless option with skim bead.

Utilising retractable suspension arms, the CARDEX fast fix mechanism ensures quick and secure installation in a wide range of ceiling types down to 1mm.

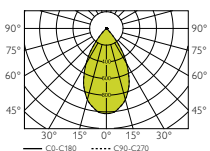
Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20
Weight	4 kg



CARDEX 22 20deg



CARDEX 22 40deg



CARDEX 22 60deg

### INSTALLATION TYPE

- R – recessed luminaire
- TM – trimless, recessed luminaire without visible frame

### OPTICAL SYSTEM

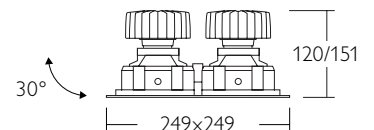
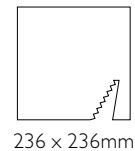
- RSS – specular symmetric reflector made of polished aluminium, available in 20°, 40° and 60° beam angle, providing ambient to dramatic effects

### ELECTRICAL EQUIPMENT

- electronic LED driver
- terminal block with strain relief, max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with dimmable control gear (DIM 1-10V, DSI or DALI)
- wired with emergency unit (3h)
- SC – snoot
- HLC – honeycomb louvre
- SLC – softening lens
- CGC – clear glass
- WIB – white inner body and rings
- TM – trimless version



Type	Luminous flux (lm)	Power (W) CRI80	Equivalent
CARDEX 22 R LED 700lm	4x700lm	48	4x75W halogen
CARDEX 22 R LED 1000lm	4x1000lm	72	4x100W halogen
CARDEX 22 R LED 1300lm	4x1300lm	84	4x20W HI
CARDEX 22 R LED 2000lm	4x2000lm	144	4x35W HI

CODE TYPE

### SPECIFICATION

	cct	optics	cri	control gear	colour	accessories
CA30R000LE00700	2700K	20°	80+	ECG	white	M 3h
CA30R000LE01000	3000K	40°	98	DIM 1-10V	matt nickel	SC
CA30R000LE01300	3500K*	60°		DSI		HLC
CA30R000LE02000	4000K			DALI		SLC
CA30TM00LE00700						CGC
CA30TM00LE01000						WIB
CA30TM00LE01300						
CA30TM00LE02000						

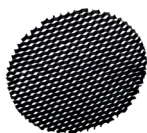
\*3500K for 1000lm and 1300lm



# CARDEX

## OPTIONAL EQUIPMENT

HLC



### HONEYCOMB LOUVRE

Reduces the light dispersion only to straight direction and prevents from glare from the side-view.

SC



### SNOOT

The snoot is used to create a tight beam of light, with sharp transition between illuminated surface and dark surrounding.

High accent factor is used by dramatic lighting, where only small part of object should be highlighted.

SLC



### SOFTENING LENS

Lens makes the light beam more diffused and soften the transition from illuminated surface to dark surrounding.

CGC



### CLEAR GLASS

Cover of optical system prevents from dust and from smudges on reflector caused by fingerprints.

Advantage from the point of long-time operation – luminaire keeps its constant photometric characteristics.

Easy maintenance – enough to clean dust from the cover in periodic intervals.

