



#### **GENERAL:**

LUMINOS nuclear LINEAR/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					
Туре	LED Linear Light				
Nominal power	10 - 60 W				
Overall luminous flux	6.400 lm (at 40W)				
Overall light efficiency	> 160 lm/W (at 4000K(80))				
ССТ	3000K-6000 K				
Ra	> 70 - 90				
Nominal AC voltage	AC 230V +20% , 50Hz				
El. Consumption	40 kWh/1000h(at 40 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 [°]	15,30,45,60,90,120,ASIM				
Diffuser	PMMA				
IP protection	IP 65				
IK protection	IK 07				
Ambient temparature	-20 to +50 °C				
Weight	1,6 - 4,5 kg				
Lifetime (L80/B10)	70.000 h				
Energy efficiency	A++, EEI<0,1				
Warranty	5 years				
Certificate	CE, RoHS, SIQ, ENEA				

MODELS AND POWER					
Model	El. Power	Luminous Flux	Overall Dimensions	Mounting System	
LN-LIN40/G	10-20 W	160 lm/W	380x95x105 mm		
LN-LIN75/G	20-40 W	160 lm/W	755x95x105 mm	Adjustable by the length of the light and angle	
LN-LIN100/G	40-60 W	160 lm/W	1030x95x105 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.

## ORDERING CODE

### **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:



EMC, SAFETY TEST ON CE-EN NORMS BY:



DEVELOPED AND MANUFACTURED BY:

NANOCUT d.o.o.

# LN-LINxxx/G-xxW-xxxxK(xx)-Rxxx-x- (D150kGy)

LUMINOS

LINEAR40/GAMMA LINEAR75/GAMMA LINEAR100/GAMMA EL. POWER [W] 10, 20, 30, 40, 50 or 60 CCT [K] 3000, 3500, 4000, 4500, 5000, 5500 or 6000

CRI > 70,80 or 90 DISTRIBUTION ANGLE [°] 15, 30, 45, 60, 90, 120 or ASIM COVER C - clear M - matt GAMMA RESISTANCE max. GAMMA DOSE 150 kGy



WARRANTY: 5 YEARS LIFETIME: > 20 YEARS

