The Linergy LED+ is a premium, highly efficient version of the standard Linergy LED, designed to provide the same lumen values whilst using less power.

The Linergy LED+ delivers even greater energy savings with a leading efficiency performance of up to 144 luminaire lumens per circuit watt (144Llm/cW).

The Linergy LED+ closely replicates the familiar mechanical and material specifications of the standard Linergy LED. Additonally, this new range includes a high rack option.

15,000, 23,000 nominal lumen options.

Occupancy and daylight control options.

- Latest LED light engine technology delivers leading power savings - up to 144Llm/cW
- Enhanced Capital Allowance (ECA) Compliance across the complete range
- Four light distribution models are available; wide area, narrow, rack and high rack.
- Integral emergency available which allows mounting to a maximum height of 20m
- Low, mid and high bay integral programmable occupancy detector variants available to maximise performance and coverage
- DALI dimming options available for increased comfort, lighting control and energy savings
- Wire guard option for increased security in environments where impact resistance is needed

Lamp and Control Gear Options

- High efficacy linear LED light engines
- >80 CRI 4000°K
- Energy efficient control gear as standard
- DALI dimmable options available

Materials

- Body – Full box steel construction powder coated in RAL 9016 white finish
- Reflectors – Faceted Finish (Wide Area) and Satin Finish (Narrow and Rack) zero iridescence anodised aluminium
- Wire Guard – Heavy duty zinc plated steel, 25mm grid size (not available with high rack option)

Installation Notes

- Suitable for ceiling, conduit, chain, rod and trunking mounting
- Quick fit mounting brackets to fix to mounting surface
- Supplied with diffuser and light engines pre-fitted, no need to remove during installation
- Access flap on the rear of housing to aid wiring during installation
- Fused as standard
- Wire guard is a retrofit accessory secured by screws, hangs for ease of maintenance

Specification

To specify state: Surface mounted, LED high/low bay luminaire, of full box welded construction with post coat powder paint finish, high performance faceted/satin reflectors for Wide Area/Narrow/Rack with high output light engines and integrated emergency sensor/wire guard options, as Eaton's Linergy LED+ range, part no. _____

Dimensions

Nominal Lengths		Length (L)	Width (W)	Depth (D)
Wide Area/Narrow/Rack	4'	1142mm	358mm	76mm
High Rack	4'	1142mm	475mm	180mm
Wide Area/Narrow Rack	6'	1705mm	358mm	76mm
High Rack	6'	1705mm	475mm	180mm

Integral Emergency and Sensor Option

Options

- Fully integral emergency conversion, 3 hour duration
- Emergency versions available with automatic test functionality as an option, reducing maintenance costs and offers ease of compliance with testing requirements
- Suitable for use on defined escape routes
- Wide Area, Narrow, Rack and High Rack reflector options
- Lighting control options including integrated occupancy and daylight detectors for mounting up to 16m
- We offer a range of product support contracts to aid commissioning, reduce your maintenance costs, comply with legislative test requirements and increase the lifespan of your lighting equipment

Photometric Data

Wide area: Cat. No. LNP1504KZ

LO: 15144lm
SHR nom: 1.25
SHR max: 1.341

Reflectances			Room Index								
C	W	F	0.75	1.0	1.25	1.5	2.0	2.5	3.0	4.0	5.0
70	50	20	69	79	85	90	95	99	102	105	107
70	30	20	63	73	79	84	91	95	98	102	105
70	10	20	58	68	75	80	87	92	95	100	103
50	50	20	67	77	83	87	93	96	98	101	103
50	30	20	62	72	78	83	89	93	95	99	101
50	10	20	58	67	74	79	85	90	93	97	99
30	50	20	66	75	81	85	90	93	95	98	100
30	30	20	61	71	77	81	87	90	93	96	98
30	10	20	57	67	73	78	84	88	91	94	96
0	0	0	55	65	71	75	81	84	87	90	92
BZ-class			2	2	2	2	2	2	2	2	2