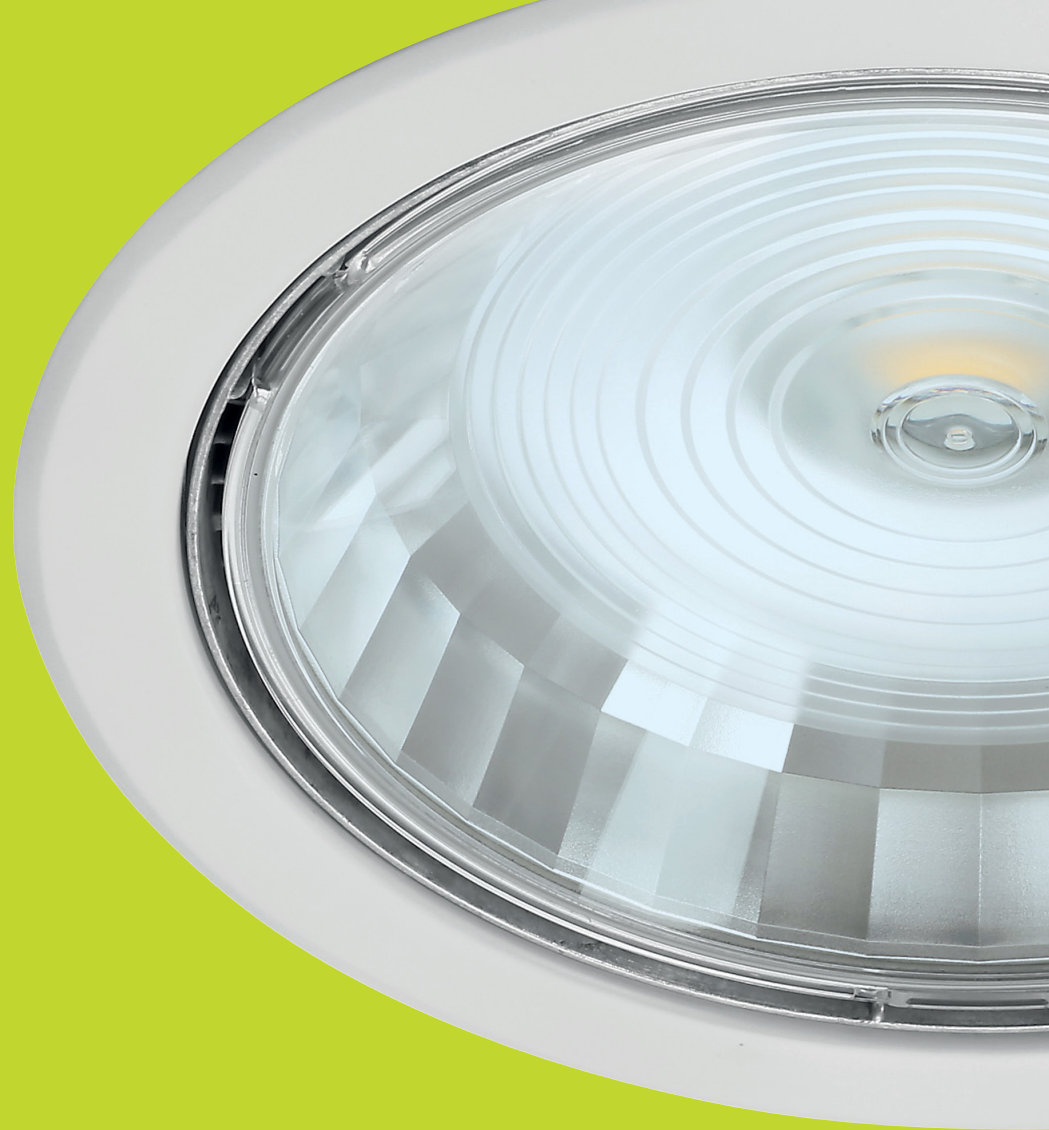
TM



### TRIMLESS

Skim bead for recessed installation of luminaire allows exact plastering in the level of ceiling, without disturbing luminaire frame.

Minimalistic, very clean architectural solution enables the luminaire to become part of the ceiling.



HELM

# HELM

## New generation of luminaires for administrative areas



HELM R LED

Powerfull downlight with optimally wide light distribution curve, dedicated to installation into ceiling tiles or plasterboard false ceilings. HELM use as a light source the new generation of LED module, that perfectly replace high power compact fluorescent lamps, mass-used until now. This solution brings to user huge advantages, in term of much lower consumption of electric energy, extreme long life of a light source and zero requirement for maintenance for the whole life time.

### GENERAL CHARACTERISTICS

- optimally wide light distribution curve, suitable for uniform illumination of different interior areas
- low installation height
- specially designed, patented optical system
- enclosed optical system - no dirt could reach optical parts, no change in photometric characteristics, simple maintenance
- luminance of light emitting area is in accordance with EN 12464-1: Light and lighting - lighting of indoor workplaces
- value UGR<19
- passive heat sink with patented construction
- optimized thermal management
- applications - offices, computer rooms, meeting rooms, classrooms, banks, corridors, showrooms, production areas, general public areas

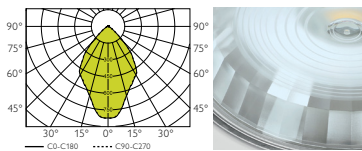


# HELM

## R LED



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20 / IP40
Weight	2,5 kg



HELM R LED 3400lm

Luminaire housing made of die cast aluminium, that serve at the same time as a passive heat sink for LED module. Patented thermal management. Bottom visible rim made of 0,6mm sheet steel, white powder coated finish (RAL9003). Other colours on request.

Specially designed, patented optical system is a combination of reflector and refractor. Their combination results in optimally wide light distribution curve. Refractor made of etched PMMA, metallised plastic reflector. Refractor is dust proof welded to reflector. Fast and tool-free installation into different types of false ceilings through the use of three strong sheet steel springs.

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

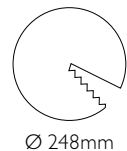
- specular symmetric reflector made of polished aluminium, available in wide 70° beam angle. Protective clear glass.

### ELECTRICAL EQUIPMENT

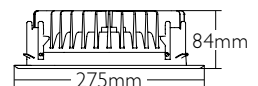
- 1 x multi-chip LED module
- electronic LED driver
- terminal block with strain relief, max. 2,5mm<sup>2</sup>
- class II on request

### OPTIONAL EQUIPMENT/ACCESSORIES

- components for fast electrical connection (Wieland, Wago)



Ø 248mm



Type	Lumious flux (lm)	System power (W)	Equivalent	CRI
HELM R LED 2600lm	2600	32	2x26W TC-TEL	80
HELM R LED 3400lm	3400	43	2x32W TC-TEL	80

CODE	TYPE	SPECIFICATION	cct	ldc	cri	control gear	colour	accessories
HM00R000LE02600	HELM R LED 2600lm		4000K	60°	80	ECG		
HM00R000LE03400	HELM R LED 3400lm							



**ORB LED**

# ORB LED

## Low energy solution in compact form



ORB LED V1 700lm



ORB LED V2 3000lm



ORB LED V3 1850lm



ORB LED ADJUSTABLE 2950lm

Downlighters from ORB range with powerful LED chip and robust aluminium housing are dedicated for installation into ceiling tiles or plasterboard false ceilings. Wide range of light outputs in combination with different types of optical systems guarantee the right selection of product for every application. Modern LED light sources from renowned producer with colour rendering index higher than 80 ensures very good perception and colour recognition in illuminated space.

