

MINO 60

suspended

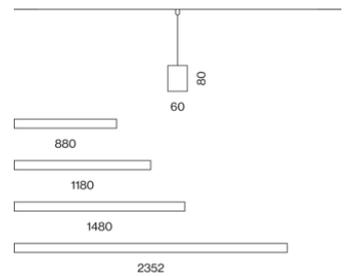
EN Luminaire housing from extruded aluminium profile, angular design; no visible screws; surface powder coated; luminaire profile for mounting available in advance; remaining luminaire components mounted without tools; pendant fitting with cable suspension; with integrated toolless suspension height adjustment; spring clip attachment to the luminaire; freely positionable; incl. feeder cable; light inset consisting of highly reflective coated extruded profile for improved thermal management; HPO (High Performance Opal) cover for uniform illumination; micro prismatic PMMA diffuser incl. diffuser film for homogeneous illumination and reduced luminance; energy-efficient LEDs with very good colour rendering

ES Cuerpo de perfil de aluminio con diseño angular; sin tornillos visibles; superficie con recubrimiento de pintura en polvo; perfil disponible para pre-montaje; resto de componentes luminosos montables sin herramienta; suspendido con cable; regulación de la altura sin necesitar herramientas; fijación en las lámparas por medio de enganches elásticos; ajustable de una manera sencilla; incl. cable de alimentación; elemento de luz formado por perfil extruido con acabado altamente reflectante para una gestión térmica mejorada; difusor opal de alta calidad que proporciona una iluminación uniforme; cubierta microprismática de PMMA con lámina difusora para la reducción de iluminancia y un alumbrado homogéneo; LEDs de alta eficiencia que proporcionan una alta reproducción cromática

Quickinfo

3000 K, 4000 K, tunable white
 2700 - 6500 K
 CRI ≥ 80, CRI ≥ 90 / 3 SDCM
 (initial MacAdam)
 UGR ≤ 19
 hasta 2,710 lm/m
 hasta 141 lm/W
 L90 / 100000 h, L90 / 50000 h,
 L90 / 75000 h
 DALI-2, non attenuable
 High Performance Opal,
 Microprismatic
 IP20

Types



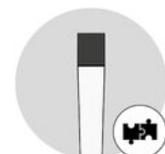
Color



Distribución luminosa



DiA® standards
 251, 252, 253



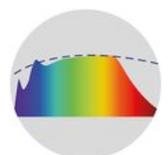
system solution



microprismatic
 UGR ≤ 19



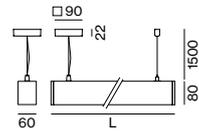
tunable white
 2700 - 6500 K



CRI ≥ 98
 XPECTRUM
 (optional)



MINO 60 suspended



OPAL | MID LUMEN non DIM

| SYSTEM | LENGTH | COLOUR TEMP. | CRI ≥ | LUM. FLUX | EFFICACY | ORDER CODE |
|--------|---------|--------------|-------|-----------|----------|---|
| 10.3 W | 880 mm | 3000 K | 80 | 1320 lm | 128 lm/W | 0 4 6 - 4 2 L 3 5 1 <input checked="" type="checkbox"/> H |
| | | | 90 | 1150 lm | 112 lm/W | 0 4 6 - 4 2 L 3 0 1 <input checked="" type="checkbox"/> H |
| | | 4000 K | 80 | 1400 lm | 136 lm/W | 0 4 6 - 4 2 L 3 6 1 <input checked="" type="checkbox"/> H |
| | | | 90 | 1150 lm | 112 lm/W | 0 4 6 - 4 2 L 3 1 1 <input checked="" type="checkbox"/> H |
| 13.3 W | 1180 mm | 3000 K | 80 | 1760 lm | 132 lm/W | 0 4 6 - 4 2 L 4 5 1 <input checked="" type="checkbox"/> H |
| | | | 90 | 1530 lm | 115 lm/W | 0 4 6 - 4 2 L 4 0 1 <input checked="" type="checkbox"/> H |
| | | 4000 K | 80 | 1870 lm | 141 lm/W | 0 4 6 - 4 2 L 4 6 1 <input checked="" type="checkbox"/> H |
| | | | 90 | 1530 lm | 115 lm/W | 0 4 6 - 4 2 L 4 1 1 <input checked="" type="checkbox"/> H |
| 16.6 W | 1480 mm | 3000 K | 80 | 2200 lm | 133 lm/W | 0 4 6 - 4 2 L 5 5 1 <input checked="" type="checkbox"/> H |
| | | | 90 | 1910 lm | 115 lm/W | 0 4 6 - 4 2 L 5 0 1 <input checked="" type="checkbox"/> H |
| | | 4000 K | 80 | 2340 lm | 141 lm/W | 0 4 6 - 4 2 L 5 6 1 <input checked="" type="checkbox"/> H |
| | | | 90 | 1910 lm | 115 lm/W | 0 4 6 - 4 2 L 5 1 1 <input checked="" type="checkbox"/> H |
| 26.6 W | 2352 mm | 3000 K | 80 | 3520 lm | 132 lm/W | 0 4 6 - 4 2 L 8 5 1 <input checked="" type="checkbox"/> H |
| | | | 90 | 3060 lm | 115 lm/W | 0 4 6 - 4 2 L 8 0 1 <input checked="" type="checkbox"/> H |
| | | 4000 K | 80 | 3740 lm | 141 lm/W | 0 4 6 - 4 2 L 8 6 1 <input checked="" type="checkbox"/> H |
| | | | 90 | 3060 lm | 115 lm/W | 0 4 6 - 4 2 L 8 1 1 <input checked="" type="checkbox"/> H |

