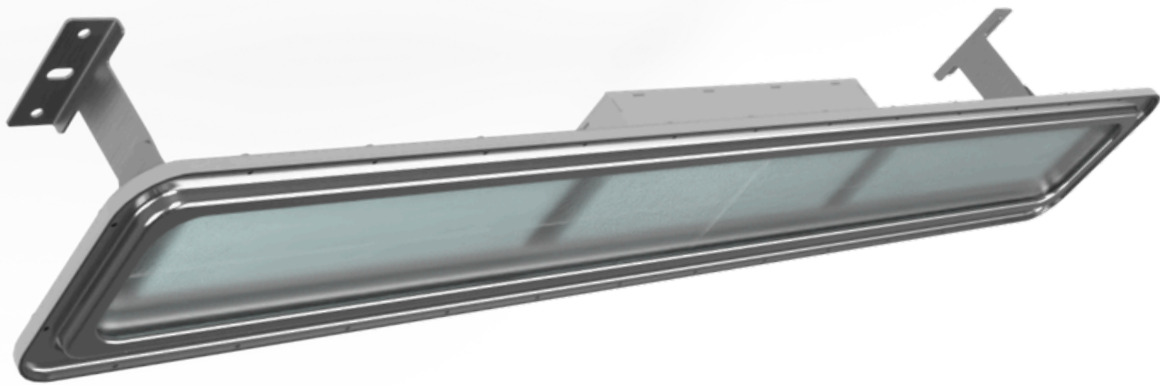




>220 lm/W
LED Module Efficiency

5 Years
Warranty

IP 65 / IK 07
Protection

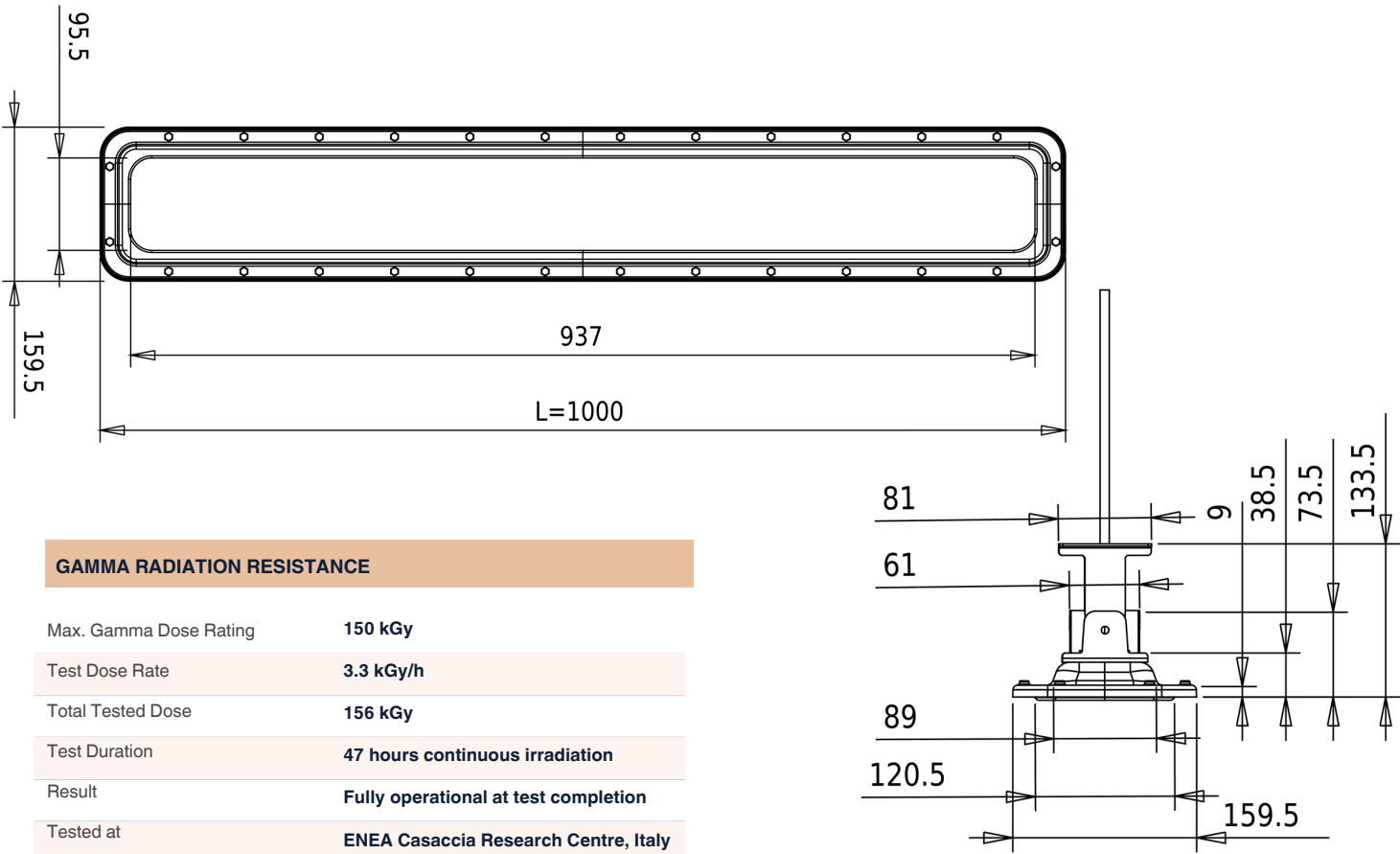
70 000 h
Lifetime (L80/B10)

