DarkLicht GLARE FREE LIGHTING BY DCbright







DARK LICHT GLARE FREE LIGHTING

The Dark Licht Series of light fittings were developed to meet the increasing market demand for optimum flexibility and efficiency in glare free cut-off flood lighting applications.

The two body types of Dark Licht light fittings share the base marine grade high pressure cast aluminium body. The wedge shape aesthetic Dark Licht is for Architectural and Commercial projects. Industrial applications use the standard Dark Licht model which has slightly higher ambient thermal performance and can have a marine application kit fitted, if required. This dynamic modular transformation is the most economical solution for industrial, commercial, and architectural lighting applications.

Unique Highly Efficient Reflector System®

The Patent innovative high performance reflector design maximises luminaire efficiency, providing 160 lumens per watt fixture light output.

Unique Adjustable full Cut-Off $^{\odot}$ from 57° to 70°

Unique patented adjustable forward asymmetric light distribution from 57° to 70°. Adjustments of the forward beam can be made by the installation contractor, pre-installation to meet the requirements of the lighting application.

Unique Modular Rotating Reflectors®

The square unique parabolic internal high performance reflector modules in the fitting can rotate in both directions by 90° to completely alter the light distribution of the fitting.

Unique Glare Free Optic®

The powerful LED light sources are concealed inside the patented highly efficient deep parabolic reflector system. Outside the full cut-off there is no light visible.





ABOUT

Dark Licht is a European Lighting Company with research and development in the Netherlands, administration in Hong Kong and manufacturing in Shanghai. We combine excellence from these regions to deliver the most cost-effective innovative luminaires to the international lighting market.

THE COMPANY

The Dark Licht Series was established in Holland's long history in the lighting industry. The Woelders family from Holland have been in lighting for two generations. The family has a deep understanding and commitment to the international lighting industry. The focus in 2017 was to research and design innovative European quality luminaires and manufacture them in their new world class DC Bright facility in Shanghai.

The combination of excellence in design and manufacturing from these two regions provides customers with economical, innovative, quality luminaires. DC Bright's production was established in 2012 in the international heavy industrial LED lighting market. As an established organisation DC Bright has positioned Dark Licht as a leading innovative lighting company in 2021. Dark Licht provides the ultimate lighting proposition in quality, performance, and value for their customers.



Dark Licht



HIGHLY EFFICIENT REFLECTOR SYSTEM®

The Patent Pending[®] innovative high performance reflector design maximises luminaire efficiency, providing 160 lumens per watt fixture light output.

Unique Highly Efficient Reflector System®

The Dark Licht Series utilises the highest quality LED's, reflector material, electronics, and glass available worldwide. This patented break-through technology produces 160 fixture lumens per watt.

The patented unique optical / reflector system controls the light so precisely there is no light lost outside of the area of illumination. This increases the efficiency of the fitting and in many cases a lower wattage Dark Licht fitting can be used in an application.

The use of a flat glass lens seals the fitting providing a static free optical system. The much lower dust and dirt build up on the glass lens greatly improves light output of the fitting over the life of the product.





Unique Adjustable Peak Intensity® 45° to 65°

DSimple adjustment of the reflector to change the peak intensity in the field, pre-installation. The Dark Licht has 5 adjustable forward throw settings to alter the light distribution. An Engineer or Lighting Designer can use any of the 5 settings to provide a uniform light distribution for the application. During installation there can sometimes be unforeseen variable factors that cause a problem. For example, the pole is higher, in a different location or not perfectly straight. The forward light distribution can, if needed, be altered by the installation contractor on site to accommodate small changes. The opportunity to supply on time and not have to order in alternative optics for the light fittings is removed and this reduces delays on the project.

Adjustable Light Cut-Off® 55° to 70°

The Dark Licht series has an adjustable 5 step forward throw reflector system. This simultaneously adjusts the light cut-off. The Dark Licht light sources are not visible outside the cut-off for both forward and side light distribution. There is no light emitted past the cut-off.

At the maximum forward throw setting of 65°, the full cut-off is 70°. The low brightness of the fitting and light cut-off is so precise past 70° that the fitting can be tilted if required a further 15° to 20° and there will be no light above 90° horizontal.



