

1001355 Ballerud sykkelrute, kryss Høvikveienx Dragveien

Fv1628 Høvikveien x Dragveien

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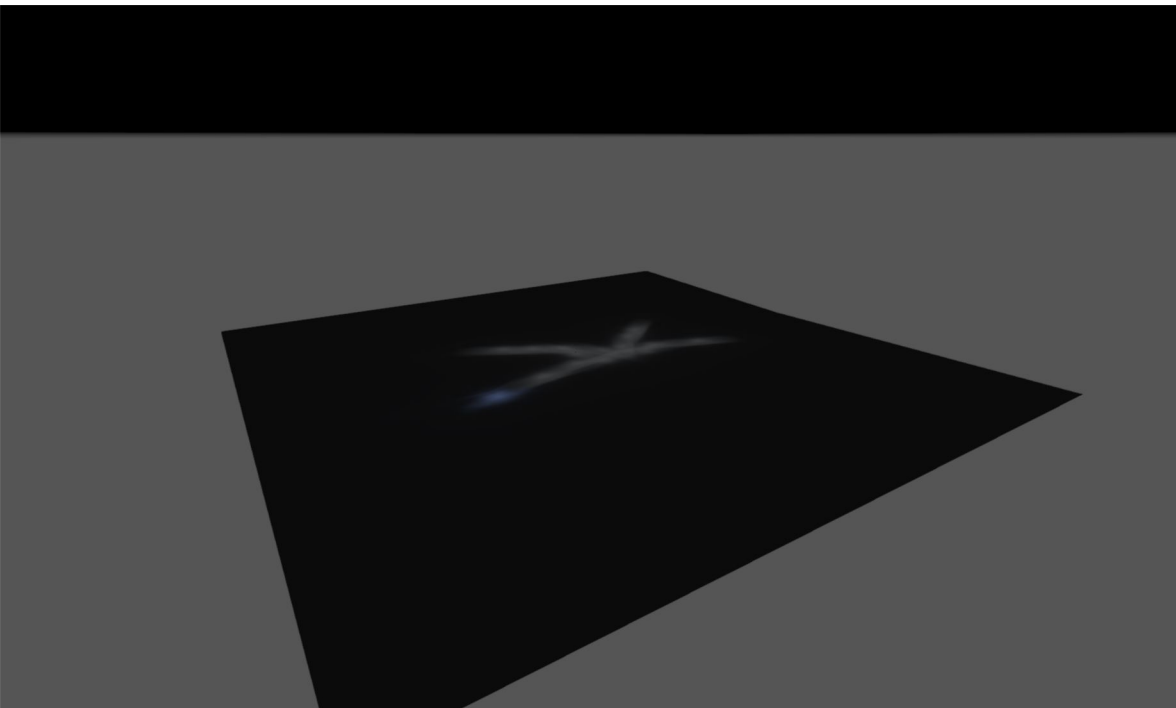
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Description

Armaturutskiftning på eksisterende master, nye master på østsiden

Ny sykkelvei med fortau i konflikt med noen av de eksisterende masten på østsiden.

Pga geometrisk utforming er gangfeltetene ikke optimalt plassert for intensivbelysning, forstreket belysning i hele kryssområdet (50m ut i alle retninger fra gangfelt) legges derfor til grunn.

ÅDT fra NVDB: Dragveien: 3700, Høvikveien nord: 5000, Høvikveien sør: 6000

Fartsgrense fra NVDB: 50 km/h

Som i før forsterket belysning tilsier belysningsklasser C2/C3, fra tabell 4.6.3-1 i N100:2023

Forsterket belysning tilser økning med 2 klasser til maks C1, belysningsklasse C1 legges derfor til grunn på veibane, det medfører E midlere minimum 30 lux, jevnhet på 0,40 og blending på maks 15%

Tilhørende belysningsklasse for gang og sykkelareal blir da P1 som tilsvarer E midlere minimum 15 lux, E minimum på 3 lux og

blending på maks 20%

forsterket belysning har også følgende krav til masteplassering:

□ De nærmeste lysmastene plasseres i en avstand fra gangfeltet minst lik lyspunkthøyden, slik at fotgjengerne blir relativt mørke og kan sees i kontrast mot en lysere bakgrunn.

