

IOS® Beam distributions for ceiling luminaires

- [B] wide beam, symmetric
- [BD] wide beam, symmetric – Darklight
- [M] medium beam, symmetric
- [EE] very narrow beam, symmetric
- [EES] very narrow beam, symmetric, 'sharp cut-off'
- [A20] wallwash, asymmetric

Ceiling luminaires



DOC200 Gimbal LED 116



DOC200 Gimbal 118



DOC200 LED 120



DOC200 124



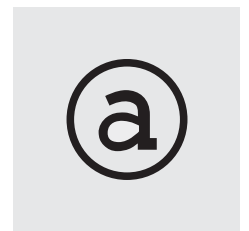
DAC200 Gimbal LED 126



DAC200 LED 128



DAC200 130



ACCESSORIES

- Mounting 132
- Optical 134

DOC200 GIMBAL SERIES

Downlight, wide, medium, very narrow or very narrow beam distribution 'sharp cut-off', symmetric, or wallwash distribution, asymmetric. Tilt and rotatable.

IP66, Class I. IK07. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Powdercoat finish in RAL 9004, RAL 9006, RAL 9007 or RAL 9016. Silicone rubber gasket. Safety glass lens, hinged. Frame with safety catch. Two cable entries.

EC electronic converter in thermally separated compartment.

Factory installed LED circuit board. LED boards can be easily removed for upgrading. PMMA LED lens array. 30° tilt and 355° rotatable.

A pre-installation blockout, proud or flush, is available and recommended for mounting in concrete ceilings. To be ordered separately.

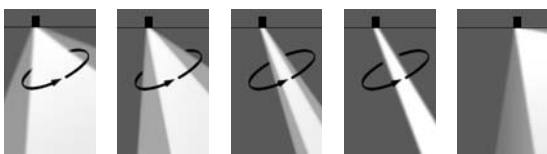
Light source
LED 18 W, 3000 K,
for 4000 K refer to www.we-ef.com

Light distributions
[B] [M] [EE] [EES] [A20]

Accessories
■ Mounting, page 132
■ Optical, page 134



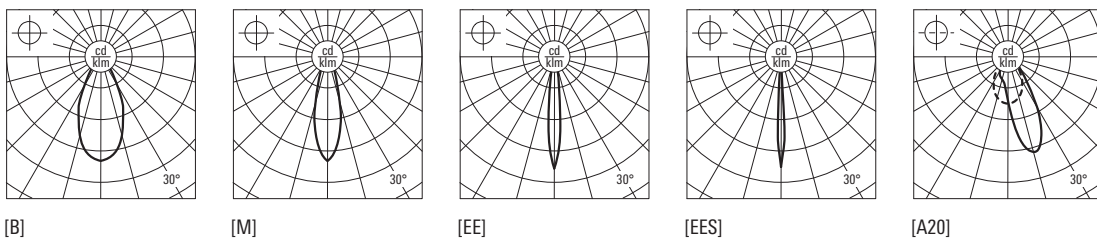
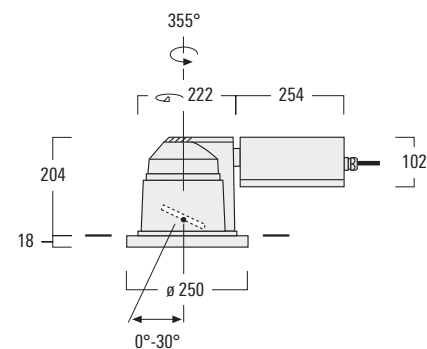
White City. London (UK). Lighting design: Speirs & Majors Associates.



- [B] Wide beam distribution, symmetric
- [M] Medium beam distribution, symmetric,
- [EE] Very narrow beam distribution, symmetric
- [EES] Very narrow beam distribution, symmetric, 'sharp cut-off'
- [A20] Wallwash distribution, asymmetric



[B]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg	
DOC240-GB	134-1344	12 LED 18W / 500 mA	3000	2217	920	25°/25°	5.5	
[M]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg	
DOC240-GB	134-1253	12 LED 18W / 500 mA	3000	2217	2196	16°/16°	5.5	
[EE]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg	
DOC240-GB	134-1347	12 LED 18W / 500 mA	3000	2217	7191	7°/7°	5.5	
[EES]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg	
DOC240-GB	134-1256	12 LED 18W / 500 mA	3000	2217	20389	5°/5°	5.5	
[A20]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	C ₉₀ C ₂₇₀	kg
DOC240-GB	134-1611	12 LED 18W / 500 mA	3000	2217	787	15°/16°	35°/35°	5.5



* Nominal lumen output based on LED manufacturers data at 85°C T_j. For rated lumens at 25°C T_a and latest data refer to www.we-ef.com.

DOC200 GIMBAL SERIES

Downlight, medium or very narrow beam distribution, symmetric. Tilt and rotatable.

IP66, Class I, IK 07. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Powdercoat finish in RAL 9004, RAL 9006, RAL 9007 or RAL 9016. Silicone rubber gasket. Safety glass lens, hinged. Frame with safety catch. Two cable entries.

Anodised aluminium reflector. 25° tilt and 355° rotatable.

ECG control gear in thermally separated compartment.