Dark Licht

UNIQUE MODULAR ROTATING REFLECTORS®

The square unique parabolic internal high performance reflector modules in the fitting can rotate in both directions by 90° to completely alter the light distribution of the fitting. Subject to the lighting design the reflectors inside the fitting can be rotated to meet the specific lighting application requirements. This unique feature provides several light distribution options in each fitting. The unique flexibility of the Dark Licht removes the requirement to order a variety of different fittings for the one project. Now with the Dark Licht, only one light fitting type is required for the whole project.

For example, in a 600-watt Dark Licht there are 8 modules, these modules are rotatable. A lamp can therefore consist of 2 modules to the left, 2 modules to the right and 4 modules to the front. The rotating of reflectors can only be made by authorised local Dark Licht Distributors in each country.





UNIQUE GLARE-FREE OPTIC®

LED light sources are hidden in the back of the reflector system. Inside the field of view the actual light source is hidden back inside the parabolic reflector system. Outside the field of view the light source becomes invisible. This single feature provides lighting designers with confidence to install the Dark Licht and know the light fitting will not be visible by neighbouring properties near the lighting installation. This means there will be no complaints that the lights and LED light sources are visible from the general public, outside the facility.







È STURDY LIGHT

DARK LICHT PHOTOMETRIC PERFORMANCE®

The DARK LICHT series is adjustable in five different positions. two of these modes were tested in the lab from which we received photometric files. The information below shows these results. The results below are the results of the DL1-AC-600W-100. Because the optics and lamps are identical to each other, these results can be calculated into smaller and / or larger models.

Dark Licht - Setting 1

Test date	2021 - 03 - 17
Model	DL1-AC-600W-100-S1
Power range	600W
Power factor	> 0.99
Fixed lumen output	93 682lm (600W)
Light color	5000k
CRI	> 70
Optical setting	1
Cutoff class	Full cutoff

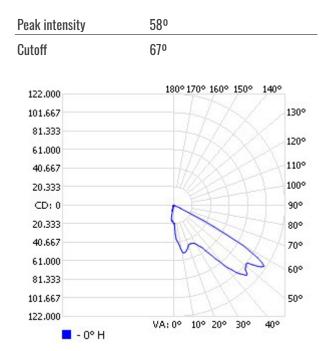
Dark Licht - Setting 2

Test date	2021 - 03 - 17
Model	DL1-AC-600W-100-S2
Power range	600W
Power factor	> 0.99
Fixed lumen output	95 518lm (600W)
Light color	5000k
CRI	> 70
Optical setting	2
Cutoff class	Full cutoff

Polar Candela Distribution - S1

Cutoff	70°
118.000	180° 170° 160° 150° 140°
98.333	130
78.667	120
59.000	$-++\times$
39.333	
19.667	100
CD: 0	909
19.667	804
39.333	700
59.000	60%
78.667	-++0
98.333	504
118.000	VA: 0° 10° 20° 30° 40°

Polar Candela Distribution - S2





Dark Licht

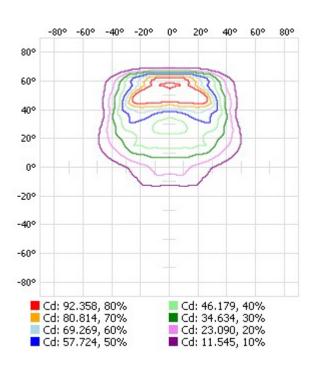
Lumens Per Zone - S1

Lumens Per Zone					
	umens	% Total	Zone	Lumens%	Total
0-5	607.1	0.6%	90-95	0	0%
5-10	1.903.9	2.0%	95-100	0	0%
10-15	3.162.2	3.3%	100-105	0	0%
15-20	4.379.0	4.6%	105-110	0	0%
20-25	5.183.6	5.5%	110-115	0	0%
25-30	5.763.0	6.1%	115-120	0	0%
30-35	6.325.9	6.7%	120-125	0	0%
35-40	7.432.9	7.9%	125-130	0	0%
40-45	9.503.6	10.0%	130-135	0	0%
45-50	11.703.9	12.4%	135-140	0	0%
50-55	12.979.9	13.7%	140-145	0	0%
55-60	10.661.9	11.3%	145-150	0	0%
60-65	9.254.3	9.8%	150-155	0	0%
65-70	4.707.6	5.0%	155-160	0	0%
70-75	936.8	1.0%	160-165	0	0%
75-80	59.2	0.1%	165-170	0	0%
80-85	0.4	0.0%	170-175	0	0%
85-90	0	0.0%	175-180	0	0%