Og følgende krav til lysarmatur:

□ Det skal benyttes hvitt lys med god fargegjengivelse, $R_a > 70$ og fargetemperatur maksimum 3000 K

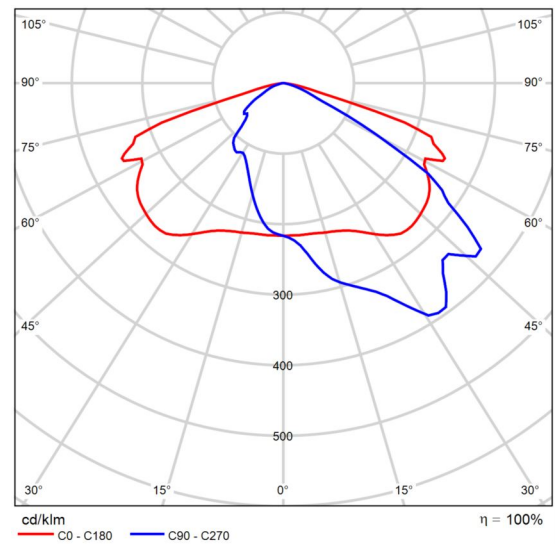
Product data sheet

FAGERHULT - Evolume 2 G2 STD 18300LM L7 740



Article No.	550500-32268
P	121.0 W
Φ_{Lamp}	18300 lm
$\Phi_{\text{Luminaire}}$	18298 lm
η	99.99 %
Luminous efficacy	151.2 lm/W
CCT	4000 K
CRI	70

20LED, CLII, RAL9006 G70, COLOURED POST TOP 76, FQQ 2X1,5 12M
White glass



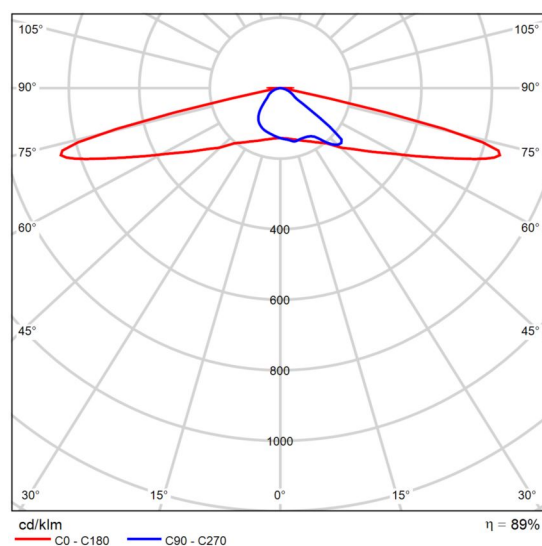
Polar LDC

Product data sheet

Philips - BGP762 T25 1 xLED180-4S/730 DM50



P	112.0 W
Φ_{Lamp}	18000 lm
$\Phi_{\text{Luminaire}}$	16008 lm
η	88.93 %
Luminous efficacy	142.9 lm/W
CCT	3000 K
CRI	70



Polar LDC

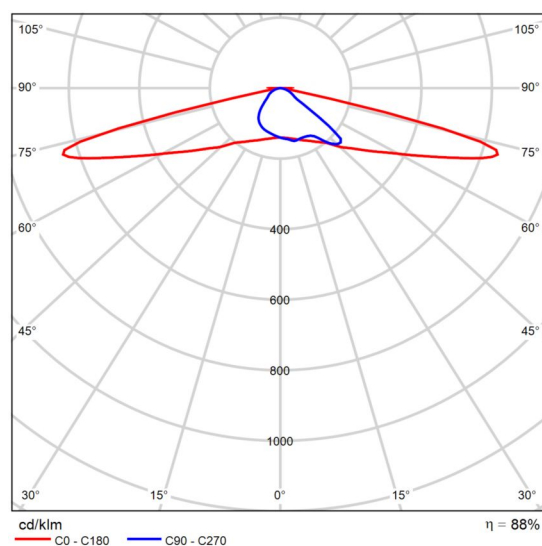
Get your city ready for the future with DigiStreet. Developed with the aim to become your long term partner, the system ready architecture of DigiStreet enables you to enjoy the benefits of connected lighting systems today and also gets the city ready for the innovations to come!. Its two sockets enable you to connect directly to the Philips CityTouch system and is also prepared to connect you to the future innovations of IoT. Next to this, each individual luminaire is uniquely identifiable, thanks to the Philips Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making maintenance and programming operations faster and easier, no matter what stage of the luminaire's lifetime. DigiStreet is also equipped with dedicated light recipes that: 1) maintain an optimal ecosystems for bats or 2) preserve a dark night sky.