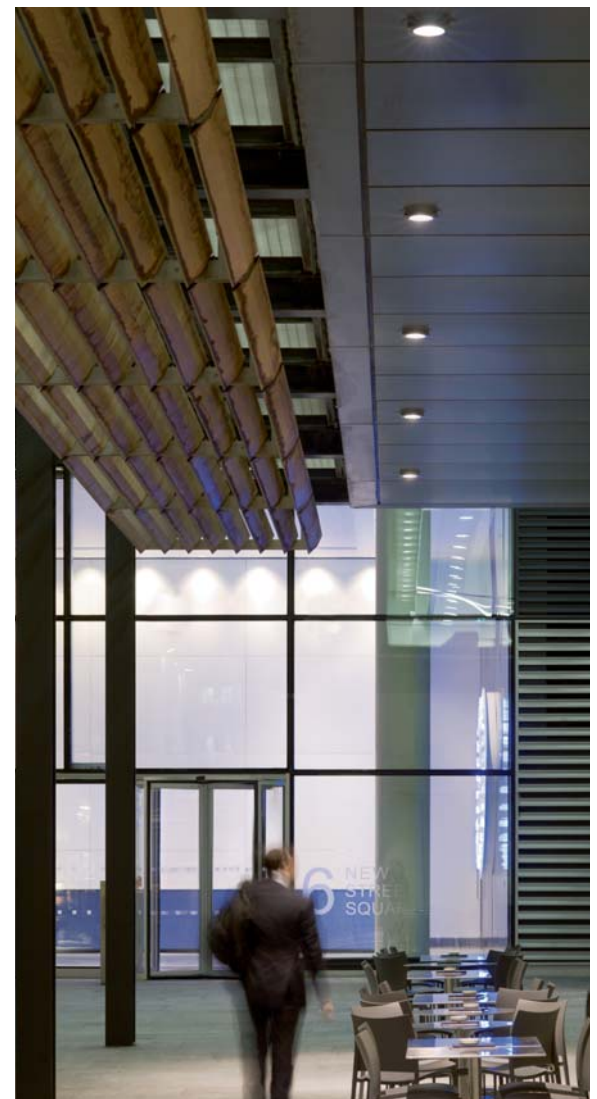
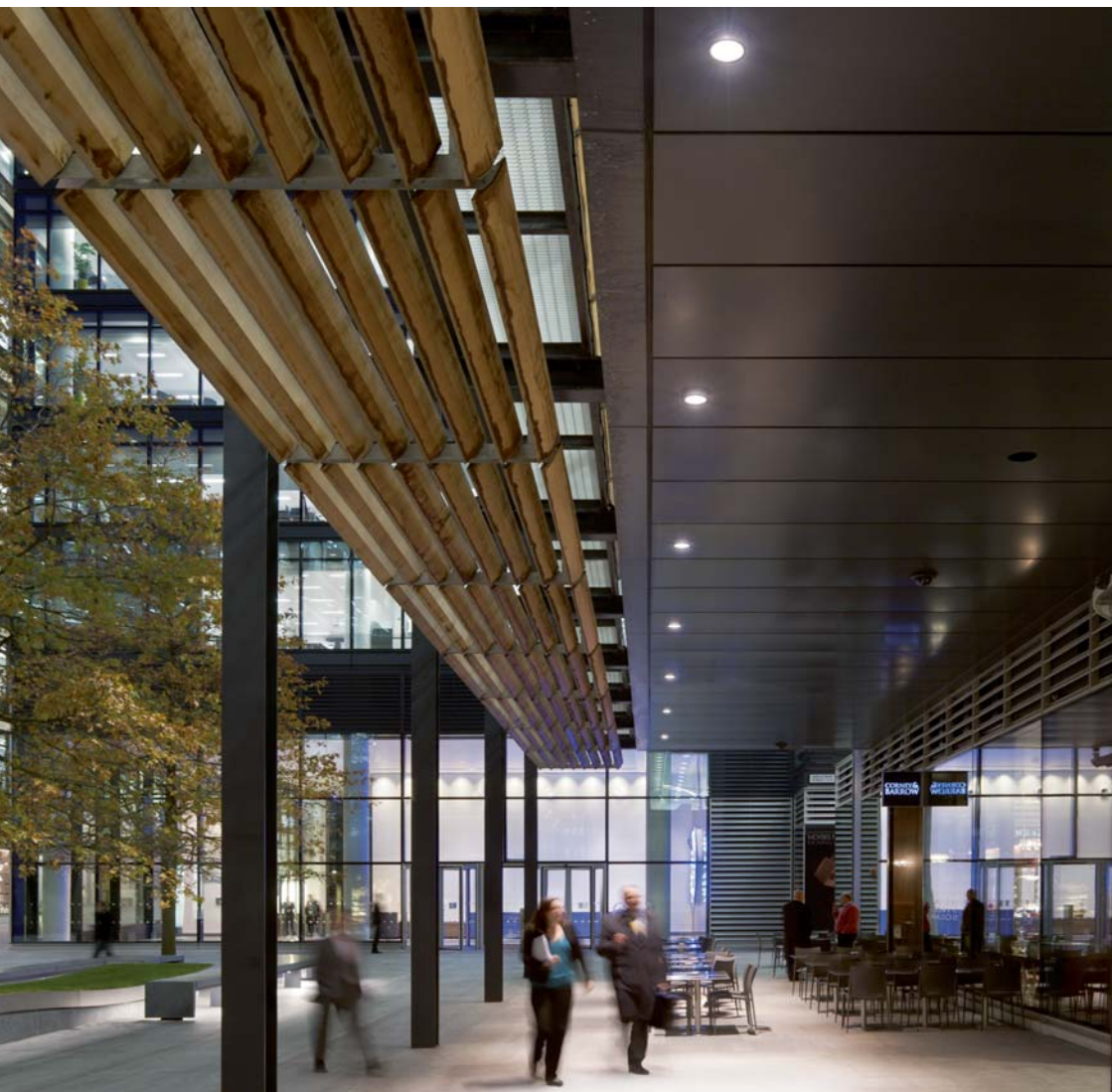
A pre-installation blockout, proud or flush, is available and recommended for mounting in concrete ceilings. To be ordered separately.

Light source
HIT 20-70 W

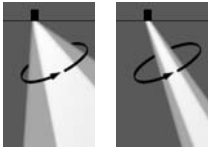
Light distributions
[M] [EE]

Accessories

- Mounting, page 132
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New Street Square. London (UK). Architect: Bennett Associates, London. Lighting design: Speirs & Majors Associates, London.



