

TS Kremnica

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Contacts



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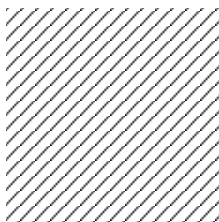
Luminaire list

Φ_{total} 427427 lm	P_{total} 3809.6 W	Luminous efficacy 112.2 lm/W
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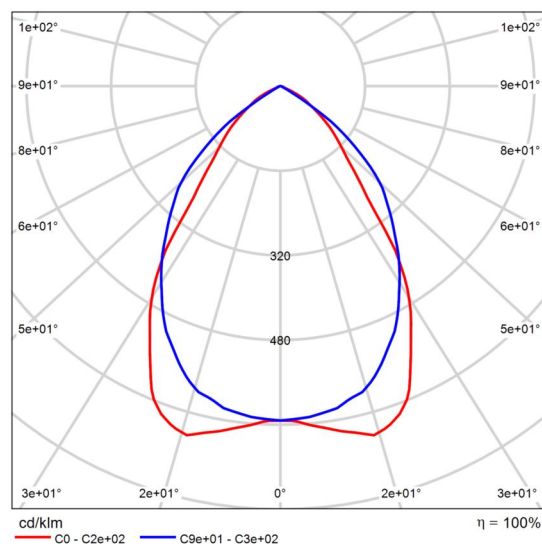
pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
8	BRIGHTSOL	BS01O4K40UN	BS01O4K40UN	40.0 W	4267 lm	106.7 lm/W
35	BRIGHTSOL	BS01P4K36UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm	139.6 lm/W
4	BRIGHTSOL	BS01S4K35ME	BS01S4K35ME	35.0 W	4799 lm	137.1 lm/W
14	BRIGHTSOL	BS01U4K25UN	BS01U4K25UN	23.0 W	1600 lm	69.6 lm/W
33	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W
12	BRIGHTSOL	BS03O4K50UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W
5	BRIGHTSOL	BS03U4K20UNL	BS03U4K20UNL	20.0 W	2189 lm	109.5 lm/W
8	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W
7	BRIGHTSOL	BS06U4K30UNL	BS06U4K30UNL	30.0 W	3269 lm	109.0 lm/W

Product data sheet

BRIGHTSOL BS01O4K40UN



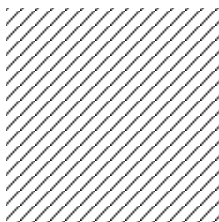
Article No.	BS01O4K40UN
P	40.0 W
Φ_{Lamp}	4270 lm
$\Phi_{\text{Luminaire}}$	4267 lm
η	99.93 %
Luminous efficacy	106.7 lm/W
CCT	4000 K
CRI	82



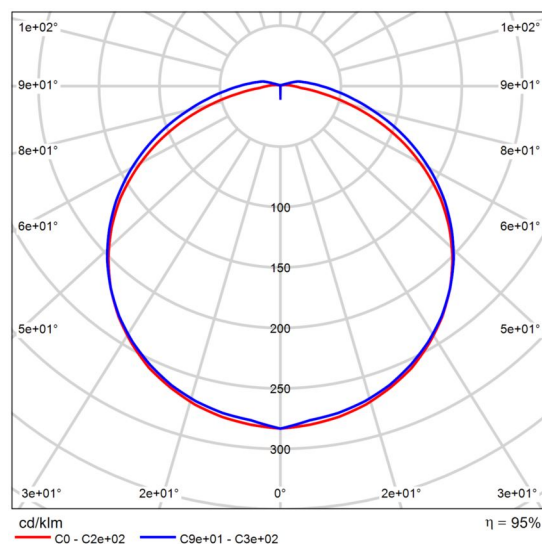
Polar LDC

Product data sheet

BRIGHTSOL BS01P4K36UN 35.5W 4000K NW



Article No.	BS01P4K36UN
P	35.5 W
Φ_{Lamp}	5227 lm
$\Phi_{\text{Luminaire}}$	4957 lm
η	94.84 %
Luminous efficacy	139.6 lm/W
CCT	4000 K
CRI	80



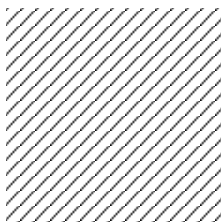
Polar LDC

Glare evaluation according to UGR												
p Ceiling	70	70	50	50	30	70	70	50	50	30		
p Walls	50	30	50	30	30	50	30	50	30	30		
p Floor	20	20	20	20	20	20	20	20	20	20		
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	20.3	21.7	20.7	22.0	22.3	19.6	21.0	20.0	21.3	21.6	
	3H	21.9	23.2	22.3	23.5	23.9	21.2	22.4	21.5	22.7	23.1	
	4H	22.6	23.8	23.0	24.1	24.5	21.8	23.0	22.2	23.3	23.7	
	6H	23.0	24.1	23.4	24.5	24.9	22.3	23.4	22.8	23.8	24.2	
	8H	23.2	24.2	23.6	24.6	25.0	22.6	23.6	23.0	24.0	24.4	
4H	12H	23.2	24.3	23.7	24.7	25.1	22.7	23.8	23.2	24.2	24.6	
	2H	20.9	22.1	21.3	22.4	22.8	20.4	21.5	20.8	21.9	22.3	
	3H	22.7	23.7	23.1	24.1	24.5	22.1	23.1	22.5	23.5	23.9	
	4H	23.5	24.4	23.9	24.8	25.3	22.9	23.8	23.3	24.2	24.7	
	6H	24.0	24.9	24.5	25.3	25.8	23.5	24.3	24.0	24.8	25.3	
8H	8H	24.2	25.0	24.7	25.5	26.0	23.8	24.6	24.3	25.0	25.5	
	12H	24.4	25.1	24.9	25.6	26.1	24.1	24.8	24.6	25.3	25.8	
	4H	23.7	24.5	24.2	25.0	25.5	23.2	24.0	23.7	24.4	24.9	
	6H	24.5	25.1	25.0	25.6	26.2	24.1	24.7	24.6	25.2	25.7	
	8H	24.8	25.4	25.3	25.9	26.4	24.5	25.0	25.0	25.5	26.1	
12H	12H	25.0	25.5	25.6	26.1	26.6	24.8	25.3	25.4	25.9	26.5	
	4H	23.8	24.5	24.3	25.0	25.5	23.2	23.9	23.8	24.4	24.9	
	6H	24.6	25.1	25.1	25.7	26.2	24.2	24.7	24.7	25.2	25.8	
	8H	24.9	25.4	25.5	26.0	26.5	24.6	25.1	25.2	25.6	26.2	
	Variation of the observer position for the luminaire distances S											
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1					
S = 1.5H		+0.2 / -0.3					+0.2 / -0.3					
S = 2.0H		+0.4 / -0.5					+0.3 / -0.6					
Standard table		BK06					BK06					
Correction summand		7.6					7.1					
Corrected glare indices referring to 5227lm Total luminous flux												

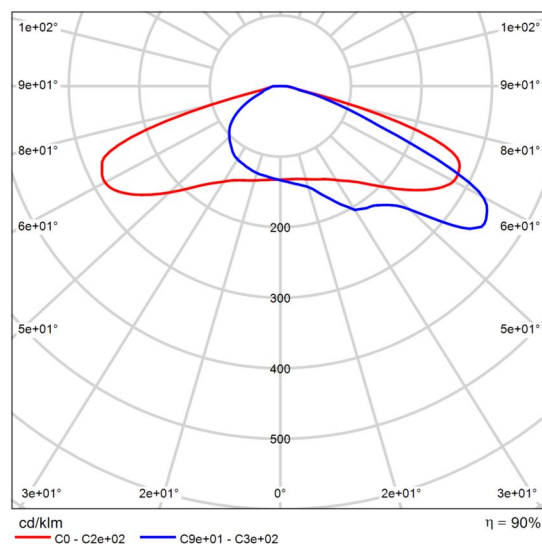
UGR diagram (SHR: 0.25)

Product data sheet

BRIGHTSOL BS01S4K35ME



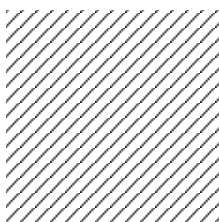
Article No.	BS01S4K35ME
P	35.0 W
Φ_{Lamp}	5344 lm
$\Phi_{\text{Luminaire}}$	4799 lm
η	89.81 %
Luminous efficacy	137.1 lm/W
CCT	4000 K
CRI	100



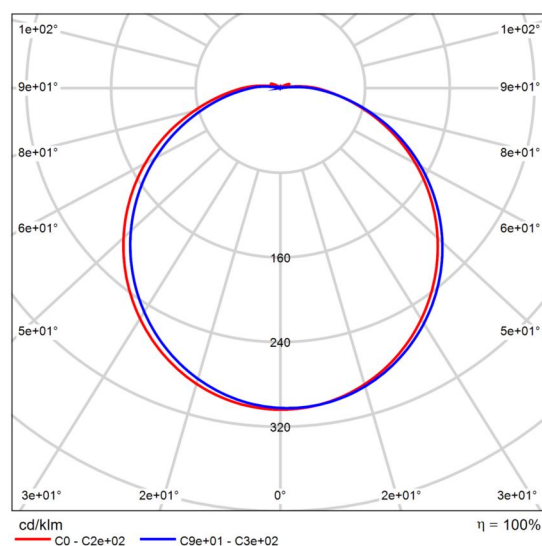
Polar LDC

Product data sheet

BRIGHTSOL BS01U4K25UN



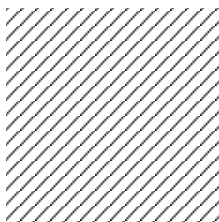
Article No.	BS01U4K25UN
P	23.0 W
Φ_{Lamp}	1600 lm
$\Phi_{\text{Luminaire}}$	1600 lm
η	100.00 %
Luminous efficacy	69.6 lm/W
CCT	4000 K
CRI	80



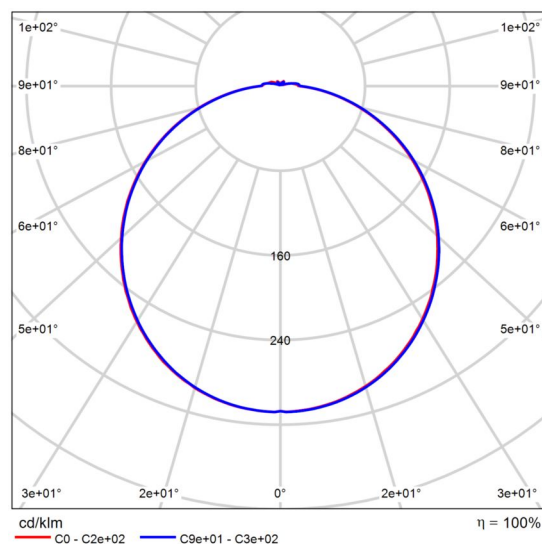
Polar LDC

Product data sheet

BRIGHTSOL BS02U4K18UN



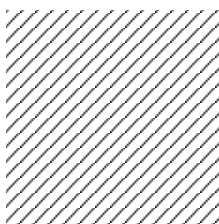
Article No.	BS02U4K18UN
P	20.7 W
Φ_{Lamp}	1700 lm
$\Phi_{\text{Luminaire}}$	1700 lm
η	100.00 %
Luminous efficacy	82.1 lm/W
CCT	4000 K
CRI	80



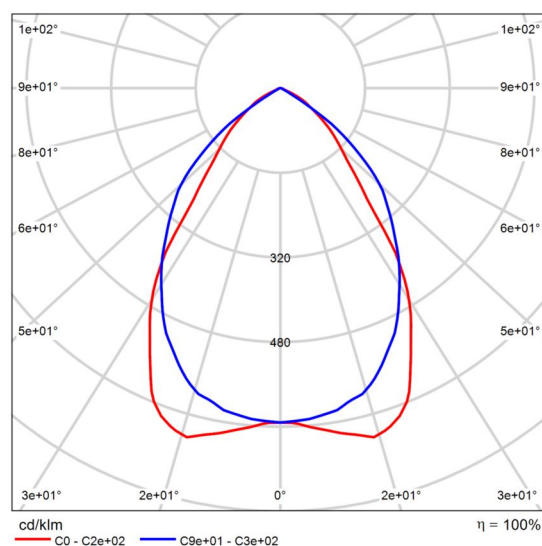
Polar LDC

Product data sheet

BRIGHTSOL BS03O4K50UNL



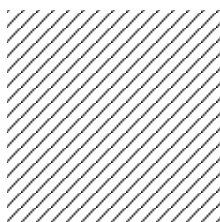
Article No.	BS03O4K50UNL
P	50.0 W
Φ_{Lamp}	5860 lm
$\Phi_{\text{Luminaire}}$	5856 lm
η	99.93 %
Luminous efficacy	117.1 lm/W
CCT	4000 K
CRI	82



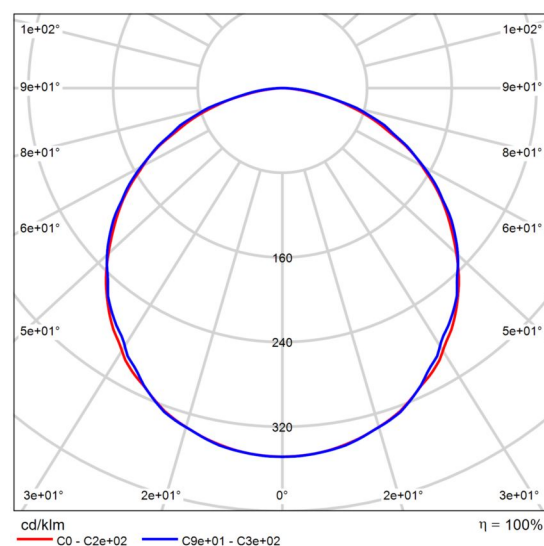
Polar LDC

Product data sheet

BRIGHTSOL BS03U4K20UNL



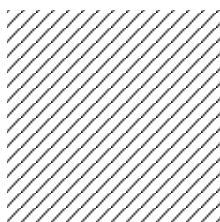
Article No.	BS03U4K20UNL
P	20.0 W
Φ_{Lamp}	2190 lm
$\Phi_{\text{Luminaire}}$	2189 lm
η	99.97 %
Luminous efficacy	109.5 lm/W
CCT	4000 K
CRI	85



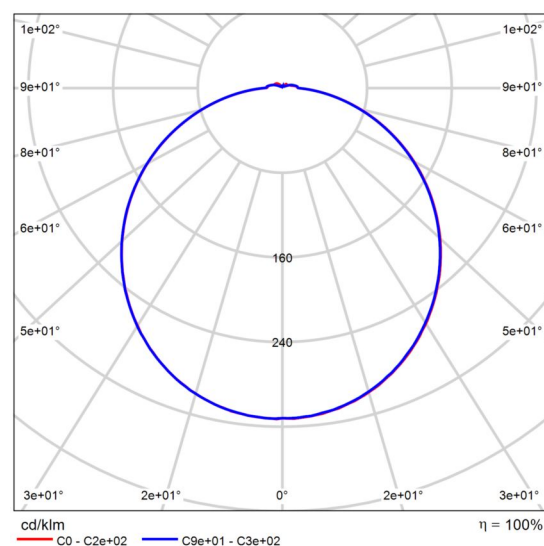
Polar LDC

Product data sheet

BRIGHTSOL BS04U4K24UNK



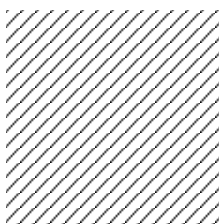
Article No.	BS04U4K24UNK
P	24.0 W
Φ_{Lamp}	2250 lm
$\Phi_{\text{Luminaire}}$	2250 lm
η	100.00 %
Luminous efficacy	93.7 lm/W
CCT	4000 K
CRI	80



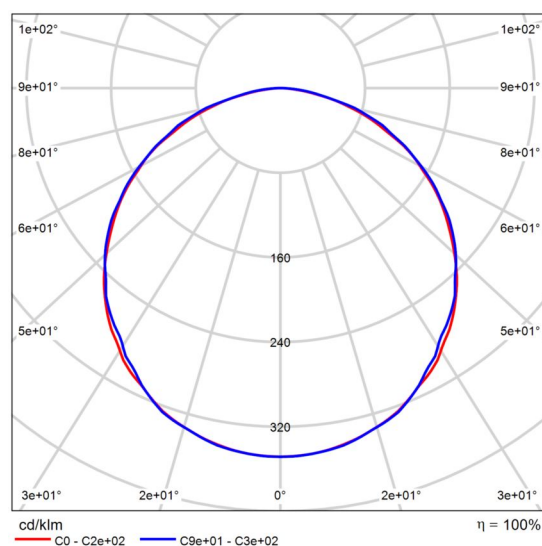
Polar LDC

Product data sheet

BRIGHTSOL BS06U4K30UNL



Article No.	BS06U4K30UNL
P	30.0 W
Φ_{Lamp}	3270 lm
$\Phi_{\text{Luminaire}}$	3269 lm
η	99.97 %
Luminous efficacy	109.0 lm/W
CCT	4000 K
CRI	85



Polar LDC

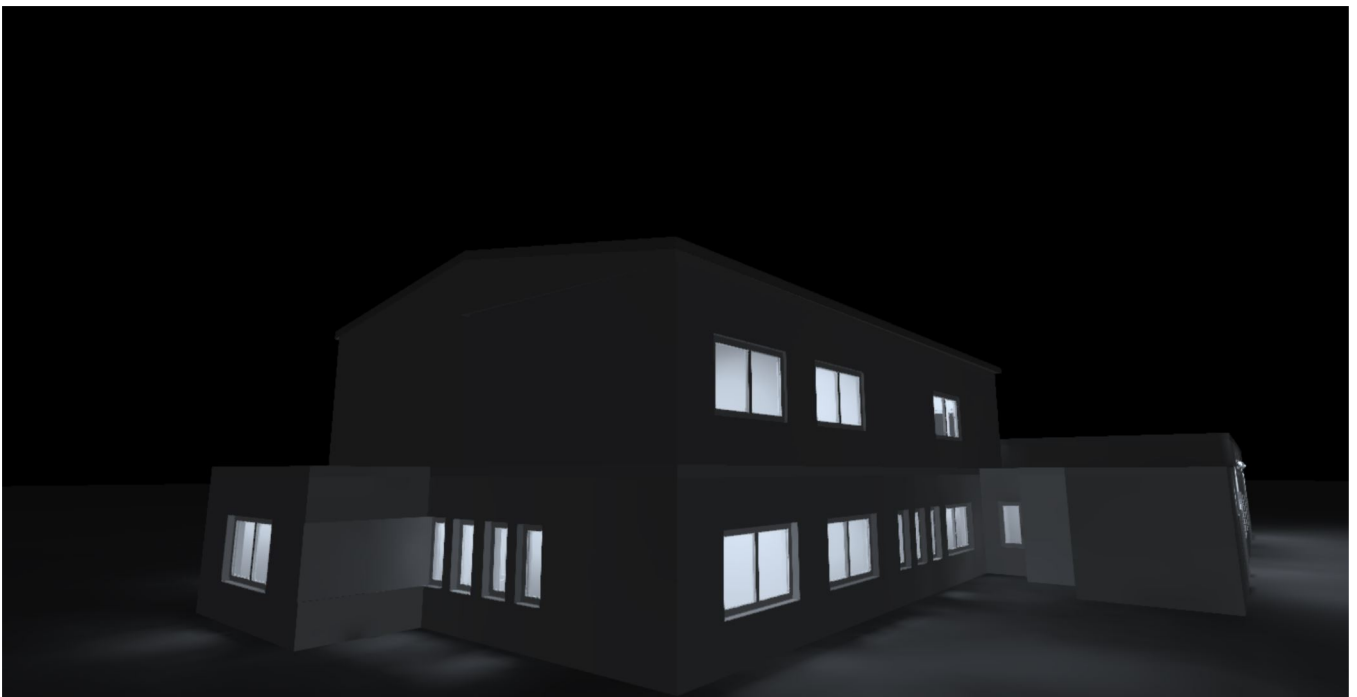
Site 1

Luminaire list

Φ_{total} 31996 lm	P_{total} 324.0 W	Luminous efficacy 98.8 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	BRIGHTSOL	BS01S4K3 5ME	BS01S4K35ME	35.0 W	4799 lm	137.1 lm/W
8	BRIGHTSOL	BS01U4K2 5UN	BS01U4K25UN	23.0 W	1600 lm	69.6 lm/W

Images



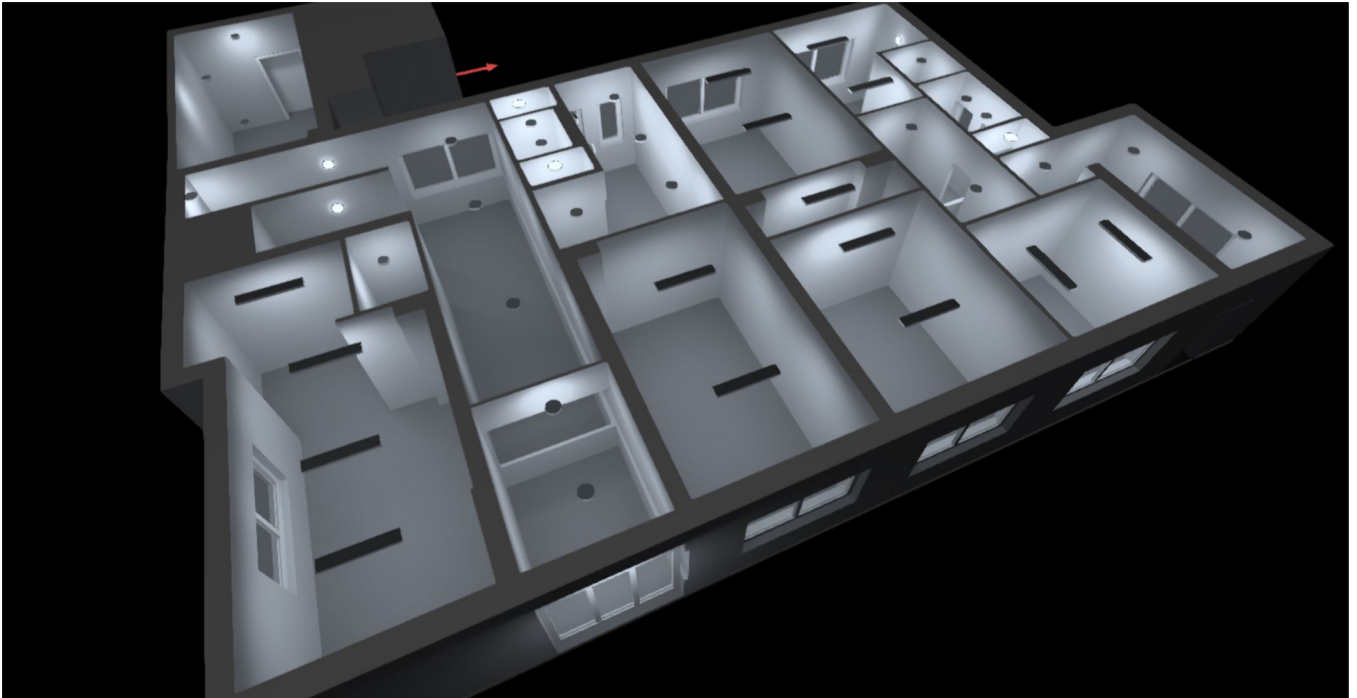
Building 1

Luminaire list

Φ_{total} 221936 lm	P_{total} 2243.1 W	Luminous efficacy 98.9 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
8	BRIGHTSOL	BS01O4K40UN	BS01O4K40UN	40.0 W	4267 lm	106.7 lm/W
6	BRIGHTSOL	BS01U4K25UN	BS01U4K25UN	23.0 W	1600 lm	69.6 lm/W
33	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W
12	BRIGHTSOL	BS03O4K50UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W
5	BRIGHTSOL	BS03U4K20UNL	BS03U4K20UNL	20.0 W	2189 lm	109.5 lm/W
8	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W
7	BRIGHTSOL	BS06U4K30UNL	BS06U4K30UNL	30.0 W	3269 lm	109.0 lm/W