Product data sheet

Philips - BGP762 T25 1 xLED200-4S/730 DM50



P	126.0 W
Φ_{Lamp}	20000 lm
$\Phi_{\text{Luminaire}}$	17605 lm
η	88.03 %
Luminous efficacy	139.7 lm/W
CCT	3000 K
CRI	70



Polar LDC

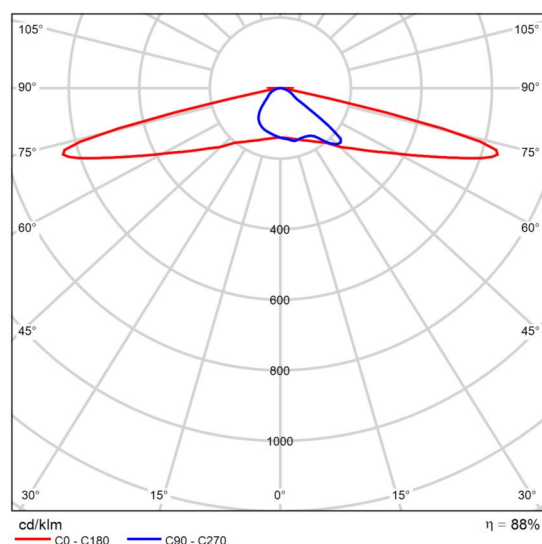
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Product data sheet

Philips - BGP763 T25 1 xLED240-4S/730 DM50



P	150.0 W
Φ_{Lamp}	24000 lm
$\Phi_{\text{Luminaire}}$	21126 lm
η	88.03 %
Luminous efficacy	140.8 lm/W
CCT	3000 K
CRI	70