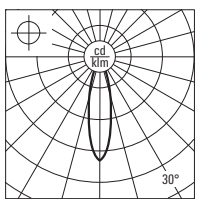
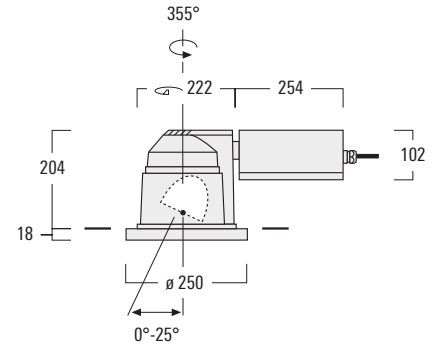
[M] [EE]

[M] Medium beam distribution, symmetric
 [EE] Very narrow beam distribution, symmetric

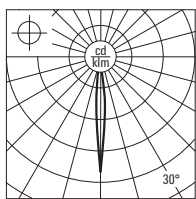


[M]	Part ID	Light source	lm	cd/klm	C ₀ C ₁₈₀	kg
DOC240-GB	134-1155 [ECG]	HIT-TC-CE 20W G8.5	1700	2145	12°/12°	6.8
	134-1156 [ECG]	HIT-TC-CE 35W G8.5	3500	1441	18°/18°	6.8
	134-1157 [ECG]	HIT-TC-CE 70W G8.5	6900	1296	17°/17°	6.8

[EE]	Part ID	Light source	lm	cd/klm	C ₀ C ₁₈₀	kg
DOC240-GB	134-1158 [ECG]	HIT-TC-CE 20W G8.5	1700	10244	4°/4°	6.8
	134-1159 [ECG]	HIT-TC-CE 35W G8.5	3500	11214	4°/4°	6.8
	134-1160 [ECG]	HIT-TC-CE 70W G8.5	6900	7479	4°/4°	6.8



[M]



[EE]

DOC200 SERIES

Downlight, wide, medium, very narrow beam or very narrow beam distribution 'sharp cut-off', symmetric.

IP66, Class I. IK07. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Powdercoat finish in RAL 9004, RAL 9006, RAL 9007 or RAL 9016. Silicone rubber gasket. Safety glass lens, hinged. Frame with safety catch. Two cable entries.

EC electronic converter in thermally separated compartment.

Factory installed LED circuit board. LED boards can be easily removed for upgrading. PMMA LED lens array.

A pre-installation blockout, proud or flush, is available and recommended for mounting in concrete ceilings. To be ordered separately.

Light source

LED 12-48 W, 3000 K,
for 4000 K refer to www.we-ef.com

Light distributions

[B] [M] [EE] [EES]

Accessories

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Metro station Breslauer Platz, Köln (D). Architect: Architekturbüro Bueder + Wenzel Architekten, Köln. Lighting design: Licht Kunst Licht, Bonn/Berlin.



[B] [M] [EE] [EES]

- [B] Wide beam distribution, symmetric
- [M] Medium beam distribution, symmetric
- [EE] Very narrow beam distribution, symmetric
- [EES] Very narrow beam distribution, symmetric, 'sharp cut-off'

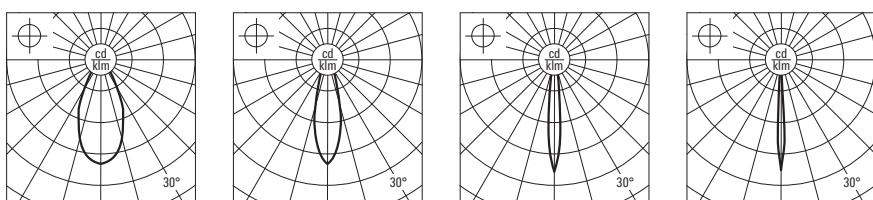
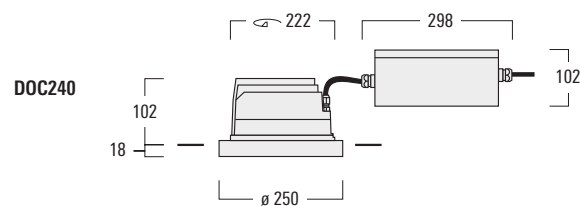
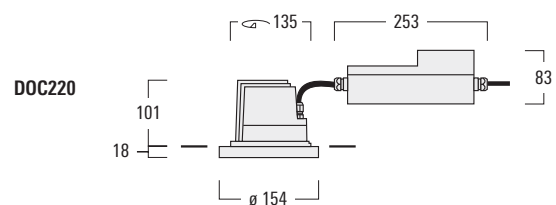
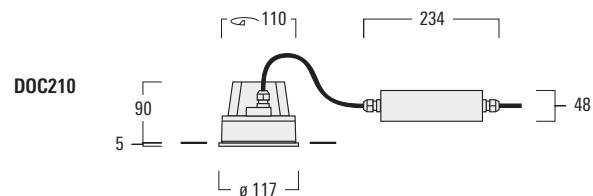


[B]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DOC210	134-1625	6 LED 12W / 700 mA	3000	1476	934	25°/25°	1.2
DOC220	134-1332	12 LED 24W / 700 mA	3000	2951	920	25°/25°	2.0
DOC240	134-1396	24 LED 48W / 700 mA	3000	5903	934	25°/25°	2.0

[M]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DOC210	134-1627	6 LED 12W / 700 mA	3000	1476	2196	16°/16°	1.2
DOC220	134-1210	12 LED 24W / 700 mA	3000	2951	2196	16°/16°	2.0
DOC240	134-1398	24 LED 48W / 700 mA	3000	5903	2196	16°/16°	2.0

[EE]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DOC210	134-1631	6 LED 12W / 700 mA	3000	1476	7207	7°/7°	1.2
DOC220	134-1335	12 LED 24W / 700 mA	3000	2951	7191	7°/7°	2.0
DOC240	134-1400	24 LED 48W / 700 mA	3000	5903	7207	7°/7°	2.0

[EES]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DOC210	134-1633	6 LED 12W / 700 mA	3000	1476	22108	5°/5°	1.2
DOC220	134-1211	12 LED 24W / 700 mA	3000	2951	20398	5°/5°	2.0
DOC240	134-1402	24 LED 48W / 700 mA	3000	5903	22108	5°/5°	2.0



[B] [M] [EE] [EES]

* Nominal lumen output based on LED manufacturers data at 85°C T_J. For rated lumens at 25°C T_q and latest data refer to www.we-ef.com.

