Luminosnuclear®

RADIATION RESISTANT LED LIGHT

FLAT LINE/GAMMA

NEW

- Inrush current = 2A - optional

150 kGy
GAMMA DOSE

GENERAL:

Luminosnuclear® FLAT LINE/GAMMA LED Lights are in category with the most efficient LED products. They are developed and produced by the company NANOCUT co.ltd. in Slovenia, EU.
The LED panels are of our own design with efficiency of 210 - 220 lm/W. By usign high quality components throughout the whole light, we achieve overall efficiency of over 160 lm/W.
Housing is from aluminium, colored with quality UV resistant powder coatings. The montage system and end caps of the lights are made from stainless steel. The LED DRIVER is also of our own design and is the key component of Radiation Resistant LED Lights. It is encapsulated in a stainless steel box with neutron absorbing and shielding material.

GAMMA RADIATION TESTING	
GAMMA dose speed	3,3 kGy/h
Total GAMMA dose	156 kGy

RESISTANCE ON GAMMA RADIATION:

The complete LED light was tested up to a GAMMA dose of 156 kGy at GAMMA dose speed 3,3 kGy/h.
At the end of testing, the LED light was still working properly.
Exposion to GAMMA radiation was tested in ENEA - Italian National Agency for New Tehnologies, Energy and Economic Development.

TECHNICAL DATA

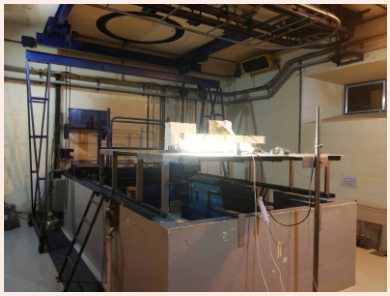
Type	LED Flat Line Light
Nominal power	20 - 65 W
Overall luminous flux	7.200 lm (at 45W)
Overall light efficiency	> 160 lm/W (at 4000K(80))
CCT	3000K-6000 K
Ra	> 70 - 90
Nominal AC voltage	AC 230V $^{+20\%}_{-10\%}$, 50Hz
El. Consumption	45 kWh/1000h(at 45 W)
Min working voltage	AC 24V, DC 35V
Max survival voltage	AC 360V, DC 510V
Power factor (cos fi)	> 0,9
Inrush current	16A max. / 0,05 ms
Housing	extruded aluminium
Optic [°]	120
Diffuser	PMMA
IP protection	IP 65
IK protection	IK 07
Ambient temparature	-20 to +50 °C
Weight	1,9 - 3,6 kg
Lifetime (L80/B10)	70.000 h
Energy efficiency	A++, EEI<0,1
Warranty	5 years
Certificate	CE

MODELS AND POWER

Model	El. Power	Luminous Flux	Dimensions	Mounting System
LN-FL50/G	20-30 W	160 lm/W	520x120x89 mm	The mounting system is attached on both ends of the light and is adjustable by angle
LN-FL75/G	20-45 W	160 lm/W	765x120x89 mm	
LN-FL100/G	20-65 W	160 lm/W	1030x120x89 mm	

Rated Luminous Flux is at 4000K and Ra 80

COMPLETE LED LIGHT GAMMA RESISTANCE TESTING IN ENEA



Our lights can be used in:

- Military areas,
- Nuclear Power Plants,
- Containment building in Nuclear PP,
- Medical facilities,
- Nuclear testing facilities,
- WMB (waste management building),
- SFDS (spent fuel dry storage area),
- LILRW (low and intermediate level radiaoactive waste building),
- Fusion Reactors,
- NEUTRON and PROTON accelerators,
- INDUSTRIAL radiography detection areas.

OPTIONS ON CUSTOMERS REQUEST:

- NOMINAL AC VOLTAGE 120V 60Hz for US market,
- DIFFERENT NOMINAL AC OR DC VOLTAGE,
- CUSTOMISED MOUNTING SYSTEM,
- LOWER INRUSH CURRENT (2A / 0,1ms).

Seismic tested on IEC 60980-344

TESTED ON GAMMA RADIATION BY:

ENEA

EMC, SAFETY TEST ON CE-EN NORMS BY:

SIQ

DEVELOPED AND MANUFACTURED BY:

NANOCUT d.o.o.
LED LIGHTING

ORDERING CODE

LN-FLxxx/G-xxW-xxxxK(xx)-R120- x -(D150kGy)

LUMINOS NUCLEAR	FLAT LINE50/GAMMA FLAT LINE75/GAMMA FLAT LINE100/GAMMA	EL. POWER [W] 20, 30, 45, 65	CCT [K] 3000, 3500, 4000, 4500, 5000, 5000, 6000	CRI > 70,80,90	DISTRIBUTION ANGLE [°] 120	COVER C - clear M - matt	GAMMA RESISTANCE max. GAMMA DOSE 150 kGy

RoHS CE

WARRANTY: 5 YEARS
LIFETIME : > 20 YEARS

NANOCUT d.o.o. | LED LIGHTING