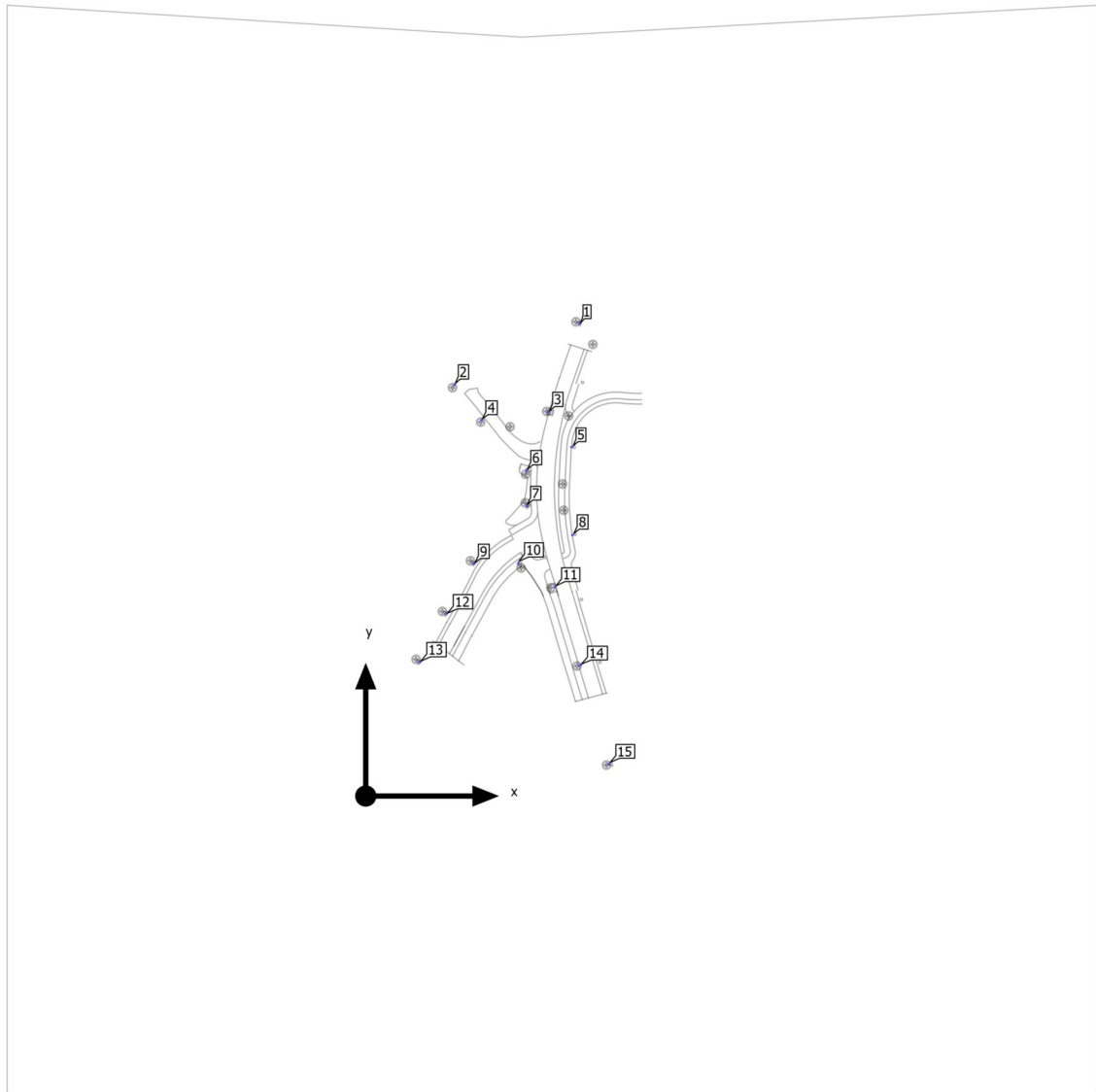


Polar LDC

Get your city ready for the future with DigiStreet. Developed with the aim to become your long term partner, the system ready architecture of DigiStreet enables you to enjoy the benefits of connected lighting systems today and also gets the city ready for the innovations to come!. Its two sockets enable you to connect directly to the Philips CityTouch system and is also prepared to connect you to the future innovations of IoT. Next to this, each individual luminaire is uniquely identifiable, thanks to the Philips Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making maintenance and programming operations faster and easier, no matter what stage of the luminaire's lifetime. Digistreet is also equipped with dedicated light recipes that: 1) maintain an optimal ecosystems for bats or 2) preserve a dark night sky.

Site 1

Luminaire layout plan



Site 1

Luminaire layout plan



Manufacturer	FAGERHULT	P	121.0 W
Article No.	550500-32268	$\Phi_{\text{Luminaire}}$	18298 lm
Article name	Evolume 2 G2 STD 18300LM L7 740		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
100.100 m	13.168 m	8.000 m	15

Site 1

Luminaire layout plan



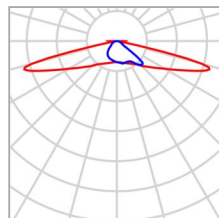
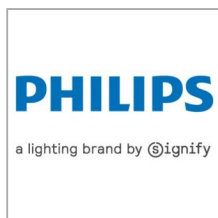
Manufacturer	Philips	P	112.0 W
Article name	BGP762 T25 1 xLED180-4S/730 DM50	$\Phi_{\text{Luminaire}}$	16008 lm
Fitting	1x LED180-4S/730		

Individual luminaires

X	Y	Mounting height	Luminaire
36.361 m	169.330 m	8.000 m	2
47.537 m	154.755 m	8.000 m	4

Site 1

Luminaire layout plan



Manufacturer	Philips	P	126.0 W
Article name	BGP762 T25 1 xLED200-4S/730 DM50	$\Phi_{\text{Luminaire}}$	17605 lm
Fitting	1x LED200-4S/730		

Individual luminaires

X	Y	Mounting height	Luminaire
87.884 m	195.081 m	8.000 m	1
74.912 m	158.488 m	8.000 m	3
85.347 m	143.891 m	8.000 m	5
66.222 m	133.911 m	8.000 m	6
66.465 m	120.002 m	8.000 m	7
85.724 m	107.732 m	8.000 m	8
44.278 m	96.168 m	8.000 m	9
63.273 m	95.613 m	8.000 m	10
77.684 m	86.246 m	8.000 m	11
32.894 m	75.454 m	8.000 m	12
21.955 m	55.506 m	8.000 m	13

Site 1

Luminaire layout plan



Manufacturer	Philips	P	150.0 W
Article name	BGP763 T25 1 xLED240-4S/730 DM50	$\Phi_{\text{Luminaire}}$	21126 lm
Fitting	1x LED240-4S/730		