DOC200 SERIES

Downlight, wide beam distribution, 'darklight', symmetric.

IP66, Class I. IK07. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Powdercoat finish in RAL 9004, RAL 9006, RAL 9007 or RAL 9016. Silicone rubber gasket. Safety glass lens, hinged. Frame with safety catch. Two cable entries. Anodised aluminium reflector with PMMA LED diffuser.

EC electronic converter in thermally separated compartment.

A pre-installation blockout, proud or flush, is available and recommended for mounting in concrete ceilings. To be ordered separately.

Light source

LED 24 W, 3000 K,
for 4000 K refer to www.we-ef.com



Light distribution

[BD]

Accessories

■ Mounting, page 132



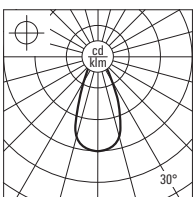
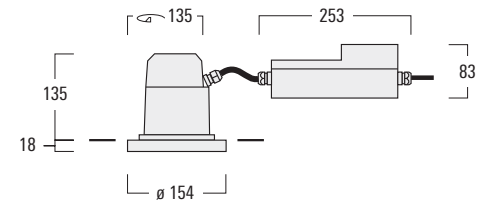
Train station Berlin Südkreuz, Berlin (D). Architect: J.S.K. GmbH, Berlin. Lighting design: DE Consult, Berlin.



[BD] Wide beam distribution, symmetric – Darklight



[BD]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DOC220	134-1483	LED-FT 24W	3000	3795	752	25°/25°	2.3



[BD]

* Nominal lumen output based on LED manufacturers data at 25°C T_c. For rated lumens at 25°C T_q and latest data refer to www.we-ef.com.

DOC200 SERIES

Downlight, medium or very narrow beam distribution, symmetric.

IP66, Class I. IK07. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Powdercoat finish in RAL 9004, RAL 9006, RAL 9007 or RAL 9016. Silicone rubber gasket. Safety glass lens, hinged. Frame with safety catch. Two cable entries. Anodised aluminium reflector.

HPF or ECG control gear in thermally separated compartment.

A pre-installation blockout, proud or flush, is available and recommended for mounting in concrete ceilings.

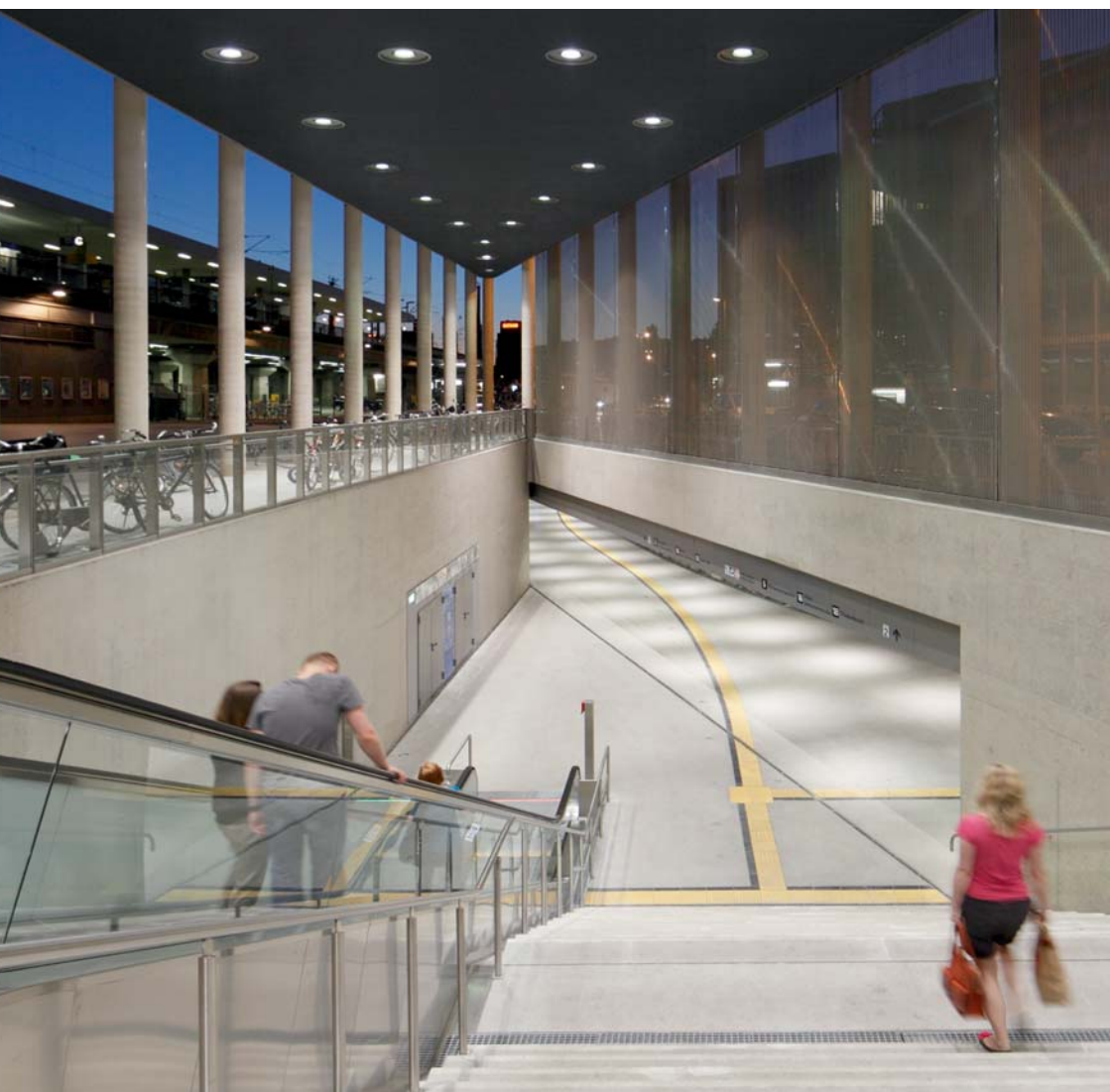
Light source
HIT 20-150 W

Light distributions
[M] [EE]