MICROPRISMATIC | MID LUMEN non DIM

| SYSTEM | LENGTH | COLOUR TEMP. | CRI ≥ | LUM. FLUX | EFFICACY | ORDER CODE |
|--------|---------|--------------|-------|-----------|----------|--|
| 10.3 W | 880 mm | 3000 K | 80 | 1150 lm | 112 lm/W | 0 4 6 - 4 2 L 3 5 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | | 90 | 1000 lm | 97 lm/W | 0 4 6 - 4 2 L 3 0 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | 4000 K | 80 | 1220 lm | 118 lm/W | 0 4 6 - 4 2 L 3 6 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | | 90 | 999 lm | 97 lm/W | 0 4 6 - 4 2 L 3 1 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 13.3 W | 1180 mm | 3000 K | 80 | 1530 lm | 115 lm/W | 0 4 6 - 4 2 L 4 5 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | | 90 | 1330 lm | 100 lm/W | 0 4 6 - 4 2 L 4 0 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | 4000 K | 80 | 1630 lm | 123 lm/W | 0 4 6 - 4 2 L 4 6 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | | 90 | 1330 lm | 100 lm/W | 0 4 6 - 4 2 L 4 1 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 16.6 W | 1480 mm | 3000 K | 80 | 1910 lm | 115 lm/W | 0 4 6 - 4 2 L 5 5 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | | 90 | 1670 lm | 101 lm/W | 0 4 6 - 4 2 L 5 0 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | 4000 K | 80 | 2040 lm | 123 lm/W | 0 4 6 - 4 2 L 5 6 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | | 90 | 1670 lm | 101 lm/W | 0 4 6 - 4 2 L 5 1 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 26.6 W | 2352 mm | 3000 K | 80 | 3060 lm | 115 lm/W | 0 4 6 - 4 2 L 8 5 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | | 90 | 2670 lm | 100 lm/W | 0 4 6 - 4 2 L 8 0 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | 4000 K | 80 | 3260 lm | 123 lm/W | 0 4 6 - 4 2 L 8 6 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | | 90 | 2670 lm | 100 lm/W | 0 4 6 - 4 2 L 8 1 1 <input checked="" type="checkbox"/> <input type="checkbox"/> |

Order options

| CONTROL | | COLOUR | | COVER OPTION | |
|---------|---|--------------------------|---|--------------------------------|---|
| non DIM | 1 | white aluminium RAL 9006 | G | microprismatic (glare reduced) | G |
| DALI-2 | 3 | pure white RAL 9010 | 7 | microprismatic | Z |
| | | jet black RAL 9005 | 8 | | |