Individual luminaires

X	Y	Mounting height	Luminaire
88.002 m	53.897 m	8.000 m	14

Site 1

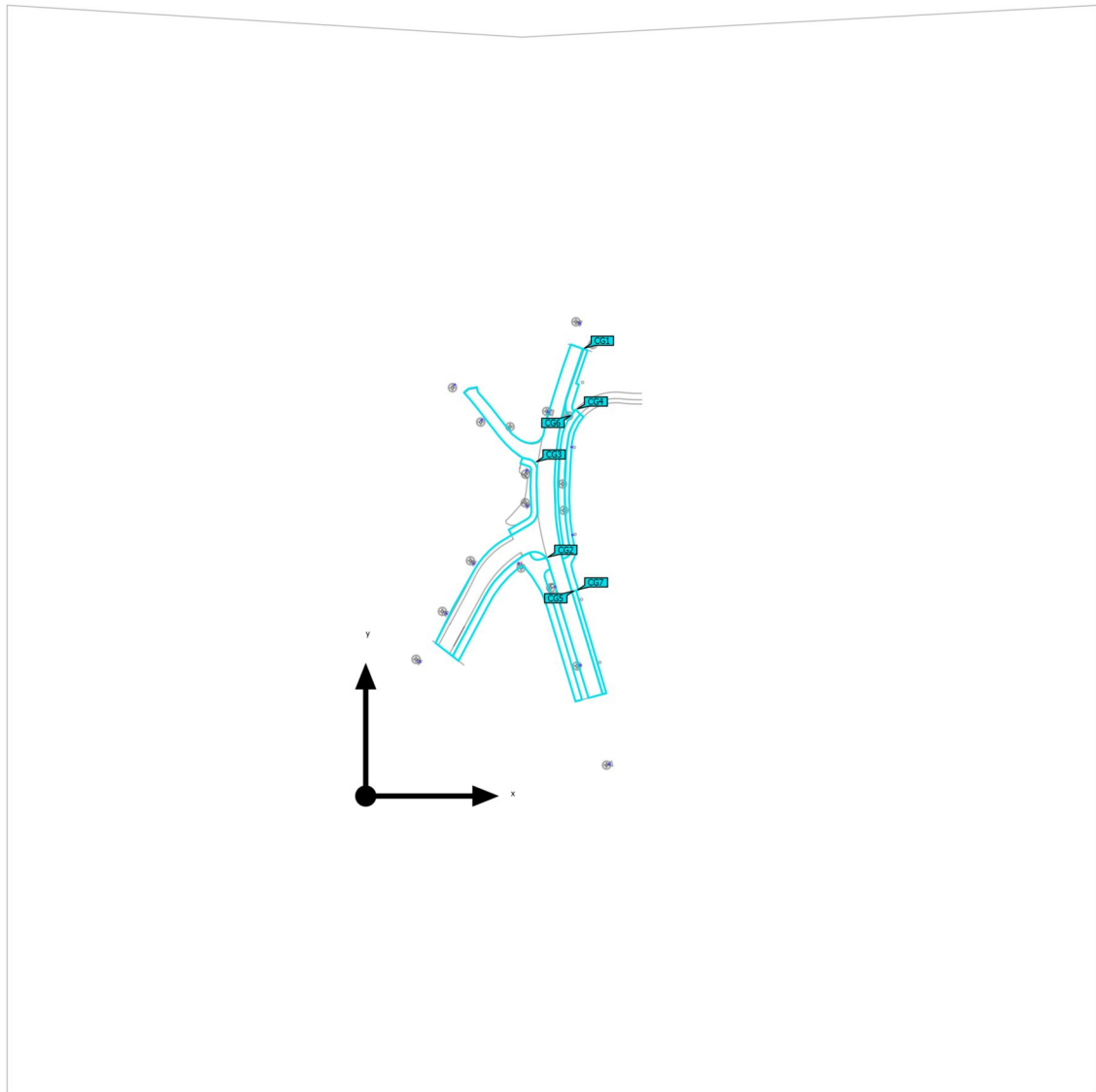
Luminaire list

Φ_{total} 265095 lm	P_{total} 1881.0 W	Luminous efficacy 140.9 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
1	FAGERHULT	550500-32268	Evolume 2 G2 STD 18300LM L7 740	121.0 W	18298 lm	151.2 lm/W
2	Philips		BGP762 T25 1 xLED180-4S/730 DM50	112.0 W	16008 lm	142.9 lm/W
11	Philips		BGP762 T25 1 xLED200-4S/730 DM50	126.0 W	17605 lm	139.7 lm/W
1	Philips		BGP763 T25 1 xLED240-4S/730 DM50	150.0 W	21126 lm	140.8 lm/W

Site 1 (Light scene 1)

Calculation objects



Site 1 (Light scene 1)

