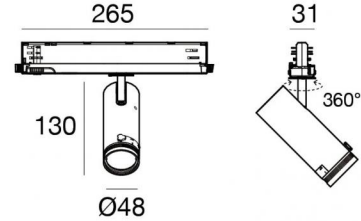




Projectors | 176-264 V
1 arrayLED 13 W DC - 15.5 W AC | CRI 90
81987N85



Technical data	
Type	Track
Installation position	Ceiling
Installation environment	Indoor
Light Source	LED
Circuit structure	arrayLED
Optics	Adjustable Focus
Light emission direction	frontal
Nominal power	13 W DC
Total Power	15.5 W
Source lumens	1863 lm
Nominal input voltage	220 - 240 V AC
Input voltage range	176 - 264 V AC
Frequency	50 - 60 Hz
CCT / Tone	4000 K
Colour rendering index	90 Ra
C.C. / C.V.	AC
Safety class	2
IP	IP20
Glow wire test	850°
Direct mounting on normally flammable surfaces	Yes
CE	Yes
Driver included	Driver
Dimmable article	DALI-2 - PUSH DIM
Directional	Swivelling
total angle (vertical plane)	90 °
total angle (horizontal plane)	360 °
Tilting	No
Walk-over	No
Drive-over	No
Cable included	No
Resin potting	No
Type of light emission	Single emission
Net weight	0.390 Kg
Electrostatic discharge protection	Yes
Surge protection	2 KV
Optics technology	Anti - Glare

Finishing casing	
Material	Die-cast Aluminium EN AB - 46100
Colour	White
Processing	Powder coating



Projectors | 176-264 V | 1 arrayLED 13 W DC - 15.5 W AC | CRI 90 | Angle Max
81987N85

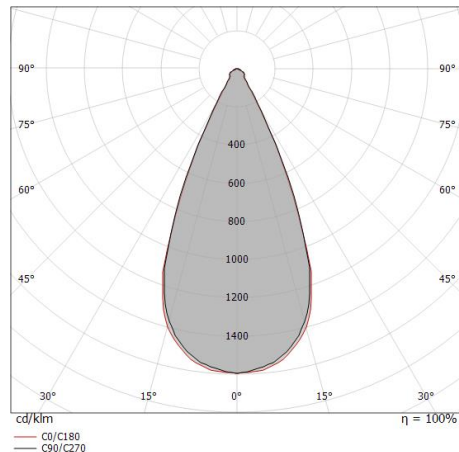
Single emission projectors for indoor application. The natural white LED light source with a adjustable focus light distribution is composed of 1 arrayed LEDs with CCT of 4000 K and a CRI 90; the source luminous flux is 1863 lm, with a 143.3 lm/W nominal luminous efficacy.

The device body is made of die-cast aluminium en ab - 46100 and features a white finish, processed by means of powder coating. The ingress protection degree is IP20; the total weight is of 0.390 kg.

The total absorbed power is 15.5 W.

The device features protection class II and can be ceiling-mounted.

Compliant with the EN 60598-1 standard and its specific provisions.



Distance [m]	Cone diameter [m]	E(0°)	E(C90)	E(C0)	Illuminance [lx]
0.5	0.43	3275	1274	1278	3275
1.0	0.86	819	318	320	819
1.5	1.29	364	142	142	364
2.0	1.72	205	80	80	205
2.5	2.15	131	51	51	131
3.0	2.58	91	35	36	91

— C0/C180 (Half-peak divergence: 46.2°)
— C90/C270 (Half-peak divergence: 46.6°)

Energy efficiency class

This product contains a light source of energy efficiency class E.

