VER. 01















DOWNLIGHTS

BLACK HOLE series is a range of product which has black ring design. These products are widely used in commercial and hospitality area.



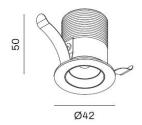


BLACK HOLE/SPOT LIGHT/FIXED

Model: RR-DL3357







→ Cutout: 35mm✓ 5-25mm

Feature:

- MINI Size
- Black Ring
- Low UGR

Technical data:

Light source
 LED Power (max)
 System Power (ref.)
 COB or others
 5.4W (150mA, 36V)
 7W (ref. only depends on the ECG)

■ Lumen flux (typ.) 500lm

Colour temperature 2700K, 3000K, 4000K

Colour rendering index Ra≥90MacAdam Step 3

■ Beam Angle 20D, 40D PMMA Lens

Tiltable No
 Ingress protection IP21
 Operation temperature 0-40C
 Protection Class III

LED Life time
 Finishing
 Baffle Finishing
 Black

■ Construction Aluminum

Installation Ceiling Recessed, Spring type

■ Dimension 42mm(OD)x50mm(H)/Cutout 35mm

LED Driver RemoteTrimless version No

Electronic control gear

NON-DIM/Dimmable MP series

1-10V/0-10V/DALI SC series

Other brand is available upon request

*Use IDP multi-power LED Driver can trim down the output power according to actual application.

wide 36°

Light Distribution For 3000K

medium 20°

h(m)	E(Ix)	ø(m)
1	1985	ø0.35
2	496.3	ø0.70
3	220.6	ø1.06
4	124.1	ø1.41
5	79.41	ø1.77

h(m)	E(Ix)	ø(m
1	835.0	ø0.63
2	208.7	ø1.27
3	92.77	ø1.91
4	52.19	ø2.55
5	33.40	ø3.19

^{**}The specification is subject to change without note.**

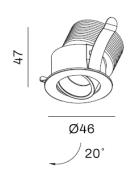


BLACK HOLE/SPOT DOWNLIGHT/TILTABLE

Model: RR-DL3358







→ Cutout: 40mm✓ 5-25mm

Feature:

- Compact size
- Black Ring
- Low UGR

Technical data:

Light source
 LED Power (max)
 System Power (ref.)
 COB or others
 5.4W (150mA, 36V)
 7W (ref. only depends on the ECG)

■ Lumen flux (typ.) 500lm

Colour temperature 2700K, 3000K, 4000K

Colour rendering index Ra≥90MacAdam Step 3

Beam Angle
 20D PMMA Lens

Tiltable Yes
 Ingress protection IP21
 Operation temperature 0-40C
 Protection Class III

LED Life time
 Finishing
 Baffle Finishing
 Construction
 S0,000h L70B10
 White/Black
 Black
 Aluminum

Installation Ceiling Recessed, Spring type

Dimension 46mm(OD)x47mm(H)/Cutout 40mm

LED Driver RemoteTrimless No

Electronic control gear

NON-DIM/Dimmable INP MP series
1-10V/0-10V/DALI SC series

Other brand is available upon request

*Use IDP multi-power LED Driver can trim down the output power according to actual application.

Light Distribution For 2700K

spot 20.4°

h(m)	E(Ix)	ø(m
1	1494	ø0.36
2	373.5	ø0.72
3	166.0	ø1.08
4	93.38	ø1.44
5	59.76	ø1.80

^{**}The specification is subject to change without note.**

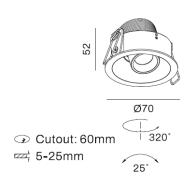


BLACK HOLE/SPOT LIGHT/TILTABLE/SNOOT

Model: RR-DL3526







Feature:

- Compact size
- Compact snoot
- Low UGR

Technical data:

Light source COB or others
 LED Power (max) 5.4W (150mA, 36V)
 System Power (ref.) 7W (ref. only depends on the ECG)

■ Lumen flux (typ.) 500lm

Colour temperature 2700K, 3000K, 4000K

Colour rendering index Ra≥90MacAdam Step 3

Beam Angle 20D PMMA Lens

Tiltable Yes
 Ingress protection IP21
 Operation temperature 0-40C
 Protection Class III

LED Life time 50,000h L70B10
 Finishing White/Black
 Baffle finishing Black
 Construction Aluminum

Installation Ceiling Recessed, Spring type

■ Dimension 70mm(OD)x52mm(H)/Cutout 60mm

LED Driver remoteTrimless version No

Electronic control gear

Other brand is available upon request

*Use IDP multi-power LED Driver can trim down the output power according to actual application.

