





## IR Lighting

For orders Call: 0860 22 55 23

ADI Part number	Vendor	Description																																										
<b>INFRA RED ILLUMINATION</b>																																												
<b>LED</b>																																												
<b>DM Dennard Infrared Illuminators</b>																																												
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<b>C0402</b>	<b>P4-P37L</b>	<b>Pecan IR Illuminator in Bullet Housing</b> 37mm White Led lamp, P67, Photocell, 12Vdc
<b>C0403</b>	<b>P4-P60L</b>	<b>Pecan IR Illuminator in Bullet Housing</b> 60mm, IR 36 LEDs, 850nm, Photocell, 12Vdc
<b>C0413</b>	<b>RM50-AI-30</b>	<b>RAYMAX 50 High Power</b> Ultra long Life, Long Range IR LED Lamp. External IP66, 850nm, 40m range, includes power supply
<b>C0412</b>	<b>RM50-AI-120</b>	<b>RAYMAX 50 High Power</b> Ultra long Life, Long Range IR LED Lamp. External IP66, 850nm, 16m range, includes power supply
<b>C0409</b>	<b>RM100-AI-30</b>	<b>RAYMAX 100 High Power</b> Ultra long Life, Long Range IR LED Lamp. External IP66, 850nm, 80m range, includes power supply
<b>C0408</b>	<b>RM100-AI-120</b>	<b>RAYMAX 100 High Power</b> Ultra long Life, Long Range IR LED Lamp. External IP66, 850nm, 32m range, includes power supply
<b>C0410</b>	<b>RM200-AI-10</b>	<b>RAYMAX 200 High Power</b> Ultra long Life, Long Range IR LED Lamp. External IP66, 850nm, 250m range, includes power supply
<b>C0411</b>	<b>RM200-AI-50</b>	<b>RAYMAX 200 High Power</b> Ultra long Life, Long Range IR LED Lamp. External IP66, 850nm, 112m range, includes power supply





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ADI Part number	Vendor	Description
<b>LED (continued)</b>		
<b>C0401</b>	<b>MFLED30/850</b>	<b>Derwent Miniflood LED</b> Ultra long Life, Long Range IR LED Lamp. External IP68, 850nm, 25m range, includes power supply
<b>C0400</b>	<b>MFLED10/850</b>	<b>Derwent Miniflood LED</b> Ultra long Life, Long Range IR LED Lamp. External IP68, 850nm, 40m range, includes power supply
<b>C0417</b>	<b>UFLED30/850</b>	<b>Derwent Uniflood LED</b> Ultra long Life, Long Range IR LED Lamp. External IP68, 850nm, 55m range, includes power supply
<b>C0416</b>	<b>UFLED10/850</b>	<b>Derwent Uniflood LED</b> Ultra long Life, Long Range IR LED Lamp. External IP68, 850nm, 85m range, includes power supply
<b>C0415</b>	<b>SLED30/850</b>	<b>Derwent Super LED</b> Ultra long Life, Long Range IR LED Lamp. External IP68, 850nm, 115m range, includes power supply
<b>C0414</b>	<b>SLED10/850</b>	<b>Derwent Super LED</b> Ultra long Life, Long Range IR LED Lamp. External IP68, 850nm, 200m range, includes power supply

The **2025** is a powerful, robust, infra-red LED illuminator that offers an economical, low maintenance and environmentally-friendly alternative to white flood lighting.

Providing discrete illumination for cameras and outdoor domes that have spectral responses extending into the infra-red range. It can give comprehensive coverage for large areas, reaching up to 160 metres from the source at the nominal beam width of 30 degrees. The maximum beam width is 70 degrees at close range, and four power settings ensure that the effective distance of the illuminator can be tailored to individual site conditions.

The rugged design features a high impact, polycarbonate front sheet to withstand attack by vandals. The LEDs have a typical life expectancy in excess of five years, eliminating the regular maintenance required of halogen-based illuminators, and the unit comes with lightning protection as standard. The Dennard 2025 is also water and dust resistant to IP66. For ease of installation the 2025 is supplied with a two-axis wall mounting bracket, supporting easy horizontal and vertical adjustment.