Illuminotechnical Features

Light Output Ratio (LOR)	27 %
Source lumens	1863 lm
Delivered lumens	514 lm
Consumption	15.5 W
Luminaire efficacy	33 lm/W
Colour temperature	4000 K
Standard Deviation of Colour Matching	2 Step MacAdam
Colour rendering index	90 Ra
Colour Rendering Index	60 R9
Black Body Locus	On
Standard Operating Ambient Temperature	-20 / +50°C
Ordinary temperature on the glass	40°C

LED Life / Failure Ratio

L70 B10 C0 252000h (at Tj 65 Ta 25)

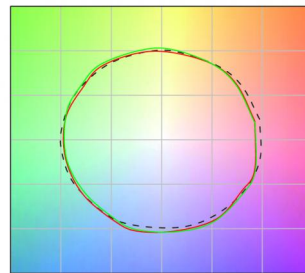
UGR

UGR axial	23.1
UGR transversal	22.9
X=4H Y=8H	S=0.25H
Reflection factor	70/50/20

OPTICAL

C0/C180 optics	46°
Light distribution simmetry	Symmetrical

COLOR VECTOR GRAPHIC





Projectors | 176-264 V | 1 arrayLED 13 W DC - 15.5 W AC | CRI 90 | Angle Min

81987N85

Single emission projectors for indoor application. The natural white LED light source with a adjustable focus light distribution is composed of 1 arrayed LEDs with CCT of 4000 K and a CRI 90; the source luminous flux is 1863 lm, with a 143.3 lm/W nominal luminous efficacy.

The device body is made of die-cast aluminium en ab - 46100 and features a white finish, processed by means of powder coating. The ingress protection degree is IP20; the total weight is of 0.390 kg.

The total absorbed power is 15.5 W.

The device features protection class II and can be ceiling-mounted.

Compliant with the EN 60598-1 standard and its specific provisions.

Energy efficiency class

This product contains a light source of energy efficiency class E.

Illuminotechnical Features

Light Output Ratio (LOR)	11 %
Source lumens	1863 lm
Delivered lumens	223 lm
Consumption	15.5 W
Luminaire efficacy	14 lm/W
Colour temperature	4000 K
Standard Deviation of Colour Matching	2 Step MacAdam
Colour rendering index	90 Ra
Colour Rendering Index	60 R9
Black Body Locus	On
Standard Operating Ambient Temperature	-20 / +50°C
Ordinary temperature on the glass	40°C

LED Life / Failure Ratio

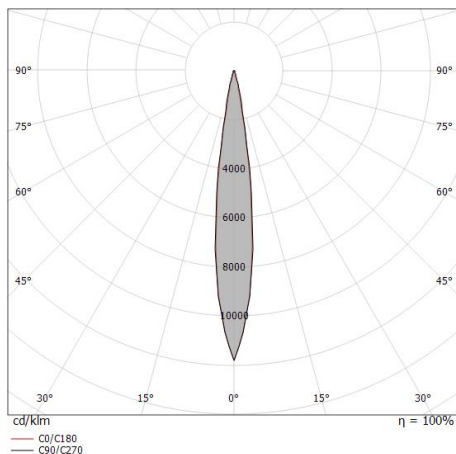
L70 B10 C0 252000h (at Tj 65 Ta 25)

UGR

UGR axial	16.9
UGR transversal	16.2
X=4H Y=8H	S=0.25H
Reflection factor	70/50/20

OPTICAL

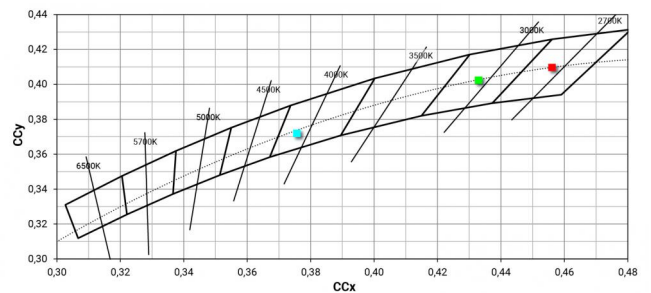
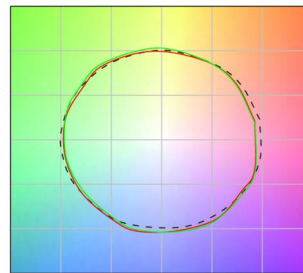
C0/C180 optics	14°
Light distribution simmetry	Symmetrical