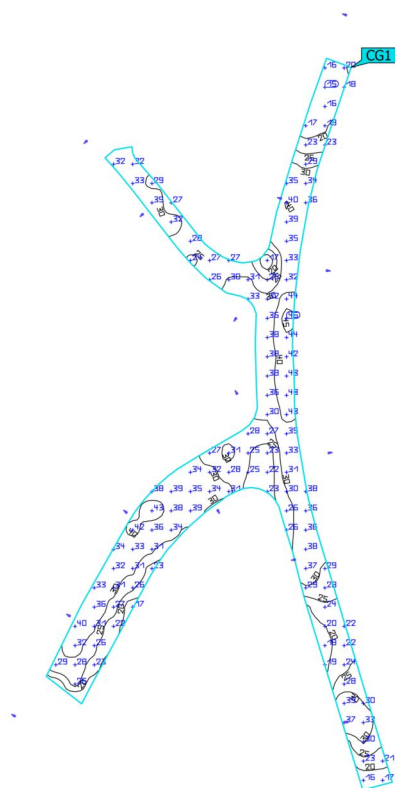
Calculation objects

Calculation surfaces

Properties	\bar{E}	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
vagbane i kryssområde Perpendicular illuminance Height: 0.000 m	30.1 lx	15.0 lx	46.4 lx	0.50	0.32	CG1
Fortau sør Perpendicular illuminance Height: 0.000 m	15.8 lx	6.68 lx	31.5 lx	0.42	0.21	CG2
Fortau vest Perpendicular illuminance Height: 0.000 m	30.1 lx	22.6 lx	39.6 lx	0.75	0.57	CG3
Sykkelvei øst Perpendicular illuminance Height: 0.000 m	35.0 lx	11.7 lx	43.3 lx	0.33	0.27	CG4
Fortau langs ny sykkelvei øst Perpendicular illuminance Height: 0.000 m	30.5 lx	10.3 lx	43.1 lx	0.34	0.24	CG5
Fortau nord øst Perpendicular illuminance Height: 0.000 m	22.7 lx	17.9 lx	30.9 lx	0.79	0.58	CG6
Fortau sør øst Perpendicular illuminance Height: 0.000 m	22.9 lx	15.8 lx	27.3 lx	0.69	0.58	CG7

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

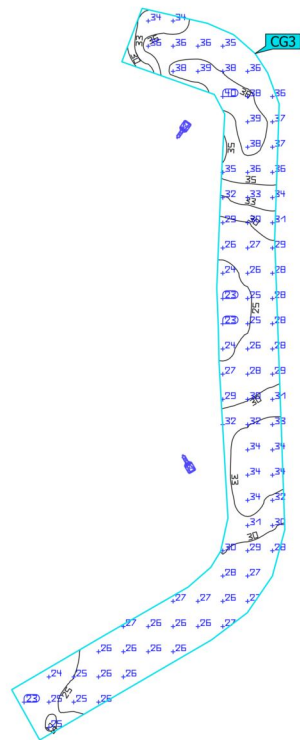
Site 1 (Light scene 1)

vagbane i kryssområde

Properties	\bar{E}	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
vagbane i kryssområde Perpendicular illuminance Height: 0.000 m	30.1 lx	15.0 lx	46.4 lx	0.50	0.32	CG1

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

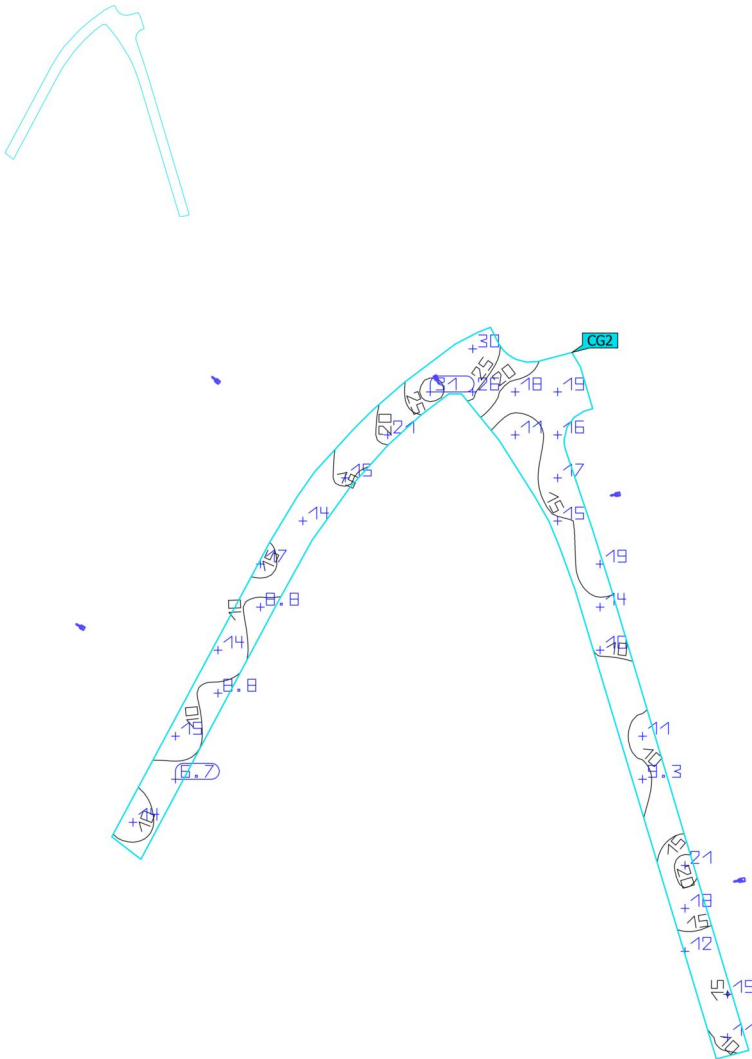
Site 1 (Light scene 1)