### GENERAL CHARACTERISTICS

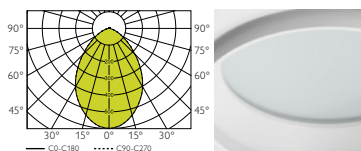
- passive heat sink
- high luminous efficiency, low power consumption
- high colour rendering index (CRI>80)
- dimmable on request
- considerate to environment – without mercury content
- harmless towards illuminated objects – zero UV and IR radiation
- luminaire housing made of die cast aluminium
- various diameters
- different types of optical system
- light output range 700 – 4000lm
- different power consumption depending upon requested light output
- available in 3000K and 4000K
- easy and reliable ceiling installation
- ORB LED V2 optical system with luminance of light emitting area in accordance with EN 12464-1: Light and lighting - lighting of indoor workplaces
- long lifetime 50.000 hours (L70/B50)
- application areas - corridors, general public areas, showrooms, sales areas, hotels, offices, computer rooms, meeting rooms, banks, residential areas

# ORB LED

## V1



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP44
Weight	0,3-2,2 kg



ORB LED V1 1300lm

Luminaire housing is a massive aluminium cast alloy, that serves at the same time as a passive heat sink for used LED chip. Bottom visible ring (twist&lock) made of aluminium, white powder coated finish (RAL9003). Other colours available on request.

Smaller diameters are fixed in the ceiling by help of two strong steel springs. Bigger ORB diameters are due to installation reliability fixed by three aluminium retractable arms, adjustable for various ceiling thickness (1-45mm) through screws hidden under the rim. Increased ingress protection against dirt and water (IP44) allows to utilize ORB in more demanding applications. Pleasant diffuse lighting characteristics. Perfect hiding capability of bottom diffuser (homogeneously backlighted, without visible LED hot spots).

### INSTALLATION TYPE

- R – luminaire recessed into various types of false ceilings such as plasterboard, ceiling tiles, wooden ceiling and similar

### OPTICAL SYSTEM

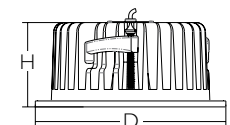
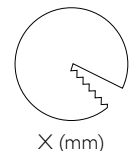
- DO – opal diffuser, made of sand blasted PMMA, available in wide 80° beam angle
- internal reflector with high portion of diffuse reflection for increase of optical efficiency

### ELECTRICAL EQUIPMENT

- external electronic control gear for LED
- strain relief for cable safety

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Type	System power (W)	Equivalent	D/X (mm)	H (mm)	kg
ORB LED V1 700lm	10	75W halogen lamp	100/90	67	0,3
ORB LED V1 1300lm	18	2x18W TC-DEL	147/125	80	0,7
ORB LED V1 2000lm	26	2x26W TC-DEL	208/175	92	1,7
ORB LED V1 3000lm	38	1x50W HI	230/205	102	2,2

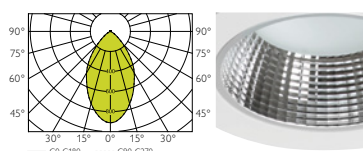
CODE	TYPE	SPECIFICATION	cct	optics	cri	control gear	colour	accessories
OL10R000LE00700	ORB LED V1 700lm		3000K	80°	85	ECG		
OL10R000LE01300	ORB LED V1 1300lm		4000K			DIM 1-10V		
OL10R000LE02000	ORB LED V1 2000lm					DALI		
OL10R000LE03000	ORB LED V1 3000lm							

# ORB LED

## V2



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP44
Weight	0,7-2,2 kg



ORB LED V2 1300lm

Luminaire housing is a massive aluminium cast alloy, that serves at the same time as a passive heat sink for used LED chip. Bottom visible ring (twist&lock) made of aluminium, white powder coated finish (RAL9003). Other colours available on request. Smaller diameters are fixed in the ceiling by help of two strong steel springs. Bigger ORB diameters are due to installation reliability fixed by three aluminium retractable arms, adjustable for various ceiling thickness (1-45mm) through screws hidden under the rim. Increased ingress protection against dirt and water (IP44) allows to utilize ORB in more demanding applications. Designed for applications with higher requirements for visual comfort. Secondary reflector for glare prevention. Value UGR<19.