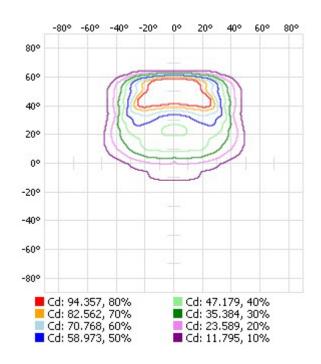
Lumens Per Zone - S2

Lume	Lumens Per Zone				
Zone L	umens	% Total	Zone	Lumens%	Total
0-5	582.8	0.6%	90-95	0	0%
5-10	2.019.8	2.1%	95-100	0	0%
10-15	3.512.9	3.6%	100-105	i 0	0%
15-20	4.591.6	4.8%	105-110	0	0%
20-25	5.372.0	5.6%	110-115	0	0%
25-30	6.130.5	6.4%	115-120	0	0%
30-35	7.380.8	7.7%	120-125	i 0	0%
35-40	9.322.0	9.7%	125-130	0	0%
40-45	11.723.9	12.2%	130-135	i 0	0%
45-50	13.755.6	14.3%	135-140	0	0%
50-55	12.319.5	12.8%	140-145	i 0	0%
55-60	11.375.2	11.8%	145-150	0	0%
60-65	6.666.0	6.9%	150-155	i 0	0%
65-70	1.480.4	1.5%	155-160	0	0%
70-75	208.2	0.2%	160-165	i 0	0%
75-80	5.4	0.0%	165-170	0	0%
80-85	0	0.0%	170-175	0	0%
85-90	0	0.0%	175-180	0	0%

IsoCandala Plot - S1



IsoCandala Plot - S2



ark Licht GLARE FREE LIGHTING

3

IsoLux Plot - S1 IsoLux Plot - S2 3 3 2 2 4 4 3 3 2 2 1 1 0 0 1 1 2 2 3 3 4 📒 0.2 LUX 20 LUX 📃 2.5 LUX 📒 0.2 LUX 📕 20 LUX 2.5 LUX 📕 10 LUX 📕 1 LUX 0.1 LUX Total LLF: 0.9 📕 10 LUX 🛛 📕 1 LUX 0.1 LUX Total LLF: 0.9 0.5 LUX 5 LUX 📕 0.5 LUX 5 LUX Distance in units of mount height (15M) Distance in units of mount height (15M)

PHOTOMETRIC PERFORMANCE®

The DARK LICHT series is adjustable in five different positions, two of these modes were tested in the lab from which we received photometric files. The information above shows these results. The results below are the results of the DL1-AC-600W-100. Because the optics and lamps are identical to each other, these results can be calculated into smaller and / or larger models.



Dark Licht



designed specifically to produce a "thermal chimney" effect and dramatically improve cooling. Air is drawn through specific zones in the castings that cool the fitting and improve light output and reliability.

2. LOW WIND RATING

The Dark Licht has a very narrow profile and reduced "sail area". The smaller size and lower wind rating reduces pole costs on new installations.

3. DARK LICHT PATENTED MODULES

The Dark Licht has 5 ground breaking features:

- 1. Unique Highly Efficient Reflector System®
- 2. Unique adjustable forward light distribution full cut-off® from 57° to 70°
- 3. Unique Modular Rotating Reflectors®
- 4. Unique Glare Free Optic[®]
- 5. Unique capability to tilt the fitting 15° above horizontal and produce Full Cut-Off. This increases the forward full cut-off range from 57° <> 70° to 72° <> 85°.

Those features are unique due to the fact there is not a single light which could match those specifications.

4. HIGH EFFICIENT LED'S

The Dark Licht Series comes standard with the highest quality 3 step MacAdam Ellispe 5,000k LED's and is available with different light color if specified.

5. MOUNTING BRACKET

Universal mounting bracket, fits most standardised poles and got the option to mount the luminaire under swing.

6. DRIVER BOX

The external pressure cast aluminium driver box can be attached on the back of the Dark Licht. The external box could also be placed on the bottom of the pole or elsewhere.

7. LIGHT ANGLE ADJUSTMENT

The Dark Licht Series is designed to face downwards in the horizontal position. The low brightness and sharp cut off the optical systems allows the Dark Licht to be tilted up 15° above horizontal and still provide full cut-off at 90°.