Fortau vest

Properties	\bar{E}	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Fortau vest	30.1 lx	22.6 lx	39.6 lx	0.75	0.57	CG3
Perpendicular illuminance						
Height: 0.000 m						

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

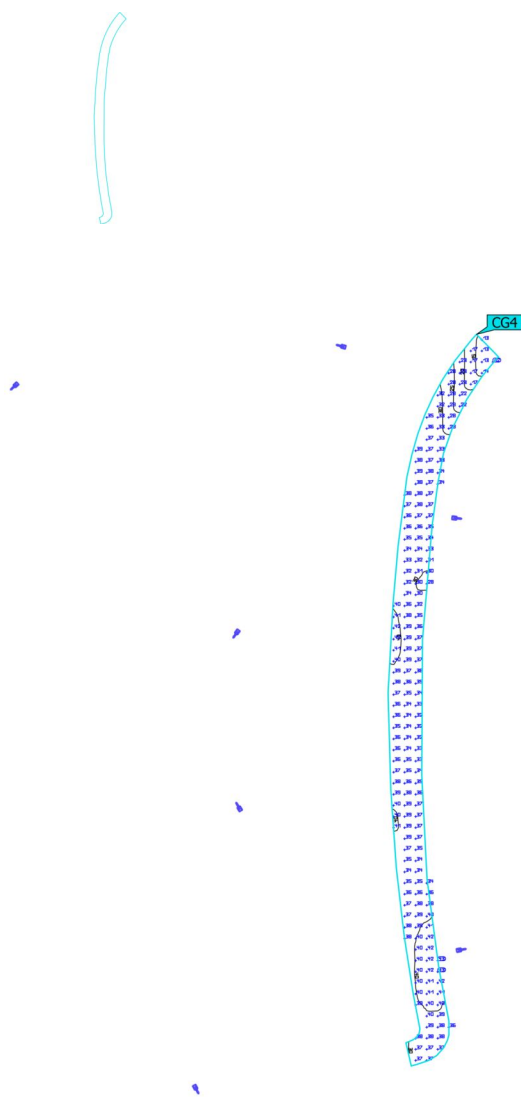
Site 1 (Light scene 1)

Fortau sør

Properties	\bar{E}	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Fortau sør Perpendicular illuminance Height: 0.000 m	15.8 lx	6.68 lx	31.5 lx	0.42	0.21	CG2