**DM/2025-700** **Dennard LED IR Illuminator**  
Long Life, Long Range, External IP66, 850nm, Impact Resistant, Surge Protected, Includes Bracket, 30 degree beam width @ 160 meters

## WHITE LIGHT ILLUMINATION

### LED

<b>C0406</b>	<b>RL200-AI-10</b>	<b>RAYLUX 200 High Power</b> Ultra long Life, Long Range White LED Lamp. External IP66, 60m range, includes power supply
<b>C0407</b>	<b>RL200-AI-50</b>	<b>RAYLUX 50 High Power</b> Ultra long Life, Long Range White LED Lamp. External IP66, 40m range, includes power supply



Raylux RL100



Raylux RL200

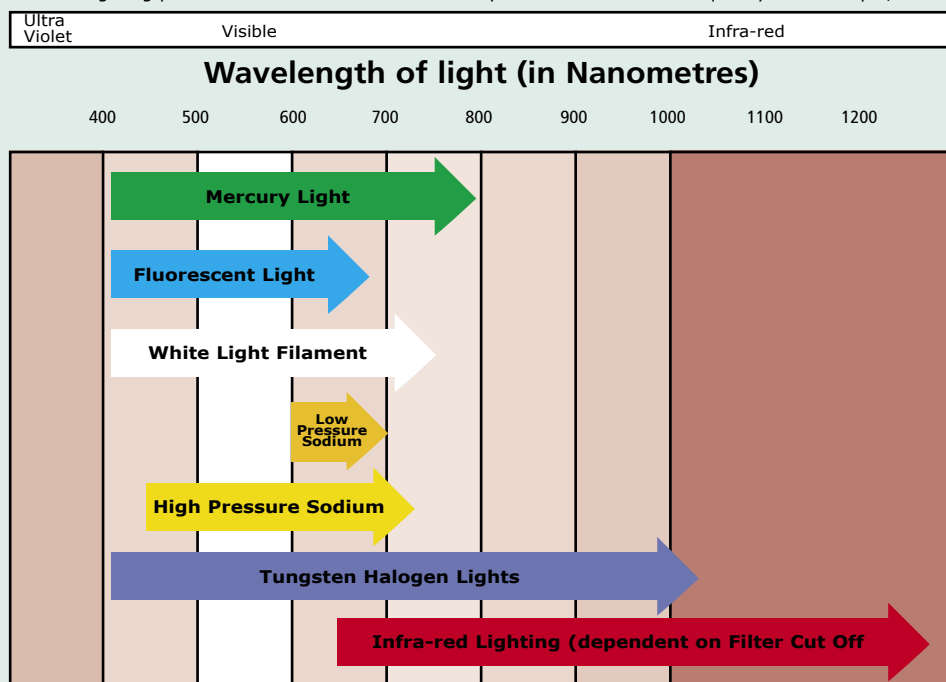
**NOTES ON IR ILLUMINATION**

IR Lamps are available in differing Wavelengths and Power outputs. In operation the lower Frequency Illuminators ie 715Nm & 730Nm will give off a faint red glow. Higher Frequency, shorter Wavelength units (830Nm) are almost totally discreet.

However not all Cameras give the same performance at the different Wavelengths. Cameras such as the Ikegami ICD 48E/49E are almost 95% efficient at 830 Nm, whilst at a similar frequency other Cameras may only be giving 50% efficiency and will work better with a lower Frequency Lamp. Check with our Technical Sales team regarding IR choice if you are unsure.

The DICHROIC IR Lamps work in the 730Nm range and will give off slightly more reddish light than the standard 715 Nm unit.

While all lighting provides illumination it does not always do so at the same frequency. For example, look at the chart below.



Different types of lighting have differing frequency ranges. This is an important consideration with some types of cameras. Colour cameras, for example, are designed to work best across the full white light range. Lighting for colour cameras can be provided by fluorescent lamps, standard white light bulbs and daylight. All produce acceptable results. However, if a sodium vapour lamp was introduced it would cause an imbalance in the illumination because it does not cover the blue end of the spectrum. This would affect the colour reproduction.