8. HIGH EFFICIENCY THERMAL MANAGMENT

- Passive thermal cooling management
- Active thermal control system
- Optimal airflow due to open space between lights
- · Improves lumen performance and reliability

9. JUNCTION BOX

- Simply connect all cables inside J-Box
- Fitted with an breather
- All cables and glands are protected by a shield

É STURDY <mark>LIGHT</mark>



DARK LICHT STANDARD MODELS

DARK LICHT ONE

Available versions:

320W 50 000 lm 400W 67 000 lm 600W 100 000 lm



DARK LICHT TWO

Available versions:

800W 134 000 lm

1200W 200 000 lm

DARK LICHT THREE

Available versions:

1800W 300 000 lm





PERFORMANCE SUMMARY

Modular Rotating Reflector System®
Glare Free Optic [®] from 55° to 70°
Limited Warranty: 7 Years on luminaire
Fixture Weight: Weight per model in spec sheet

Dutch Design.





DARK LICHT ONE

Designed in Europe to meet the demanding requirements of Urban living within residential communities. The Dark Licht One - 600w LED light fitting delivers 100,000 lumens.

There are numerous flood lighting applications, from illuminating airports, carparks, retail facilities, sporting facilities, through to industrial areas, ports, stockpiles and storage yards.

DARK LICHT ONE SPECIFICATIONS

PRODUCT SPECIFICATIONS

Brand	Dark Licht
Model	DL1-AC-320W-50 DL1-AC-400W-67 DL1-AC-600W-100
Limited warranty	7 Years
ELECTRICAL	
Power range	320W (internal driver) 400W (internal driver) 600W (external driver)
Voltage range	90-305Vac / 127-420Vdc (320W) 180-528Vac / 250-740Vdc (600W, 320W on request)
Frequency	50 / 60 Hz
Power factor	> 0.9
PERFORMANCE	
Fixed lumen output	50 000lm (320W) 67 000lm (400W)
	100 000 lm (600W)
Fixture lumen efficiency	100 000 lm (600W) 160 lm/W
Fixture lumen efficiency Diming input	
	160 lm/W
Diming input	160 lm/W 0 - 10V
Diming input Temperature control	160 lm/W 0 - 10V Yes
Diming input Temperature control Light distribution	160 lm/W O - 10V Yes Asymmetrical - adjustable cut-off
Diming input Temperature control Light distribution Light adjustment range	160 lm/W 0 - 10V Yes Asymmetrical - adjustable cut-off 57° - 70° Full cut-off Standard: >70

Driver options	Internal driver (320W & 400W) Remote or rear mounted (600W)
Operation temp range	-40°C ~ +50°C
Expected life span	320W LM80 - 82 241 hrs 400W LM80 - 210 365 hrs 600W LM80 - 196 030 hrs
Waterproof rating	IP67
Impact rating	IK07
Wireless control system	Estimated release 2021
MATERIALS	
Lamp body	Aluminium alloy
Driver box	Aluminium alloy
Mounting arm	High tensile steel
Hardware	304 Stainless steel
Paint	Conversion coating + 2 layers titanium based e-coating (grey)
SIZE & WEIGHT	
Lamp dimension Industrial	365 x 550 x 160 mm
Lamp dimension Architect	445 x 550 x 160 mm
Driver dimension	450 x 300 x 140 mm
Lamp weight Industrial	14.9 kg 320W (internal driver) 15.5 kg 400W (internal driver) 13.9 kg 600W
Lamp weight Architect	16.0 kg 320W (internal driver) 16.6 kg 400W (internal driver) 15.0 kg 600W
Driver weight	8.6 kg (600W)





DARK LICHT ONE BRACKET OPTIONS

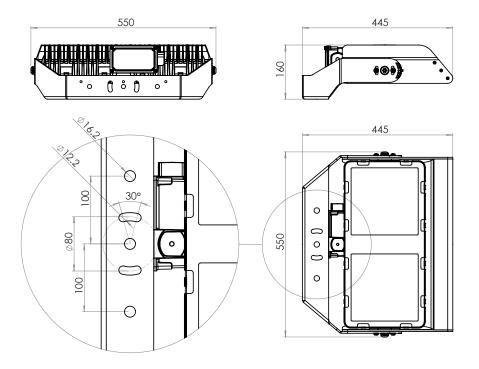
INDUSTRIAL

ARCHITECTURAL





DARK LICHT ONE MEASUREMENTS







DARK LICHT TWO

Designed in Europe to meet the demanding requirements of Urban living within residential communities. The Dark Licht Two - 1200w LED light fitting delivers 200,000 lumens.