### INSTALLATION TYPE

- R –luminaire recessed into various types of false ceilings such as plasterboard, ceiling tiles, wooden ceiling and similar

### OPTICAL SYSTEM

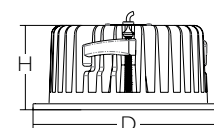
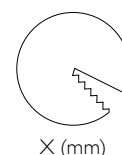
- DO – opal diffuser, made of sand blasted PMMA, internal reflector with high portion of diffuse reflection
- RFS – secondary faceted symmetric anti-glare reflector, available in medium 60° beam angle

### ELECTRICAL EQUIPMENT

- external electronic control gear for LED
- strain relief for cable safety

### OPTIONAL EQUIPMENT/ACCESSORIES

- wired with dimmable control gear (DIM 1-10V, DSI or DALI)



Type	System power (W)	Equivalent	D/X (mm)	H (mm)	kg
ORB LED V2 1300lm	18	2x18W TC-DEL	147/125	80	0,7
ORB LED V2 2000lm	26	2x26W TC-DEL	208/175	92	1,7
ORB LED V2 3000lm	38	1x50W HI	230/205	102	2,2
ORB LED V2 4000lm	57	1x70W HI	230/205	102	2,2

### CODE

### TYPE

OL21R000LE01300	ORB LED V2 1300lm
OL21R000LE02000	ORB LED V2 2000lm
OL21R000LE03000	ORB LED V2 3000lm
OL21R000LE04000	ORB LED V2 4000lm

### SPECIFICATION

cct	optics	cri	control gear	colour	accessories
3000K 4000K	60°	85	ECG DIM 1-10V DALI		

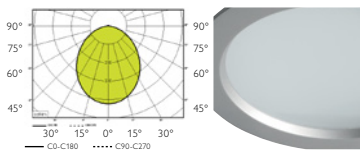


# ORB LED

## V3



Lamp	LED
Cooling	PASSIVE
Class	II
Ingress protection	IP44
Weight	0,7 kg



ORB LED V3 1850lm

High quality LED technology available to everybody.

Luminaire housing is a aluminium cast alloy, that serves at the same time as a passive heat sink for used LED chip. Bottom visible ring (twist&lock) made of aluminium, white powder coated finish (RAL9003).

ORB LED V3 are fixed in the ceiling by help of two steel springs. Increased ingress protection against dirt and water (IP44) allows to utilize ORB LED V3 in more demanding applications. Pleasant diffuse lighting characteristics. Perfect hiding capability of bottom diffuser (homogeneously backlighted, without visible LED hot spots).

### INSTALLATION TYPE

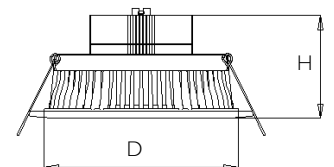
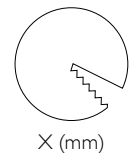
- R –luminaire recessed into various types of false ceilings such as plasterboard, ceiling tiles, wooden ceiling and similar

### OPTICAL SYSTEM

- DO – opal diffuser, made of PMMA, available in wide 100° beam angle

### ELECTRICAL EQUIPMENT

- external electronic control gear for LED



Type	System power (W)	Equivalent	D/X (mm)	H (mm)
ORB LED V3 350lm	6	35W halogen lamp	120/100	51
ORB LED V3 650lm	10	75W halogen lamp	180/158	64
ORB LED V3 1150lm	18	100W halogen lamp	190/167	88
ORB LED V3 1450lm	23	2x18W TC-DEL	230/196	110
ORB LED V3 1850lm	30	2x26W TC-DEL	230/196	110

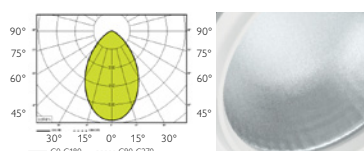
CODE	TYPE	SPECIFICATION	cct	optics	cri	control gear	colour	accessories
OL30R000LE00350	ORB LED V3 350lm		4000K	100°	85	ECG	white	
OL30R000LE00650	ORB LED V3 650lm		3000K*				grey	
OL30R000LE01150	ORB LED V3 1150lm							
OL30R000LE01450	ORB LED V3 1450lm							
OL30R000LE01850	ORB LED V3 1850LM							

# ORB LED

## ADJUSTABLE



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP43
Weight	1,4 kg



ORB LED ADJUSTABLE 2950lm

Recessed, fully adjustable (60°/355°) scoop downlight. High output with passive heat sink. Quality die cast construction with pre wired non-dimmable driver. Control gear could be fixed directly to the housing.

Cool running allowing safe and simple rotation and tilt. Zero UV or IR. Ideal replacement for metal halide lamps. Working temperature -20°C till +40°C.

ORB LED ADJUSTABLE are fixed in the ceiling by help of two steel springs.

Applications: shops, shelf lighting, galleries, museums, corridors, restaurants, residential areas, meeting rooms, showrooms, hotels, bars.

### INSTALLATION TYPE

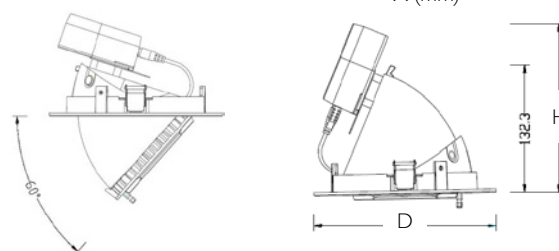
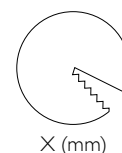
- R –luminaire recessed into various types of false ceilings such as plasterboard, ceiling tiles, wooden ceiling and similar

### OPTICAL SYSTEM

- RFS – facet symmetric reflector made of aluminium, available in 60° beam angle. Protective frosted glass.