OPAL | HIGH LUMEN

| SYSTEM | LENGTH | COLOUR TEMP. | CRI ≥ | LUM. FLUX | EFFICACY | ORDER CODE |
|--------|---------|--------------|-------|-----------|----------|--|
| 17.5 W | 880 mm | 3000 K | 80 | 2220 lm | 127 lm/W | 0 4 6 - 4 2 M 3 5 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 1930 lm | 110 lm/W | 0 4 6 - 4 2 M 3 0 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | 4000 K | 80 | 2360 lm | 135 lm/W | 0 4 6 - 4 2 M 3 6 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 1930 lm | 110 lm/W | 0 4 6 - 4 2 M 3 1 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| 19.0 W | 880 mm | tunable w. | 80 | 2260 lm | 119 lm/W | 0 4 6 - 4 2 3 3 D 3 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| 23.3 W | 1180 mm | 3000 K | 80 | 2960 lm | 127 lm/W | 0 4 6 - 4 2 M 4 5 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 2570 lm | 110 lm/W | 0 4 6 - 4 2 M 4 0 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | 4000 K | 80 | 3150 lm | 135 lm/W | 0 4 6 - 4 2 M 4 6 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 2570 lm | 110 lm/W | 0 4 6 - 4 2 M 4 1 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| 25.3 W | 1180 mm | tunable w. | 80 | 3010 lm | 119 lm/W | 0 4 6 - 4 2 3 4 D 3 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| 29.1 W | 1480 mm | 3000 K | 80 | 3690 lm | 127 lm/W | 0 4 6 - 4 2 M 5 5 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 3220 lm | 111 lm/W | 0 4 6 - 4 2 M 5 0 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | 4000 K | 80 | 3930 lm | 135 lm/W | 0 4 6 - 4 2 M 5 6 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 3220 lm | 111 lm/W | 0 4 6 - 4 2 M 5 1 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| 31.0 W | 1480 mm | tunable w. | 80 | 3760 lm | 121 lm/W | 0 4 6 - 4 2 3 5 D 3 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| 45.0 W | 2352 mm | 3000 K | 80 | 5910 lm | 131 lm/W | 0 4 6 - 4 2 M 8 5 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 5150 lm | 114 lm/W | 0 4 6 - 4 2 M 8 0 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | 4000 K | 80 | 6290 lm | 140 lm/W | 0 4 6 - 4 2 M 8 6 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 5150 lm | 114 lm/W | 0 4 6 - 4 2 M 8 1 <input checked="" type="checkbox"/> <input type="checkbox"/> H |
| 49.0 W | 2352 mm | tunable w. | 80 | 6020 lm | 123 lm/W | 0 4 6 - 4 2 3 8 D 3 <input checked="" type="checkbox"/> <input type="checkbox"/> H |

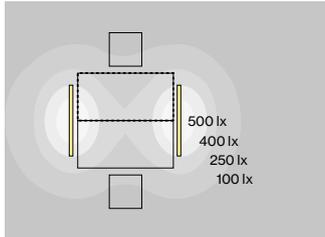
MICROPRISMATIC | HIGH LUMEN

| SYSTEM | LENGTH | COLOUR TEMP. | CRI ≥ | LUM. FLUX | EFFICACY | ORDER CODE |
|--------|---------|--------------|-------|-----------|----------|--|
| 17.5 W | 880 mm | 3000 K | 80 | 1930 lm | 110 lm/W | 0 4 6 - 4 2 M 3 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 1680 lm | 96 lm/W | 0 4 6 - 4 2 M 3 0 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | 4000 K | 80 | 2050 lm | 117 lm/W | 0 4 6 - 4 2 M 3 6 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 1680 lm | 96 lm/W | 0 4 6 - 4 2 M 3 1 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| 19.0 W | 880 mm | tunable w. | 80 | 1960 lm | 103 lm/W | 0 4 6 - 4 2 3 3 D 3 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| 23.3 W | 1180 mm | 3000 K | 80 | 2570 lm | 110 lm/W | 0 4 6 - 4 2 M 4 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 2240 lm | 96 lm/W | 0 4 6 - 4 2 M 4 0 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | 4000 K | 80 | 2740 lm | 118 lm/W | 0 4 6 - 4 2 M 4 6 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 2240 lm | 96 lm/W | 0 4 6 - 4 2 M 4 1 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| 25.3 W | 1180 mm | tunable w. | 80 | 2620 lm | 104 lm/W | 0 4 6 - 4 2 3 4 D 3 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| 29.1 W | 1480 mm | 3000 K | 80 | 3210 lm | 110 lm/W | 0 4 6 - 4 2 M 5 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 2800 lm | 96 lm/W | 0 4 6 - 4 2 M 5 0 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | 4000 K | 80 | 3420 lm | 118 lm/W | 0 4 6 - 4 2 M 5 6 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 2800 lm | 96 lm/W | 0 4 6 - 4 2 M 5 1 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| 31.0 W | 1480 mm | tunable w. | 80 | 3270 lm | 105 lm/W | 0 4 6 - 4 2 3 5 D 3 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| 45.0 W | 2352 mm | 3000 K | 80 | 5140 lm | 114 lm/W | 0 4 6 - 4 2 M 8 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 4480 lm | 100 lm/W | 0 4 6 - 4 2 M 8 0 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | 4000 K | 80 | 5480 lm | 122 lm/W | 0 4 6 - 4 2 M 8 6 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| | | | 90 | 4480 lm | 100 lm/W | 0 4 6 - 4 2 M 8 1 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |
| 49.0 W | 2352 mm | tunable w. | 80 | 5240 lm | 107 lm/W | 0 4 6 - 4 2 3 8 D 3 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> H |