Images



Building 1 · Storey 1

Room List (Energy evaluation)



Building 1 · Storey 1

Room List (Energy evaluation)

1.01

P_{total} 41.4 W	A_{Room} 6.93 m ²	Lighting power density 5.98 W/m ² = 4.05 W/m ² /100 lx (Room) 15.73 W/m ² = 10.66 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 148 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm

1.02

P_{total} 124.2 W	A_{Room} 29.29 m ²	Lighting power density 4.24 W/m ² = 3.80 W/m ² /100 lx (Room) 9.69 W/m ² = 8.68 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 112 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
6	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm

1.03

P_{total} 23.0 W	A_{Room} 2.54 m ²	Lighting power density 9.06 W/m ² = 7.47 W/m ² /100 lx (Room)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 121 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
1	BRIGHTSOL	BS01U4K25UN	BS01U4K25UN	23.0 W	1600 lm

Building 1 · Storey 1

Room List (Energy evaluation)

1.04

P_{total} 80.0 W	A_{Room} 24.97 m ²	Lighting power density $3.20 \text{ W/m}^2 = 1.48 \text{ W/m}^2/100 \text{ lx (Room)}$ $5.79 \text{ W/m}^2 = 2.67 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 217 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
4	BRIGHTSOL	BS03U4K2 OUNL	BS03U4K20UNL	20.0 W	2189 lm

1.05

P_{total} 60.0 W	A_{Room} 18.85 m ²	Lighting power density $3.18 \text{ W/m}^2 = 1.44 \text{ W/m}^2/100 \text{ lx (Room)}$ $5.54 \text{ W/m}^2 = 2.51 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 221 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS06U4K3 OUNL	BS06U4K30UNL	30.0 W	3269 lm

1.06

P_{total} 124.2 W	A_{Room} 13.52 m ²	Lighting power density $9.19 \text{ W/m}^2 = 3.58 \text{ W/m}^2/100 \text{ lx (Room)}$ $14.57 \text{ W/m}^2 = 5.68 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 257 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
6	BRIGHTSOL	BS02U4K1 8UN	BS02U4K18UN	20.7 W	1700 lm

Building 1 · Storey 1

Room List (Energy evaluation)

1.07

P_{total} 41.4 W	A_{Room} 1.94 m ²	Lighting power density $21.37 \text{ W/m}^2 = 7.01 \text{ W/m}^2/100 \text{ lx (Room)}$ $287.99 \text{ W/m}^2 = 94.47 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 305 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm

1.08

P_{total} 24.0 W	A_{Room} 1.21 m ²	Lighting power density $19.87 \text{ W/m}^2 = 8.87 \text{ W/m}^2/100 \text{ lx (Room)}$ $119.35 \text{ W/m}^2 = 53.29 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 224 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
1	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm

1.09

P_{total} 24.0 W	A_{Room} 1.16 m ²	Lighting power density $20.69 \text{ W/m}^2 = 10.24 \text{ W/m}^2/100 \text{ lx (Room)}$ $141.17 \text{ W/m}^2 = 69.86 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 202 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
1	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm

Building 1 · Storey 1

Room List (Energy evaluation)

1.10

P_{total} 62.1 W	A_{Room} 11.48 m ²	Lighting power density 5.41 W/m ² = 5.06 W/m ² /100 lx (Room) 16.45 W/m ² = 15.39 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 107 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
3	BRIGHTSOL	BS02U4K1 8UN	BS02U4K18UN	20.7 W	1700 lm

1.11

P_{total} 41.4 W	A_{Room} 7.38 m ²	Lighting power density 5.61 W/m ² = 3.99 W/m ² /100 lx (Room) 15.83 W/m ² = 11.25 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 141 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
2	BRIGHTSOL	BS02U4K1 8UN	BS02U4K18UN	20.7 W	1700 lm

1.13

P_{total} 24.0 W	A_{Room} 1.22 m ²	Lighting power density 19.60 W/m ² = 6.24 W/m ² /100 lx (Room) 130.91 W/m ² = 41.67 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 314 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm

Building 1 · Storey 1

Room List (Energy evaluation)

1.14

P_{total} 41.4 W	A_{Room} 3.00 m ²	Lighting power density 13.81 W/m ² = 4.73 W/m ² /100 lx (Room) 82.54 W/m ² = 28.29 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 292 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
2	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm

1.15

P_{total} 80.7 W	A_{Room} 10.98 m ²	Lighting power density 7.35 W/m ² = 2.66 W/m ² /100 lx (Room)	E_{perpendicular} (Workplane) 277 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
1	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm
2	BRIGHTSOL	BS06U4K30UNL	BS06U4K30UNL	30.0 W	3269 lm

1.16

P_{total} 20.7 W	A_{Room} 2.23 m ²	Lighting power density 9.27 W/m ² = 5.94 W/m ² /100 lx (Room) 85.20 W/m ² = 54.57 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 156 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
1	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm

Building 1 · Storey 1

Room List (Energy evaluation)

1.17

P_{total} 100.0 W	A_{Room} 19.57 m ²	Lighting power density 5.11 W/m ² = 0.90 W/m ² /100 lx (Room) 8.64 W/m ² = 1.52 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 567 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS03O4K5 OUNL	BS03O4K50UNL	50.0 W	5856 lm

1.18

P_{total} 20.0 W	A_{Room} 4.29 m ²	Lighting power density 4.66 W/m ² = 2.57 W/m ² /100 lx (Room) 48.08 W/m ² = 26.49 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 182 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
1	BRIGHTSOL	BS03U4K2 OUNL	BS03U4K20UNL	20.0 W	2189 lm

1.19

P_{total} 100.0 W	A_{Room} 15.75 m ²	Lighting power density 6.35 W/m ² = 1.01 W/m ² /100 lx (Room) 11.38 W/m ² = 1.80 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 631 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS03O4K5 OUNL	BS03O4K50UNL	50.0 W	5856 lm

Building 1 · Storey 1

Room List (Energy evaluation)

1.20

P_{total} 60.0 W	A_{Room} 10.86 m ²	Lighting power density 5.53 W/m ² = 2.09 W/m ² /100 lx (Room)	E_{perpendicular} (Workplane) 265 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
2	BRIGHTSOL	BS06U4K3 0UNL	BS06U4K30UNL	30.0 W	3269 lm

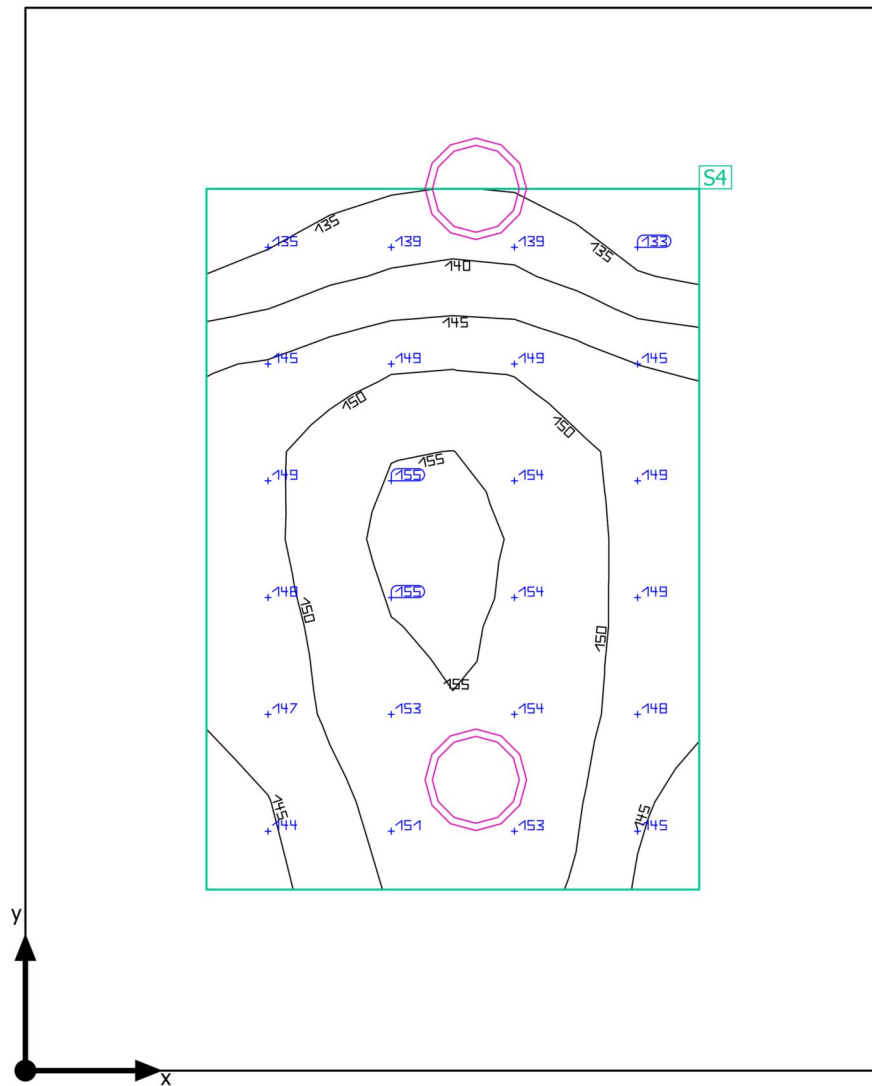
1.26

P_{total} 69.0 W	A_{Room} 17.35 m ²	Lighting power density 3.98 W/m ² = 3.17 W/m ² /100 lx (Room)	E_{perpendicular} (Workplane) 125 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
3	BRIGHTSOL	BS01U4K2 5UN	BS01U4K25UN	23.0 W	1600 lm

Building 1 · Storey 1 · 1.01

Summary



Building 1 · Storey 1 · 1.01

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	148 lx	≥ 100 lx	✓	S4
	g_1	0.89	-	-	S4
Consumption values	Consumption	[50 - 80] kWh/a	max. 250 kWh/a	✓	
Lighting power density	Room	5.98 W/m ²	-	-	
		4.05 W/m ² /100 lx	-	-	
	Workplane	15.73 W/m ²	-	-	
		10.66 W/m ² /100 lx	-	-	

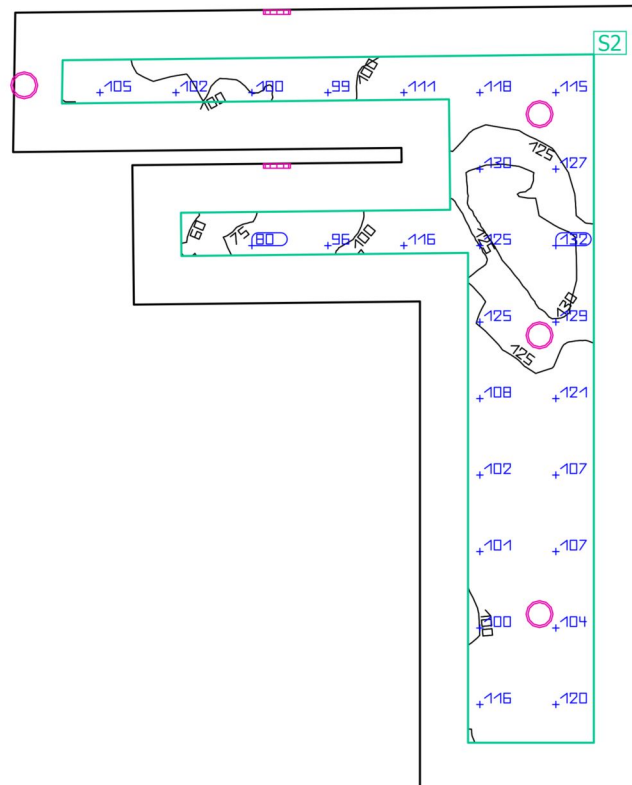
Utilisation profile: Places of public assembly - General areas, Entrance halls

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 1 · 1.02

Summary



Building 1 · Storey 1 · 1.02

Summary

Results

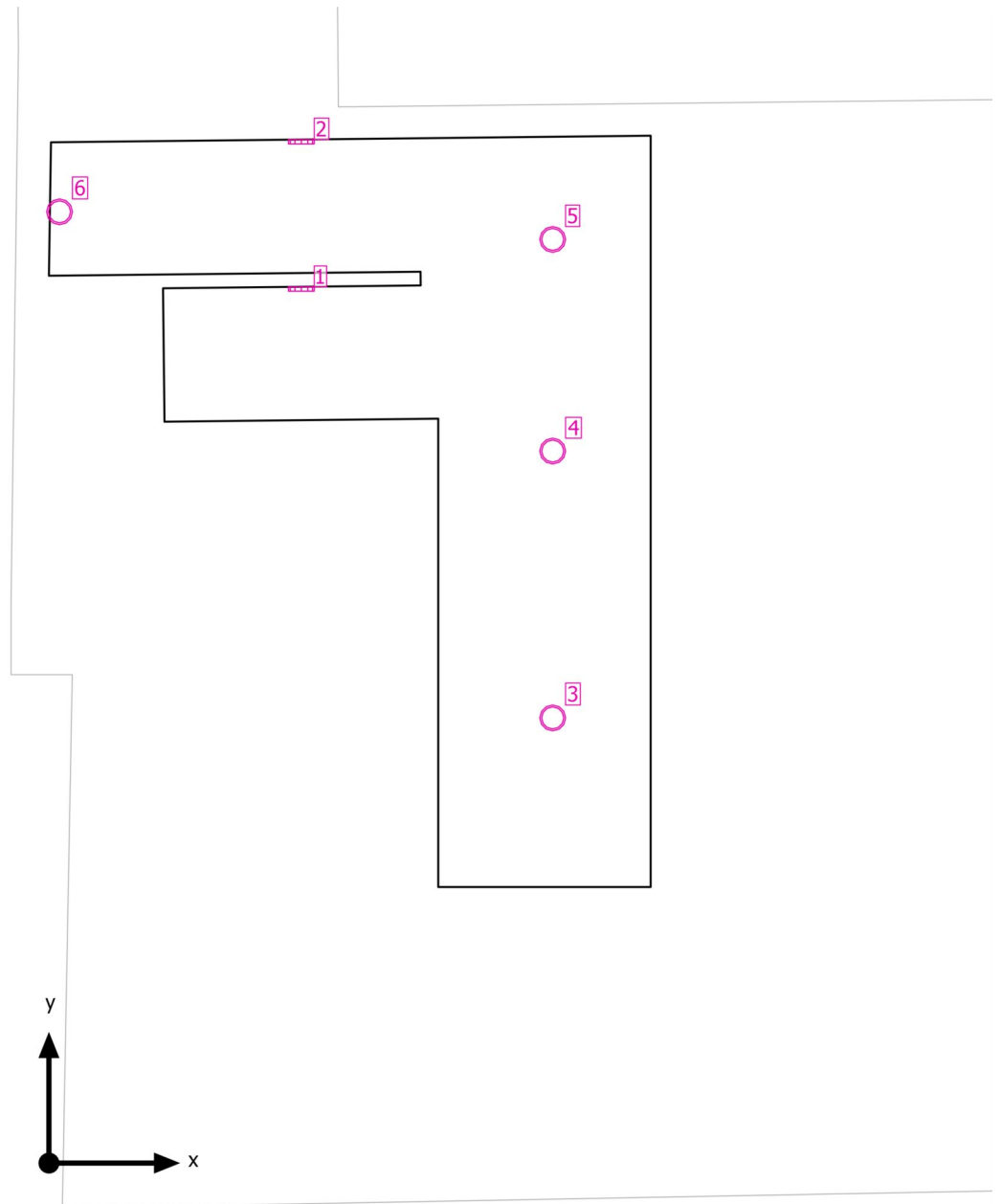
	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	112 lx	≥ 100 lx	✓	S2
	g_1	0.51	-	-	S2
Consumption values	Consumption	[170 - 240] kWh/a	max. 1050 kWh/a	✓	
Lighting power density	Room	4.24 W/m ²	-	-	
		3.80 W/m ² /100 lx	-	-	
	Workplane	9.69 W/m ²	-	-	
		8.68 W/m ² /100 lx	-	-	

Utilisation profile: Places of public assembly - General areas, Entrance halls

Luminaire list

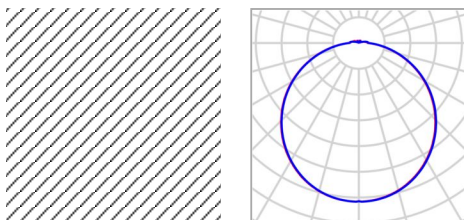
pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
6	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 1 · 1.02

Luminaire layout plan

Building 1 · Storey 1 · 1.02

Luminaire layout plan



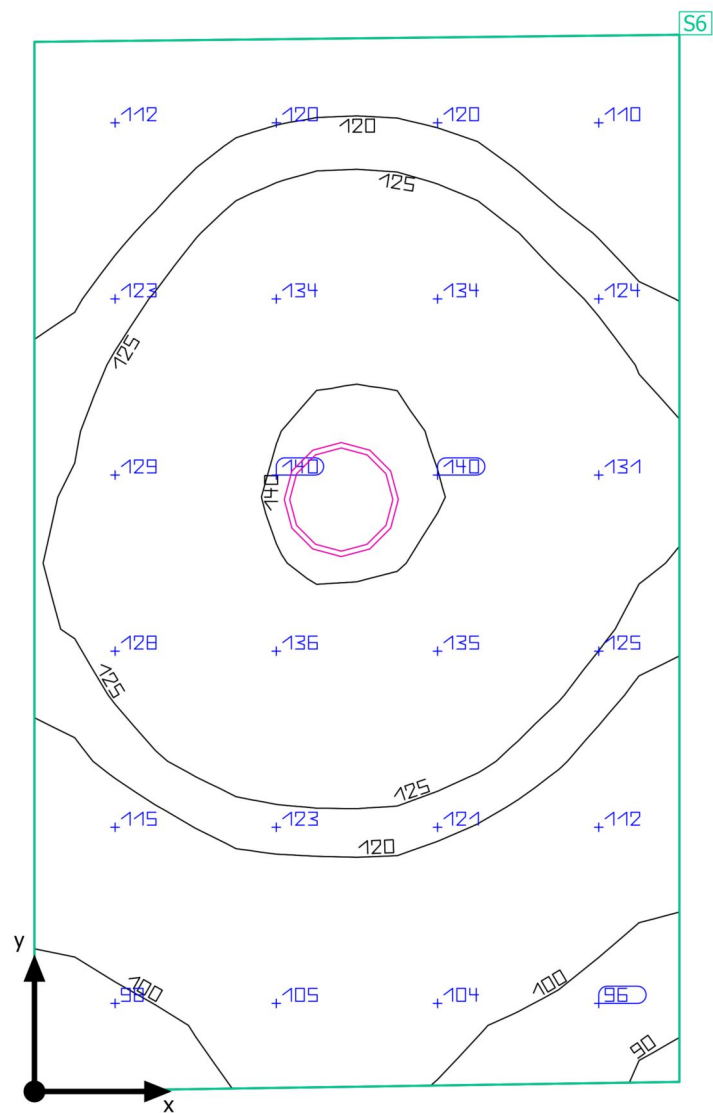
Manufacturer	BRIGHTSOL	P	20.7 W
Article No.	BS02U4K18UN	$\Phi_{\text{Luminaire}}$	1700 lm
Article name	BS02U4K18UN		
Fitting	1x BS02U4K18UN		

Individual luminaires

X	Y	Mounting height	Luminaire
2.743 m	9.524 m	2.400 m	1
2.743 m	11.124 m	2.400 m	2
5.474 m	4.838 m	2.960 m	3
5.474 m	7.738 m	2.960 m	4
5.474 m	10.038 m	2.960 m	5
0.115 m	10.338 m	2.960 m	6

Building 1 · Storey 1 · 1.03

Summary



Ground area: 2.54 m² | Reflection factors: Ceiling: 70.0 %, Walls: 50.0 %, Floor: 20.0 % | Maintenance factor: 0.79 (fixed) | Clearance height: 2.960 m | Mounting height: 2.960 m

Building 1 · Storey 1 · 1.03

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	121 lx	≥ 100 lx	✓	S6
	g_1	0.74	-	-	S6
Consumption values	Consumption	4 kWh/a	max. 100 kWh/a	✓	
Lighting power density	Room	9.06 W/m ²	-	-	
		7.47 W/m ² /100 lx	-	-	