There are numerous flood lighting applications, from illuminating airports, carparks, retail facilities, sporting facilities, through to industrial areas, ports, stockpiles and storage yards.

DARK LICHT TWO SPECIFICATIONS

PRODUCT SPECIFICATIONS

Brand	Dark Licht
Model	DL2-AC-800W-134 DL2-AC-1200W-200
Limited warranty	7 Years
ELECTRICAL	
Power range	800W (internal driver) 1200W (external driver)
Voltage range	180-528Vac / 250-740Vdc
Frequency	50 / 60 Hz
Power factor	> 0.9
PERFORMANCE	
Fixed lumen output	134 000 lm (800W) 200 000 lm (1200W)
Fixture lumen efficiency	160 lm/W
Diming input	0 - 10V
Temperature control	Yes
Light distribution	Asymmetrical - adjustable cut-off
Light adjustment range	57º - 70º Full cut-off
CRI	Standard: >70 Optional: >80, >90
LED chip binning	3 Step MacAdam Ellipse LED's
Light color:	Standard: 5000k Optional: 2200k, 2700k, 4000k
Driver options	Remote or rear mounted
Operation temp range	-40°C ~ +50°C

Expected life span	800W LM80 - 210 365 hrs 1200W LM80 - 196 030 hrs
Waterproof rating	IP67
Impact rating	IK07
Wireless control system	Estimated release 2021
MATERIALS	
Lamp body	Aluminium alloy
Driver box	Aluminium alloy
Mounting arm	High tensile steel
Hardware	304 Stainless steel
Paint	Conversion coating + 2 layers titanium based e-coating (grey)
SIZE & WEIGHT	
Lamp dimension Industrial	635 x 550 x 160 mm
Lamp dimension Architect	715 x 550 x 160 mm
Driver dimension	450 x 300 x 140 mm
Lamp weight Industrial	28.0 kg 800W (internal driver) 24.8 kg 1200W
Lamp weight Architect	28.2 kg 800W (internal driver) 25.0 kg 1200W
Driver weight	10.8 kg (1200W)

É STURDY LIGHT



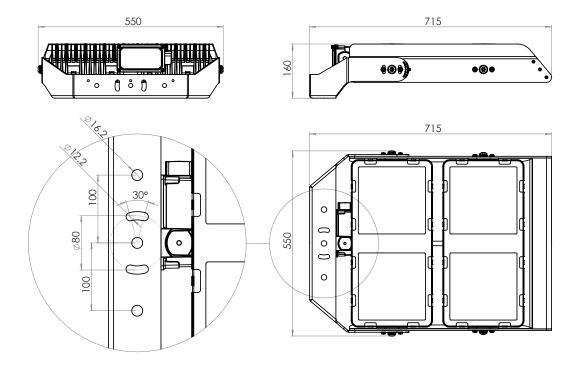
DARK LICHT TWO BRACKET OPTIONS

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DARK LICHT TWO MEASUREMENTS







DARK LICHT THREE

Designed in Europe to meet the demanding requirements of Urban living within residential communities. The Dark Licht Three - 1800w LED light fitting delivers 300,000 lumens.

There are numerous flood lighting applications, from illuminating airports, carparks, retail facilities, sporting facilities, through to industrial areas, ports, stockpiles and storage yards.

DARK LICHT THREE SPECIFICATIONS

PRODUCT SPECIFICATIONS

Brand	Dark Licht
Model	DL3-AC-1800W-300
Limited warranty	7 Years
ELECTRICAL	
Power range	1800W (external driver)
Voltage range	180-528Vac / 250-740Vdc
Frequency	50 / 60 Hz
Power factor	> 0.9
PERFORMANCE	
Fixed lumen output	300 000 lm (1800W)
Fixture lumen efficiency	160 lm/W
Diming input	0 - 10V
Temperature control	Yes
Light distribution	Asymmetrical - adjustable cut-off
Light adjustment range	57º - 70º Full cut-off
CRI	Standard: >70 Optional: >80, >90
LED chip binning	3 Step MacAdam Ellipse LED's
Light color:	Standard: 5000k Optional: 2200k, 2700k, 4000k
Driver options	Remote or rear mounted
Operation temp range	-40°C ~ +50°C
Expected life span	1800W LM80 - 196 030 hrs