Accessories

■ Mounting, page 132

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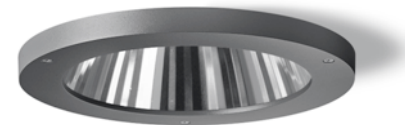


Metro station Breslauer Platz, Koeln (D). Architect: Architekturbüro Büder + Wenzel Architekten. Lighting design: Licht Kunst Licht.



[M] [EE]

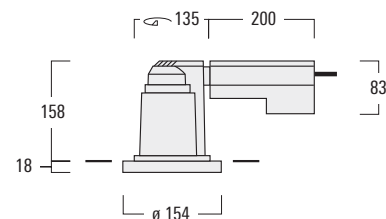
[M] Medium beam distribution, symmetric
 [EE] Very narrow beam distribution, symmetric



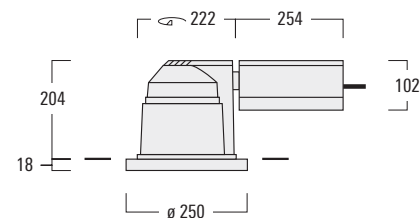
[M]	Part ID	Light source	lm	cd/klm	C ₀ C ₁₈₀	kg
DOC220	134-0802 [ECG]	HIT-TC-CE 20W G8.5	1700	2145	12°/12°	2.6
	134-0803 [ECG]	HIT-TC-CE 35W G8.5	3500	1441	18°/18°	2.6
DOC240	134-0815 [ECG]	HIT-CE 70W G12	7300	1643	20°/20°	5.8
	134-0816 [ECG+G9]*	HIT-CE 70W G12	7300	1643	20°/20°	5.8
	134-0819 [HPF]	HIT-CE 150W G12	15000	1280	23°/23°	7.5
	134-0820 [HPF+G9]*	HIT-CE 150W G12	15000	1280	23°/23°	7.5

[EE]	Part ID	Light source	lm	cd/klm	C ₀ C ₁₈₀	kg
DOC220	134-0805 [ECG]	HIT-TC-CE 20W G8.5	1700	10244	4°/4°	2.6
	134-0806 [ECG]	HIT-TC-CE 35W G8.5	3500	11214	4°/4°	2.6
DOC240	134-0825 [ECG]	HIT-CE 70W G12	7300	29929	3°/3°	5.8
	134-0826 [ECG+G9]*	HIT-CE 70W G12	7300	29929	3°/3°	5.8
	134-0829 [HPF]	HIT-CE 150W G12	15000	18752	4°/4°	7.5
	134-0830 [HPF+G9]*	HIT-CE 150W G12	15000	18752	4°/4°	7.5

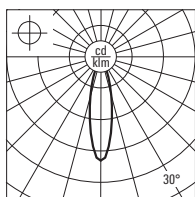
DOC220



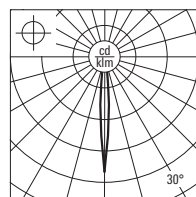
DOC240



* Version with HPF or ECG control gear and lampholder G9 for emergency light.



[M]



[EE]

DAC200 GIMBAL SERIES

Surface mounted downlight, wide, medium, very narrow or very narrow beam distribution 'sharp cut-off', symmetric, or wallwash distribution, asymmetric. Tilt and rotatable.

IP65, Class I. IK07. Marine-grade die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Powdercoat finish in RAL 9004, RAL 9006, RAL 9007 or RAL 9016. Silicone rubber gasket. Safety glass lens, hinged. Frame with safety catch. Two cable entries.

EC electronic converter in thermally separated compartment.

Factory installed LED circuit board. LED boards can be easily removed for upgrading.

PMMA LED lens array. 30° tilt and 355° rotatable.

Light source

LED 18 W, 3000 K,
for 4000 K refer to www.we-ef.com

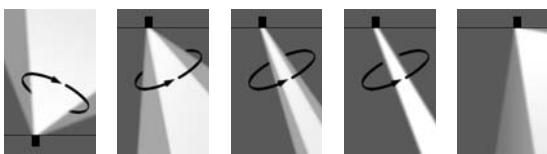
Light distributions

[B] [M] [EE] [EES] [A20]

Accessories

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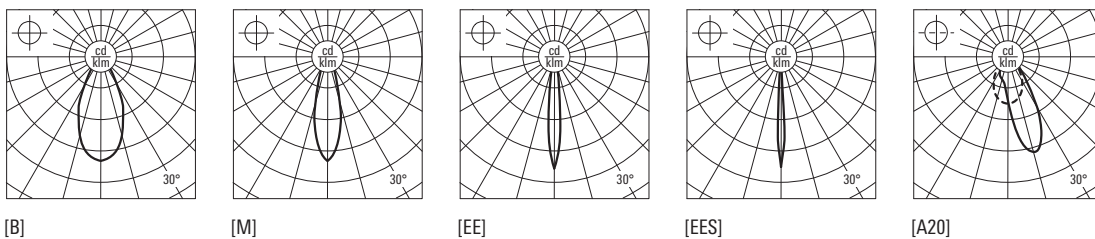
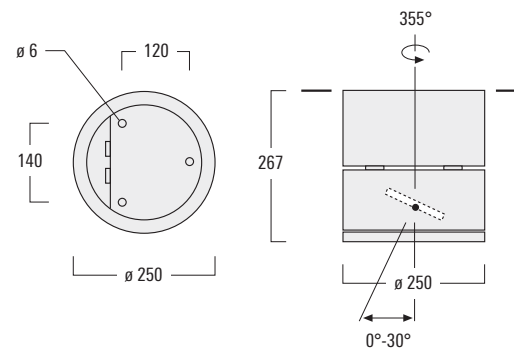