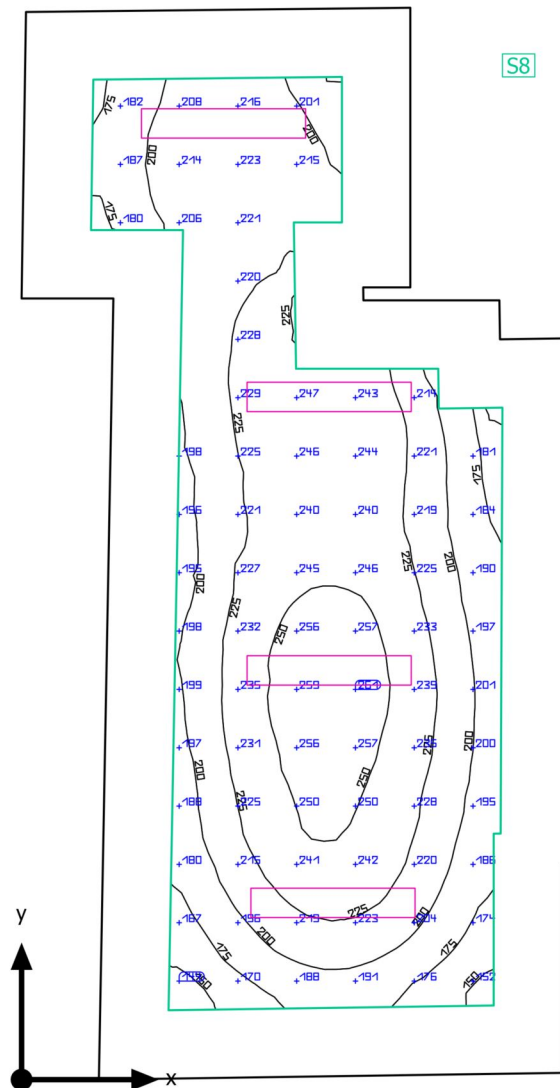
Utilisation profile: General areas inside buildings - Store rooms and cold stores, Store and stockrooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS01U4K25UN	BS01U4K25UN	23.0 W	1600 lm	69.6 lm/W

Building 1 · Storey 1 · 1.04

Summary



Building 1 · Storey 1 · 1.04

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	217 lx	≥ 200 lx	✓	S8
	g_1	0.63	-	-	S8
Consumption values	Consumption	[60 - 66] kWh/a	max. 900 kWh/a	✓	
Lighting power density	Room	3.20 W/m ²	-	-	
		1.48 W/m ² /100 lx	-	-	
	Workplane	5.79 W/m ²	-	-	
		2.67 W/m ² /100 lx	-	-	

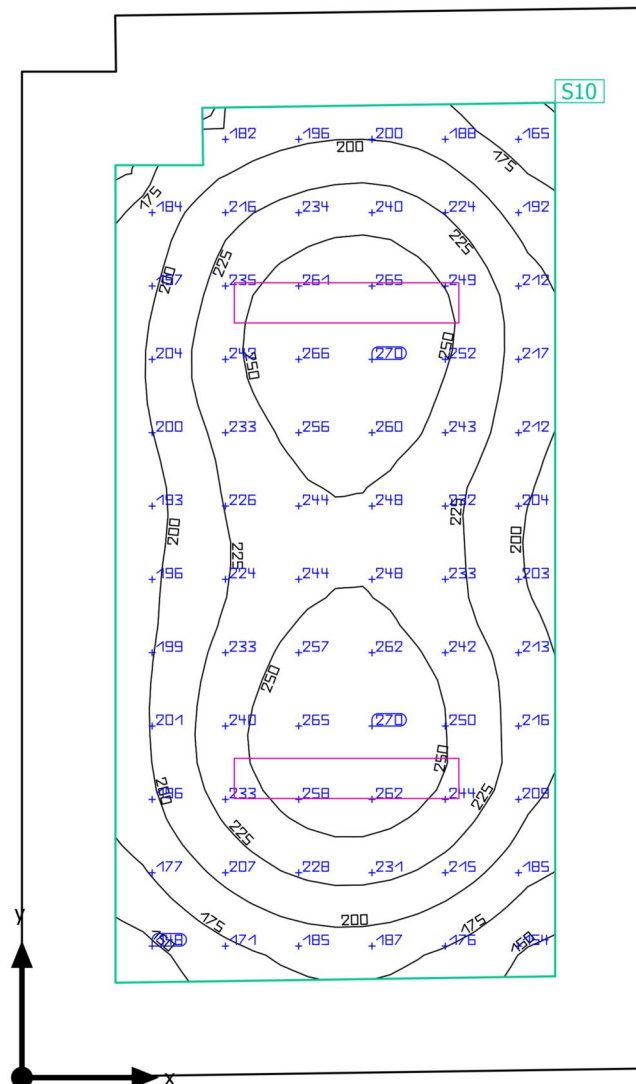
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	BRIGHTSOL	BS03U4K20UNL	BS03U4K20UNL	20.0 W	2189 lm	109.5 lm/W

Building 1 · Storey 1 · 1.05

Summary



Building 1 · Storey 1 · 1.05

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	221 lx	≥ 200 lx	✓	S10
	g_1	0.61	-	-	S10
Consumption values	Consumption	[31 - 49] kWh/a	max. 700 kWh/a	✓	
Lighting power density	Room	3.18 W/m ²	-	-	
		1.44 W/m ² /100 lx	-	-	
	Workplane	5.54 W/m ²	-	-	
		2.51 W/m ² /100 lx	-	-	

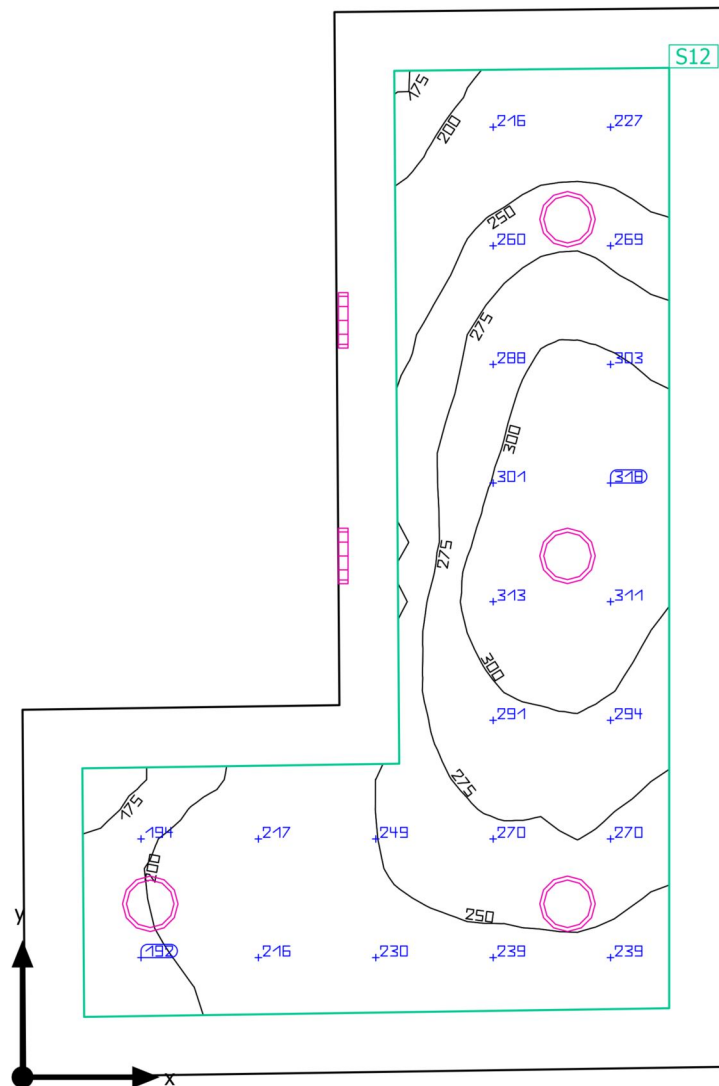
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS06U4K3 0UNL	BS06U4K30UNL	30.0 W	3269 lm	109.0 lm/W

Building 1 · Storey 1 · 1.06

Summary



Building 1 · Storey 1 · 1.06

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	257 lx	≥ 200 lx	✓	S12
	g_1	0.65	-	-	S12
Consumption values	Consumption	[71 - 100] kWh/a	max. 500 kWh/a	✓	
Lighting power density	Room	9.19 W/m ²	-	-	
		3.58 W/m ² /100 lx	-	-	
	Workplane	14.57 W/m ²	-	-	
		5.68 W/m ² /100 lx	-	-	

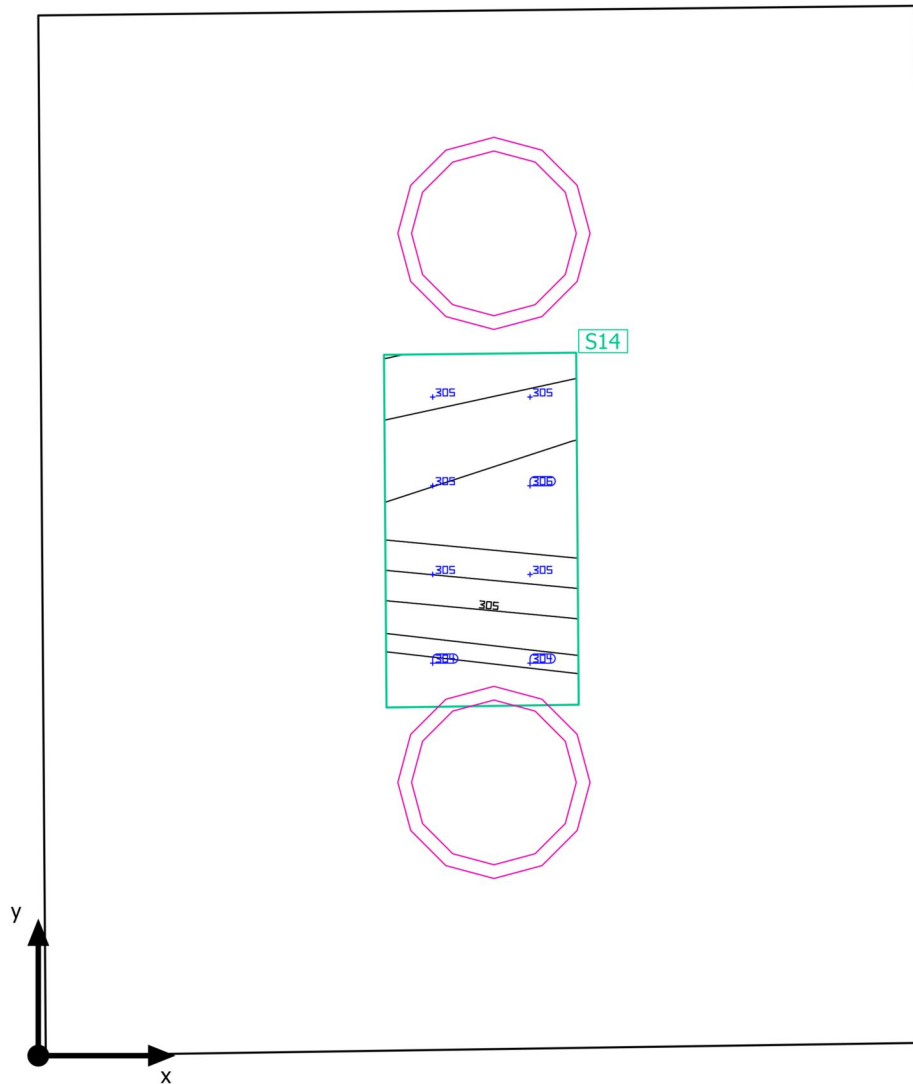
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
6	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 1 · 1.07

Summary



Building 1 · Storey 1 · 1.07

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	305 lx	≥ 200 lx	✓	S14
	g_1	1.00	-	-	S14
Consumption values	Consumption	34 kWh/a	max. 100 kWh/a	✓	
Lighting power density	Room	21.37 W/m ²	-	-	
		7.01 W/m ² /100 lx	-	-	
	Workplane	287.99 W/m ²	-	-	
		94.47 W/m ² /100 lx	-	-	

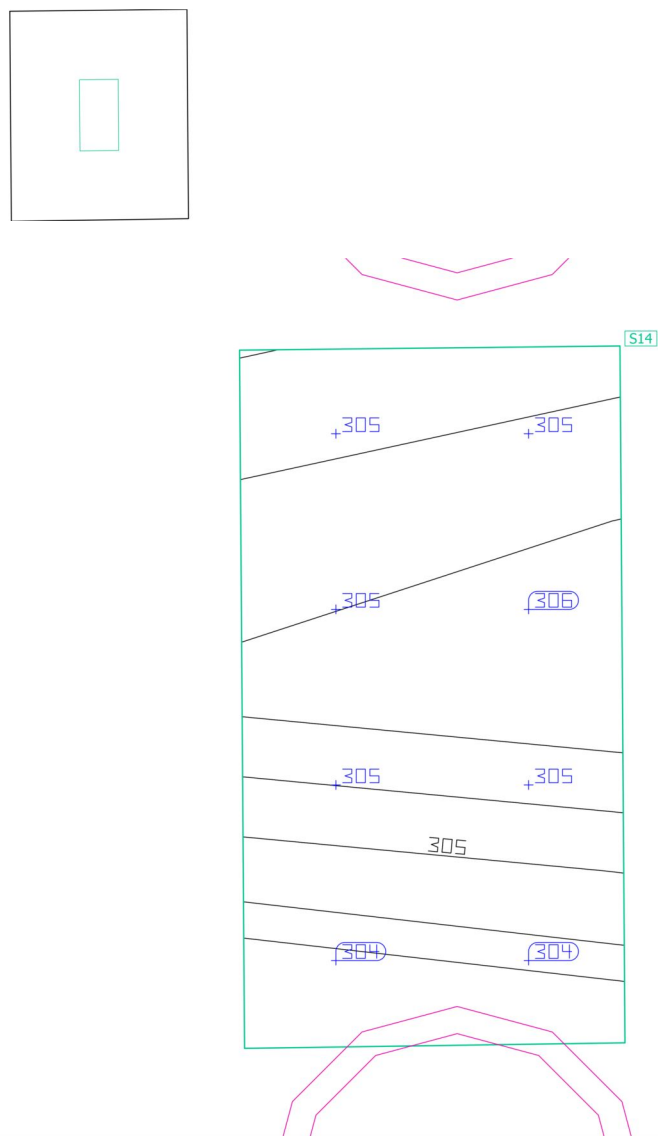
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 1 · 1.07

Workplane (1.07)

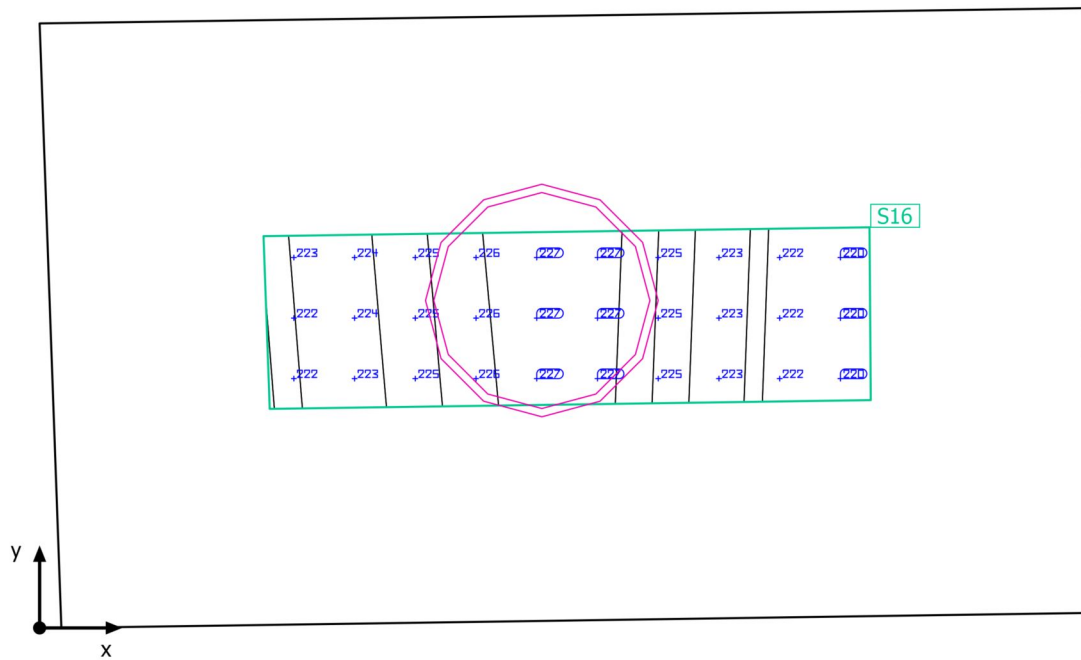


Properties	\bar{E} (Target)	E_{min}	E_{max}	g_1	g_2	Index
Workplane (1.07) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.500 m	305 lx (≥ 200 lx) ✓	304 lx	306 lx	1.00	0.99	S14

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Building 1 · Storey 1 · 1.08

Summary



Building 1 · Storey 1 · 1.08

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	224 lx	≥ 200 lx	✓	S16
	g_1	0.99	-	-	S16
Consumption values	Consumption	20 kWh/a	max. 50 kWh/a	✓	
Lighting power density	Room	19.87 W/m ²	-	-	
		8.87 W/m ² /100 lx	-	-	
	Workplane	119.35 W/m ²	-	-	
		53.29 W/m ² /100 lx	-	-	

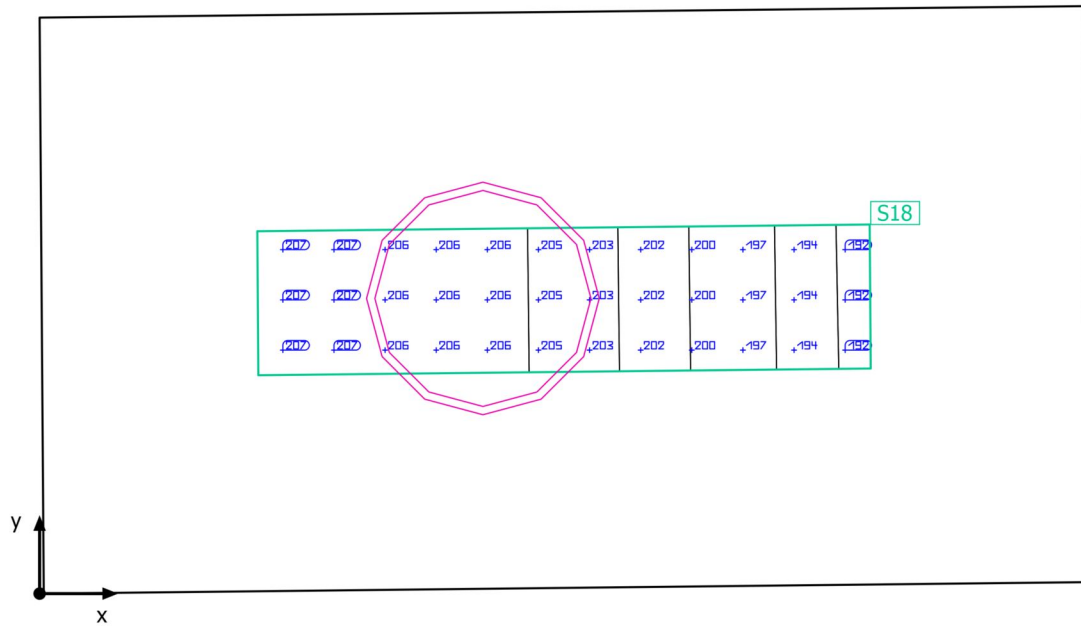
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W

Building 1 · Storey 1 · 1.09

Summary



Building 1 · Storey 1 · 1.09

Summary

Results

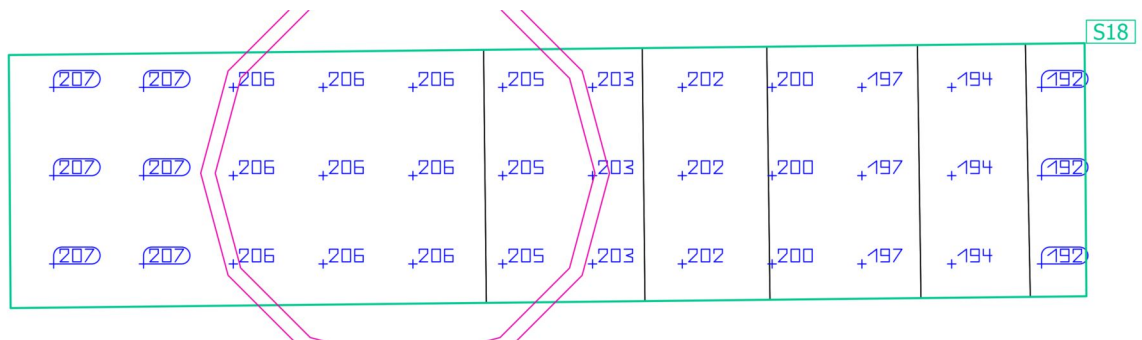
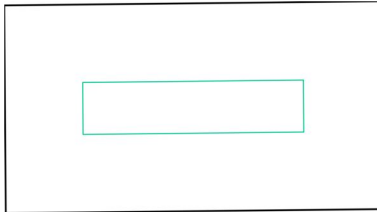
	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	202 lx	≥ 200 lx	✓	S18
	g_1	0.95	-	-	S18
Consumption values	Consumption	[12 - 20] kWh/a	max. 50 kWh/a	✓	
Lighting power density	Room	20.69 W/m ²	-	-	
		10.24 W/m ² /100 lx	-	-	
	Workplane	141.17 W/m ²	-	-	
		69.86 W/m ² /100 lx	-	-	