Waterproof rating	IP67
Impact rating	IK07
Wireless control system	Estimated release 2021
MATERIALS	
Lamp body	Aluminium alloy
Driver box	Aluminium alloy
Mounting arm	High tensile steel
Hardware	304 Stainless steel
Paint	Conversion coating + 2 layers titanium based e-coating (grey)
SIZE & WEIGHT	
Lamp dimension Industrial	905 x 550 x 160 mm
Lamp dimension Architect	985 x 550 x 160 mm
Driver dimension	450 x 300 x 140 mm
Lamp weight Industrial	35.6 kg
Lamp weight Architect	35.0 kg
Driver weight	13.0 kg (1800W)





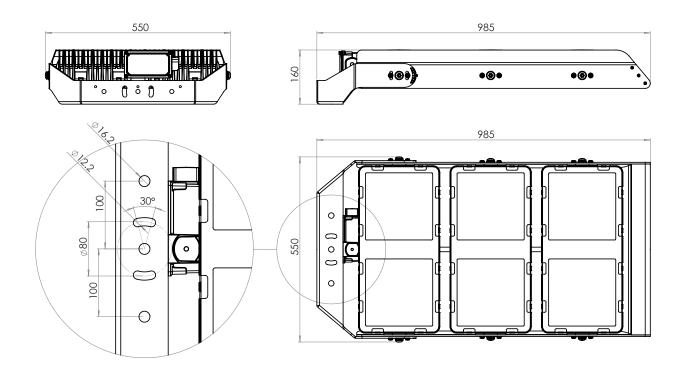
DARK LICHT THREE BRACKET OPTIONS

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DARK LICHT THREE MEASUREMENTS







DARK LICHT CLASS II MODELS

DARK LICHT ONE

Available versions:

320W 50 000 lm 480W 80 000 lm



DARK LICHT TWO

Available versions:

640W 100 000 lm 960W 160 000 lm



PERFORMANCE SUMMARY

Highly Efficient Reflector System®	Modular Rotating Reflector System $^{\odot}$
Adjustable Full Cut-Off® from 55° to 70°	Glare Free Optic [®] from 55° to 70°
CRI: Standard: >70 CRI Optional: >80 CRI, >90 CRI	Limited Warranty: 7 Years on luminaire
CCT : Standard: 5000K Optional: 2200K, 2700K, 4000K	Fixture Weight: Weight per model in spec sheet

Dutch Design.





DARK LICHT ONE CLASS II

Designed in Europe to meet the demanding requirements of Urban living within residential communities. The Dark Licht One - 480w LED light fitting delivers 80,000 lumens.

There are numerous flood lighting applications, from illuminating airports, carparks, retail facilities, sporting facilities, through to industrial areas, ports, stockpiles and storage yards.

DARK LICHT ONE CLASS II SPECIFICATIONS

PRODUCT SPECIFICATIONS

Dark Licht
DL1-AC-320W-50 DL1-AC-480W-80
7 Years
320W (internal driver Class II) 480W (external driver Class II)
90-305Vac / 127-420Vdc
50 / 60 Hz
> 0.9
50 000lm (320W) 80 000 lm (480W)
160 lm/W
0 - 10V
Yes
Asymmetrical - adjustable cut-off
57º - 70º Full cut-off
Standard: >70 Optional: >80, >90
3 Step MacAdam Ellipse LED's
Standard: 5000k Optional: 2200k, 2700k, 4000k
Internal driver (320W) Remote or rear mounted (480W)

Operation temp range	-40°C ~ +50°C
Expected life span	320W LM80 - 82 241 hrs 480W LM80 - 196 030 hrs
Waterproof rating	IP67
Impact rating	IK07
Wireless control system	Estimated release 2021
MATERIALS	
Lamp body	Aluminium alloy
Driver box	Aluminium alloy
Mounting arm	High tensile steel
Hardware	304 Stainless steel
Paint	Conversion coating + 2 layers titanium based e-coating (grey)
SIZE & WEIGHT	
Lamp dimension Industrial	365 x 550 x 160 mm
Lamp dimension Architect	445 x 550 x 160 mm
Driver dimension	450 x 300 x 140 mm
Lamp weight Industrial	14.9 kg 320W (internal driver) 13.9 kg 480W
Lamp weight Architect	16.0 kg 320W (internal driver) 15.0 kg 480W
Driver weight	8.0 kg (480W)