150 kGy
Gamma Dose Rating

Luminos nuclear® STAINLESS STEEL LINEAR/GAMMA LED luminaires are gamma radiation-hardened LED lights designed especially for use in nuclear power plant containment buildings. Custom LED panels (210–220 lm/W) combined with our proprietary radiation-hardened LED driver — encapsulated with neutron-shielding material in a stainless steel box — achieve over 150 lm/W overall efficiency. No external electronics is required. The complete luminaire is made of stainless steel and is equipped with an adjustable mounting system. Tested to 156 kGy at ENEA Casaccia Research Centre, Italy.

MODELS AND SPECIFICATIONS					TECHNICAL DATA	
Model	Power	Lum. Flux	Effic.	Dim.(mm)	Type	LED Linear Light
LN-SS-LIN40/G	20 W	3000 lm	150 lm/W	400x160x75	Nominal Power	20 - 60 W
LN-SS-LIN70/G	20 - 40 W	3000 – 6000 lm	150 lm/W	698x160x75	Luminous Flux	3000 - 9000 lm
LN-SS-LIN100/G	40 - 60 W	6000 - 9000 lm	150 lm/W	1000x160x75	Overall Efficiency	>150 lm/W
* Luminous flux at 4000 K, Ra 80					CCT	3000 K – 6000 K
APPLICATIONS					CRI (Ra)	>70 / 80 / 90
- Nuclear Power Plants (all zones) - Containment Buildings - Spent Fuel Dry Storage (SFDS) - Waste Management Buildings (WMB) - Radiotherapy & Medical Facilities - Pharmaceutical / Cyclotron Bunkers - Research Laboratories & Accelerators - Fusion Reactors - Industrial Radiography Areas - Military Areas					Nominal Voltage	AC 230 V, 50 Hz
OPTIONS ON CUSTOMER REQUEST					Min. Working V.	AC 24 V / DC 35 V
120V AC / 60 Hz for US market, 347V AC / 60Hz for Canadian market - Flicker free - Customised mounting system - Lower inrush current (2A / 0.1ms) - Elevated temperature design - Special covers / fire-resistant specifications - Custom dimensions					Max. Survival V.	AC 360 V / DC 510 V
					Power Factor	>0.9
					Inrush Current	16A max / 0.05ms (2A opt.)
					Housing	Stainless steel
					End Caps / Mount	Stainless steel
					Diffuser	PMMA
					Beam Angles	60°, 90°, 120°
					IP Protection	IP 65
					IK Protection	IK 07
					Ambient Temp.	–20°C to +50°C
					Weight	2.5 – 5.5 kg
					Lifetime (L80/B10)	70 000 h
					Energy Efficiency	A++, EEL < 0.1
					Warranty	5 years
					Spare parts avail.	20 years
					Certificate	CE

DIMENSIONAL DRAWING



GAMMA RADIATION RESISTANCE

Max. Gamma Dose Rating	150 kGy
Test Dose Rate	3.3 kGy/h
Total Tested Dose	156 kGy
Test Duration	47 hours continuous irradiation
Result	Fully operational at test completion
Tested at	ENEA Casaccia Research Centre, Italy

ENEA GAMMA TESTING — CASACCIA RESEARCH CENTRE, ITALY



Complete assembled luminaires — including the LED driver — were tested at ENEA Casaccia Research Centre (Italy) for 47 continuous hours at a dose rate of 3.3 kGy/h from a Co-60 source, accumulating a total gamma dose of 156 kGy. All luminaires remained fully operational at test completion.

We submitted complete assembled **Luminos nuclear®** luminaires — including the proprietary LED driver — to full gamma irradiation. This reflects real-world operating conditions in nuclear and radiation environments.

Gamma radiation testing performed by: ENEA Casaccia Research Centre, Rome, Italy

ORDERING CODE

LN – SS-LINXXX/G – xx W – xxxx K(xx) – R xxx – (D150kGy)

LN	LINXXX	/G	xxW	xxxxK(xx)	Rxxx	D150kGy
Luminos Nuclear	Model: LIN40 LIN70 LIN100	Gamma resistant	El. power (W): 20, 30, 40, 50, 60	CCT (K) / CRI: 3000–6000 70, 80, 90	Beam angle: 60, 90, 120	Gamma dose rating: 150 kGy

Example: LN-SS-LIN70/G-40W-4000K(80)-R120-(D150kGy) = SS-LINEAR 70/G, 40 W, 4000 K, Ra 80, 120°, 150 kGy rated