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W

Building 1 · Storey 1 · 1.09

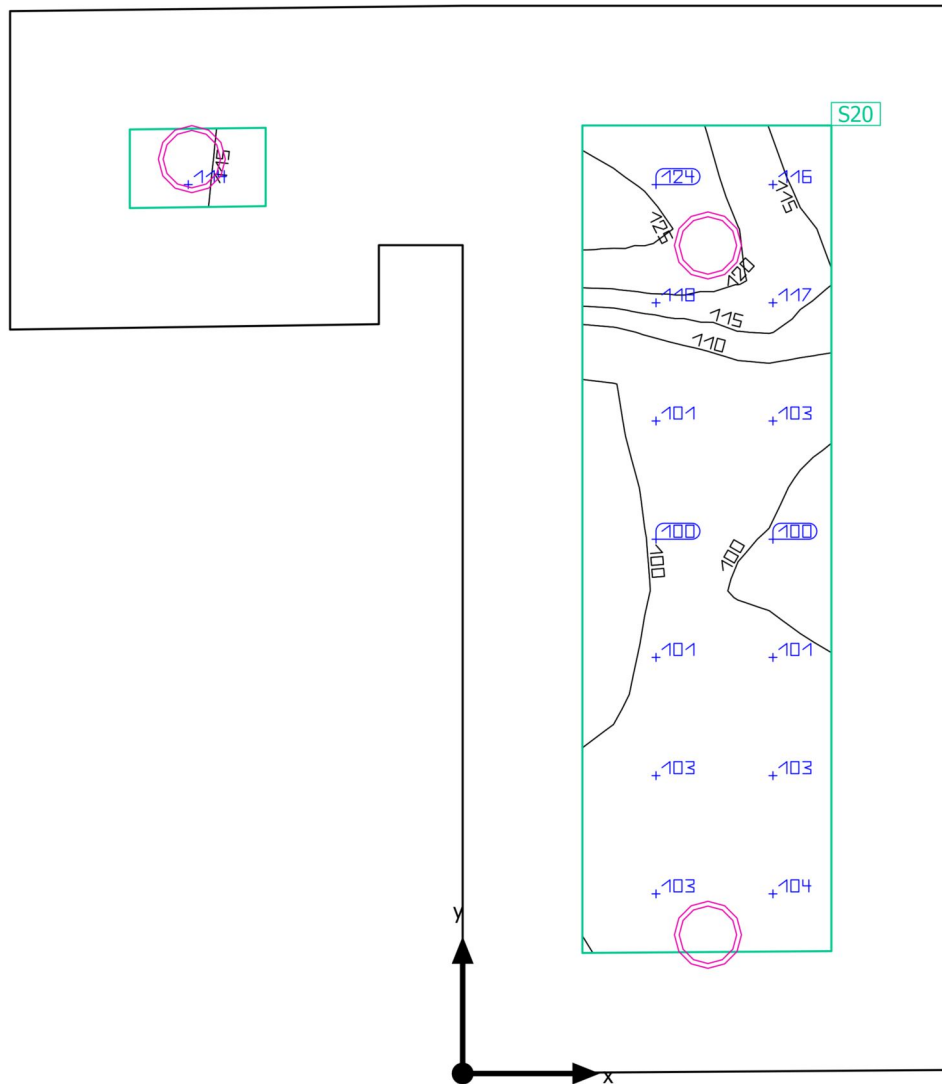
Workplane (1.09)

Properties	\bar{E} (Target)	E_{min}	E_{max}	g_1	g_2	Index
Workplane (1.09) Perpendicular illuminance (adaptive) Height: 0.800 m, Wall zone: 0.300 m	202 lx (≥ 200 lx) ✓	192 lx	206 lx	0.95	0.93	S18

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Building 1 · Storey 1 · 1.10

Summary



Building 1 · Storey 1 · 1.10

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	107 lx	≥ 100 lx	✓	S20
	g_1	0.92	-	-	S20
Consumption values	Consumption	[75 - 120] kWh/a	max. 450 kWh/a	✓	
Lighting power density	Room	5.41 W/m ²	-	-	
		5.06 W/m ² /100 lx	-	-	
	Workplane	16.45 W/m ²	-	-	
		15.39 W/m ² /100 lx	-	-	

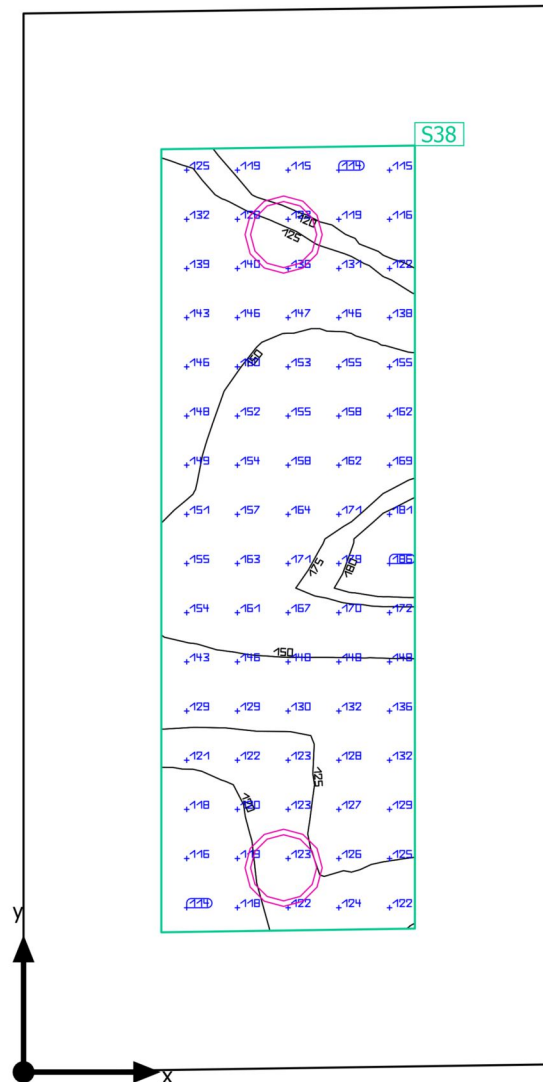
Utilisation profile: Places of public assembly - General areas, Entrance halls

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
3	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 1 · 1.11

Summary



Building 1 · Storey 1 · 1.11

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	141 lx	≥ 100 lx	✓	S38
	g_1	0.81	-	-	S38
Consumption values	Consumption	[50 - 80] kWh/a	max. 300 kWh/a	✓	
Lighting power density	Room	5.61 W/m ²	-	-	
		3.99 W/m ² /100 lx	-	-	
	Workplane	15.83 W/m ²	-	-	
		11.25 W/m ² /100 lx	-	-	

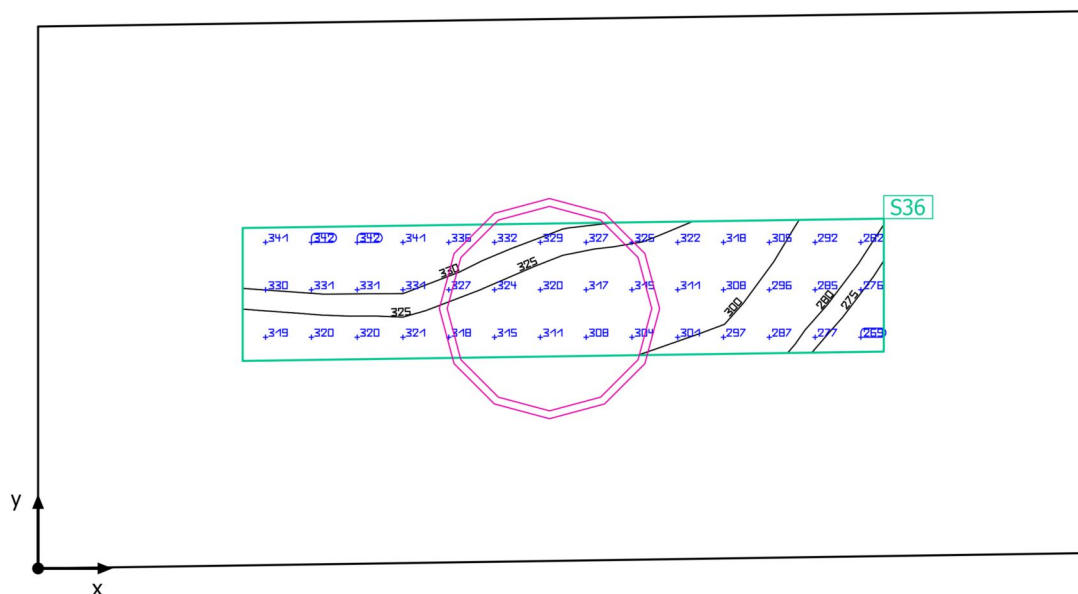
Utilisation profile: Places of public assembly - General areas, Entrance halls

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 1 · 1.13

Summary



Building 1 · Storey 1 · 1.13

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	314 lx	≥ 200 lx	✓	S36
	g_1	0.86	-	-	S36
Consumption values	Consumption	[12 - 20] kWh/a	max. 50 kWh/a	✓	
Lighting power density	Room	19.60 W/m ²	-	-	
		6.24 W/m ² /100 lx	-	-	
	Workplane	130.91 W/m ²	-	-	
		41.67 W/m ² /100 lx	-	-	

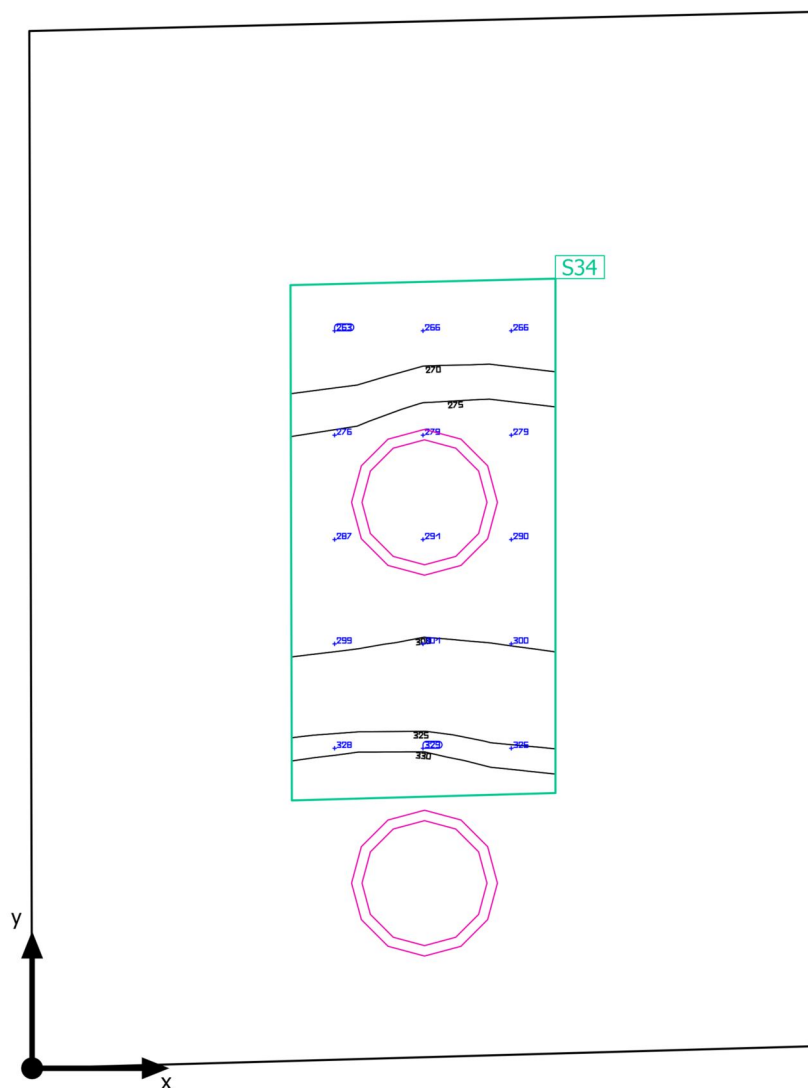
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W

Building 1 · Storey 1 · 1.14

Summary



Building 1 · Storey 1 · 1.14

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	292 lx	≥ 200 lx	✓	S34
	g_1	0.89	-	-	S34
Consumption values	Consumption	[22 - 34] kWh/a	max. 150 kWh/a	✓	
Lighting power density	Room	13.81 W/m ²	-	-	
		4.73 W/m ² /100 lx	-	-	
	Workplane	82.54 W/m ²	-	-	
		28.29 W/m ² /100 lx	-	-	

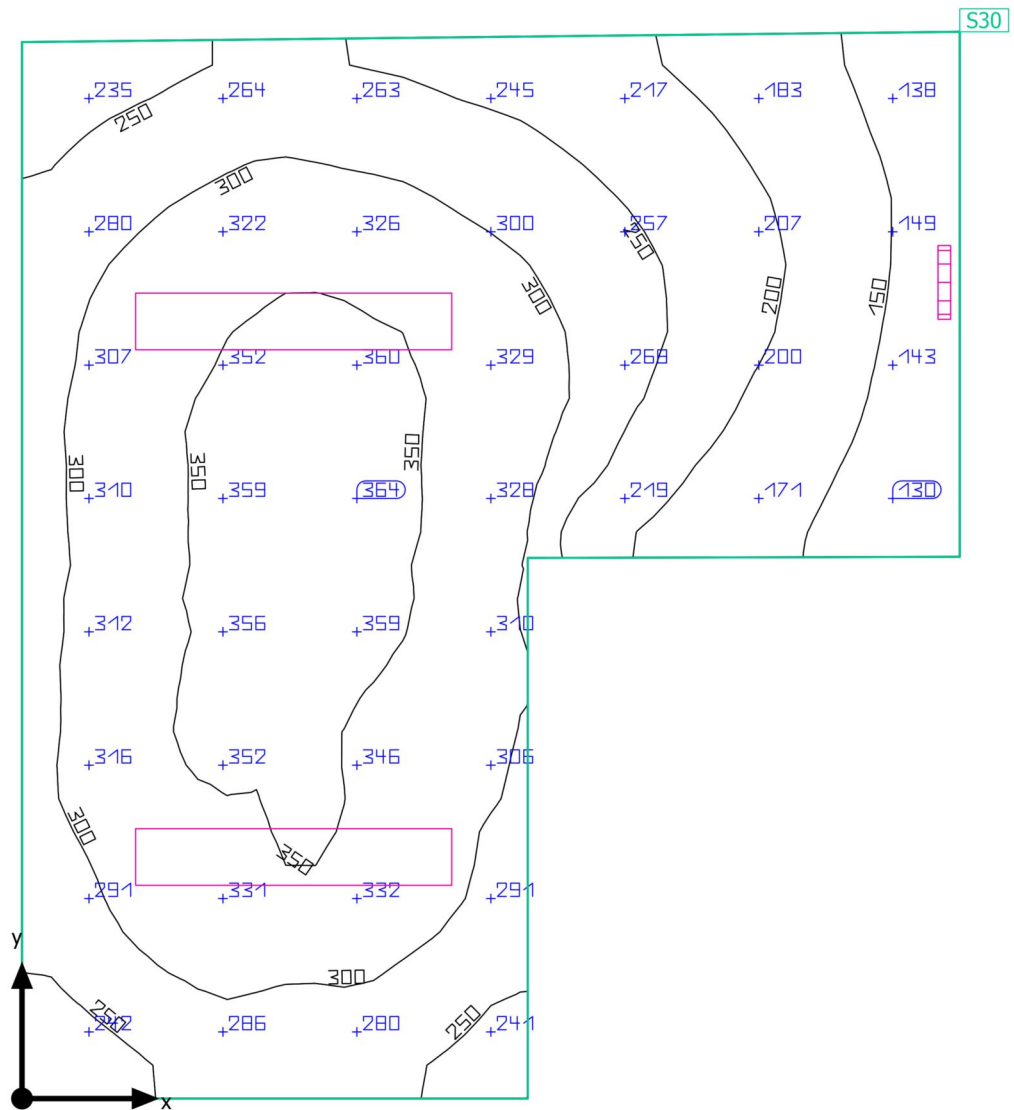
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 1 · 1.15

Summary



Building 1 · Storey 1 · 1.15

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	277 lx	≥ 200 lx	✓	S30
	g_1	0.42	-	-	S30
Consumption values	Consumption	[260 - 310] kWh/a	max. 400 kWh/a	✓	
Lighting power density	Room	7.35 W/m ²	-	-	
		2.66 W/m ² /100 lx	-	-	

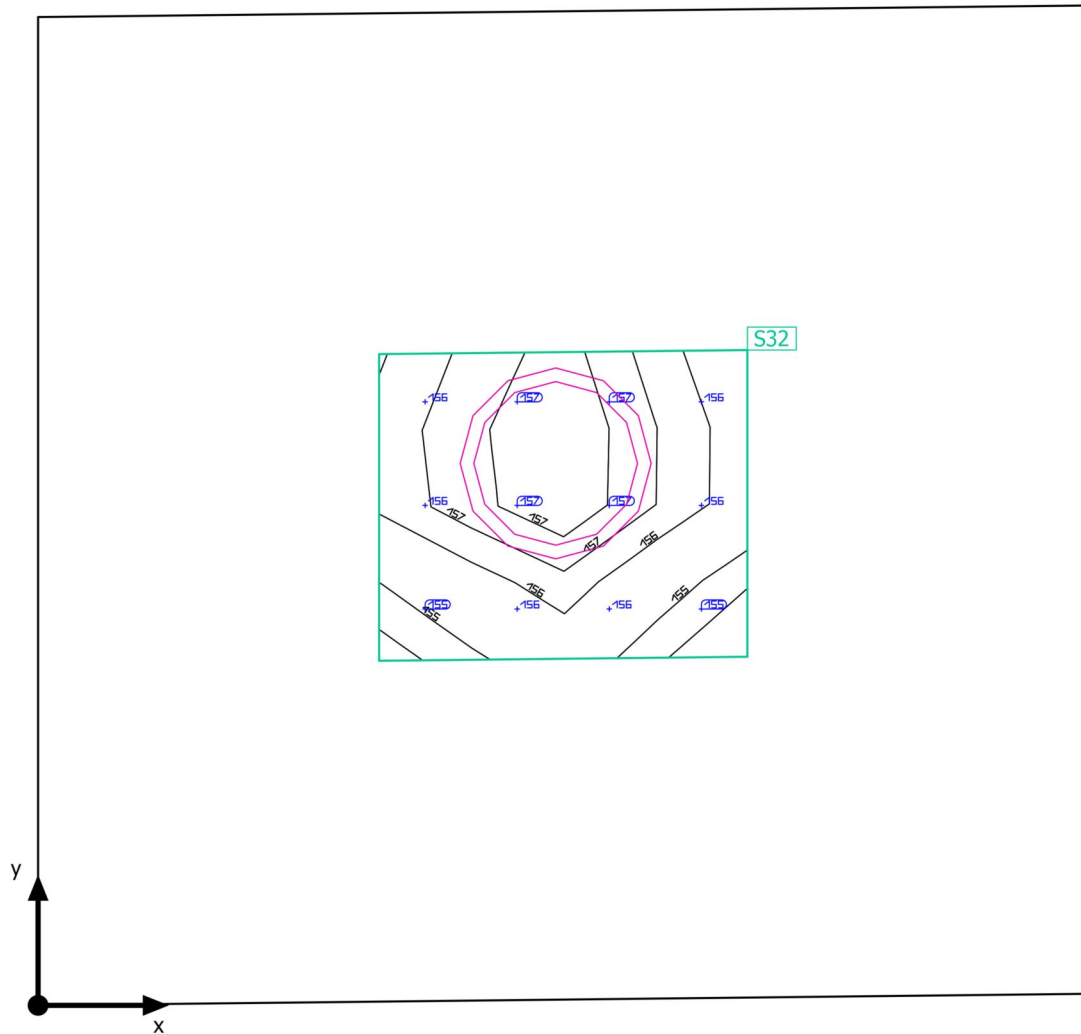
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Canteens, pantries

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W
2	BRIGHTSOL	BS06U4K30UNL	BS06U4K30UNL	30.0 W	3269 lm	109.0 lm/W

Building 1 · Storey 1 · 1.16

Summary



Building 1 · Storey 1 · 1.16

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	156 lx	≥ 100 lx	✓	S32
	g_1	0.99	-	-	S32
Consumption values	Consumption	[2 - 3] kWh/a	max. 100 kWh/a	✓	
Lighting power density	Room	9.27 W/m ²	-	-	
		5.94 W/m ² /100 lx	-	-	
	Workplane	85.20 W/m ²	-	-	
		54.57 W/m ² /100 lx	-	-	

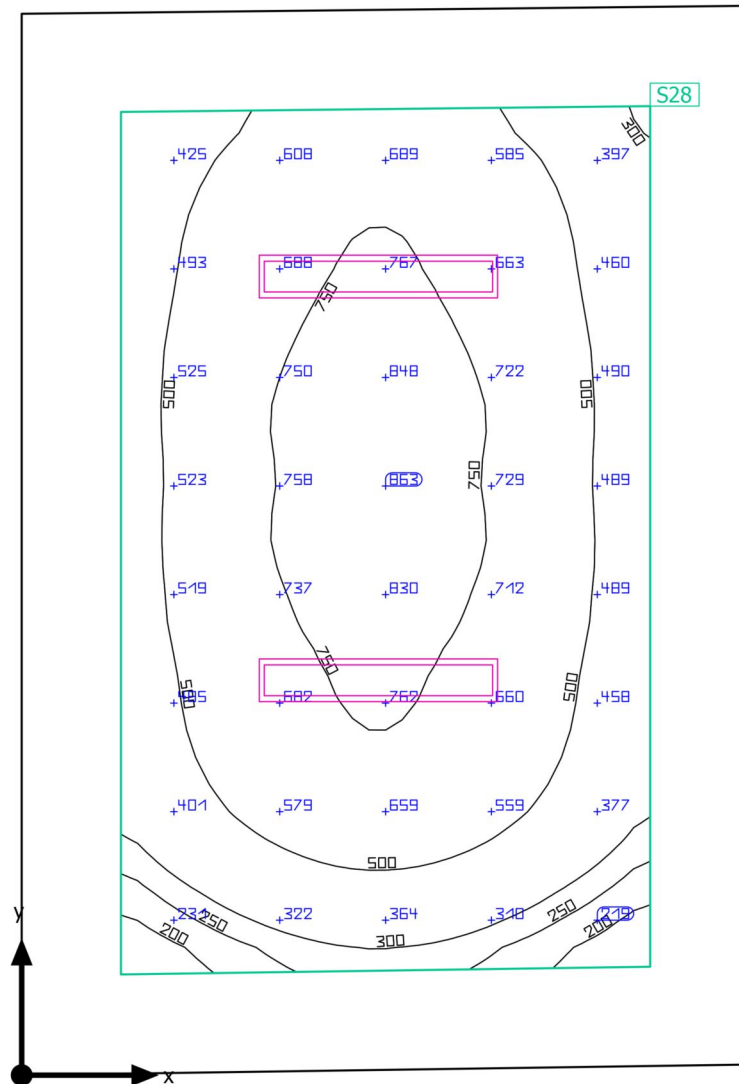
Utilisation profile: General areas inside buildings - Store rooms and cold stores, Store and stockrooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 1 · 1.17

Summary



Building 1 · Storey 1 · 1.17

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	567 lx	≥ 200 lx	✓	S28
	g_1	0.27	-	-	S28
Consumption values	Consumption	[120 - 190] kWh/a	max. 700 kWh/a	✓	
Lighting power density	Room	5.11 W/m ²	-	-	
		0.90 W/m ² /100 lx	-	-	
	Workplane	8.64 W/m ²	-	-	
		1.52 W/m ² /100 lx	-	-	