ADI Part number	Vendor	Description
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**LED (continued)**

<b>C0405</b>	<b>RL100-AI-30</b>	<b>RAYLUX 100 High Power</b> Ultra long Life, Long Range White Lamp. External IP66, 30m range, includes power supply
<b>C0404</b>	<b>RL100-AI-120</b>	<b>RAYLUX 100 High Power</b> Ultra long Life, Long Range White Lamp. External IP66, 18m range, includes power supply

**HALOGEN**

**VIDEOTEC RANGE**

<b>C0394</b>	<b>IR50SP11</b>	<b>Videotec 50W Spot IR Illuminator</b> 20m Range, 850nm, 12V AC/DC
<b>C0395</b>	<b>IR50WFL11</b>	<b>Videotec 50W Wide IR Illuminator</b> 12m Range, 850nm, 12V AC/DC

**DERWENT RANGE**

<b>C0397</b>	<b>UF300-SPOT-730</b>	<b>Derwent Uniflood 300</b> Long Life, Long Range IR Lamp. External IP68, 730nm, 150m range. Requires PSU
<b>C0396</b>	<b>UF300-30-730</b>	<b>Derwent Uniflood 300</b> Long Life, Long Range IR Lamp. External IP68, 730nm, 70m range. Requires PSU

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ADI Part number	Vendor	Description
<b>HALOGEN</b> (continued)		
<b>C0399</b>	<b>UF500-SPOT-730</b>	<b>Derwent Uniflood 500</b> Long Life, Long Range IR Lamp. External IP68, 730nm, 200m range. Requires PSU
<b>C0398</b>	<b>UF500-30-730</b>	<b>Derwent Uniflood 500</b> Long Life, Long Range IR Lamp. External IP68, 730nm, 100m range. Requires PSU

### DENNARD RANGE

The type **880 50 Watt** and **883 75 Watt** microlights have been designed to provide a low power, low cost, high performance infra red illuminator, at a size complementing C.C.D. camera equipment. The units are constructed from aluminium alloy, powder coated and stoved with stainless fixings.

Average lamp life is 2000 hours with specially modified 12V 50mm tungsten halogen lamps. Replacement lamps obtainable only from Dedicated Micros.

<b>C1474</b>	<b>DM/880M50715</b>	<b>Dennard Micro Light 50W IR Illuminator</b> 16m Range, 715nm, 12Vdc, Requires PSU.
	<b>DM/880M50830</b>	<b>Dennard Micro Light 50W IR Illuminator</b> 16m Range, 850nm, 12Vdc, Requires PSU.
	<b>DM/883M715</b>	<b>Dennard Micro Light 75W IR Illuminator</b> 32m Range, 715nm, 12Vdc, Requires PSU.
	<b>DM/883M830</b>	<b>Dennard Micro Light 75W IR Illuminator</b> 32m Range, 830nm, 12Vdc, Requires PSU.
	<b>DM/2020300N715</b>	<b>Dennard 2020 IR Illuminator 300 Watt</b> Narrow beam supplied with photocell, 715nm
	<b>DM/2020300N830</b>	<b>Dennard 2020 IR Illuminator 300 Watt</b> Narrow beam supplied with photocell, 830nm

The type **2020** range of infra-red illuminators have been designed to offer a cost effective solution to night surveillance, with either 300W or 500W output in a stylish pressure die cast enclosure.

These units provide a source of illumination for cameras with spectral response that extends into the infra-red region. To simplify operation and installation each illuminator is supplied with a built-in 25 lux photo cell unit.

These light-weight (3KG) weatherproof assemblies have protective-coated toughened glass filters and a choice of sealed beam bulbs. Replacement bulbs can be fitted in seconds.

	<b>DM/2020300M715</b>	<b>Dennard 2020 IR Illuminator 300 Watt</b> Medium beam supplied with photocell, 715nm
	<b>DM/2020300M830</b>	<b>Dennard 2020 IR Illuminator 300 Watt</b> Medium beam supplied with photocell, 830nm
	<b>DM/2020300W715</b>	<b>Dennard 2020 IR Illuminator 300 Watt</b> Wide beam supplied with photocell, 715nm
	<b>DM/2020300W830</b>	<b>Dennard 2020 IR Illuminator 300 Watt</b> Wide beam supplied with photocell, 830nm
	<b>DM/2020500N715</b>	<b>Dennard 2020 IR Illuminator 500 Watt</b> Narrow beam supplied with photocell, 715nm
	<b>DM/2020500N830</b>	<b>Dennard 2020 IR Illuminator 500 Watt</b> Narrow beam supplied with photocell, 830nm
	<b>DM/2020500M715</b>	<b>Dennard 2020 IR Illuminator 500 Watt</b> Medium beam supplied with photocell, 715nm
	<b>DM/2020500M830</b>	<b>Dennard 2020 IR Illuminator 500 Watt</b> Medium beam supplied with photocell, 830nm