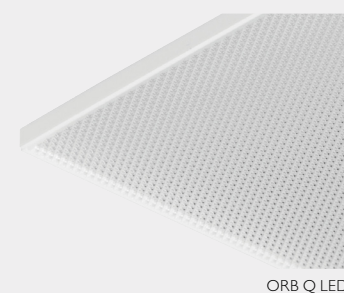
### ELECTRICAL EQUIPMENT

- external electronic control gear for LED

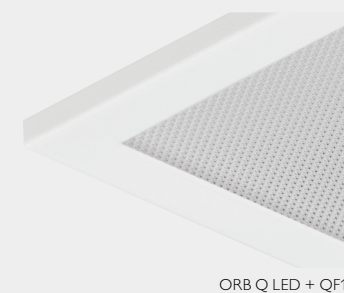


Type	System power (W)	Equivalent	D/X (mm)	H (mm)	kg
ORB LED ADJUSTABLE 2950lm	36	50WHI	195/175	175	1,4

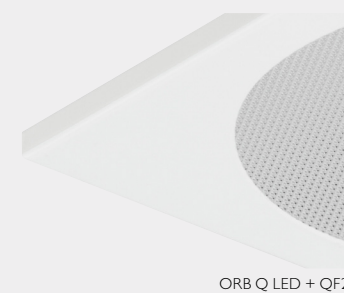
CODE	TYPE	SPECIFICATION	cct	optics	cri	control gear	colour	accessories
OLA0R000LE02950	ORB LED ADJUSTABLE 2950lm		4000K 3000K 5000K	60°	80	ECG	white	



ORB Q LED



ORB Q LED + QF1



ORB Q LED + QF2

LED

# ORB Q LED

Performance and simplicity.

## GENERAL CHARACTERISTICS

- passive heat sink
- high luminous efficiency, low power consumption
- high colour rendering index (CRI>80)
- available in 3000K and 4000K
- considerate to environment – without mercury content
- harmless towards illuminated objects – zero UV and IR radiation
- long lifetime 50.000 hours (L70/B50)
- optional two types of bottom frame
- on special request – different luminaire dimensions
- version with IP65 on request
- light output range 1100 – 2000lm
- application areas - corridors, residential areas, public areas, showrooms, hospitals, laboratories, shops, hotels, work rooms, meeting rooms, banks, restaurants, production areas, wet and dusty environments

## VALUE FOR PRICE

- 1 high ingress protection of optical part IP54
- 2 Osram LED module
- 3 ultra low weight 250g do not stress the ceiling construction
- 4 low installation height
- 5 extremely quick and reliable fixation into ceilings of different thickness just by one spring
- 6 two types of optical system
- 7 luminaire housing made of aluminium – excellent protection against corrosion, excellent cooling ability
- 8 product fully manufactured and assembled in Slovakia

## DO YOU STILL REALLY THINK THAT LED TECHNOLOGY IS EXPENSIVE?

ORB Q LED is a new luminaire, that was from the begin developed to reach balanced ratio between price, quality and technical parameters, for purpose of being attractive for wide group of concerned persons. The luminaire is designed for mass application in any type of areas, where downlights with incandescent or compact fluorescent lamps were used until now.

Downlight with powerful LED module and robust square aluminium housing, dedicated for recessed installation into T-bar ceilings, plasterboard ceilings or any other type of false ceilings.

Possibility to choose from two light outputs in combination with two types of optical systems ensures the right choice of product for every application. The basic version could be optionally complemented with two types of bottom decorative frame.

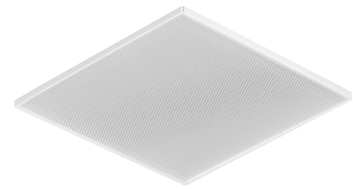
## THE MODERN LED MODULES FROM RENOWNED PRODUCER

- colour rendering index more than 80 guarantees very good colour perception and colour recognition in illuminated space
- luminous flux 1.100lm, and 2000lm
- pleasant warm temperature, preferred in residential interiors, is also available (3000K)

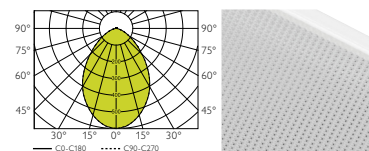


# ORB Q LED

## V1



Lamp	LED
Cooling	PASSIVE
Class	I
Ingress protection	IP20/54
Weight	0,25-0,34kg



ORB Q LED V1 1100lm DMP



OPAL / MICROPRISMATIC DIFFUSER

Luminaire housing is made of aluminium sheet, that serves as a passive heat sink of employed LED module at the same time. Luminaire housing finished with matt white powder coated colour (RAL9003). Bottom visible frames made of sheet steel, surface treated with white powder coated colour (RAL9003). Other colours on request.

Extremely quick and reliable fixation into ceilings of different thickness just by one strong steel spring. Increased ingress protection of the luminaire against dust and water (IP54) extends the application possibility also in demanding areas. Pleasant diffuse light distribution. Perfect hiding capability of bottom diffuser - homogeneously backlighted, without visible LED hot spots.