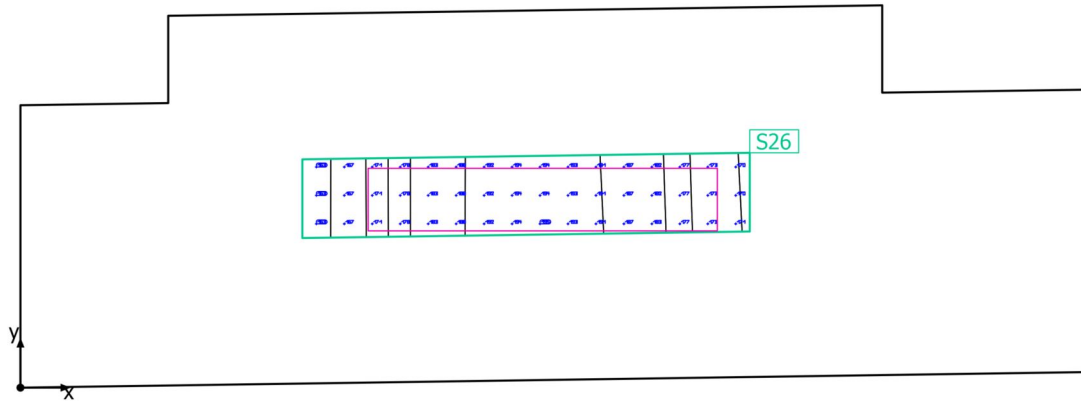
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Rest rooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS03O4K50UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W

Building 1 · Storey 1 · 1.18

Summary



Building 1 · Storey 1 · 1.18

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	182 lx	≥ 100 lx	✓	S26
	g_1	0.90	-	-	S26
Consumption values	Consumption	3 kWh/a	max. 200 kWh/a	✓	
Lighting power density	Room	4.66 W/m ²	-	-	
		2.57 W/m ² /100 lx	-	-	
	Workplane	48.08 W/m ²	-	-	
		26.49 W/m ² /100 lx	-	-	

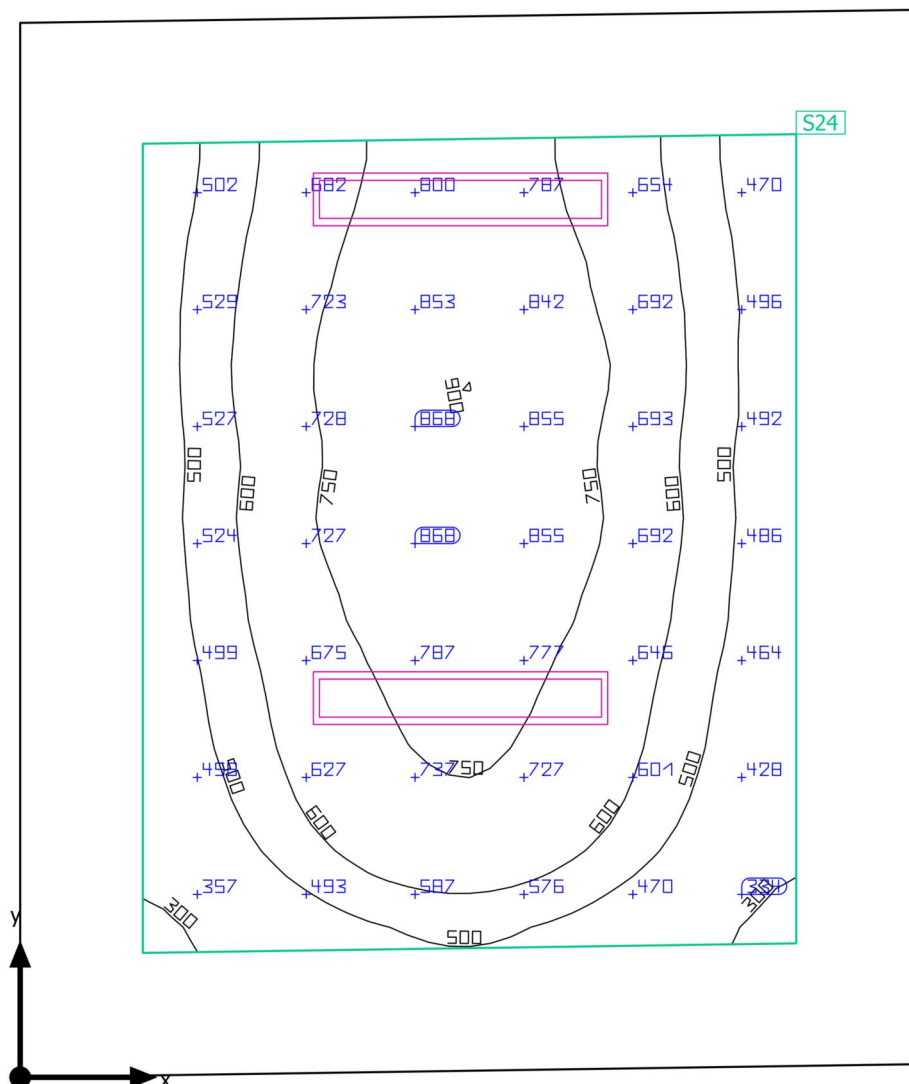
Utilisation profile: General areas inside buildings - Store rooms and cold stores, Store and stockrooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS03U4K20UNL	BS03U4K20UNL	20.0 W	2189 lm	109.5 lm/W

Building 1 · Storey 1 · 1.19

Summary



Building 1 · Storey 1 · 1.19

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	631 lx	≥ 200 lx	✓	S24
	g_1	0.40	-	-	S24
Consumption values	Consumption	[120 - 190] kWh/a	max. 600 kWh/a	✓	
Lighting power density	Room	6.35 W/m ²	-	-	
		1.01 W/m ² /100 lx	-	-	
	Workplane	11.38 W/m ²	-	-	
		1.80 W/m ² /100 lx	-	-	

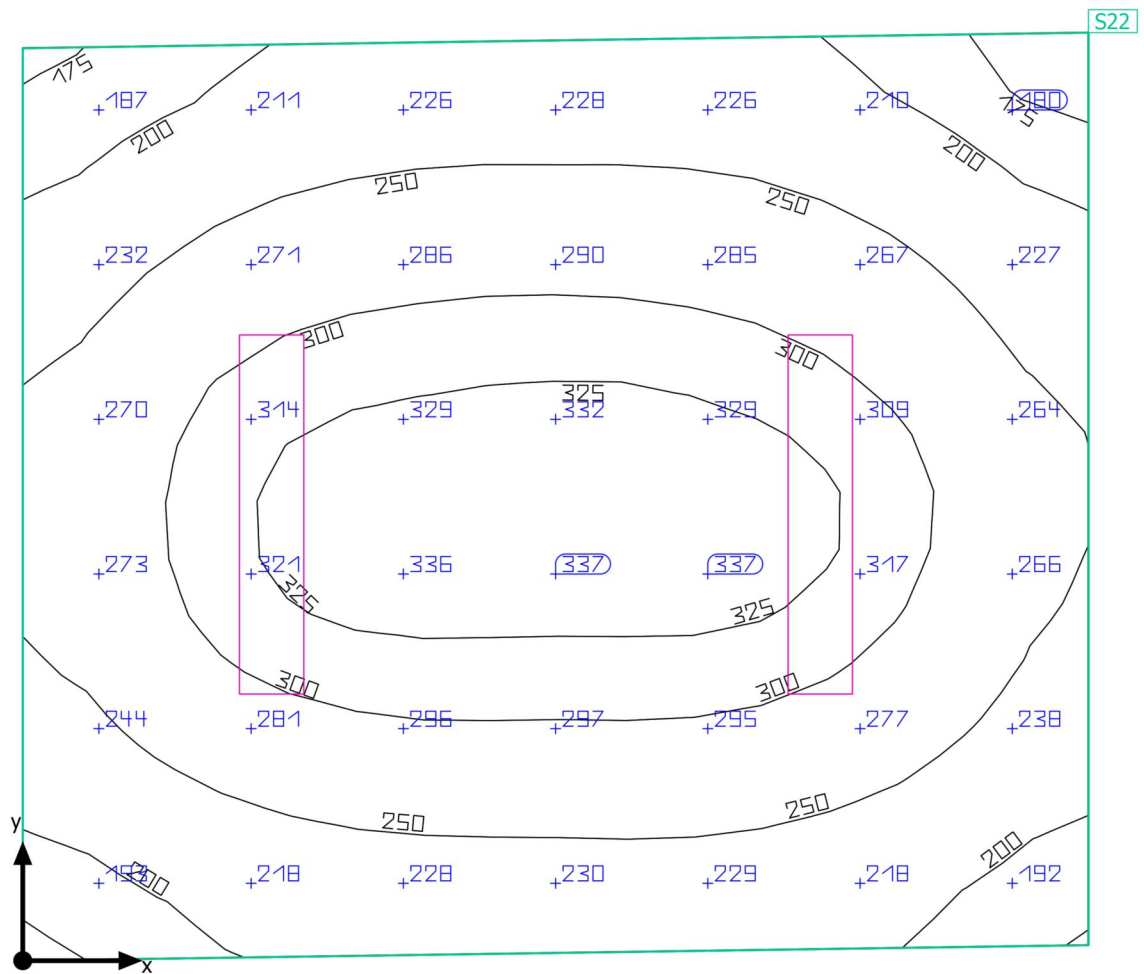
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Rest rooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS03O4K50UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W

Building 1 · Storey 1 · 1.20

Summary



Building 1 · Storey 1 · 1.20

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	265 lx	≥ 200 lx	✓	S22
	g_1	0.62	-	-	S22
Consumption values	Consumption	[73 - 120] kWh/a	max. 400 kWh/a	✓	
Lighting power density	Room	5.53 W/m ²	-	-	
		2.09 W/m ² /100 lx	-	-	

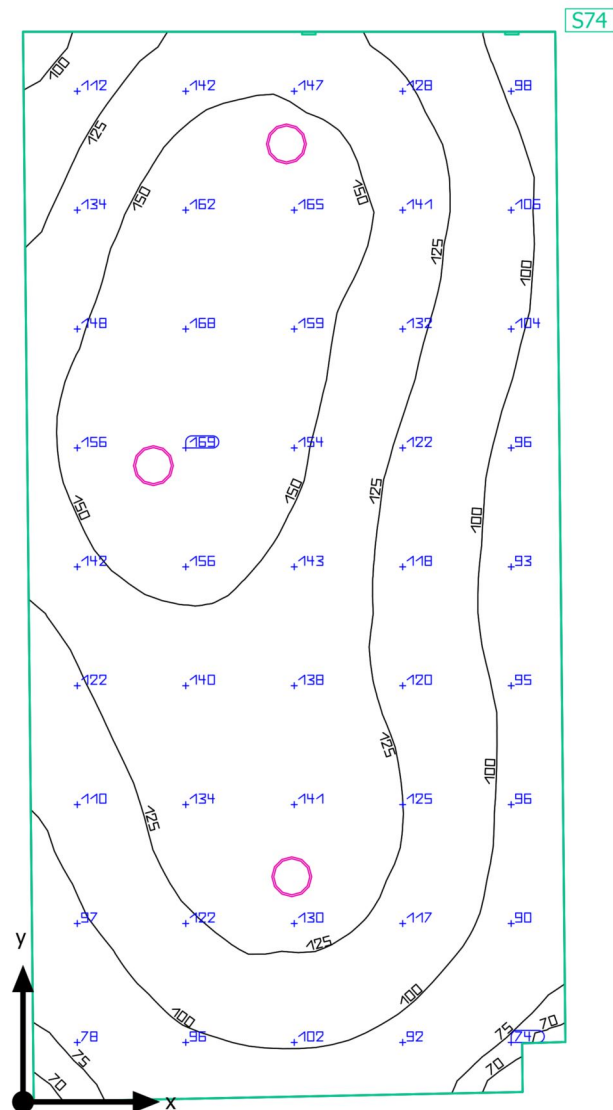
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Rest rooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS06U4K3 0UNL	BS06U4K30UNL	30.0 W	3269 lm	109.0 lm/W

Building 1 · Storey 1 · 1.26

Summary



Building 1 · Storey 1 · 1.26

Summary

Results

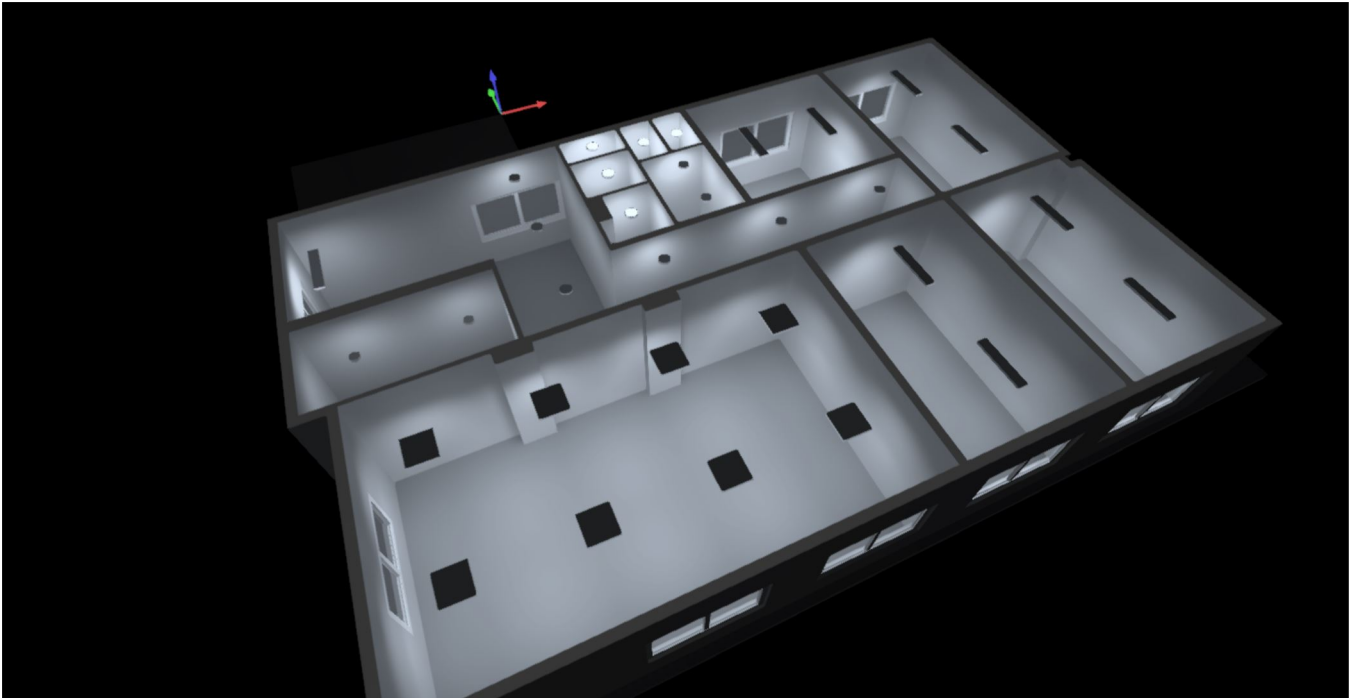
	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	125 lx	≥ 100 lx	✓	S74
	g_1	0.53	-	-	S74
Consumption values	Consumption	[140 - 160] kWh/a	max. 650 kWh/a	✓	
Lighting power density	Room	3.98 W/m ²	-	-	
		3.17 W/m ² /100 lx	-	-	

Utilisation profile: Industrial activities and crafts - Power stations, Boiler houses

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
3	BRIGHTSOL	BS01U4K25UN	BS01U4K25UN	23.0 W	1600 lm	69.6 lm/W

Images



Building 1 · Storey 2

Room List (Energy evaluation)

Building 1 · Storey 2

Room List (Energy evaluation)

2.01 + 2.02

P_{total} 154.2 W	A_{Room} 36.37 m ²	Lighting power density 4.24 W/m ² = 3.37 W/m ² /100 lx (Room) 8.59 W/m ² = 6.83 W/m ² /100 lx (Workplane)	E_{perpendicular (Workplane)} 126 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
6	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm
1	BRIGHTSOL	BS06U4K30UNL	BS06U4K30UNL	30.0 W	3269 lm

2.03

P_{total} 24.0 W	A_{Room} 1.86 m ²	Lighting power density 12.89 W/m ² = 7.34 W/m ² /100 lx (Room) 41.61 W/m ² = 23.69 W/m ² /100 lx (Workplane)	E_{perpendicular (Workplane)} 176 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
1	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm

2.04

P_{total} 24.0 W	A_{Room} 1.15 m ²	Lighting power density 20.78 W/m ² = 11.65 W/m ² /100 lx (Room) 156.87 W/m ² = 87.96 W/m ² /100 lx (Workplane)	E_{perpendicular (Workplane)} 178 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
1	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm

Building 1 · Storey 2

Room List (Energy evaluation)

2.05

P_{total} 24.0 W	A_{Room} 2.02 m ²	Lighting power density 11.89 W/m ² = 6.51 W/m ² /100 lx (Room) 41.84 W/m ² = 22.90 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 183 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm

2.06

P_{total} 41.4 W	A_{Room} 3.78 m ²	Lighting power density 10.94 W/m ² = 4.62 W/m ² /100 lx (Room) 48.64 W/m ² = 20.53 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 237 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
2	BRIGHTSOL	BS02U4K1 8UN	BS02U4K18UN	20.7 W	1700 lm

2.07

P_{total} 24.0 W	A_{Room} 1.07 m ²	Lighting power density 22.50 W/m ² = 12.12 W/m ² /100 lx (Room) 168.39 W/m ² = 90.72 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 186 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm

Building 1 · Storey 2

Room List (Energy evaluation)

2.07

P_{total} 24.0 W	A_{Room} 1.07 m ²	Lighting power density $22.50 \text{ W/m}^2 = 12.25 \text{ W/m}^2/100 \text{ lx (Room)}$ $168.45 \text{ W/m}^2 = 91.71 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 184 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm

2.09

P_{total} 46.0 W	A_{Room} 8.34 m ²	Lighting power density $5.51 \text{ W/m}^2 = 3.66 \text{ W/m}^2/100 \text{ lx (Room)}$ $14.38 \text{ W/m}^2 = 9.55 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 151 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS01U4K2 5UN	BS01U4K25UN	23.0 W	1600 lm

2.10

P_{total} 320.0 W	A_{Room} 54.00 m ²	Lighting power density $5.93 \text{ W/m}^2 = 1.12 \text{ W/m}^2/100 \text{ lx (Room)}$ $8.15 \text{ W/m}^2 = 1.54 \text{ W/m}^2/100 \text{ lx (Workplane)}$	$\bar{E}_{\text{perpendicular (Workplane)}}$ 528 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
8	BRIGHTSOL	BS01O4K4 0UN	BS01O4K40UN	40.0 W	4267 lm

Building 1 · Storey 2

Room List (Energy evaluation)

2.11

P_{total} 100.0 W	A_{Room} 20.52 m ²	Lighting power density 4.87 W/m ² = 0.94 W/m ² /100 lx (Room) 9.21 W/m ² = 1.79 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 516 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS03O4K5 OUNL	BS03O4K5OUNL	50.0 W	5856 lm

2.12

P_{total} 100.0 W	A_{Room} 19.73 m ²	Lighting power density 5.07 W/m ² = 1.00 W/m ² /100 lx (Room) 8.62 W/m ² = 1.70 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 508 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS03O4K5 OUNL	BS03O4K5OUNL	50.0 W	5856 lm

2.13

P_{total} 100.0 W	A_{Room} 18.96 m ²	Lighting power density 5.27 W/m ² = 1.00 W/m ² /100 lx (Room) 9.03 W/m ² = 1.72 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 526 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS03O4K5 OUNL	BS03O4K5OUNL	50.0 W	5856 lm

Building 1 · Storey 2

Room List (Energy evaluation)

2.14

P_{total} 100.0 W	A_{Room} 14.66 m ²	Lighting power density 6.82 W/m ² = 1.08 W/m ² /100 lx (Room) 14.49 W/m ² = 2.29 W/m ² /100 lx (Workplane)	$E_{\text{perpendicular (Workplane)}}$ 634 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
2	BRIGHTSOL	BS03O4K5 OUNL	BS03O4K5OUNL	50.0 W	5856 lm

Building 1 · Storey 2

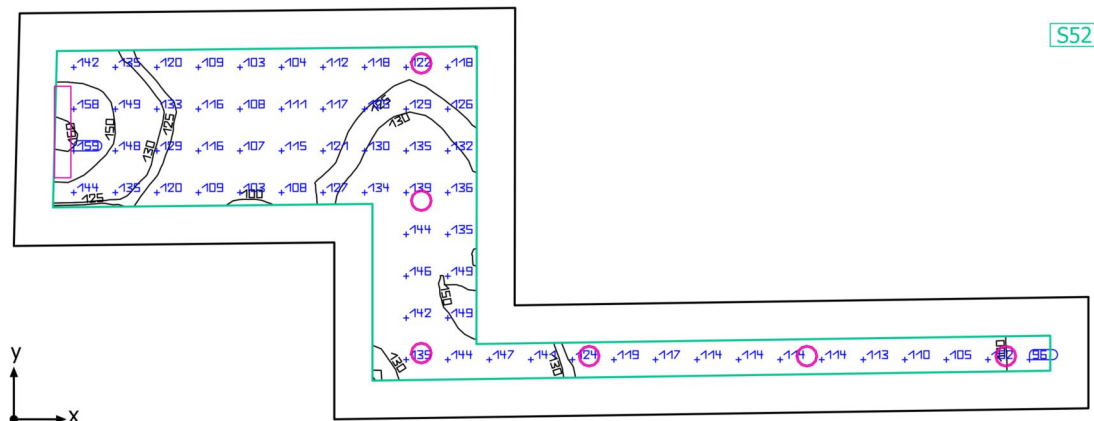
Luminaire list

Φ_{total} 112303 lm	P_{total} 1081.6 W	Luminous efficacy 103.8 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
8	BRIGHTSOL	BS01O4K40UN	BS01O4K40UN	40.0 W	4267 lm	106.7 lm/W
2	BRIGHTSOL	BS01U4K25UN	BS01U4K25UN	23.0 W	1600 lm	69.6 lm/W
8	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W
8	BRIGHTSOL	BS03O4K50UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W
5	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W
1	BRIGHTSOL	BS06U4K30UNL	BS06U4K30UNL	30.0 W	3269 lm	109.0 lm/W