ADI Part number	Vendor	Description
<b>ACCESSORIES</b>		
<b>VIDEOTEC RANGE</b>		
<b>C0389</b>	<b>IRBA</b>	<b>Videotec IR Illuminator Bracket</b> For mounting two IR50 Illuminators to Videotec Housing
<b>C0390</b>	<b>OHPVIRA</b>	<b>Videotec IR Illuminator Bracket</b> For mounting one IR50 Illuminators to Videotec Verso and HOV Housings
<b>RAYTECH RANGE</b>		
<b>C0392</b>	<b>SB1</b>	<b>Raymax/Raylux Bracket</b> Single Lamp For Over The Top Pan Tilt Mount
<b>C0391</b>	<b>DB2</b>	<b>Raymax/Raylux Bracket</b> Twin Lamp For Over The Top Pan Tilt Mount
<b>C0393</b>	<b>WB1</b>	<b>Raymax/Raylux Bracket</b> "L" Shape Wall Mount Bracket
<b>DENNARD RANGE</b>		
<b>DM/880/PSU</b>		<b>Dennard IR Lamp PSU</b> 230V input 12V (50W) output power supply for 880 Micro light IR Lamp
<b>DM/888/2</b>		<b>Dennard PSU Combo</b> Includes 880 PSU (50W), Photoelectric Switch and weatherproof junction box
<b>DM/883/PSU</b>		<b>Dennard IR Lamp PSU</b> 230V input 12V (75W) output power supply for 883 Micro light IR Lamp
<b>DM/888/2/105</b>		<b>Dennard PSU Combo</b> Includes 883 PSU (75W), Photoelectric Switch and weatherproof junction box
<b>DM/95097</b>		<b>Dennard Medium Replacement Bulb</b> for 880 (50W) range of Micro lights
<b>DM/95093</b>		<b>Dennard Spot Replacement Bulb</b> for 880 (50W) range of Micro lights
<b>DM/95091</b>		<b>Dennard Medium Replacement Bulb</b> for 883 (75W) range of Micro lights
<b>DM/95092</b>		<b>Dennard Spot Replacement Bulb</b> for 883 (75W) range of Micro lights
<b>DM/94032</b>		<b>Dennard External Photocell</b> for 2025 IR LED Illuminator
<b>DM/95084</b>		<b>Dennard Replacement LED Array</b> for DM2025 Illuminator 850/30
<b>DM/95083</b>		<b>Dennard Replacement PSU Assembly</b> for DM2025 Illuminator
<b>DM/95086</b>		<b>Dennard Replacement Clear Front Window</b> for DM2025 Illuminator
<b>DM/95087</b>		<b>Dennard Replacement Internal Photocell</b> for DM2025 Illuminator

### **IR LAMP BULB LIFE**

Installers and end users are often disappointed by the life they get from Halogen bulbs.

Manufacturers quote life expectancy figures as 'Mean Time'. They are not a guarantee of the bulb life. This simply means that on average after a number of hours quoted by the manufacturer HALF OF THE BULBS WILL HAVE FAILED. If the 'Mean Time' of 4,000 hours is quoted, half the bulbs will fail within that 4,000 hour period (5.5months).

Matters appear worse during the period of October to March, obviously because of the longer hours of darkness. During this period, lamps may be on as much as 16 hours each day. A simple calculation may be used in order to provide adequate maintenance on these systems.

If you have 5 external cameras each with 2 lamps that gives us a total daily lamp usage of:

$10 \times 16 \text{ hr} = 160 \text{ hours per day.}$

If the lamp has a mean life expectancy of 4,000 hours, this means that you can expect a bulb to fail every:

$4,000 / 160 = 25 \text{ days.}$

You should make sufficient provision for this within a maintenance contract.

### **IR Bulbs Vs IR LEDs**

The current trend in the Industry seems to be moving toward LED based Infra-Red illuminators. However there remains a strong argument to consider halogen lamps, especially for large scale projects. When using halogen lamps the actual housing will last indefinitely with only the halogen bulb requiring replacement (typically annually). This bulb replacement can be done during a proactive annual maintenance schedule. LED lamps have an average operating life <5 years, when LED lamps cease functioning however effectively the LED's cannot be replaced.

The entire unit must be replaced and this can be a very costly proposition.

Therefore it is very important be aware that they will ultimately need to replace every LED lamp installed on a project.

Although LED units can have lower running costs and longer life than halogen bulbs the replacement cost could far surpass these savings.