Utilisation factors / TM5

Narrow: Cat. No. LNP1504KZ

LO: 15422lm
SHR nom: 1.00
SHR max: 1.098

Reflectances			Room Index								
C	W	F	0.75	1.0	1.25	1.5	2.0	2.5	3.0	4.0	5.0
70	50	20	70	80	86	90	96	100	102	105	108
70	30	20	64	74	80	85	91	96	98	102	105
70	10	20	59	69	76	81	88	92	95	100	103
50	50	20	69	78	84	88	93	96	99	102	103
50	30	20	63	73	79	83	89	93	96	99	101
50	10	20	59	69	75	80	86	90	93	97	100
30	50	20	67	76	81	85	90	93	95	98	100
30	30	20	62	72	77	82	87	91	93	96	98
30	10	20	59	68	74	78	84	88	91	94	97
0	0	0	57	66	72	76	81	85	87	90	92
BZ-class			2	2	2	2	2	2	2	2	2

Utilisation factors / TM5

Rack: Cat. No. LNPR1504KZ

LO: 14597lm
SHR nom: 0.50
SHR max: 0.673

Reflectances			Room Index								
C	W	F	0.75	1.0	1.25	1.5	2.0	2.5	3.0	4.0	5.0
70	50	20	67	77	84	88	95	99	101	105	107
70	30	20	60	70	78	83	90	94	98	102	104
70	10	20	55	66	73	78	86	91	94	99	102
50	50	20	65	75	81	86	92	95	98	101	103
50	30	20	59	69	76	81	88	92	95	99	101
50	10	20	55	65	72	77	84	89	92	96	99
30	50	20	64	73	79	83	89	92	95	97	99
30	30	20	59	68	75	79	86	89	92	95	98
30	10	20	55	64	71	76	83	87	90	94	96
0	0	0	53	62	69	73	79	83	86	89	91
BZ-class			2	2	2	2	2	2	2	2	2

Utilisation factors / TM5

High rack: Cat. No. LNPHR2254KZ

LO: 22875lm
SHR nom: 0.50
SHR max: -0.100

| Reflectances			Room Index								
C	W	F	0.75	1.0	1.25	1.5	2.0	2.5	3.0	4.0	5.0
70	50	20	73	82	88	92	97	101	103	106	108
70	30	20	67	76	82	87	93	97	100	103	105
70	10	20	63	72	78	83	89	94	97	101	104
50	50	20	72	80	85	89	94	97	100	102	104
50	30	20	66	75	81	85	91	94	97	100	102
50	10	20	63	71	77	82	88	92	94	98	101
30	50	20	70	78	83	87	92	94	96	99	100
30	30	20	66	74	80	83	89	92	94	97	99
30	10	20	62	71	76	81	88	90	92	95	97
0	0	0	60	69	74	78	83	86	88	91	94
BZ-class			1	1	1	1	1	1	1	1	1

Utilisation factors / TM5

Emergency operation

Linergy LED+ has the option of an integral emergency built centrally into the body of the luminaire. Utilising the efficient Eaton optical system, capital and installation costs are reduced with class leading spacings achievable. Two variants allow for maximised utilisation in the space, up to 10m mounting height and up to 20m mounting height.

For applications to 10m mounting height, the optic distribution is a square footprint allowing the designer scope for achieving compliance with reduced quantities of emergency points.

Applications with mounting heights above this, up to 20m, the optic is utilised to be elongated in one plane. This allows optimum spacing, following the linear installation direction.

For application mounting heights of up to 10m the standard variant should be used, the prefix is 'ELL'. Emergency operation for mounting heights up to 20m, the prefix 'ELH' should be used. See the catalogue numbers for more detail.
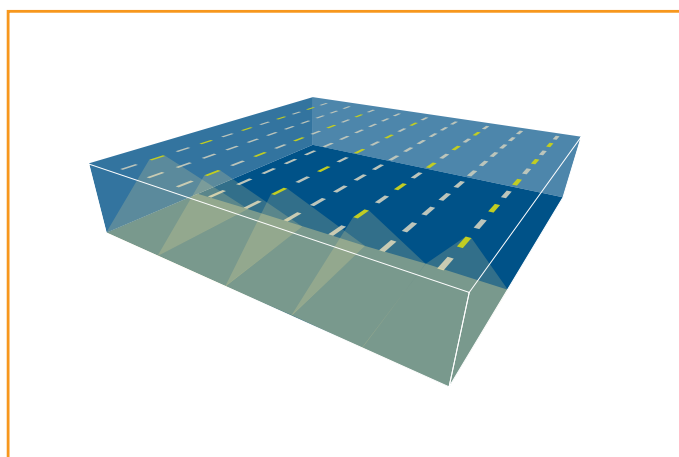
10m mounting height - square distribution
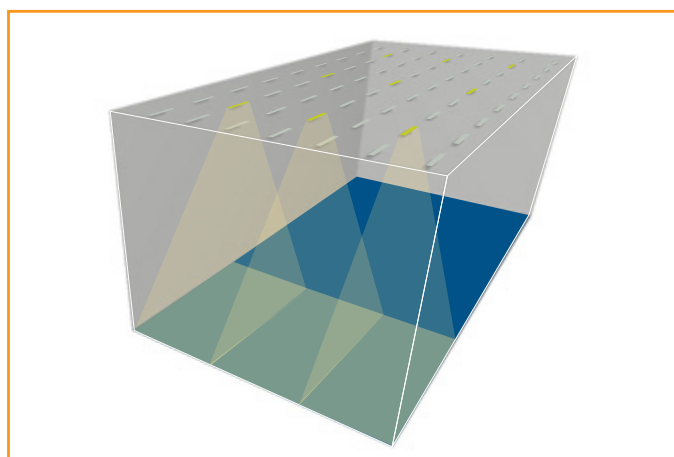
20m mounting height - elongated linear distribution