Building 1 · Storey 2 · 2.01 + 2.02

Summary



Building 1 · Storey 2 · 2.01 + 2.02

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	126 lx	≥ 100 lx	✓	S52
	g_1	0.75	-	-	S52
Consumption values	Consumption	[240 - 300] kWh/a	max. 1300 kWh/a	✓	
Lighting power density	Room	4.24 W/m ²	-	-	
		3.37 W/m ² /100 lx	-	-	
	Workplane	8.59 W/m ²	-	-	
		6.83 W/m ² /100 lx	-	-	

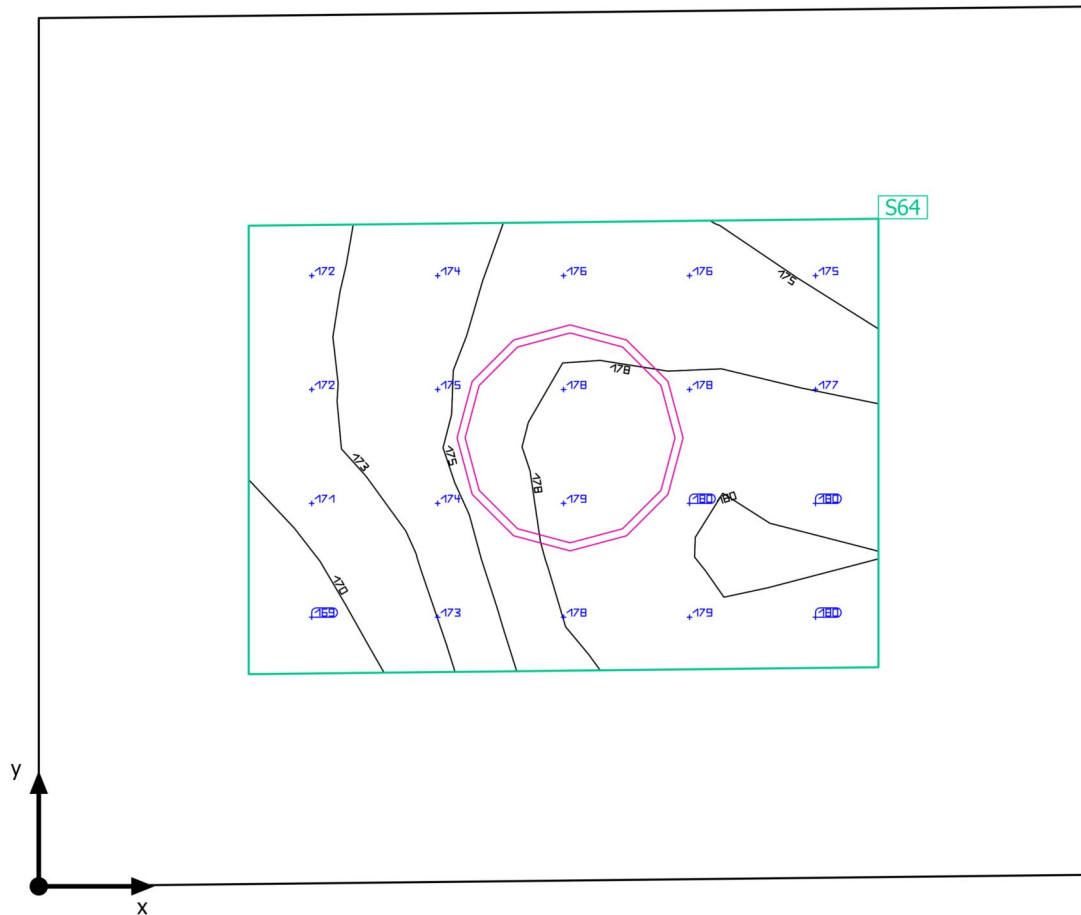
Utilisation profile: Places of public assembly - General areas, Entrance halls

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
6	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W
1	BRIGHTSOL	BS06U4K30UNL	BS06U4K30UNL	30.0 W	3269 lm	109.0 lm/W

Building 1 · Storey 2 · 2.03

Summary



Building 1 · Storey 2 · 2.03

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	176 lx	≥ 200 lx	✗	S64
	g_1	0.96	-	-	S64
Consumption values	Consumption	20 kWh/a	max. 100 kWh/a	✓	
Lighting power density	Room	12.89 W/m ²	-	-	
		7.34 W/m ² /100 lx	-	-	
	Workplane	41.61 W/m ²	-	-	
		23.69 W/m ² /100 lx	-	-	

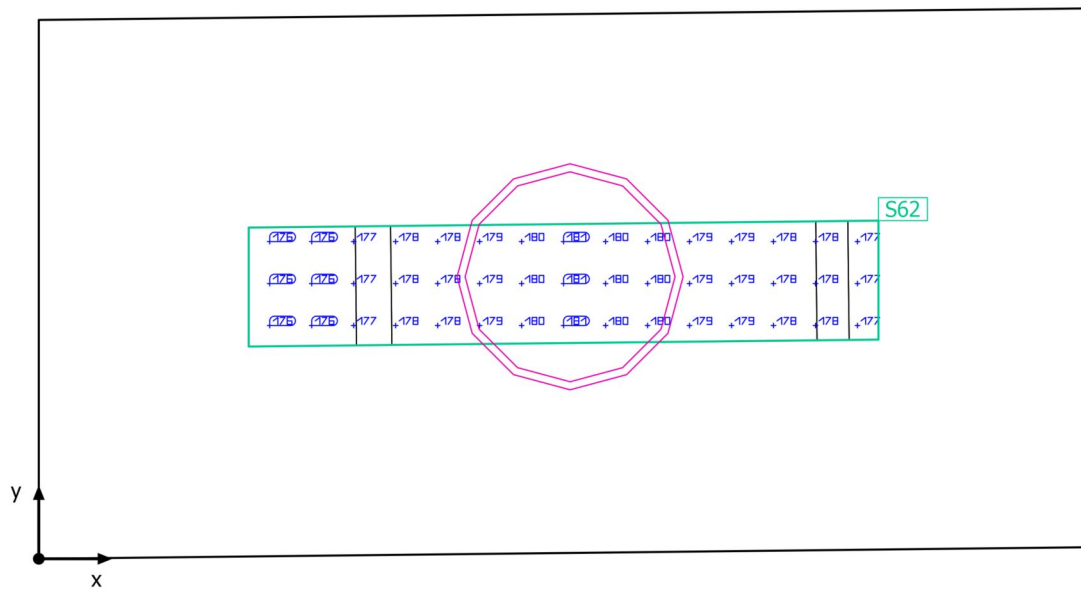
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W

Building 1 · Storey 2 · 2.04

Summary



Building 1 · Storey 2 · 2.04

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	178 lx	≥ 200 lx	✗	S62
	g_1	0.99	-	-	S62
Consumption values	Consumption	20 kWh/a	max. 50 kWh/a	✓	
Lighting power density	Room	20.78 W/m ²	-	-	
		11.65 W/m ² /100 lx	-	-	
	Workplane	156.87 W/m ²	-	-	
		87.96 W/m ² /100 lx	-	-	

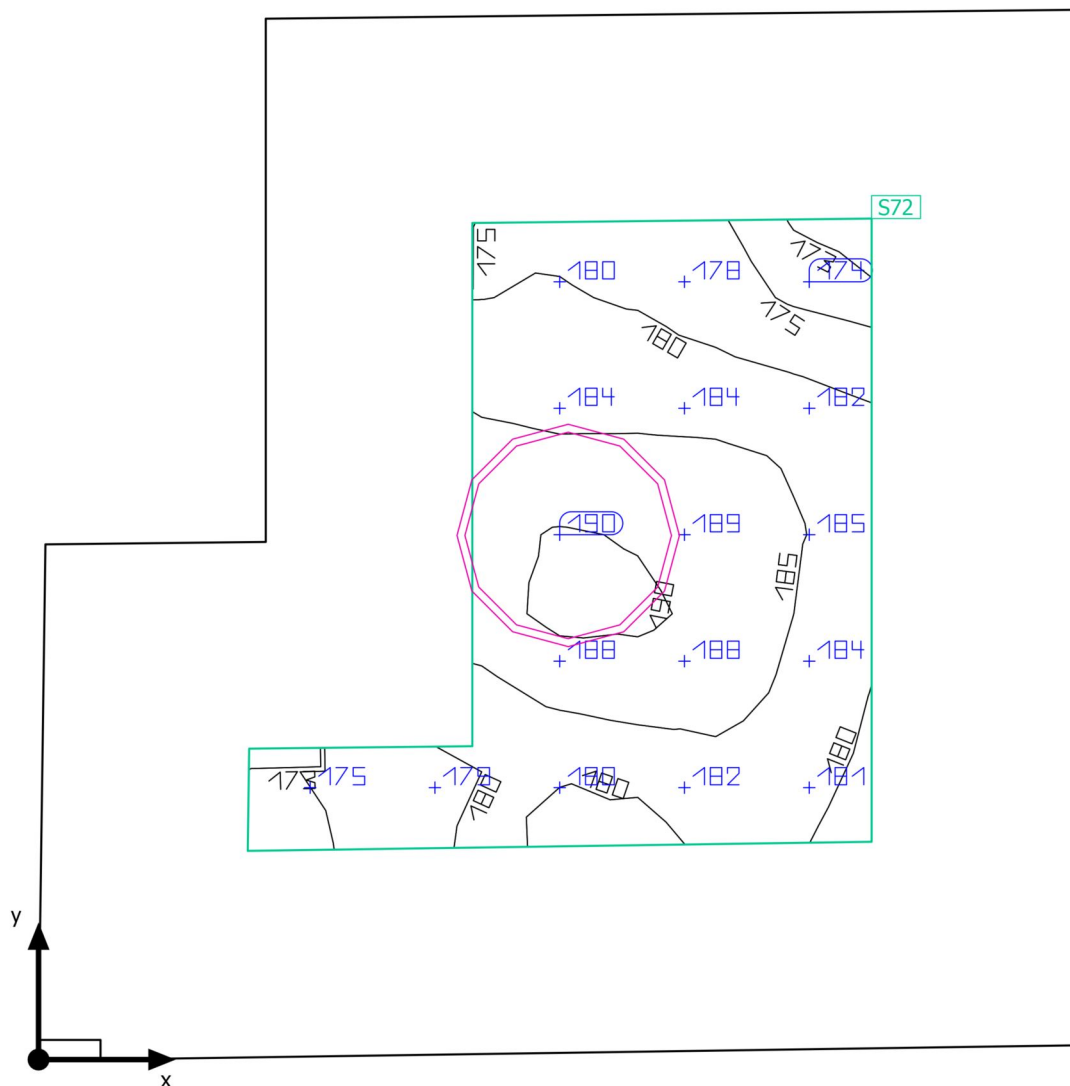
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W

Building 1 · Storey 2 · 2.05

Summary



Building 1 · Storey 2 · 2.05

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	183 lx	≥ 200 lx	✗	S72
	g_1	0.94	-	-	S72
Consumption values	Consumption	20 kWh/a	max. 100 kWh/a	✓	
Lighting power density	Room	11.89 W/m ²	-	-	
		6.51 W/m ² /100 lx	-	-	
	Workplane	41.84 W/m ²	-	-	
		22.90 W/m ² /100 lx	-	-	

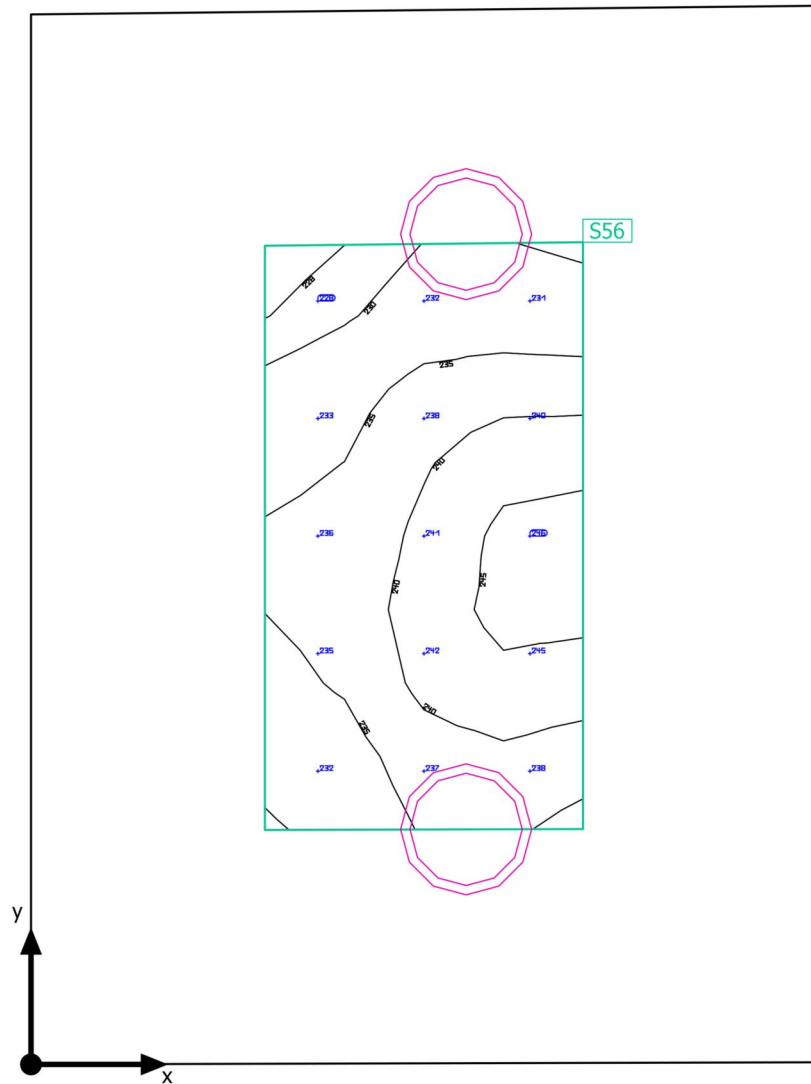
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W

Building 1 · Storey 2 · 2.06

Summary



Building 1 · Storey 2 · 2.06

Summary

Results

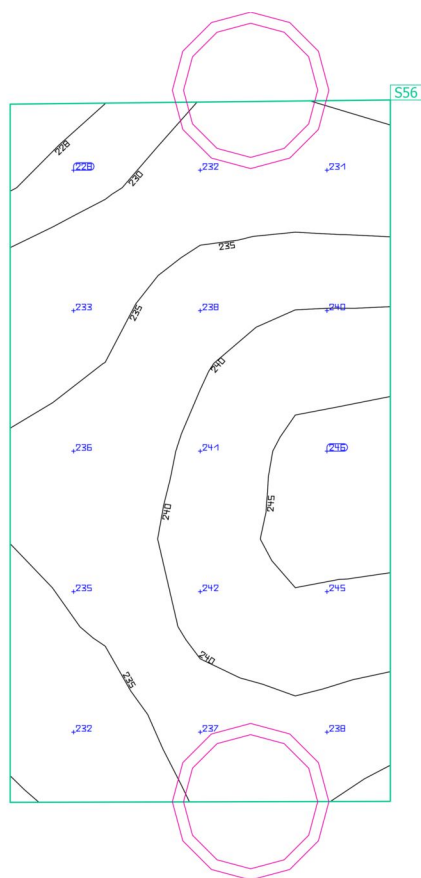
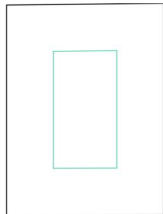
	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	237 lx	≥ 200 lx	✓	S56
	g_1	0.96	-	-	S56
Consumption values	Consumption	34 kWh/a	max. 150 kWh/a	✓	
Lighting power density	Room	10.94 W/m ²	-	-	
		4.62 W/m ² /100 lx	-	-	
	Workplane	48.64 W/m ²	-	-	
		20.53 W/m ² /100 lx	-	-	

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS02U4K18UN	BS02U4K18UN	20.7 W	1700 lm	82.1 lm/W

Building 1 · Storey 2 · 2.06

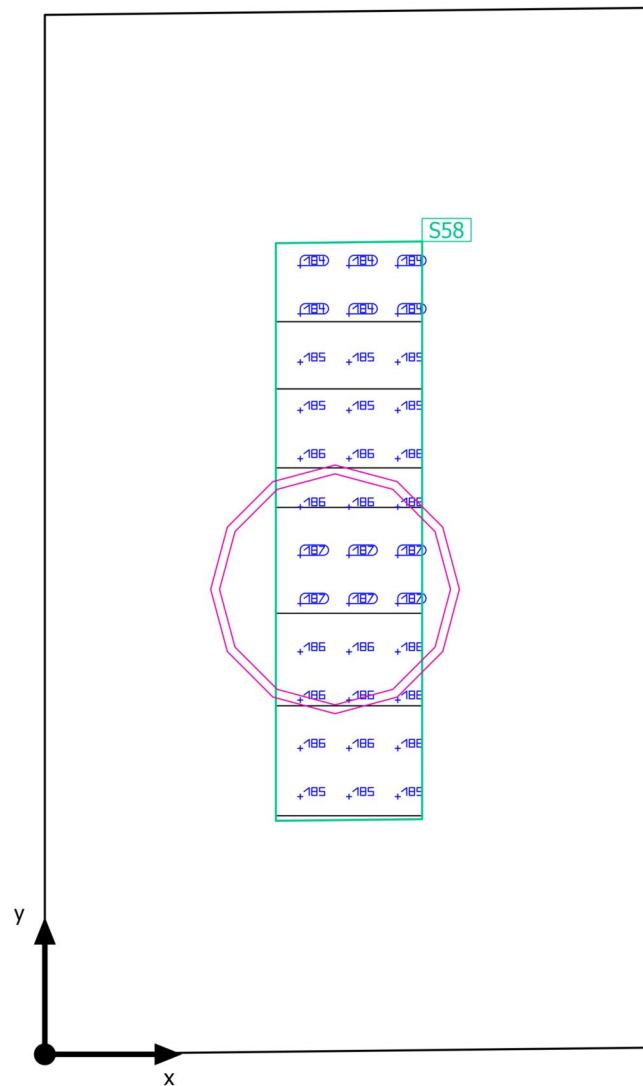
Workplane (2.06)

Properties	\bar{E} (Target)	E_{min}	E_{max}	g_1	g_2	Index
Workplane (2.06) Perpendicular illuminance (adaptive) Height: 0.850 m, Wall zone: 0.500 m	237 lx (≥ 200 lx) ✓	227 lx	247 lx	0.96	0.92	S56

Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Building 1 · Storey 2 · 2.07

Summary



Building 1 · Storey 2 · 2.07

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	186 lx	≥ 200 lx	✗	S58
	g_1	0.99	-	-	S58
Consumption values	Consumption	20 kWh/a	max. 50 kWh/a	✓	
Lighting power density	Room	22.50 W/m ²	-	-	
		12.12 W/m ² /100 lx	-	-	
	Workplane	168.39 W/m ²	-	-	
		90.72 W/m ² /100 lx	-	-	

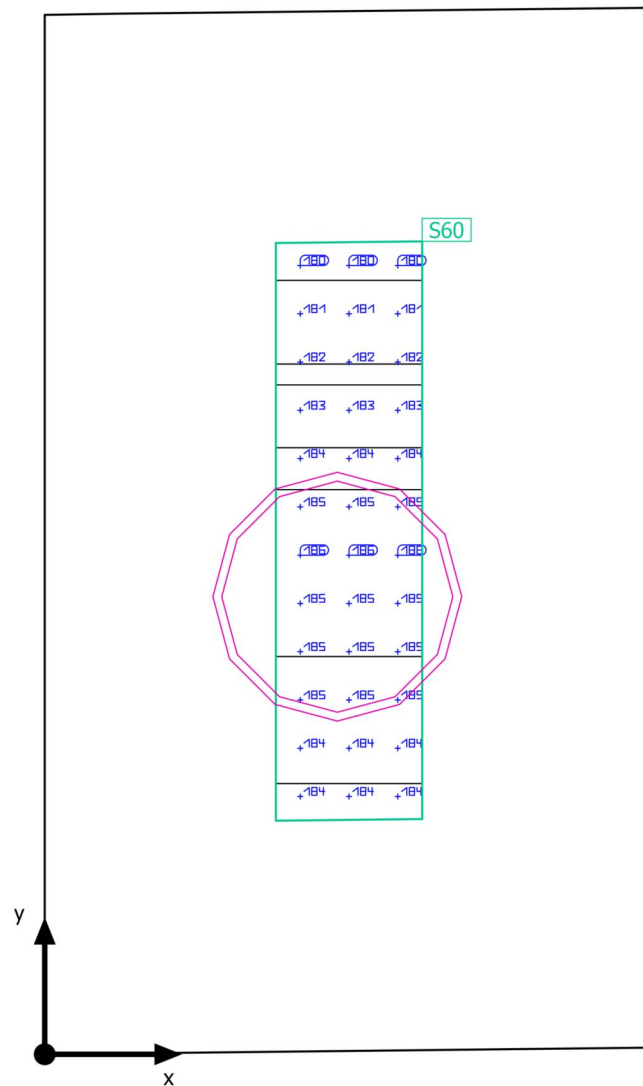
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS04U4K2 4UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W

Building 1 · Storey 2 · 2.07

Summary



Building 1 · Storey 2 · 2.07

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	184 lx	≥ 200 lx	✗	S60
	g_1	0.98	-	-	S60
Consumption values	Consumption	20 kWh/a	max. 50 kWh/a	✓	
Lighting power density	Room	22.50 W/m ²	-	-	
		12.25 W/m ² /100 lx	-	-	
	Workplane	168.45 W/m ²	-	-	
		91.71 W/m ² /100 lx	-	-	