^{**}The specification is subject to change without note.**

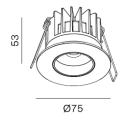


BLACK HOLE/SPOT LIGHT/FIXED

Model: RR-DL3061







→ Cutout: 65mm✓ 5-25mm

Feature:

- Compact size
- Simple
- Low UGR

Technical data:

Light source COB or others
 LED Power (max) 9W (250mA, 36V)
 System Power (ref.) 11W (ref. only depends on the ECG)

■ Lumen flux (typ.) 800lm

Colour temperature 2700K, 3000K, 4000K

Colour rendering index Ra≥90MacAdam Step 3

Beam Angle
 20D, 36D, 50D PMMA Lens

Tiltable Yes
 Ingress protection IP54
 Operation temperature 0-40C
 Protection Class III

LED Life time 50,000h L70B10
 Finishing White/Black
 Baffle finishing Black

Construction Aluminum

■ Installation Ceiling Recessed, Spring type
■ Dimension 75mm(AD)v53mm(AL) / Cutout 65m

■ Dimension 75mm(OD)x53mm(H)/Cutout 65mm

LED Driver RemoteTrimless version No

Electronic control gear

Other brand is available upon request

 * Use IDP multi-power LED Driver can trim down the output power according to actual application.

^{**}The specification is subject to change without note.**

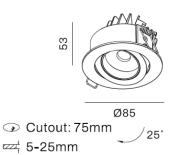


BLACK HOLE/SPOT LIGHT/TILTABLE

Model: RR-DL3060







Feature:

- Compact size
- Simple
- Low UGR

Technical data:

Light source COB or others
 LED Power (max) 9W (250mA, 36V)
 System Power (ref.) 11W (ref. only depends on the ECG)

■ Lumen flux (typ.) 800lm

Colour temperature 2700K, 3000K, 4000K

Colour rendering index Ra≥90
MacAdam Step 3

Beam Angle 20D, 36D, 50D PMMA Lens

Tiltable Yes
 Ingress protection IP54
 Operation temperature 0-40C
 Protection Class III

LED Life time 50,000h L70B10
 Finishing White/Black
 Baffle finishing Black
 Construction Aluminum

Installation Ceiling Recessed, Spring type

■ Dimension 85mm(OD)x53mm(H)/Cutout 75mm

LED Driver RemoteTrimless version No

Electronic control gear

Other brand is available upon request

 * Use IDP multi-power LED Driver can trim down the output power according to actual application.

^{**}The specification is subject to change without note.**



BLACK HOLE/SPOT LIGHT/TILTABLE/SNOOT

Model: RR-DL3382







,02

Cutout: 82mm

∞ 5-25mm



Feature:

- Compact size
- Compact snoot
- Low UGR

Technical data:

Light source COB or others
 LED Power (max) 9W (250mA, 36V)
 System Power (ref.) 11W (ref. only depends on the ECG)

■ Lumen flux (typ.) 800lm

Colour temperature 2700K, 3000K, 4000K

Colour rendering index Ra≥90MacAdam Step 3

Beam Angle 15D, 24D, 36D, 50D PMMA Lens

Tiltable Yes
 Ingress protection IP21
 Operation temperature 0-40C
 Protection Class III

LED Life time 50,000h L70B10
 Finishing White/Black
 Baffle finishing Black
 Construction Aluminum

Installation Ceiling Recessed, Spring type

■ Dimension 92mm(OD)x76mm(H)/Cutout 82mm

LED Driver
 Remote

■ Trimless versin Yes, please contact us in detail

Electronic control gear

Other brand is available upon request



^{**}The specification is subject to change without note.**

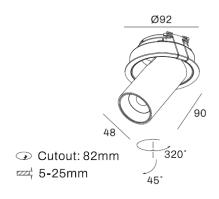


BLACK HOLE/SPOT DOWNLIGHT/TILTABLE

Model: RR-DL3562







Feature:

- Compact size
- Semi Recessed with adjustable spot light
- Low UGR

Technical data:

Light source
 LED Power (max)
 System Power (ref.)
 COB or others
 7.2W (200mA, 36V)
 9W (ref. only depends on the ECG)

■ Lumen flux (typ.) 700lm

Colour temperature 2700K, 3000K, 4000K

Colour rendering index Ra≥90MacAdam Step 3

Beam Angle 15D, 24D, 36D PMMA Lens

Tiltable Yes
 Ingress protection IP21
 Operation temperature 0-40C
 Protection Class III

LED Life time 50,000h L70B10
 Finishing White/Black
 Baffle finishing Black

Construction Aluminum

Installation Ceiling Recessed, spring type
 Dimension 48mm(OD)x90mm(H)/Cutout 92mm

LED Driver
 Remote

■ Trimless vesrion Yes, please contact us in detail

Electronic control gear

Other brand is available upon request

*Use IDP multi-power LED Driver can trim down the output power according to actual application.

Light Distribution For 3000K

wide 40.5°

h(m)	E(Ix)	ø(m
1	1247	ø0.74
2	311.6	ø1.48
3	138.5	ø2.21
4	77.91	ø2.95
5	49.86	ø3.69

^{**}The specification is subject to change without note.**