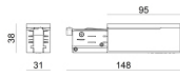


Distance [m]	Cone diameter [m]	illuminance [lx]
0.5	0.13 0.12	E(0°) 10493 E(C90) 7.2° 5165 E(C0) 7.0° 5157
1.0	0.25 0.25	E(0°) 2623 E(C90) 7.2° 1251 E(C0) 7.0° 1289
1.5	0.38 0.37	E(0°) 1166 E(C90) 7.2° 574 E(C0) 7.0° 573
2.0	0.51 0.48	E(0°) 656 E(C90) 7.2° 323 E(C0) 7.0° 322
2.5	0.63 0.61	E(0°) 420 E(C90) 7.2° 207 E(C0) 7.0° 206
3.0	0.76 0.74	E(0°) 291 E(C90) 7.2° 143 E(C0) 7.0° 143

— C0/C180 (Half-peak divergence: 14.0°)
— C90/C270 (Half-peak divergence: 14.4°)

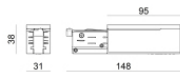
COLOR VECTOR GRAPHIC





Power supply - White Right power supply header (9001/W)
Material:PC, colour:white.

Code
81033



Power supply - White left power supply header (9002/W)
Material:PC, colour:white.

Code
81036



Power supply - Black left power supply header (9002/B)
Material:PC, colour:black.

Code
81037



Power supply - Black Right power supply header (9001/B)
Material:PC, colour:black.

Code
81034



Closing cap - White end cap 9004/W
Material:PC, colour:white.

Code
80999



Closing cap - Black end cap 9004/B
Material:PC, colour:black.

Code
81000



Closing cap - Recessed white end cap 9004-R/W
Material:PC, colour:white.

Code
81002



Closing cap - Recessed black end cap 9004-R/B
Material:PC, colour:black.

Code
81003



Closing cap - White gasket (S-9001/115-W)
Material:white.

Code
81084



Closing cap - Black gasket (S-9001/115-B)
Material:black, colour:black.

Code
81085



Ceiling rose - 1.5m white pendant luminaire kit + bracket (9000-KIT5-1,5-W)
Material:plastic, colour:white.

Code
81012



Ceiling rose - 1.5m black pendant luminaire kit + bracket ((9000-KIT5-1,5-B)
Material:plastic, colour:black.

Code
81014



Ceiling rose - 5m white pendant luminaire kit + bracket (9000-KIT5-5-W)
Material:plastic, colour:white.

Code
81013



Ceiling rose - 5m black pendant luminaire kit + bracket (9000-KIT5-5-B)
Material:plastic, colour:black.

Code
81015



Bracket - Anodized fixing bracket (S-9000/131)
L=35mm, H=14mm, D=24mm.
Material:Aluminium, colour:translucent.

Finish
Anod. Al. **Code**
81086



Bracket - Anodized stiffening bracket (S-9000/333)
L=180mm, H=24mm, D=26mm.

Material:Aluminium, colour:Anodised Aluminum, processing:Anodisation.