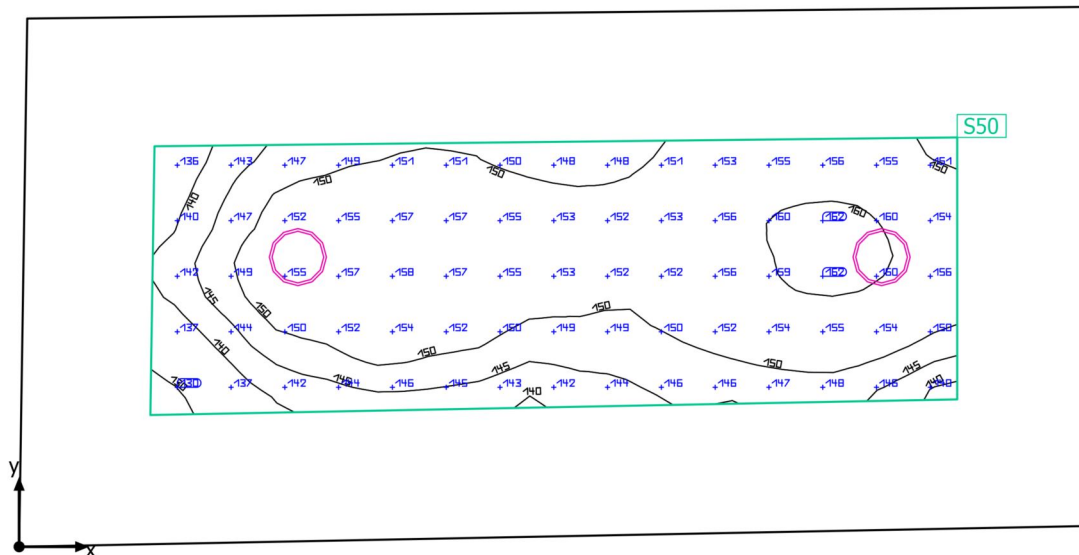
Utilisation profile: General areas inside buildings - Rest, sanitation and first aid rooms, Cloakrooms, washrooms, bathrooms, toilets

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS04U4K24UNK	BS04U4K24UNK	24.0 W	2250 lm	93.7 lm/W

Building 1 · Storey 2 · 2.09

Summary



Building 1 · Storey 2 · 2.09

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	151 lx	≥ 100 lx	✓	S50
	g_1	0.84	-	-	S50
Consumption values	Consumption	8 kWh/a	max. 300 kWh/a	✓	
Lighting power density	Room	5.51 W/m ²	-	-	
		3.66 W/m ² /100 lx	-	-	
	Workplane	14.38 W/m ²	-	-	
		9.55 W/m ² /100 lx	-	-	

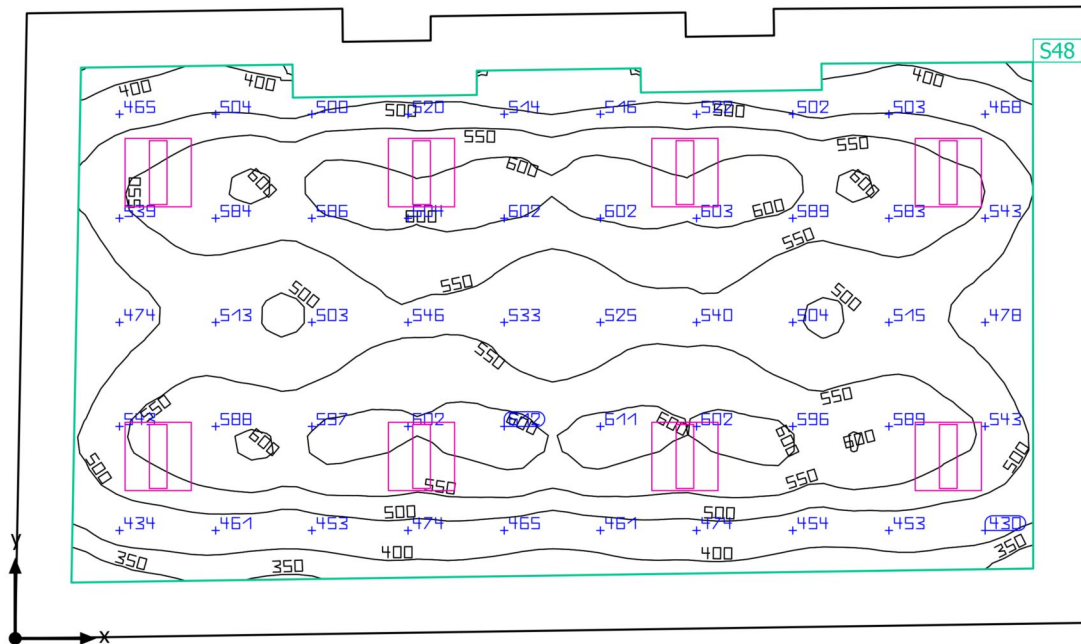
Utilisation profile: General areas inside buildings - Store rooms and cold stores, Store and stockrooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS01U4K25UN	BS01U4K25UN	23.0 W	1600 lm	69.6 lm/W

Building 1 · Storey 2 · 2.10

Summary



Building 1 · Storey 2 · 2.10

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	528 lx	≥ 500 lx	✓	S48
	g_1	0.57	-	-	S48
Consumption values	Consumption	[550 - 880] kWh/a	max. 1900 kWh/a	✓	
Lighting power density	Room	5.93 W/m ²	-	-	
		1.12 W/m ² /100 lx	-	-	
	Workplane	8.15 W/m ²	-	-	
		1.54 W/m ² /100 lx	-	-	

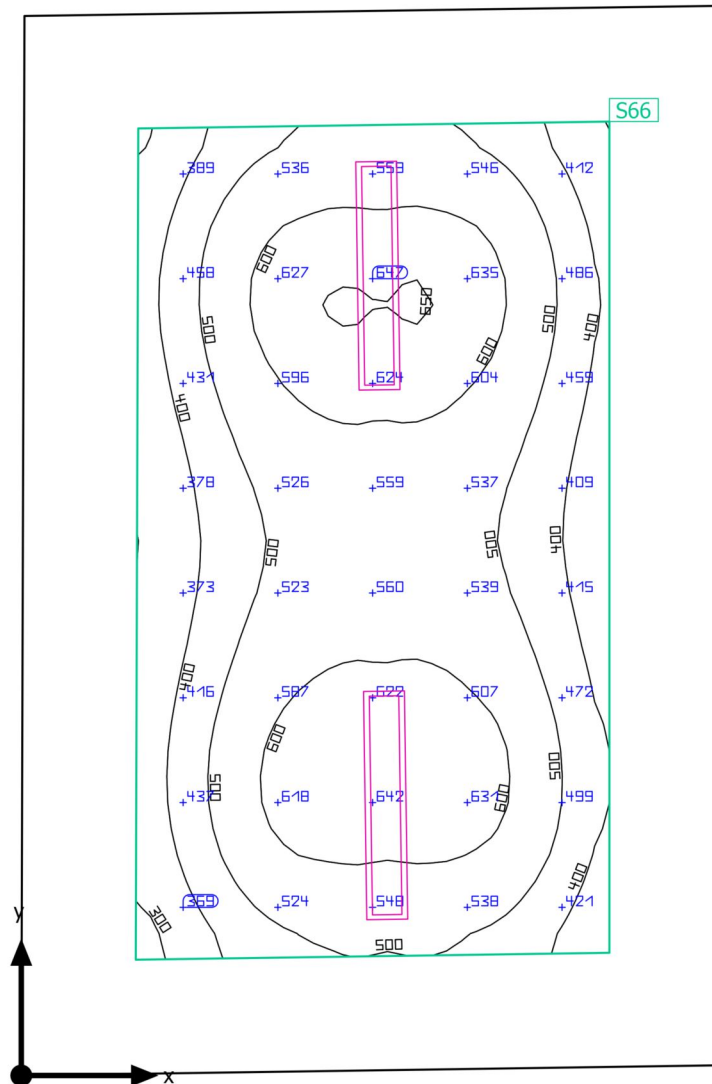
Utilisation profile: DIALux presetting, Standard (office)

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
8	BRIGHTSOL	BS01O4K4 0UN	BS01O4K40UN	40.0 W	4267 lm	106.7 lm/W

Building 1 · Storey 2 · 2.11

Summary



Building 1 · Storey 2 · 2.11

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	516 lx	≥ 500 lx	✓	S66
	g_1	0.53	-	-	S66
Consumption values	Consumption	[170 - 280] kWh/a	max. 750 kWh/a	✓	
Lighting power density	Room	4.87 W/m ²	-	-	
		0.94 W/m ² /100 lx	-	-	
	Workplane	9.21 W/m ²	-	-	
		1.79 W/m ² /100 lx	-	-	

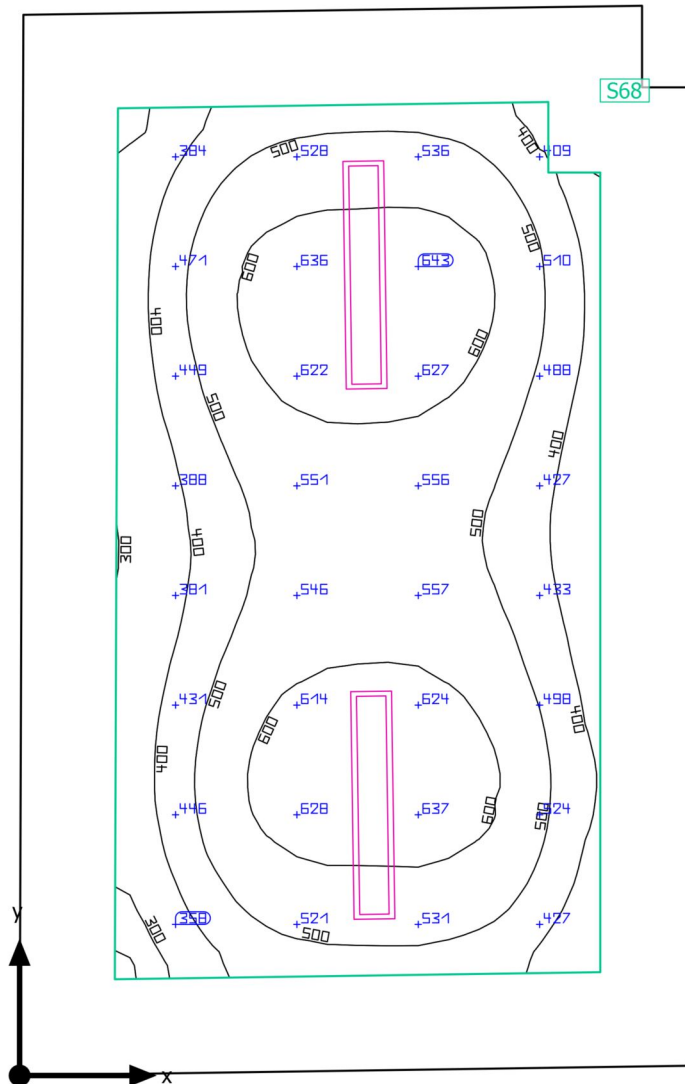
Utilisation profile: DIALux presetting, Standard (office)

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS03O4K50UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W

Building 1 · Storey 2 · 2.12

Summary



Building 1 · Storey 2 · 2.12

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	508 lx	≥ 500 lx	✓	S68
	g_1	0.47	-	-	S68
Consumption values	Consumption	[170 - 280] kWh/a	max. 700 kWh/a	✓	
Lighting power density	Room	5.07 W/m ²	-	-	
		1.00 W/m ² /100 lx	-	-	
	Workplane	8.62 W/m ²	-	-	
		1.70 W/m ² /100 lx	-	-	

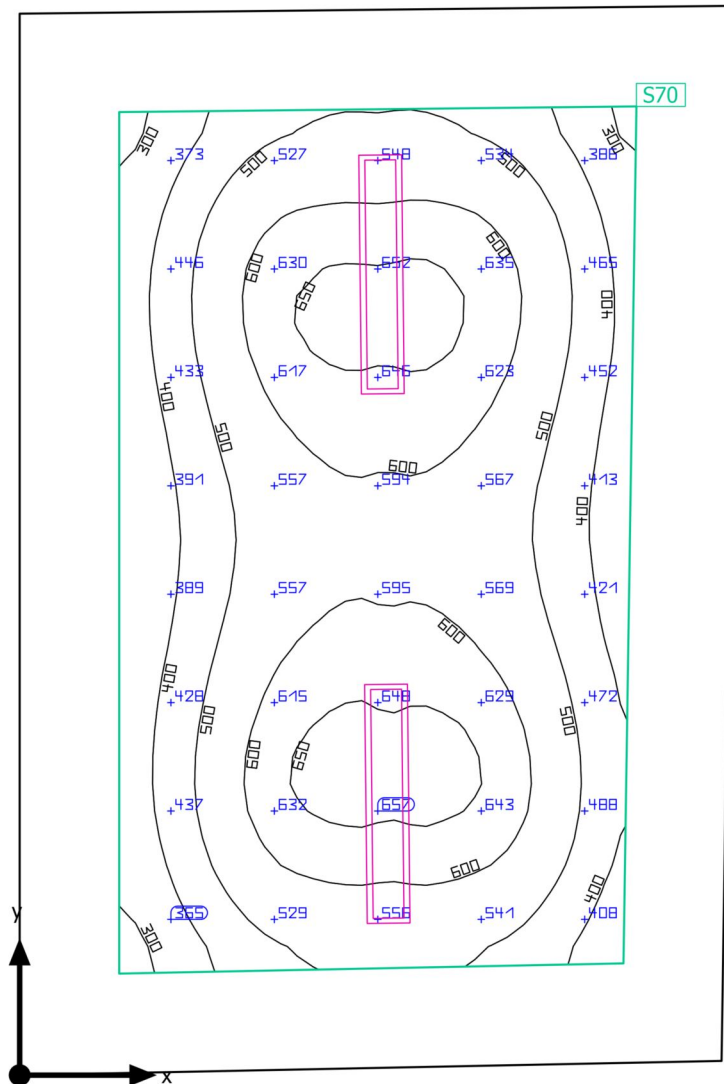
Utilisation profile: DIALux presetting, Standard (office)

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS03O4K50UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W

Building 1 · Storey 2 · 2.13

Summary



Building 1 · Storey 2 · 2.13

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	526 lx	≥ 500 lx	✓	S70
	g_1	0.51	-	-	S70
Consumption values	Consumption	[170 - 280] kWh/a	max. 700 kWh/a	✓	
Lighting power density	Room	5.27 W/m ²	-	-	
		1.00 W/m ² /100 lx	-	-	
	Workplane	9.03 W/m ²	-	-	
		1.72 W/m ² /100 lx	-	-	

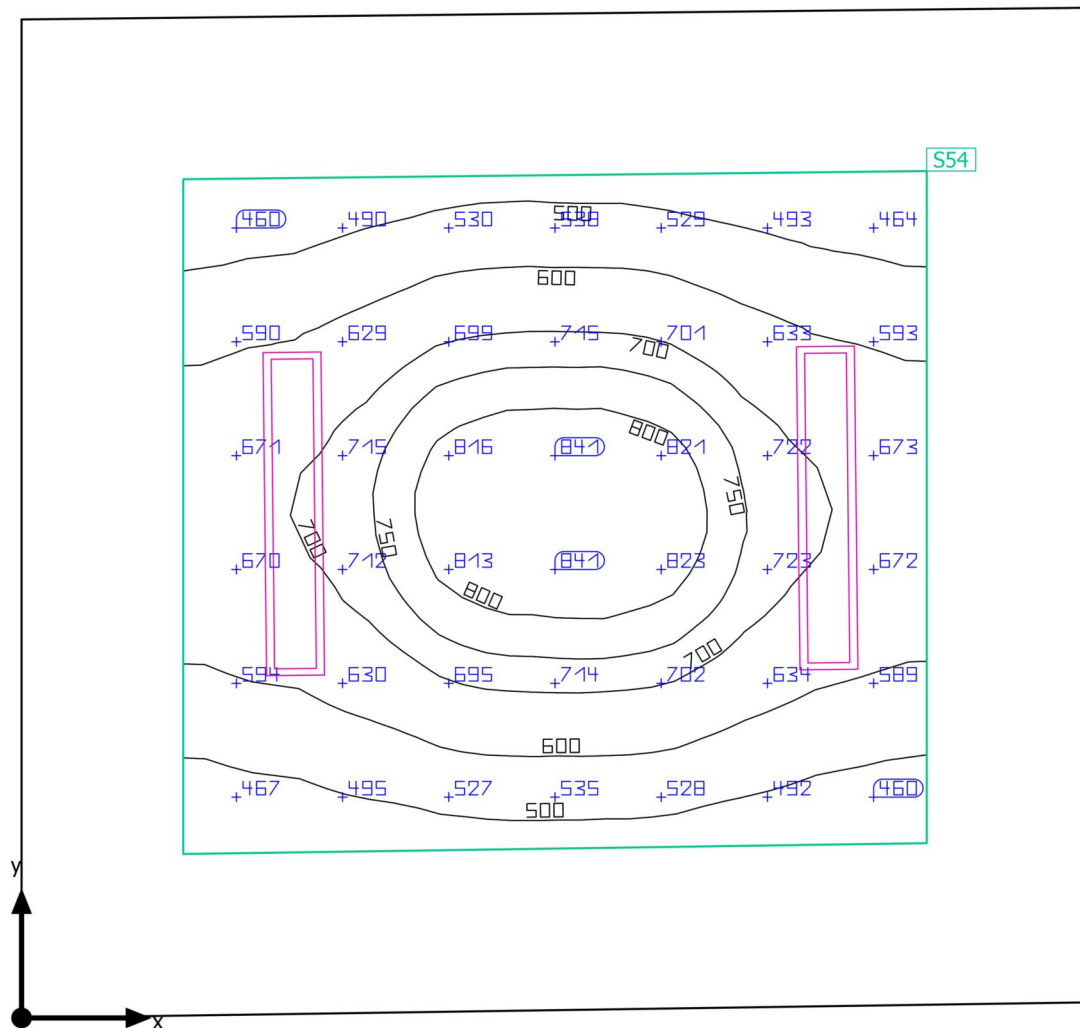
Utilisation profile: DIALux presetting, Standard (office)

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS03O4K50UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W

Building 1 · Storey 2 · 2.14

Summary



Building 1 · Storey 2 · 2.14

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	634 lx	≥ 500 lx	✓	S54
	g_1	0.64	-	-	S54
Consumption values	Consumption	[170 - 280] kWh/a	max. 550 kWh/a	✓	
Lighting power density	Room	6.82 W/m ²	-	-	
		1.08 W/m ² /100 lx	-	-	
	Workplane	14.49 W/m ²	-	-	
		2.29 W/m ² /100 lx	-	-	

Utilisation profile: DIALux presetting, Standard (office)

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS03O4K5 0UNL	BS03O4K50UNL	50.0 W	5856 lm	117.1 lm/W

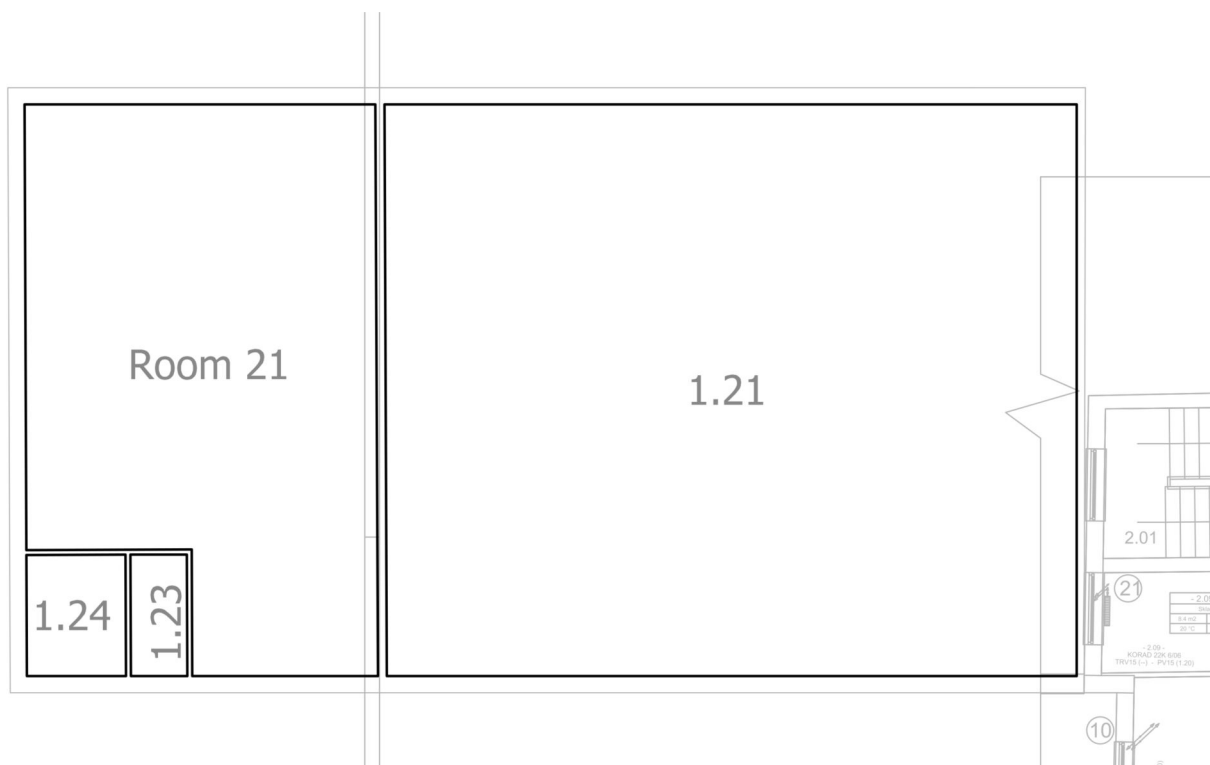
Building 2

Luminaire list

Φ_{total} 173495 lm	P_{total} 1242.5 W	Luminous efficacy 139.6 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
35	BRIGHTSOL	BS01P4K3 6UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm	139.6 lm/W

Building 2 · Storey 1

Room List (Energy evaluation)

Building 2 · Storey 1

Room List (Energy evaluation)

1.21

P_{total} 710.0 W	A_{Room} 164.06 m ²	Lighting power density 4.33 W/m ² = 1.10 W/m ² /100 lx (Room) 5.10 W/m ² = 1.30 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 392 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
20	BRIGHTSOL	BS01P4K3 6UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm

1.23

P_{total} 35.5 W	A_{Room} 2.85 m ²	Lighting power density 12.47 W/m ² = 6.22 W/m ² /100 lx (Room) 34.42 W/m ² = 17.17 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 201 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
1	BRIGHTSOL	BS01P4K3 6UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm

1.24

P_{total} 71.0 W	A_{Room} 4.99 m ²	Lighting power density 14.23 W/m ² = 3.85 W/m ² /100 lx (Room) 47.34 W/m ² = 12.80 W/m ² /100 lx (Workplane)	E_{perpendicular} (Workplane) 370 lx
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pcs.	Manufacturer	Article No.	Article name	P	Φ _{Luminaire}
2	BRIGHTSOL	BS01P4K3 6UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm

Building 2 · Storey 1

Room List (Energy evaluation)

Room 21

P_{total} 426.0 W	A_{Room} 74.65 m ²	Lighting power density 5.71 W/m ² = 1.34 W/m ² /100 lx (Room) 7.50 W/m ² = 1.76 W/m ² /100 lx (Workplane)	$\bar{E}_{\text{perpendicular (Workplane)}}$ 426 lx
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pcs.	Manufacturer	Article No.	Article name	P	$\Phi_{\text{Luminaire}}$
12	BRIGHTSOL	BS01P4K3 6UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm

Building 2 · Storey 1

Luminaire list Φ_{total}

173495 lm

 P_{total}

1242.5 W

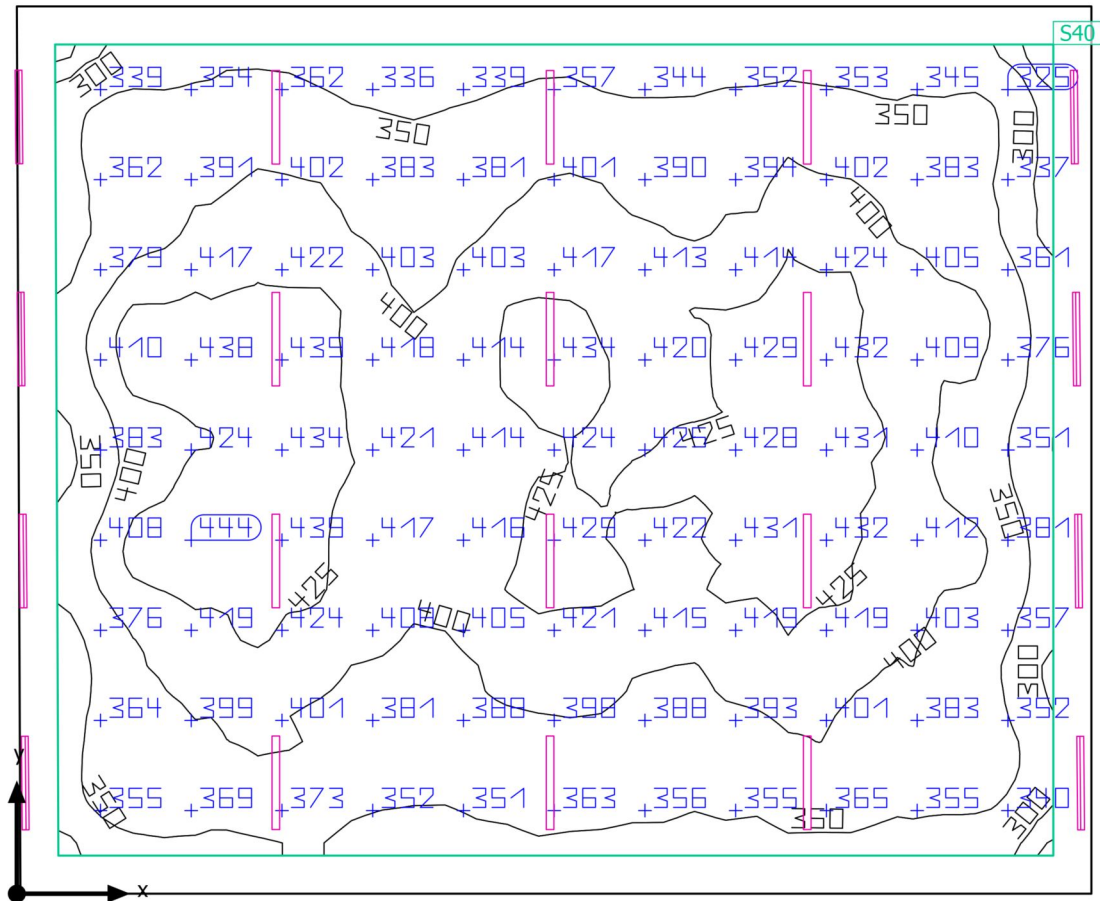
Luminous efficacy

139.6 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
35	BRIGHTSOL	BS01P4K3 6UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm	139.6 lm/W

Building 2 · Storey 1 · 1.21

Summary



Building 2 · Storey 1 · 1.21

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	392 lx	≥ 300 lx	✓	S40
	g_1	0.64	-	-	S40
Consumption values	Consumption	[1250 - 1450] kWh/a	max. 5750 kWh/a	✓	
Lighting power density	Room	4.33 W/m ²	-	-	
		1.10 W/m ² /100 lx	-	-	
	Workplane	5.10 W/m ²	-	-	
		1.30 W/m ² /100 lx	-	-	

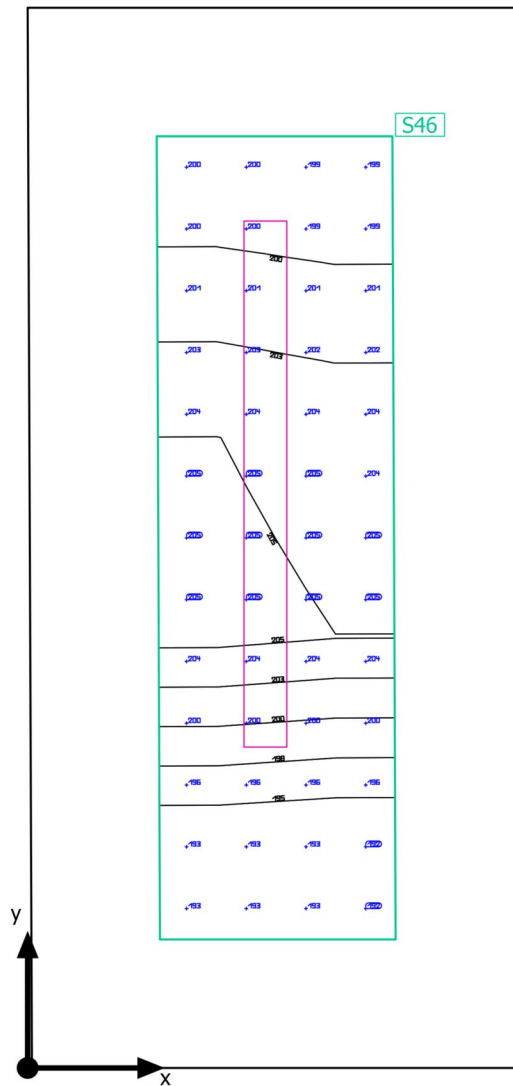
Utilisation profile: Industrial activities and crafts - Metalworking and processing, Assembly work: Medium

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
20	BRIGHTSOL	BS01P4K3 6UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm	139.6 lm/W

Building 2 · Storey 1 · 1.23

Summary



Building 2 · Storey 1 · 1.23

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	201 lx	≥ 100 lx	✓	S46
	g_1	0.96	-	-	S46
Consumption values	Consumption	6 kWh/a	max. 150 kWh/a	✓	
Lighting power density	Room	12.47 W/m ²	-	-	
		6.22 W/m ² /100 lx	-	-	
	Workplane	34.42 W/m ²	-	-	
		17.17 W/m ² /100 lx	-	-	

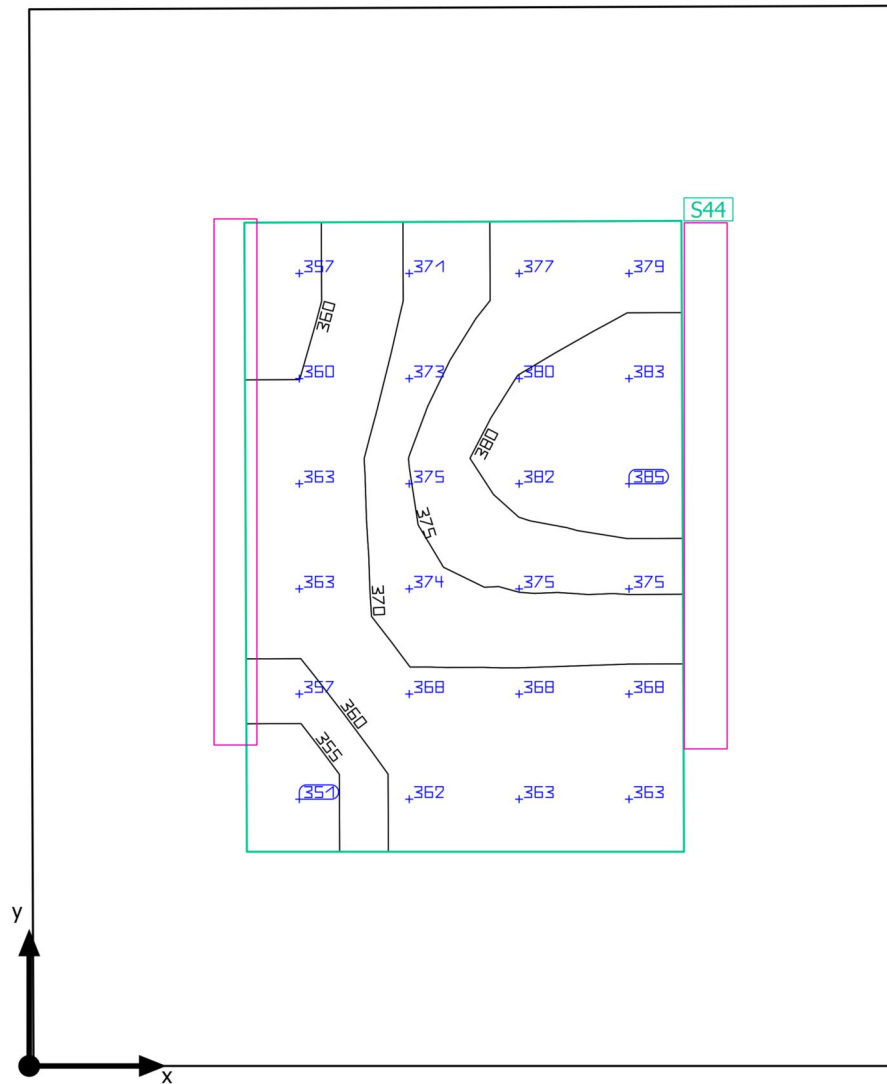
Utilisation profile: General areas inside buildings - Store rooms and cold stores, Store and stockrooms

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	BRIGHTSOL	BS01P4K36UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm	139.6 lm/W

Building 2 · Storey 1 · 1.24

Summary



Building 2 · Storey 1 · 1.24

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	370 lx	≥ 300 lx	✓	S44
	g_1	0.95	-	-	S44
Consumption values	Consumption	[97 - 160] kWh/a	max. 200 kWh/a	✓	
Lighting power density	Room	14.23 W/m ²	-	-	
		3.85 W/m ² /100 lx	-	-	
	Workplane	47.34 W/m ²	-	-	
		12.80 W/m ² /100 lx	-	-	

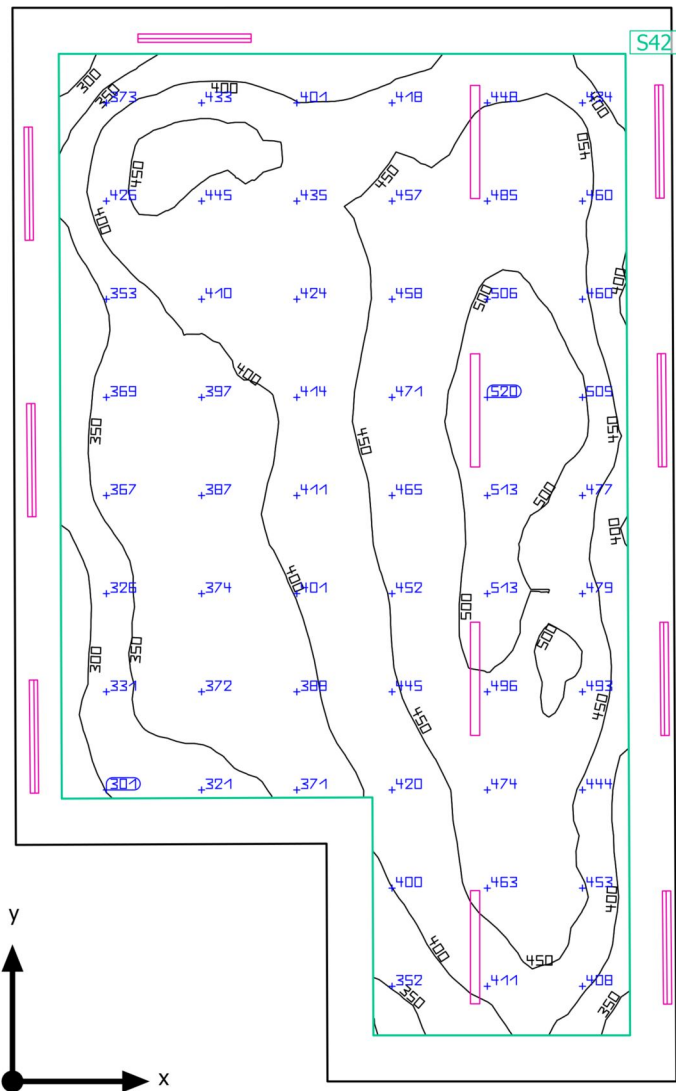
Utilisation profile: Industrial activities and crafts - Metalworking and processing, Assembly work: Medium

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	BRIGHTSOL	BS01P4K36UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm	139.6 lm/W

Building 2 · Storey 1 · Room 21

Summary



Building 2 · Storey 1 · Room 21

Summary

Results

	Symbol	Calculated	Target	Check	Index
Workplane	$\bar{E}_{\text{perpendicular}}$	426 lx	≥ 300 lx	✓	S42
	g_1	0.61	-	-	S42
Consumption values	Consumption	[680 - 960] kWh/a	max. 2650 kWh/a	✓	
Lighting power density	Room	5.71 W/m ²	-	-	
		1.34 W/m ² /100 lx	-	-	
	Workplane	7.50 W/m ²	-	-	
		1.76 W/m ² /100 lx	-	-	

Utilisation profile: Industrial activities and crafts - Metalworking and processing, Assembly work: Medium

Luminaire list

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
12	BRIGHTSOL	BS01P4K3 6UN	BS01P4K36UN 35.5W 4000K NW	35.5 W	4957 lm	139.6 lm/W

Glossary

A

A	Formula symbol for a surface in the geometry
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B

Background area	The background area borders the direct ambient area according to DIN EN 12464-1 and reaches up to the borders of the room. In larger rooms, the background area is at least 3 m wide. It is located horizontally at floor level.
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C

CCT	<p>(Engl. correlated colour temperature) Body temperature of a thermal radiator which serves to describe its light colour. Unit: Kelvin [K]. The lesser the numerical value the redder; the greater the numerical value the bluer the light colour. The colour temperature of gas-discharge lamps and semi-conductors are termed "correlated colour temperature" in contrast to the colour temperature of thermal radiators.</p> <p>Allocation of the light colours to the colour temperature ranges acc. to EN 12464-1:</p> <p>Light colour - colour temperature [K] warm white (ww) < 3,300 K neutral white (nw) $\geq 3,300 - 5,300$ K daylight white (dw) > 5.300 K</p>
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Clearance height	The designation for the distance between upper edge of the floor and bottom edge of the ceiling (in the completely furnished status of room).
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CRI	<p>(Engl. colour rendering index) Designation for the colour rendering index of a luminaire or a lamp acc. to DIN 6169: 1976 or CIE 13.3: 1995.</p> <p>The general colour rendering index Ra (or CRI) is a dimensionless figure that describes the quality of a white light source in regards to its similarity with the remission spectra of defined 8 test colours (see DIN 6169 or CIE 1974) to a reference light source.</p>
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D

Daylight factor	<p>Ratio of the illuminance achieved solely by daylight incidence at a point in the inside to the horizontal illuminance in the outer area under an unobstructed sky.</p> <p>Formula symbol: D (Engl. daylight factor) Unit: %</p>
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Glossary

Daylight quotient effective area	A calculation surface within which the daylight quotient is calculated.
E	
Eta (η)	<p>(light output ratio)</p> <p>The light output ratio describes what percentage of the luminous flux of a free radiating lamp (or LED module) is emitted by the luminaire when installed.</p> <p>Unit: %</p>
G	
g1	<p>Often also Uo (Engl. overall uniformity)</p> <p>Designates the overall uniformity of the illuminance on a surface. It is the quotient from Emin to \bar{E} and is required, for instance, in standards for illumination of workstations.</p>
g2	<p>Actually it designates the "non-uniformity" of the illuminance on a surface. It is the quotient of Emin to Emax and is generally only relevant for certifying the emergency lighting acc. to EN 1838.</p>
I	
Illuminance	<p>Describes the ratio of the luminous flux that strikes a certain surface to the size of this surface ($\text{lm}/\text{m}^2 = \text{lx}$). The illuminance is not tied to an object surface. It can be determined anywhere in space (inside or outside). The illuminance is not a product feature because it is a recipient value. Luxometers are used for measuring.</p> <p>Unit: Lux Abbreviation: lx Formula symbol: E</p>
Illuminance, adaptive	For the determining of the middle adaptive illuminance on a surface, this is rastered "adaptively". In the area of large illuminance differences within the surface, the raster is subdivided finer; within lesser differences, a rougher classification is made.
Illuminance, horizontal	Illuminance that is calculated or measured on a horizontal (level) surface (this can be for example a table top or the floor). The horizontal illuminance is usually identified by the formula letter Eh.
Illuminance, perpendicular	Illuminance that is calculated or measured plumb-vertical to a surface. This needs to be taken into account for tilted surfaces. If the surface is horizontal or vertical, then there is no difference between the perpendicular and the horizontal or vertical illuminance.

Glossary

Illuminance, vertical	<p>Illuminance that is calculated or measured on a vertical surface (this can be for example the front of some shelves). The vertical illuminance is usually identified by the formula letter E_v.</p>
<hr/>	
L	
LENI	<p>(Engl. lighting energy numeric indicator) Lighting energy numeric indicator acc. to EN 15193</p> <p>Unit: kWh/m² year</p>
<hr/>	
LLMF	<p>(Engl. lamp lumen maintenance factor)/acc. to CIE 97: 2005 Lamp flux maintenance factor that takes the luminous flux reduction into account of a luminaire or an LED module in the course of the operating time. The lamp flux maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no luminous flux reduction existing).</p>
<hr/>	
LMF	<p>(Engl. luminaire maintenance factor)/acc. to CIE 97: 2005 Luminaire maintenance factor that takes the soiling into account of the luminaire in the course of the operating time. The luminaire maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no soiling existing).</p>
<hr/>	
LSF	<p>(Engl. lamp survival factor)/acc. to CIE 97: 2005 Lamp survival factor that takes the total failure into account of a luminaire in the course of the operating time. The lamp survival factor is specified as a decimal digit and can have a maximum value of 1 (no failures existing within the time concerned or prompt replacement after the failure).</p>
<hr/>	
Luminance	<p>Dimension for the "brightness impression" that the human eye has of a surface. The surface itself can emit light thereby or light striking it can be reflected (emitter value). It is the only photometric value that the human eye can perceive.</p> <p>Unit: Candela per square metre Abbreviation: cd/m² Formula symbol: L</p>
<hr/>	
Luminous efficacy	<p>Ratio of the emitted luminous flux Φ [lm] to the absorbed electrical power P [W] Unit: lm/W.</p> <p>This ratio can be formed for the lamp or LED module (lamp or module light output), the lamp or module with control gear (system light output) and the complete luminaire (luminaire light output).</p>
<hr/>	

Glossary

Luminous flux	<p>Dimension for the total light output that is emitted from one light source in all directions. It is thus an "emitter value" that specifies the entire emitting output. The luminous flux of a light source can only be determined in a laboratory. A difference is made between the lamp or LED module luminous flux and the luminaire luminous flux.</p> <p>Unit: Lumen Abbreviation: lm Formula symbol: Φ</p>
Luminous intensity	<p>Describes the intensity of the light in a certain direction (emitter value). The luminous intensity is a matter of the luminous flux Φ that is emitted in a certain spherical angle Ω. The radiation characteristics of a light source are presented graphically in a light distribution curve (LDC). The luminous intensity is an SI base unit.</p> <p>Unit: Candela Abbreviation: cd Formula symbol: I</p>
M	
Maintenance factor	See MF
MF	<p>(Engl. maintenance factor)/acc. to CIE 97: 2005 Maintenance factor as decimal number between 0 and 1 that describes the ratio of the new value of a photometric planning parameter (e.g. of the illuminance) to a maintenance value after a certain time. The maintenance factor takes into account the soiling of luminaires and rooms as well as the luminous flux reduction and the failure of light sources. The maintenance factor is taken into account either overall or determined in detail acc. to CIE 97: 2005 by the formula $RMF \times LMF \times LLMF \times LSF$.</p>
P	
P	<p>(Engl. power) Electric power consumption</p> <p>Unit: watt Abbreviation: W</p>
R	
Reflection factor	<p>The reflection factor of a surface describes how much of the striking light is reflected back. The reflection factor is defined by the colour of the surface.</p>

Glossary

RMF	(Engl. room maintenance factor)/acc. to CIE 97: 2005 Room maintenance factor that takes the soiling into account of the space encompassing surfaces in the course of the operating time. The room maintenance factor is specified as a decimal digit and can have a maximum value of 1 (no soiling existing).
<hr/>	
S	
Surrounding area	The ambient area directly borders the area of the visual task and should be planned with a width of at least 0.5 m according to DIN EN 12464-1. It is at the same height as the area of the visual task.
<hr/>	
U	
UGR (max)	(unified glare rating) Measure for the psychological glare effect in interiors. In addition to luminaire luminance, the UGR value also depends on the position of the observer, the viewing direction and the ambient luminance. Among other things, EN 12464-1 specifies maximum permissible UGR values for various indoor workplaces.
<hr/>	
UGR observer	Calculation point in the room, for the DIALux the UGR value is determined. The location and height of the calculation point should correspond to the typical observer position (position and eye level of the user).
<hr/>	
V	
Visual task area	The area that is needed for carrying out the visual task in accordance with DIN EN 12464-1. The height corresponds with the height at which the visual task is executed.
<hr/>	
W	
Wall zone	Circumferential area between working plane and walls which is not taken into account for the calculation.
<hr/>	
Workplane	Virtual measuring or calculation surface at the height of the visual task that generally follows the room geometry. The working plane may also feature a wall zone.
<hr/>	