Order options

| CONTROL | | COLOUR | | COVER OPTION | |
|---------|---|--------------------------|---|--------------------------------|---|
| non DIM | 1 | white aluminium RAL 9006 | G | microprismatic (glare reduced) | G |
| DALI-2 | 3 | pure white RAL 9010 | 7 | microprismatic | Z |
| | | jet black RAL 9005 | 8 | | |

Planning Information



MINO 60 suspended, 15.3W,
4000 K, direct

ROOM VALUES

| | |
|--------------------|-----------------|
| Room dimensions | 5.4 × 4 × 2.8m |
| Reflection factor | 0.7 0.5 0.2 |
| Maintenance factor | 0.8 |
| Suspension height | 2.25m |

CALCULATION SURFACE

| | |
|-------------------------------|------------|
| Surface dimensions | 1.6 × 0.8m |
| Surface height | 0.75m |
| Average illuminance (E_m) | > 500lx |
| Uniformity (U_o) | > 0.6 |

GLARE EVALUATION

| | |
|----------------------|-----------------------|
| Table Classification | X=4H Y=8H S=0.25H |
| UGR transversal | ≤ 19 |
| UGR axial | ≤ 19 |

University Academy 92, Manchester

Reino Unido

Arquitecto
BDP Architecture

Fotografía
David Barbour



Productos utilizados



MINO 60 suspended



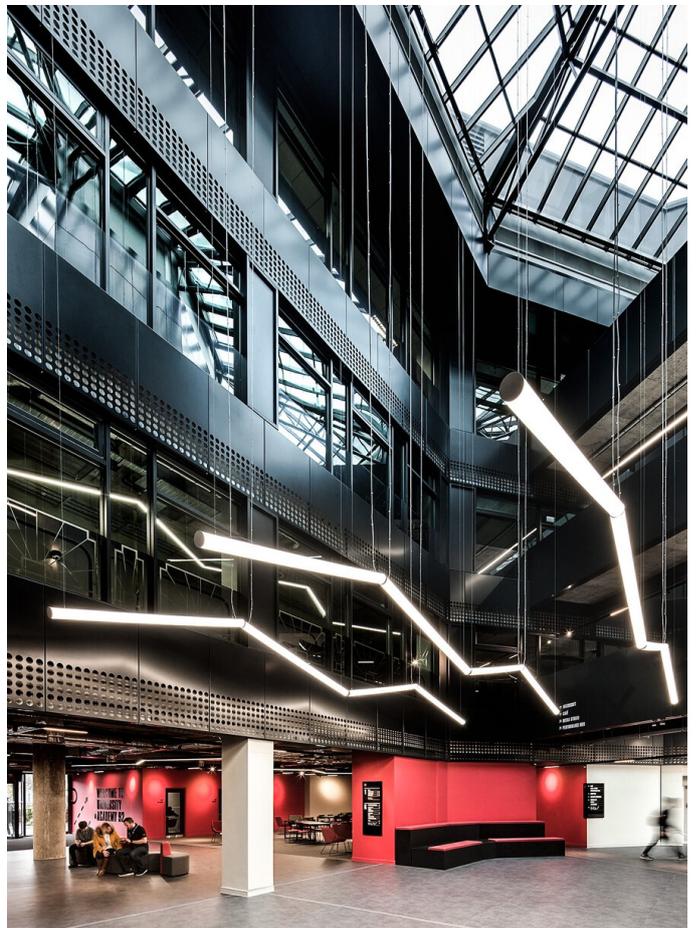
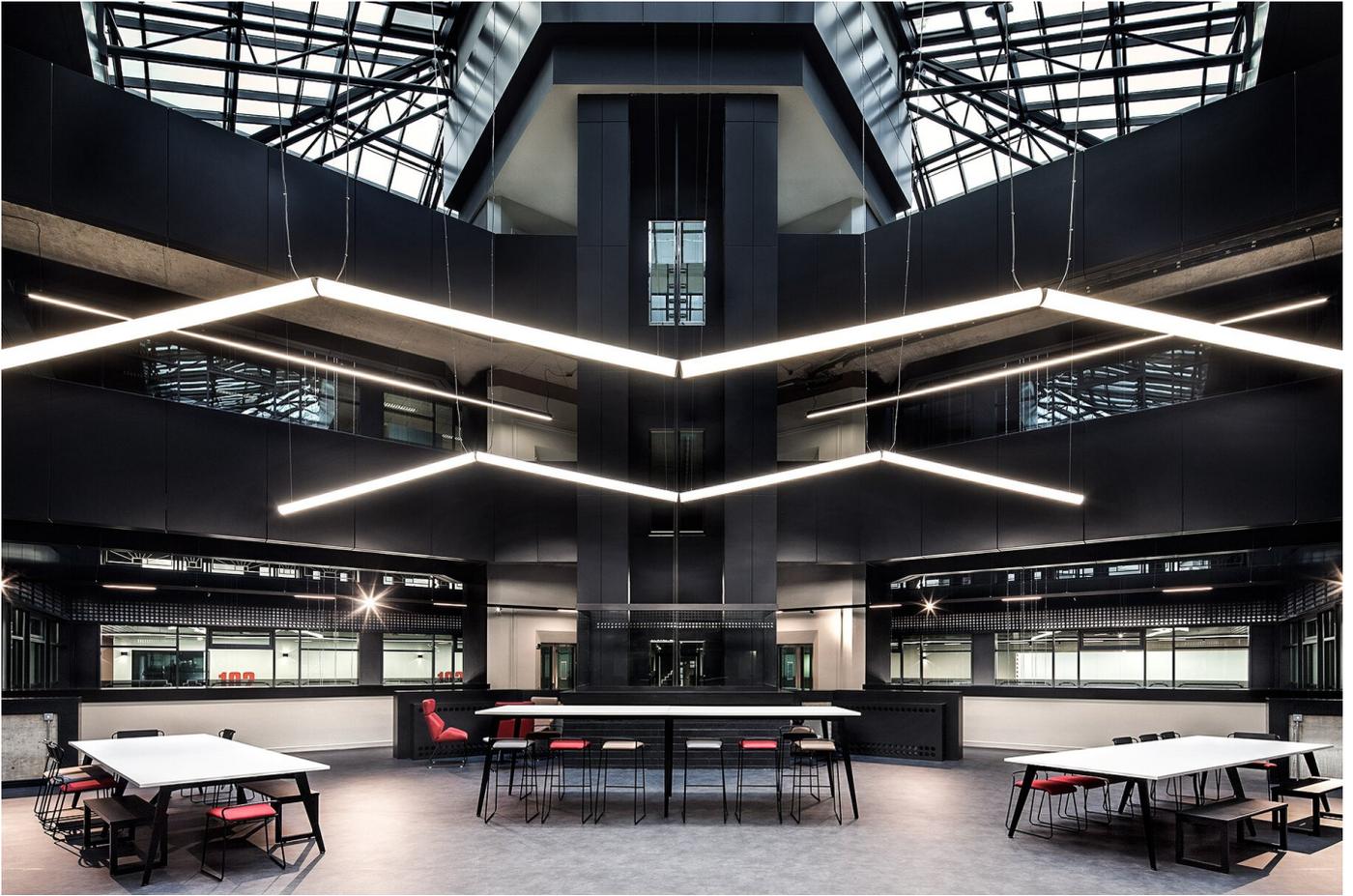
**OPAL HIGH
PERFORMANCE**
MOVE IT 25



MOVE IT 25 surface /
suspended system



JUST 55 MOVE IT
25 / 25 S / 45







Office IPAI, Heilbronn

Alemania

Arquitecto
Süd.Com GmbH

Fotografía
Süd.Com GmbH



Productos utilizados



**MINO 60 ceiling /
suspended system**



**MINO 60 CURVE
ceiling / suspended
system**



MINO 60 suspended