Finish
Code
81024



		<p>Bracket - White stiffening bracket (S-9000/333-W) L=180mm, H=24mm, D=20mm. Material:Aluminium, colour:white RAL 9010, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>81025</td> </tr> </tbody> </table>	Finish	Code	White	81025
Finish	Code						
White	81025						
		<p>Bracket - Black stiffening bracket (S-9000/333-B) L=180mm, H=24mm, D=20mm. Material:Aluminium, colour:black RAL 9005, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>81026</td> </tr> </tbody> </table>	Finish	Code	Black	81026
Finish	Code						
Black	81026						
		<p>Bracket - White fixing bracket (S-9000/131-W) L=35mm, H=14mm, D=24mm. Material:Aluminium, colour:white, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>81087</td> </tr> </tbody> </table>	Finish	Code	White	81087
Finish	Code						
White	81087						
		<p>Bracket - Black fixing bracket (S-9000/131-B) L=35mm, H=14mm, D=24mm. Material:Aluminium, colour:Black, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>81088</td> </tr> </tbody> </table>	Finish	Code	Black	81088
Finish	Code						
Black	81088						
		<p>Junction - White electrical junction - internal (9003/W) Type linear. Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>81039</td> </tr> </tbody> </table>	Finish	Code	White	81039
Finish	Code						
White	81039						
		<p>Junction - Black electrical junction - internal (9003/B) Type linear. Material:PC, colour:black.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>81040</td> </tr> </tbody> </table>	Finish	Code	Black	81040
Finish	Code						
Black	81040						
		<p>Junction - White power supply junction - central (9010/W) Type linear. Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>81042</td> </tr> </tbody> </table>	Finish	Code	White	81042
Finish	Code						
White	81042						
		<p>Junction - White L junction - internal (9011/W) Type linear. Material:PC, colour:white.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>81045</td> </tr> </tbody> </table>	Finish	Code	White	81045
Finish	Code						
White	81045						



		<p>Junction - White L junction - external (9012/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81048</p>
		<p>Junction - Flexible white junction (9018/W) Type flexible curve. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81066</p>
		<p>Junction - White X junction (9017/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81063</p>
		<p>Junction - Left white T junction - external (9013/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81051</p>
		<p>Junction - Right white T junction - external (9014/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81054</p>
		<p>Junction - Left white T junction - internal (9015/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81057</p>
		<p>Junction - Right White T junction - internal (9016/W) Type linear. Material:PC, colour:white.</p>	<p>Finish White</p>	<p>Code 81060</p>
		<p>Junction - Black power supply junction - centrale (9010/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81043</p>



		<p>Junction - Black L junction - internal (9011/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81046</p>
		<p>Junction - Black L junction - external (9012/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81049</p>
		<p>Junction - Flexible black junction (9018/B) Type flexible curve. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81067</p>
		<p>Junction - Black X junction (9017/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81064</p>
		<p>Junction - Black left T junction - external (9013/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81052</p>
		<p>Junction - Right black T junction - external (9014/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81055</p>
		<p>Junction - Left black T junction - internal (9015/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81058</p>
		<p>Junction - Right black T junction - internal (9016/B) Type linear. Material:PC, colour:black.</p>	<p>Finish Black</p>	<p>Code 81061</p>



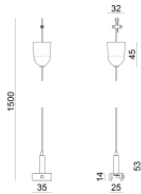
Suspensions - 1.5m white pendant luminaires kit (9000-KIT3-1,5-W)
Material:plastic, colour:white.

Code
81006



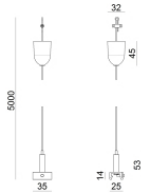
Suspensions - 5m white pendant luminaires kit (9000-KIT3-5-W)
Material:plastic, colour:white.

Code
81007



Suspensions - 1.5m black pendant luminaires kit (9000-KIT3-1,5-B)
Material:plastic, colour:black.

Code
81008



Suspensions - 5m black pendant luminaires kit (9000-KIT3-5-B)
Material:plastic, colour:black.

Code
81009



Suspensions - White rigid suspension clip (S-9000-P2-W)
Material:plastic, colour:white.

Code
81018



Suspensions - Black rigid suspension clip (S-9000-P2-B)
Material:plastic, colour:black.

Code
81019



Suspensions - White rigid suspension 1m (S-9000-P3-W)
Material:plastic, colour:white.

Code
81021



Suspensions - Black rigid suspension 1m (S-9000-P3-B)
Material:plastic, colour:black.