- [B] Wide beam distribution, symmetric
- [M] Medium beam distribution, symmetric,
- [EE] Very narrow beam distribution, symmetric
- [EES] Very narrow beam distribution, symmetric, 'sharp cut-off'
- [A20] Wallwash distribution, asymmetric



[B]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg	
DAC240-GB	134-1596	12 LED 18W / 500 mA	3000	2217	920	25°/25°	8.5	
[M]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg	
DAC240-GB	134-1598	12 LED 18W / 500 mA	3000	2217	2196	16°/16°	8.5	
[EE]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg	
DAC240-GB	134-1602	12 LED 18W / 500 mA	3000	2217	7191	7°/7°	8.5	
[EES]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg	
DAC240-GB	134-1605	12 LED 18W / 500 mA	3000	2217	20389	5°/5°	8.5	
[A20]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	C ₉₀ C ₂₇₀	kg
DAC240-GB	134-1600	12 LED 18W / 500 mA	3000	2217	787	15°/16°	35°/35°	8.5



* Nominal lumen output based on LED manufacturers data at 85°C T_J. For rated lumens at 25°C T_q and latest data refer to www.we-ef.com.

DAC200 SERIES

Surface mounted downlight, wide, medium, very narrow or very narrow beam
'sharp cut-off' distribution, symmetric.

IP65, Class I. IK07. Marine-grade die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Powdercoat finish in RAL 9004, RAL 9006, RAL 9007 or RAL 9016. Silicone rubber gasket. Safety glass lens, hinged. Frame with safety catch. Two cable entries.

EC electronic converter in thermally separated compartment.

Factory installed LED circuit board. LED boards can be easily removed for upgrading.
PMMA LED lens array.

Light source
LED 24-48 W, 3000 K,
for 4000 K refer to www.we-ef.com

Light distributions
[B] [M] [EE] [EES]

Accessories
■ Optical, page 134



Steinmüller passage, Gummersbach (D)



[B] [M] [EE] [EES]

- [B] Wide beam distribution, symmetric
- [M] Medium beam distribution, symmetric
- [EE] Very narrow beam distribution, symmetric
- [EES] Very narrow beam distribution, symmetric, 'sharp cut-off'



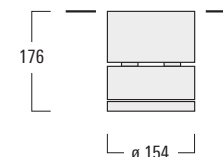
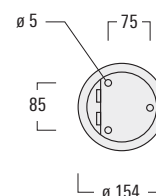
[B]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DAC220	134-1424	12 LED 24W / 700 mA	3000	2951	920	25°/25°	2.9
DAC240	134-1432	24 LED 48W / 700 mA	3000	5903	934	25°/25°	7.6

[M]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DAC220	134-1425	12 LED 24W / 700 mA	3000	2951	2196	16°/16°	2.9
DAC240	134-1433	24 LED 48W / 700 mA	3000	5903	2196	16°/16°	7.6

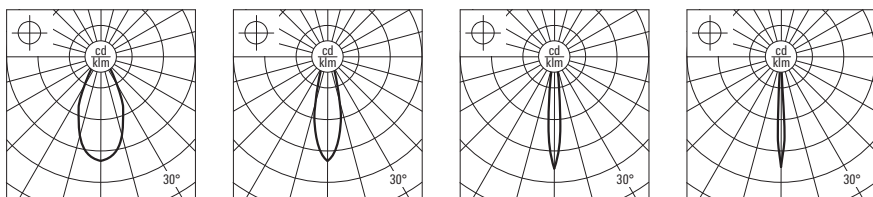
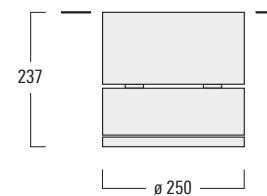
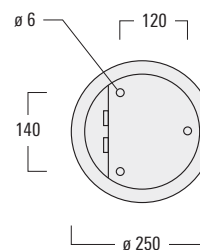
[EE]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DAC220	134-1426	12 LED 24W / 700 mA	3000	2951	7191	7°/7°	2.9
DAC240	134-1434	24 LED 48W / 700 mA	3000	5903	7207	7°/7°	7.6

[EES]	Part ID	Light source	K	lm*	cd/klm	C ₀ C ₁₈₀	kg
DAC220	134-1427	12 LED 24W / 700 mA	3000	2951	20398	5°/5°	2.9
DAC240	134-1435	24 LED 48W / 700 mA	3000	5903	22108	5°/5°	7.6

DAC220



DAC240



[B] [M] [EE] [EES]

* Nominal lumen output based on LED manufacturers data at 85°C T_J. For rated lumens at 25°C T_q and latest data refer to www.we-ef.com.

DAC200 SERIES

Surface mounted downlight, medium or very narrow beam distribution, symmetric.

IP65, Class I. IK07. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Powdercoat finish in RAL 9004, RAL 9006, RAL 9007 or RAL 9016. Silicone rubber gasket. Safety glass lens, hinged. Frame with safety catch.

Two cable entries. Anodised aluminium reflector.

HPF or ECG control gear in thermally separated compartment.

Light source

QT 65 W

HIT 20-150 W

Light distributions

[M] [EE]

Accessories

■ Optical, page 134



Southern Cross Station. Melbourne (AUS). Architect: Nicholas Grimshaw & Partners. Lighting design: Vision Design Studio.