### INSTALLATION TYPE

- R –luminaire recessed into various types of false ceilings such as plasterboard, ceiling tiles, wooden ceiling and similar

### OPTICAL SYSTEM

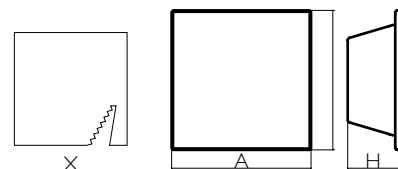
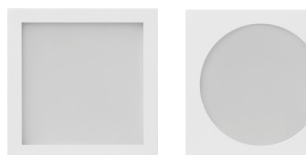
- DO – opal diffuser, made of sand blasted PC, wide beam angle, diffuse light distribution
- DMP - microprismatic diffuser made of PMMA (PC on request), semi-wide beam angle, increased glare prevention from side view
- white internal reflector with high portion of diffuse reflection for increase of optical efficiency

### ELECTRICAL EQUIPMENT

- direct supply with mains voltage (220-240V, 50/60Hz)
- 3-pole screwless terminal block 0,5-2,5 mm<sup>2</sup>
- strain relief for supply cable
- integrated safety thermal fuse - switches off the fixture in case of overheating

### OPTIONAL EQUIPMENT/ACCESSORIES

- QF1 - square decorative frame
- QF2 - square decorative frame with central circle
- optional colour of decorative frames



Type	System power (W)*	Equivalent	A/X (mm)	H (mm)	kg
ORB Q LED V1 1100lm	13	1x26W TC-DEL	155/130	60	0,25
ORB Q LED V1 2000lm	25	2x26W TC-DEL	155/130	82	0,34

\* CCT 4000K

CODE	TYPE	SPECIFICATION
		cct      optics      cri      control gear      accessories      colour of accessories
OLQ1R000LE01100	ORB Q LED V1 1100lm	3000K      DO      83           QF1      optionally
OLQ1R000LE02000	ORB Q LED V1 2000lm	4000K      DMP                QF2

General problems of many today's LED luminaires are:

- high price, thereby long pay-back time (event. no pay-back at all)
- weak technical parameters, uselessly trying to reach or to be better than fluorescent predecessors (low colour rendering index, availability only in cool white colour, low system efficiency of the luminaire)
- cheap components used, high failure rate

Uncompromising answer to all three points is the new ORB Q LED equipped with OSRAM technology. With it's price, this luminaire is definitely erasing the difference between luminaires utilizing classic technology and those utilizing LEDs.

OSRAM, as one of the market leaders in production of components for lighting industry is at the same time adequate guaranty of qualitative and technical parameters – colour rendering index CRI>80, two colour temperatures available warm 3000K and neutral 4000K, efficiency 84lm/W.

### Technology comparison

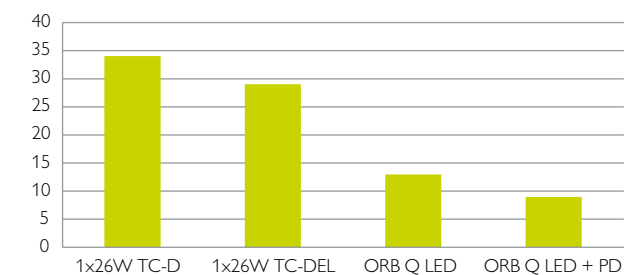
Type	Control gear	System power (W)*	Luminous flux (lamp)	Optical efficiency	Luminous flux (system)
1x26W TC-D	conventional control gear (B2)	34	1800 lm	0,65	1170
1x26W TC-DEL	standard electronic control gear (A3)	29	1800lm	0,65	1170
ORB Q LED V1 1100lm	direct 230V	13	1100lm	1	1100
ORB Q LED V1 1100lm + PD**	direct 230V, presence detector	0/13	0/1100lm	1	1100

\* system power consumptions according to CELMA Energy Efficiency Index (EEI)

\*\* PD = presence detector

### Energy consumption comparison

■ Power (W)\*

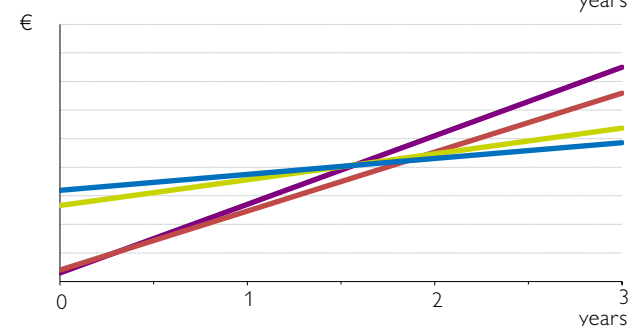
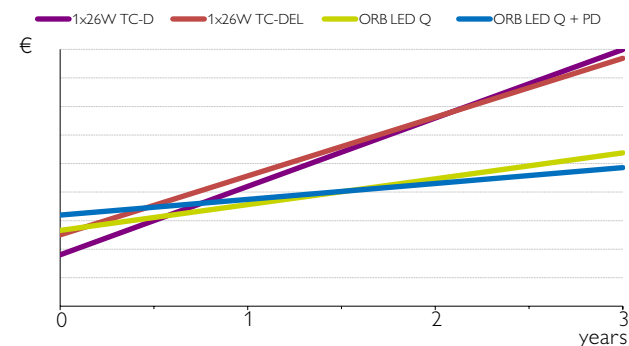


### THE NEW LIGHTING INSTALLATION

Speculations, if LED technology makes sense in specific space, eventually how long will be the pay-back time for the new LED installation, makes no sense in case of ORB Q LED: as purchasing price of ORB Q LED is equal or even lower than by fluorescent parents, the payback time is immediate. The user of lighting installation could enjoy advantages of LED technology from the first seconds after the luminaire installation - such as substantially lower power consumption, maintenance-free operation or very long lifetime of LED modules.