Code
81022



		<p>Cable cover - White recessed cover (S-9001-R/6-W) Material:PC, colour:white.</p>	<p>Code <u>81069</u></p>
		<p>Cable cover - White cover for recessed junction (S-9010-R/6-W) Material:PC, colour:white.</p>	<p>Code <u>81072</u></p>
		<p>Cable cover - White cover for recessed L junction (S-9011-R/6-W) Material:PC, colour:white.</p>	<p>Code <u>81075</u></p>
		<p>Cable cover - White cover for recessed T junction (S-9013-R/6-W) Material:PC, colour:white.</p>	<p>Code <u>81078</u></p>
		<p>Cable cover - White cover for recessed X junction (S-9017-R/6-W) Material:PC, colour:white.</p>	<p>Code <u>81081</u></p>
		<p>Cable cover - Black recessed cover (S-9001-R/6-B) Material:PC, colour:black.</p>	<p>Code <u>81070</u></p>
		<p>Cable cover - Black cover for recessed junction (S-9010-R/6-B) Material:PC, colour:black.</p>	<p>Code <u>81073</u></p>
		<p>Cable cover Material:PC, colour:black.</p>	<p>Code <u>81076</u></p>



		<p>Cable cover - Black cover for recessed T junction (S-9013-R/6-B) Material:PC, colour:black.</p>	<p>Code <u>81079</u></p>
		<p>Cable cover - Black cover for recessed X junction (S-9017-R/6-B) Material:PC, colour:black.</p>	<p>Code <u>81082</u></p>
		<p>Cable cover Material:white.</p>	<p>Code <u>83249</u></p>
		<p>Cable cover Material:black, colour:black.</p>	<p>Code <u>83250</u></p>
		<p>White three-phase/DALI adapter (9009/W)</p>	<p>Code <u>81094</u></p>
		<p>White three-phase adapter (9009-4/W)</p>	<p>Code <u>81091</u></p>
		<p>Black three-phase/DALI adapter (9009/B)</p>	<p>Code <u>81095</u></p>
		<p>Black three-phase adapter (9009-4/B)</p>	<p>Code <u>81093</u></p>



	Tool - Cutter S-9000/T	Code		
		81005		
		Track - Three-phase Recessed White DALI Track, 1 m (9000-1/W-R) Length: 1000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.	Finish	Code
			White	80990
		Track - Three-phase Recessed White DALI Track, 2 m (9000-2/W-R) Length: 2000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.	Finish	Code
			White	80991
		Track - Three-phase Recessed White DALI Track, 3 m (9000-3/W-R) Length: 3000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.	Finish	Code
			White	80992
		Track - Three-phase Recessed Grey DALI Track, 1 m (9000-1/B-R) Length: 1000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.	Finish	Code
			Black	80993
		Track - Three-phase Recessed Black DALI Track, 2 m (9000-1/B-R) Length: 2000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.	Finish	Code
			Black	80994
		Track - Three-phase Recessed Black DALI Track, 3 m (9000-3/B-R) Length: 3000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.	Finish	Code
			Black	80995
		Track Length: 1000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.	Finish	Code
			White	83336



		<p>Track Length: 2000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>83337</td> </tr> </tbody> </table>	Finish	Code	White	83337
Finish	Code						
White	83337						
		<p>Track Length: 3000mm; Type of track: Standard. Material:Aluminium, colour:White, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White</td> <td>83338</td> </tr> </tbody> </table>	Finish	Code	White	83338
Finish	Code						
White	83338						
		<p>Track Length: 1000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>83339</td> </tr> </tbody> </table>	Finish	Code	Black	83339
Finish	Code						
Black	83339						
		<p>Track Length: 2000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>83340</td> </tr> </tbody> </table>	Finish	Code	Black	83340
Finish	Code						
Black	83340						
		<p>Track Length: 3000mm; Type of track: Standard. Material:Aluminium, colour:Black, processing:Coating.</p>	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>83341</td> </tr> </tbody> </table>	Finish	Code	Black	83341
Finish	Code						
Black	83341						
		<p>Electronic accessory - TWIL-DALI controller for devices with DALI protocol installed on three-phase track. installation position: ceiling L=90mm, H=124mm, D=45mm. Material:ABS Plastic, colour:black.</p>	<table border="1"> <thead> <tr> <th>Code</th> </tr> </thead> <tbody> <tr> <td>C-E700008</td> </tr> </tbody> </table>	Code	C-E700008		
Code							
C-E700008							