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

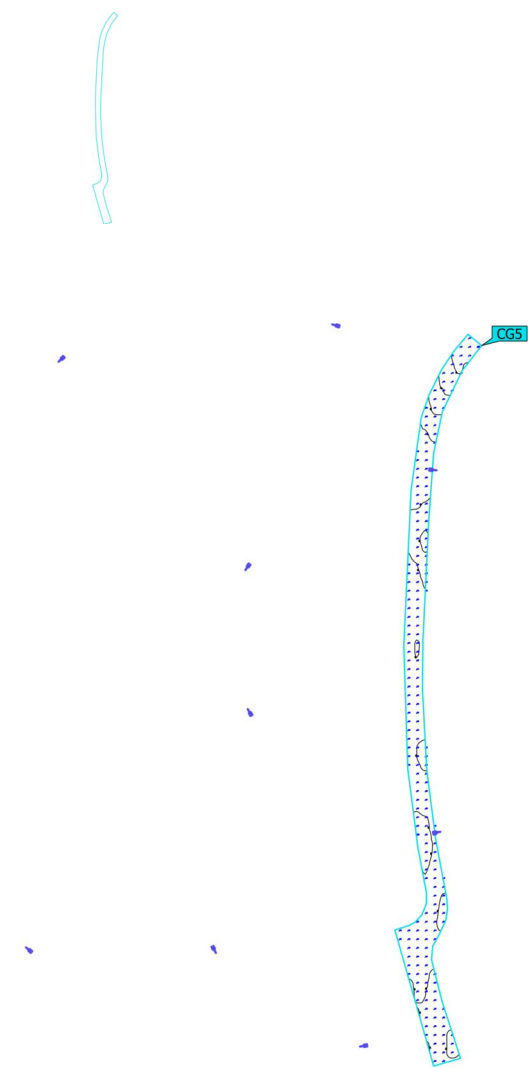
Sykkelvei øst

Properties	\bar{E}	E_{\min}	E_{\max}	$U_o (g_1)$	g_2	Index
Sykkelvei øst Perpendicular illuminance Height: 0.000 m	35.0 lx	11.7 lx	43.3 lx	0.33	0.27	CG4

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

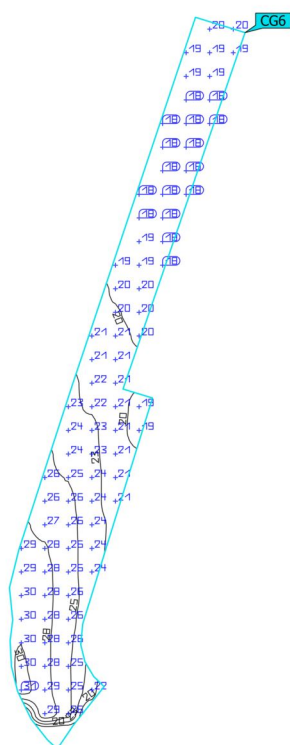
Fortau langs ny sykkelvei øst



Properties	\bar{E}	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Fortau langs ny sykkelvei øst Perpendicular illuminance Height: 0.000 m	30.5 lx	10.3 lx	43.1 lx	0.34	0.24	CG5

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

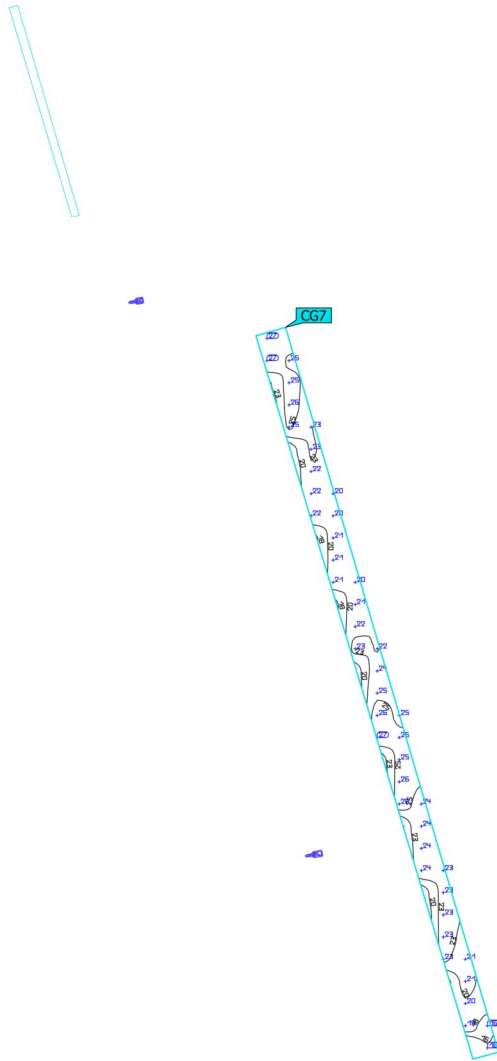
Site 1 (Light scene 1)

Fortau nord øst

Properties	\bar{E}	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Fortau nord øst	22.7 lx	17.9 lx	30.9 lx	0.79	0.58	CG6
Perpendicular illuminance						
Height: 0.000 m						

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)

Fortau sør øst

Properties	\bar{E}	E_{\min}	E_{\max}	$U_o (g_1)$	g_2	Index
Fortau sør øst Perpendicular illuminance Height: 0.000 m	22.9 lx	15.8 lx	27.3 lx	0.69	0.58	CG7

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))