### REPLACEMENT OF EXISTING FLUORESCENT LUMINAIRES FOR THE NEW LED LUMINAIRES

As ORB Q LED needs substantially less electric energy to achieve the comparable lumen output to it's fluorescent equivalent, by it's low purchasing price, costs for reconstruction of the lighting installation could come back in a very short time – pay-back period is within two years. It means, that reconstruction of the original lighting installation based on fluorescents, makes sense at any time.







# UNIVERSAL DESIGN SPOT



# UNIVERSAL DESIGN SPOT

## Connection of function and emotion



UNIVERSAL DESIGN SPOT V1



UNIVERSAL DESIGN SPOT V2

Universal design spot is a powerful recessed spotlight with robust construction that combines functions of main light and decorative ambient light in one housing. Ambient ring is separately switchable and its main beauty becomes evident mainly in the evening hours, when with the help of colour, change the atmosphere in the room.

Universal design spot could serve for general as well as for complementary illumination of different interior areas.

### GENERAL CHARACTERISTICS

- adjustable angle of inclination  $\pm 20^\circ$
- passive heat sink
- high colour rendering index CRI > 80
- quick, tool free installation
- low installation depth 50mm
- decorative ring available in three ambient light colours – blue, white, amber
- zero UV and IR radiation
- available in 40° and 60° beam angle
- ideal replacement for halogen lamps
- version without decorative ring
- clear cover glass of reflector (IP44)

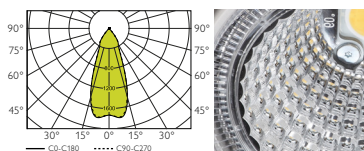


# UNIVERSAL DESIGN SPOT

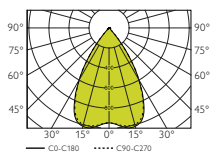
## V1



Lamp	LED
Cooling	PASSIVE
Class	III
Ingress protection	IP20
Weight	0,3 kg



UNIVERSAL DESIGN SPOT V1 40deg



UNIVERSAL DESIGN SPOT V1 60deg

Luminaire housing made of robust die cast aluminium, that serve as a passive heat sink for LED. Excellent thermal management. No overheating and low radiated heat. High colour rendering index CRI >80. Fast, tool free installation into different ceiling types by help of two strong steel springs. Very easy installation thanks to small installation depth (50 mm) and integrated terminal block.

Possible surface finish of the housing: white, light grey, dark grey.

Integrated decorative ring. Three ambient colours of light are available for decorative ring: blue, white or amber. Ambient light switch on automatically by minimum light level of main light. As soon as the main light is switched on, the ambient light switches off again.

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

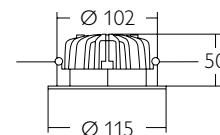
- RFS – facet symmetric reflector made of polished aluminium, available in 40° and 60° beam angle

### ELECTRICAL EQUIPMENT

- 1 x LED chip
- special electronic control gear for LED with two independent circuits for main and ambient light, standardly analog dimmable (1-10V)
- integrated terminal block max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- version without decorative ring
- CG IP44 – clear cover glass of reflector
- ACB – blue ambient light
- ACW – white ambient light
- ACA – amber ambient light



Type	Luminous flux (lm)	System power (W)	Equivalent
UNIVERSAL DESIGN SPOT V1 R LED 350lm	350lm	8	35W halogen
UNIVERSAL DESIGN SPOT V1 R LED 700lm	700lm	15	75W halogen
UNIVERSAL DESIGN SPOT V1 R LED 1150lm	1150lm	20	100W halogen

CODE	TYPE	cct	optics	cri	control gear	colour	accessories
HR10R000LE00350	UDS V1 R LED 350lm	2900K*	40°	80	DIM 1-10V	white	version
HR10R000LE00700	UDS V1 R LED 700lm	3000K	60°			light grey	without decorative
HR10R000LE01150	UDS V1 R LED 1150lm	4000K				dark grey	ring
							CG IP44
							ACB
							ACW
							ACA

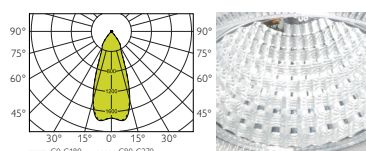
\*3500K for 1000lm and 1300lm

# UNIVERSAL DESIGN SPOT

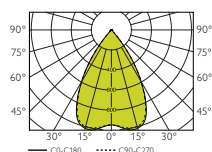
## V2



Lamp	LED
Cooling	PASÍVNE
Class	III
Ingress protection	IP20
Weight	0,3 kg



UNIVERSAL DESIGN SPOT V2 40deg



UNIVERSAL DESIGN SPOT V2 60deg

Luminaire housing made of robust die cast aluminium, that serve as a passive heat sink for LED. Excellent thermal management. No overheating and low radiated heat. High colour rendering index CRI >80. Fast, tool free installation into different ceiling types by help of two strong steel springs. Very easy installation thanks to small installation depth (50 mm) and integrated terminal block. Possible surface finish of the housing: white, light grey, dark grey. Decorative ring lowered under level of ceiling. Three ambient colours of light are available for decorative ring: blue, white or amber. Ambient light switch on automatically by minimum light level of main light. As soon as the main light is switched on, the ambient light switches off again.