DARK LICHT ONE CLASS II BRACKET OPTIONS

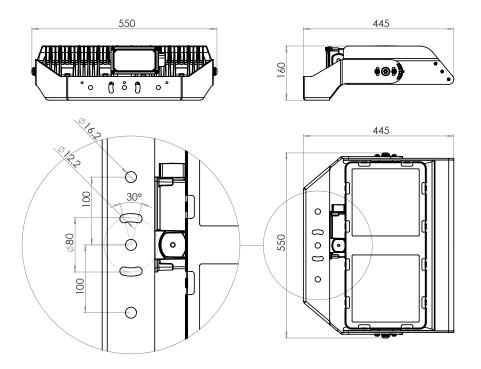
INDUSTRIAL

ARCHITECTURAL





DARK LICHT ONE CLASS II MEASUREMENTS







DARK LICHT TWO CLASS II

Designed in Europe to meet the demanding requirements of Urban living within residential communities. The Dark Licht Two - 960w LED light fitting delivers 160,000 lumens.

There are numerous flood lighting applications, from illuminating airports, carparks, retail facilities, sporting facilities, through to industrial areas, ports, stockpiles and storage yards.

DARK LICHT TWO CLASS II SPECIFICATIONS

PRODUCT SPECIFICATIONS

ModelDL2-AC-640W-100 DL2-AC-960W-160Limited warranty7 YearsELECTRICAL640W (internal driver Class II) 960W (external driver Class II)Power range90-305Vac / 127-420VdcFrequency50 / 60 HzPower factor> 0.9PERFORMANCE100 000 Im (640W) 160 000 Im (960W)Fixed lumen output100 000 Im (960W)Fixture lumen efficiency160 Im/WDiming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Brand	Dark Licht
ELLECTRICALPower range640W (internal driver Class II) 960W (external driver Class II)Voltage range90-305Vac / 127-420VdcFrequency50 / 60 HzPower factor> 0.9PERFORMANCEFixed lumen output100 000 Im (640W) 160 000 Im (960W)Fixture lumen efficiency160 Im/WDiming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Model	
Power range640W (internal driver Class II) 960W (external driver Class II)Voltage range90-305Vac / 127-420VdcFrequency50 / 60 HzPower factor> 0.9PERFORMANCEFixed lumen output100 000 lm (640W) 160 000 lm (960W)Fixture lumen efficiency160 lm/WDiming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Limited warranty	7 Years
Power range960W (external driver Class II)Voltage range90-305Vac / 127-420VdcFrequency50 / 60 HzPower factor> 0.9PERFORMANCEFixed lumen output100 000 lm (640W) 160 000 lm (960W)Fixture lumen efficiency160 lm/WDiming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	ELECTRICAL	
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Power factor> 0.9PERFORMANCEFixed lumen output100 000 lm (640W) 160 000 lm (960W)Fixture lumen efficiency160 lm/WDiming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Voltage range	90-305Vac / 127-420Vdc
PERFORMANCEFixed lumen output100 000 lm (640W) 160 000 lm (960W)Fixture lumen efficiency160 lm/WDiming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Frequency	50 / 60 Hz
Fixed lumen output100 000 lm (640W) 160 000 lm (960W)Fixture lumen efficiency160 lm/WDiming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Power factor	> 0.9
Fixed lumen output160 000 lm (960W)Fixture lumen efficiency160 lm/WDiming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	PERFORMANCE	
Diming input0 - 10VTemperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Fixed lumen output	
Temperature controlYesLight distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Fixture lumen efficiency	160 lm/W
Light distributionAsymmetrical - adjustable cut-offLight adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Diming input	0 - 10V
Light adjustment range57° - 70° Full cut-offCRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Temperature control	Yes
CRIStandard: >70 Optional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Light distribution	Asymmetrical - adjustable cut-off
CRIOptional: >80, >90LED chip binning3 Step MacAdam Ellipse LED'sLight color:Standard: 5000k Optional: 2200k, 2700k, 4000k	Light adjustment range	57º - 70º Full cut-off
Light color: Standard: 5000k Optional: 2200k, 2700k, 4000k	CRI	
Light color: Optional: 2200k, 2700k, 4000k	LED chip binning	3 Step MacAdam Ellipse LED's
	Light color:	
Driver options Remote or rear mounted	Driver options	Remote or rear mounted