[M] [EE]

[M] Medium beam distribution, symmetric
 [EE] Very narrow beam distribution, symmetric

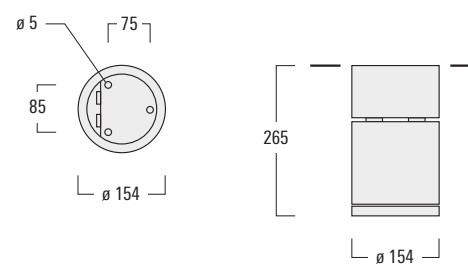


[M]	Part ID	Light source	lm	cd/klm	C ₀ C ₁₈₀	kg
DAC220	134-1456 [ET]	QT 12ax 65W/c GY6.35	1650	1481	10°/10°	3.2
	134-1457 [ECG]	HIT-TC-CE 20W G8.5	1700	2145	12°/12°	3.3
	134-1458 [ECG]	HIT-TC-CE 35W G8.5	3500	1441	18°/18°	3.3
DAC240	134-1470 [ECG]	HIT-CE 70W G12	7300	1643	20°/20°	8.8
	134-1471 [ECG+G9]*	HIT-CE 70W G12	7300	1643	20°/20°	8.9
	134-1472 [HPF]	HIT-CE 150W G12	15000	1280	23°/23°	10.0
	134-1473 [HPF+G9]*	HIT-CE 150W G12	15000	1280	23°/23°	10.1

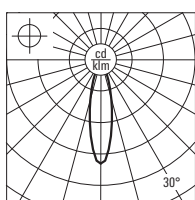
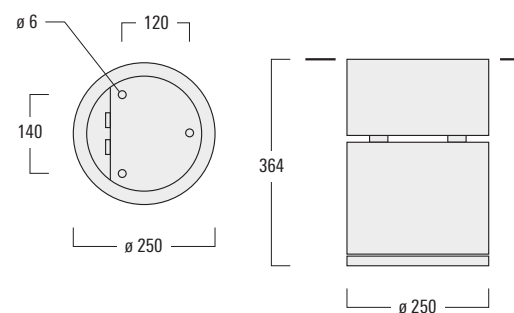
[EE]	Part ID	Light source	lm	cd/klm	C ₀ C ₁₈₀	kg
DAC220	134-1459 [ET]	QT 12ax 65W/c GY6.35	1650	20740	3°/3°	3.2
	134-1460 [ECG]	HIT-TC-CE 20W G8.5	1700	10244	4°/4°	3.3
	134-1461 [ECG]	HIT-TC-CE 35W G8.5	3500	11214	4°/4°	3.3
DAC240	134-1476 [ECG]	HIT-CE 70W G12	7300	29929	3°/3°	8.8
	134-1477 [ECG+G9]*	HIT-CE 70W G12	7300	29929	3°/3°	8.9
	134-1478 [HPF]	HIT-CE 150W G12	15000	18752	4°/4°	10.0
	134-1479 [HPF+G9]*	HIT-CE 150W G12	15000	18752	4°/4°	10.1

* Version with HPF or ECG control gear and lampholder G9 for emergency light.

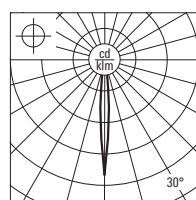
DAC220



DAC240



[M]



[EE]

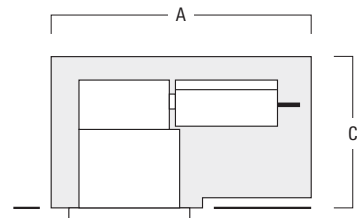
MOUNTING ACCESSORIES

Installation blackout — Luminaire frame proud of surface			A	B	C
BDO21-I	134-1639	for DOC210	383	200	160
BDO22-I	134-0797	for DOC220	383	200	209
BDO24-I	134-0798	for DOC240 / DOC240-GB	570	305	285

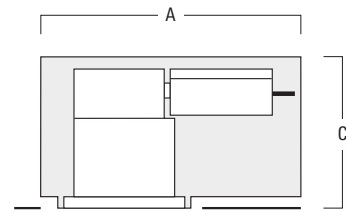
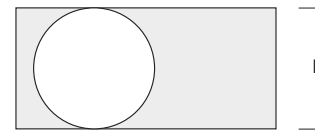
Installation blackout — Luminaire frame flush with surface			A	B	C
BDO21-II	134-1640	for DOC210	383	200	178
BDO22-II	134-1161	for DOC220	383	200	227
BDO24-II	134-1162	for DOC240 / DOC240-GB	573	305	303

Installation blackout — Luminaire frame flush with surface, with shadow line			A	B	C
BDO21-III	134-1641	for DOC210	383	200	178
BDO22-III	134-1497	for DOC220	383	200	227
BDO24-III	134-1498	for DOC240 / DOC240-GB	573	305	303

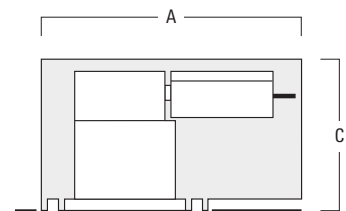
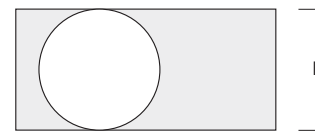
Installation blockouts to suit project specific requirements are available on request.