### INSTALLATION TYPE

- R – recessed luminaire

### OPTICAL SYSTEM

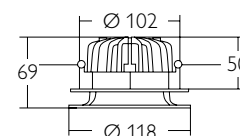
- RFS – facet symmetric reflector made of polished aluminium, available in 40° and 60° beam angle

### ELECTRICAL EQUIPMENT

- 1 x LED chip
- special electronic control gear for LED with two independent circuits for main and ambient light, standardly analog dimmable (1-10V)
- integrated terminal block max. 1,5mm<sup>2</sup>

### OPTIONAL EQUIPMENT/ACCESSORIES

- ACB – blue ambient light
- ACW – white ambient light
- ACA – amber ambient light

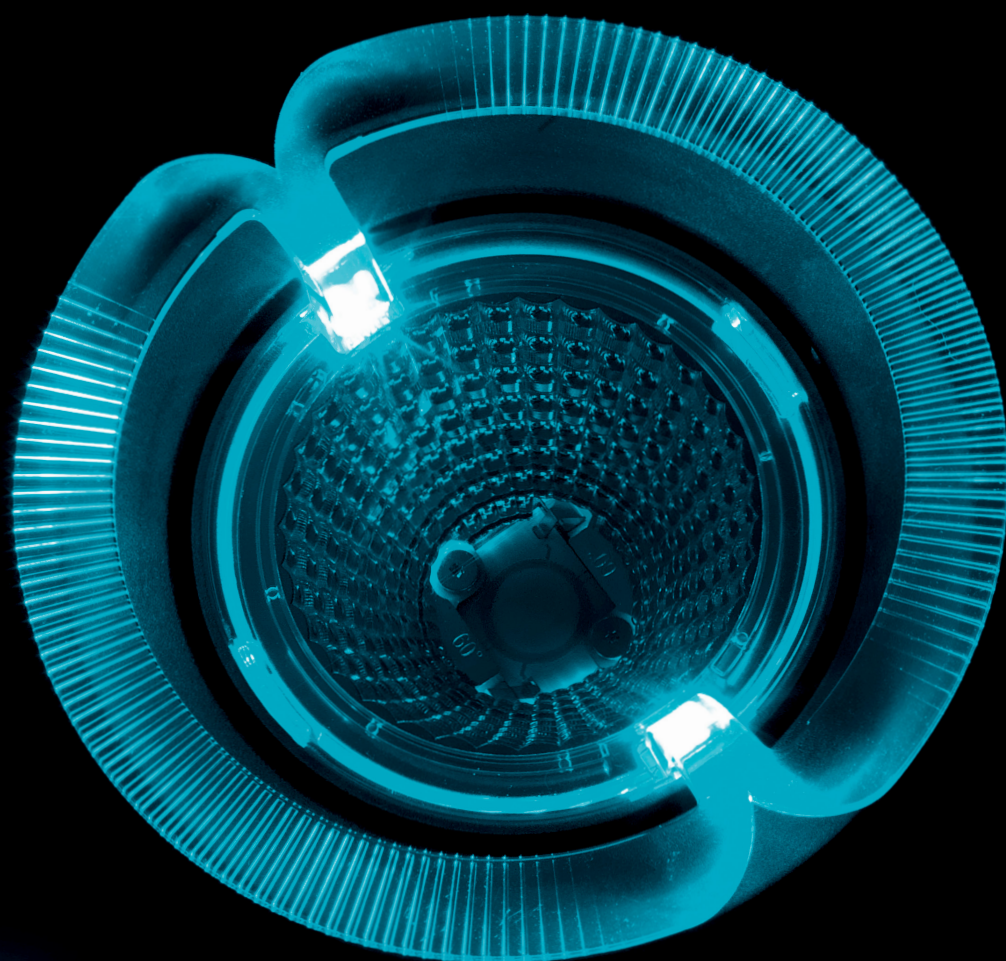


Type	Luminous flux (lm)	System power (W)	Equivalent
UNIVERSAL DESIGN SPOT V2 R LED 350lm	350lm	8	35W halogen
UNIVERSAL DESIGN SPOT V2 R LED 700lm	700lm	15	75W halogen
UNIVERSAL DESIGN SPOT V2 R LED 1150lm	1150lm	20	100W halogen

CODE	TYPE	specification	cct	optics	cri	control gear	colour	accessories
HR20R000LE00350	UDS V2 R LED 350lm		2900K*	40°	80	DIM 1-10V	white	ACB
HR20R000LE00700	UDS V2 R LED 700lm		3000K*	60°			light grey	ACW
HR20R000LE01150	UDS V2 R LED 1150lm		4000K*				dark grey	ACA

\*2900K only for 350lm  
3000K for 700 and 1150lm  
4000K for 700 and 1150lm





# ARQUILED

BRIGHT NEW FUTURE

Se pretende saber mais informações sobre estes produtos ou outras soluções de iluminação contacte-nos.

Ficamos à sua espera.

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