Detection

Energy saving is key to sustainable buildings and businesses. By adopting a clear strategy for managing the occupancy and absence of a space, significant savings may be achieved in energy usage. Application dependent, savings against constant illumination can be up to 70%.

Standard high frequency PIRs have a daylight linking function, with thresholds determinable by the user, as well as a switching function. In DALI luminaires, the PIRs have a daylight linking function, with thresholds determinable by the user, as well as a full dimming function.

PIR coverage

Linergy LED+ offers three standard options for PIR detection mounting heights. Up to 3 metres, 9 metres and 16 metres. The 3m detector boasts a high sensitivity micro detection range. The aspect ratios and coverage are shown on the diagrams to aid in scheme design.

up to 3m mounting height

Aspect ratio
Macro = 4:1
Micro = 2.8 :1

3.0m

8.4m
Micro

Macro   **12**m   Macro

up to 9m mounting height

Aspect ratio
2:1

9m

19m

up to 16m mounting height

Aspect ratio
1.9:1

16m

30m
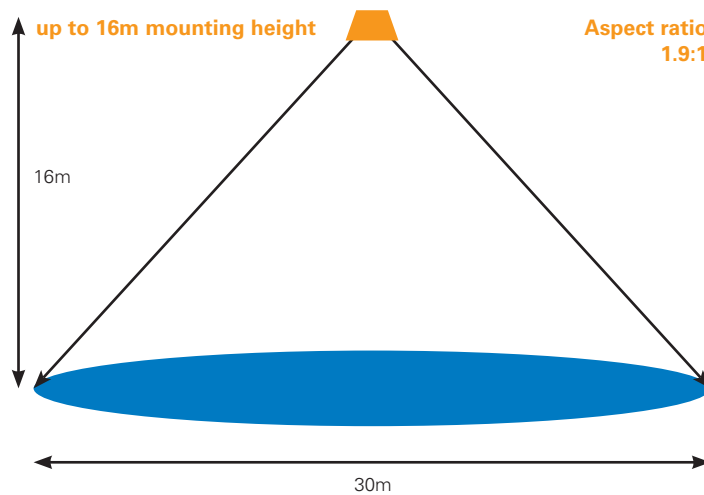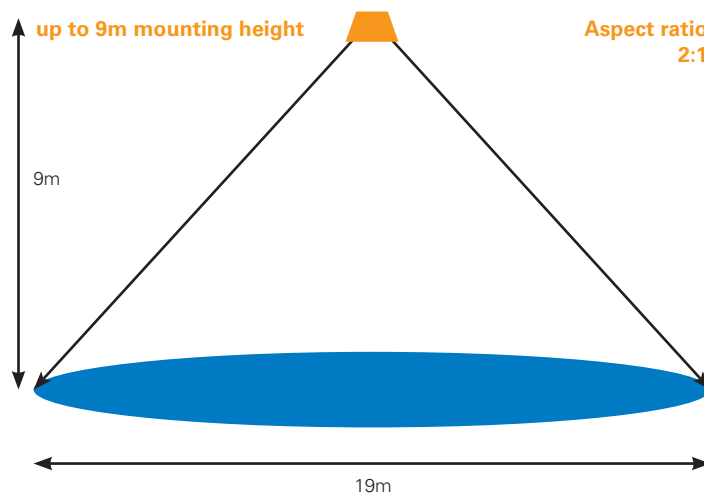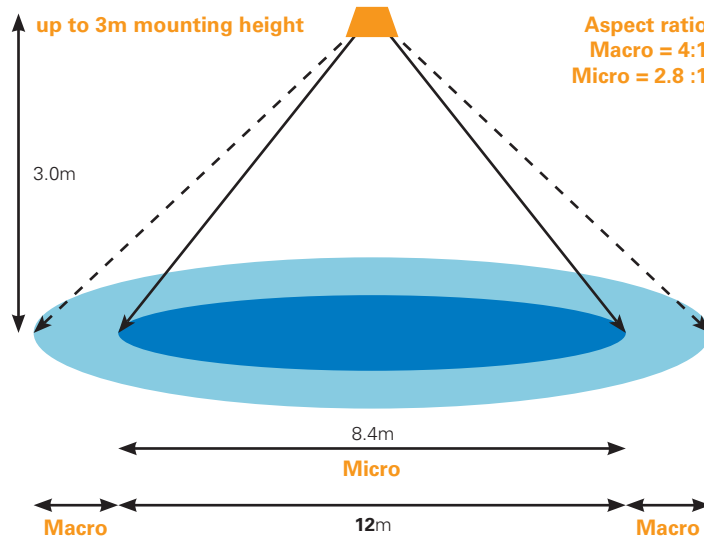
Accessories