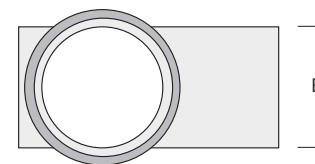
Type I
Luminaire frame proud of surface

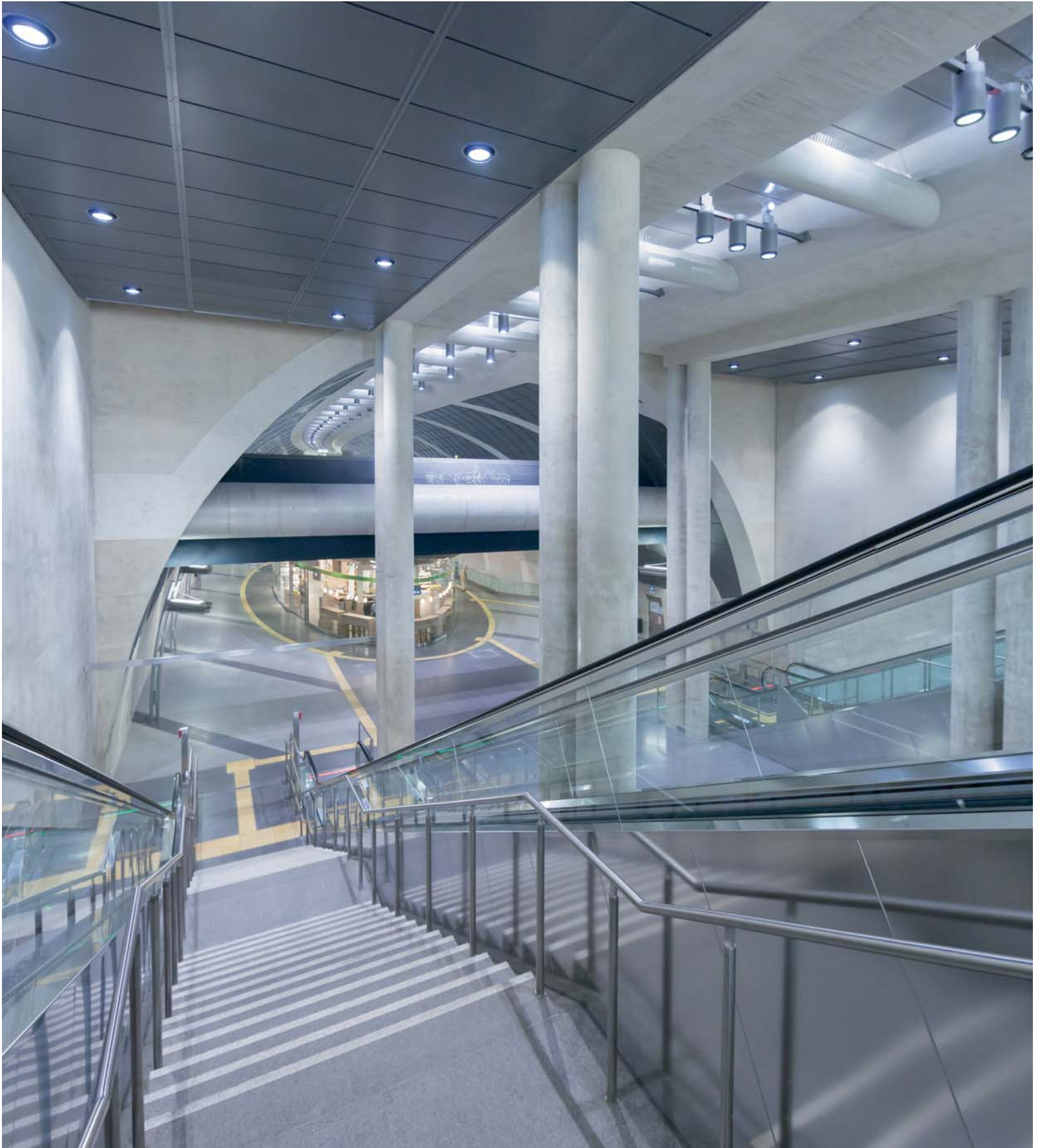


Type II
Luminaire frame flush with surface



Type III
Luminaire frame flush with surface,
with shadow line





Metro station Heumarkt, Köln (D). Planning: Lichtdesign Ingenieurgesellschaft Prof. Dr. Ing Heinrich Kramer, Köln.

OPTICAL ACCESSORIES

Gimbal and Fixed

A maximum of one internal optical accessory.

Flood lens IO-360**

for DOC220* / DAC220	134-1440
for DOC240 / DAC240	134-1441
for DOC240-GB / DAC240-GB	134-1442

Linear spread lens IO-180**

for DOC220* / DAC220	134-1381
for DOC240 / DAC240	134-1382
for DOC240-GB / DAC240-GB	185-2632

Wallwash lens IO-20

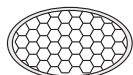
for DOC220* / DAC220 [M]	134-1491
for DOC240 / DAC240 [M]	134-1492

Honeycomb louvre IW**

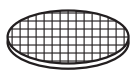
for DOC220* / DAC220	134-1444
for DOC240 / DAC240	134-1445
for DOC240-GB / DAC240-GB	134-1449

* does not fit in combination with [BD] version

** does not fit in combination with [B] lens



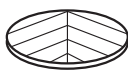
IW



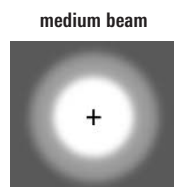
IO-360



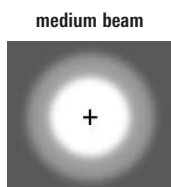
IO-180



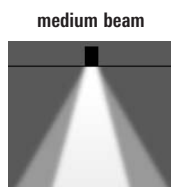
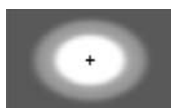
IO-20



with IO-360



with IO-180



with IO-20



OPTICAL ACCESSORIES

Gimbal and Fixed

A maximum of two internal optical accessories for Gimbal and one for Fixed.

Flood lens IO-360

for DOC220 / DAC220	134-1167
for DOC240 / DAC240	134-1174
for DOC240-GB	134-1181

Linear spread lens IO-180

for DOC220 / DAC220	134-1168
for DOC240 / DAC240	134-1175
for DOC240-GB	134-1182

Dichroic Colour Filter IF	red	green	blue	yellow
for DOC220 / DAC220	134-1163	134-1164	134-1165	134-1166
for DOC240 / DAC240	134-1170	134-1171	134-1172	134-1173
for DOC240-GB	134-1177	134-1178	134-1179	134-1180

Concentric louvre IQ

for DOC220 / DAC220 [EE]	134-1169
for DOC240 / DAC240 [EE]	134-1176
for DOC240-GB [EE]	134-1183



IQ



IF





Metro station Heumarkt, Köln (D). Planning: Lichtdesign Ingenieurgesellschaft Prof. Dr. Ing Heinrich Kramer, Köln.