Operation temp range	-40°C ~ +50°C
Expected life span	640W LM80 - 82 241 hrs 960W LM80 - 196 030 hrs
Waterproof rating	IP67
Impact rating	IK07
Wireless control system	Estimated release 2021
MATERIALS	
Lamp body	Aluminium alloy
Driver box	Aluminium alloy
Mounting arm	High tensile steel
Hardware	304 Stainless steel
Paint	Conversion coating + 2 layers titanium based e-coating (grey)
SIZE & WEIGHT	
Lamp dimension Industrial	635 x 550 x 160 mm
Lamp dimension Architect	715 x 550 x 160 mm
Driver dimension	450 x 300 x 140 mm
Lamp weight Industrial	26.8 kg 640W (internal driver) 24.8 kg 960W
Lamp weight Architect	27.0 kg 640W (internal driver) 25.0 kg 960W
Driver weight	9.6 kg (960W)

STURDY LIGHT



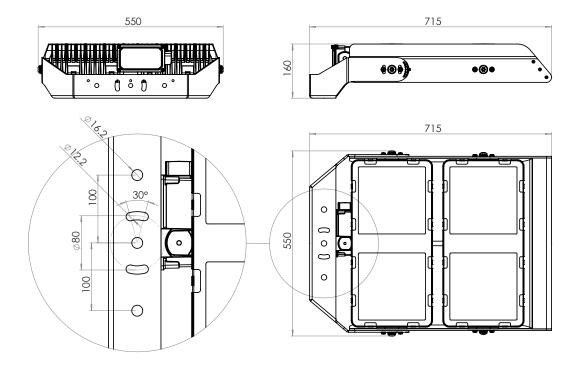
DARK LICHT TWO CLASS II BRACKET OPTIONS

INDUSTRIAL

ARCHITECTURAL



DARK LICHT TWO CLASS II MEASUREMENTS







DARK LICHT DRIVER BOX

Designed in Europe to meet the demanding requirements of urban living and industrial applications. The Dark Licht driver box is a solid and robust box in which the drivers are well protected. The box is specially designed so that the installer can easily access the connections without having to open the entire box. Ideal in high and demanding locations.

The Dark Licht driver box is ideal for use with our Dark Licht series. The driver box can be connected to the lamp but can also be placed remotely.

DARK LICHT DRIVER BOX SPECIFICATIONS

PRODUCT SPECIFICATIONS

Brand	Dark Licht
Model	Drive Box
Waterproof rating	IP67
Limited warranty	7 Years
ELECTRICAL	
Power range Class I	320W, 600W, 1200W, 1800W, 2400W
Power range Class II	320W, 480W, 960W, 1440W, 1920W
Voltage input range	90-305Vac / 127-420Vdc 180-528Vac / 250-740Vdc
Frequency	50 / 60 Hz
Power factor	> 0.9

SIZE & WEIGHT

Driver dimension	450 x 300 x 140 mm
Driver weight 480W	8.0 kg
Driver weight 600W	8.6 kg
Driver weight 960W	9.6 kg
Driver weight 1200W	10.8 kg
Driver weight 1440W	11,2 kg
Driver weight 1800W	13.0 kg
Driver weight 1920W	12,8 kg
Driver weight 2400W	15.2 kg

MATERIALS

Driver box	Aluminium alloy
Cable gland	304 Stainless steel
Mounting bracket	High tensile steel
Hardware	304 Stainless steel
Paint	Conversion coating + 2 layers titanium based e-coating (grey)





DARK LICHT DRIVER BOX BRACKET OPTIONS

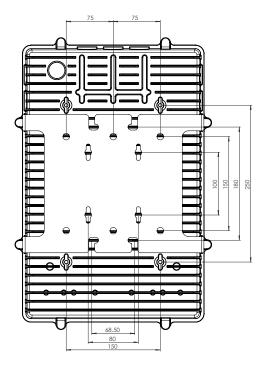
REAR MOUNTED

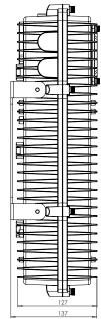


REMOTE DRIVER

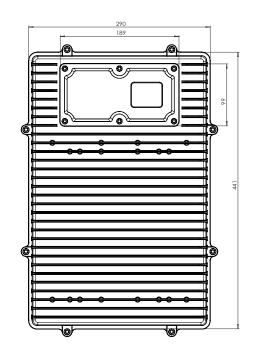


DARK LICHT DRIVER BOX MEASUREMENTS





E STURDY LIGHT



PRODUCT BY DARK LICHT





HEADQUARTERS - WORLDWIDE DARK LICHT

e-mail: sales@sturdyli**ght.com** phone: 0**488707400** Website: www.Dark Licht.com

