# Product Datasheet COOLICS R70A DS10 Adjustable LED Downlight



Indoor architectural & general lighting



## Product information: Features and benefits

- Advanced downlight application
- Choices of LEDiL's MINNIE and MIRA optics
- Optimized for light beams up to ~60 degrees FWHM, meaning optimal balance between UGR value and light output towards downlight area that is supposed to be illuminated
- Design allows tilt between 0...30 degrees with all luminaires attached
- Balanced assembly holds heatsink in all tilt positions
- Total weight of luminaire is only 135g
- Lifetime up to 50,000 h
- Color temperature 3000K, 4000K
- Dimmable
- Type of protection IP20

### Connector, plug and play

- Heatsink is equipped with 2 pcs through-board TE-connectors (2213189-1)
- Design allows solder-free wire connection from behind the heatsink

#### Applications

- Indoor architectural
- Retail display Light
- Commercial lighting
- Hotel lighting
- Bar & Restaurant
- General lighting
- Museum & Gallery

## **Structures & Materials**

Optics:

Ledil; Lens MIRA; 54°. Material PC Ledil: Reflector MINNIE; Material PC Heat-Sink: Coolics, Thermal conductive plastic Bezel: Ledil; AINO PC+ASA blend LED: Osram Duris S 10

## Assembly tips on roof

- 1. Make a ~70 mm diameter recess on roof
- 2. Connect power wire
- 3. Push springs open on both sides
- 4. Put the lamp in to the roof recess hole
- 5. Release springs
- Please note that collar is compatible with flat roofs up to ~22mm thickness maximum.







### **Technical Data**

Dimensio <b>as</b> d weight	
• Diameter	80 <i>,</i> 0mm
• Height	84 <i>,</i> 5mm
• Weight	135g

- Roof recess
- Flat roof thickness
- 67,0-71,0 mm (recommended 70mm)
- up to -22mm



Electrical data • Operating mode • Nominal wattage • Nominal voltage	Dimmable (with suitable drivers) 200mA = 5,4 W   250mA = 6,9W 28V, power supply 220240 V	
Photometrical data • Color temperature • Light color (designation) • Luminous flux	3000 K   4000 K   Warm white   White   200mA = 580 lm   250mA = 700 lm	
Light technical data • Beam angle • Light distribution	Optional MIRA 54° MINNIE-XW 86° (MIRA FAMILY 22°, 34° 54°   MINNIE 21°, 86°)* tilt between 030 degrees	
	* Optical possibilities on special demand	
Colors & materials • Body material • Cover material • Reflector material	Black, Coolics, thermal conductive plastic White, Polycarbonate (PC) + ASA blend White, HRPC	
Temperatures & operating conditions • Ambient temperature range	≤+30°C	
Type of installation	Recessed	



Type of connection	Cable, 0,65 - 1 mm²
Certificates & standards Type of protection ROHS Compliant	IP20 Yes
Order reference:	Coolics R70 DS10 MA 54 (Optics 54°) Coolics R70 DS10 ME 86 (Optics 86°)

## **OPTICAL INFORMATION**

#### PRODUCT DATASHEET

## COOLICS R70 DS10 MA54

#### DETAILS

Туре	Lens. Ledil MIRA-WW
Color	clear
Diameter	32,4 mm
Height	14,7 mm
Style	round
Optic Material	PC
ROHS Compliant	Yes

#### **OPTICAL PROPERTIES**

LED	Duris S10
Viewing Angle	54°
Light Beam	Very Wide
Efficiency	86%
cd/lm	1.100



Relative intensity of C12502\_MIRA-WW\_(Duris\_S10)



## COOLICS R70 DS10 ME86

#### DETAILS

Туре	Reflector, Ledil MINNHXW
Color	white
Diameter	32 <i>,</i> 4 mm
Height	14,75 mm
Style	round
Optic Material	HRPC
ROHS Compliant	Yes

#### **OPTICAL PROPERTIES**

LED	Duris S10
Viewing Angle	86°
Light Beam	WWW-class
Efficiency	92%
cd/lm	0,500

Relative intensity of C13526\_MINNIE-XW\_(Duris\_S10)





### **COOLICS R70A simulated Cone diagram**

Cone diameter BA-50% CO-180/ C90-270 (m)

Distance (m)	Distance (m)		Illuminance in the Cone center (lx)			
		200mA	200mA	250mA	250mA	
		Optics 54°	Optics 86°	Optics 54°	Optics 86°	
0.5		3388	1374	4089	1659	
1.0		847	343	1022	414	
1.5		376	152	454	184	
2.0		212	86	255	104	
2.5		136	55	163	66	
3.0		94	38	113	46	

#### **Application example**

- C12502\_MIRA-WW as 1000 lm led light output.
- What AINO brings to an already good LEDiL single optic performance is a glare shield to support room atmosphere where high flux downlights are needed but direct light has to be avoided.
- When lamp spacing = mounting height / 1000LM led drive UGR < 6
- When lamp spacing 0.5 from mounting height / 1000LM led drive UGR < 16
- When lamp spacing 0.3 from mounting height / 1000LM led drive UGR < 19



Lamonare. LEDL OY C12002, MRA-WW, GLasson, MJ, Ams Lamon, 1 x Knuesteknikan, Brataun JLasson, MJ, 205 ABmg2550nA, P=2 T139W, I+0 2499A





#### **Coolics Oy**

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Coolics Oy is a flexible and innovative company offering highest quality injection moulded LED Heatsink Modules and Components that are made of Thermally Conductive Polymers (TCP's). This Future Heatsink Technology will guarantee several benefits to our Customers including Lower Carbon Footprint, reduced weight, inherent corrosion resistance and total customization of the final product, including also design of the custom made solutions where lighting element itself works as a thermal transfer component.

Coolics is a patented technology where heat generating LED PCB is inserted to thermally conducting raw material by injection moulding. Products made of Coolics are made of proprietary combination of Thermally ConductivePolymers (TCP's) developed by world's leading material manufacturers materials that are designed and tested to fulfill the high performance demands for the LED cooling applications.