Catalogue Numbers

Description	Cat No
Wire guard* - 1200lm	LNLWG4
Wire guard* - 1800lm	LNLWG6
Infrared user controller	LCSQC
Infrared programmer	LCSQS
Digital 2 way programmer	LCSQSP
Rear mounting brackets	LNLMB

*Unavailable for high rack

Luminaire efficiency

Variant	Lumen output	Wattage (w)	LIm/cW
Wide Area			
LNPA1504KZ	15144	107	142
LNPA2254KZ	22875	168	136
Narrow			
LNPN1504KZ	15422	107	144
LNPN2254KZ	22996	167	137
Rack			
LNPR1504KZ	14597	107	136
LNPR2254KZ	23109	170	136
High Rack			
LNPHR1504KZ	14481	107	135
LNPHR2254KZ	22537	165.5	136

Digital 2 way programmer

Infrared programmer

Infrared user controller

Wire guard (not available with high rack)
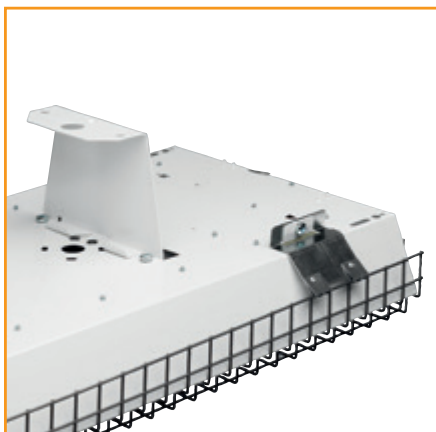
Mounting bracket detail
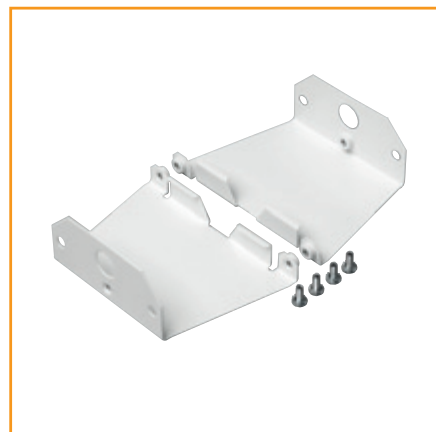
Rear mounting brackets

Catalogue Numbers

Lumen Output (lm)	Optic	Cat No.	Weight (Kg)	Emergency Cat No.	Weight (Kg)
Standard Luminaires					
1200mm	Wide area Reflector	LNPA1504KZ	5.5	ELLNPA1504KZ	6.2
1800mm	Wide area Reflector	LNPA2254KZ	8.1	ELLNPA2254KZ	9
1200mm	Narrow Reflector	LNPN1504KZ	5.5	ELLNPN1504KZ	6.2
1800mm	Narrow Reflector	LNPN2254KZ	8.1	ELLNPN2254KZ	9
1200mm	Rack Reflector	LNPR1504KZ	5.7	ELLNPR1504KZ	6.4
1800mm	Rack Reflector	LNPR2254KZ	8.2	ELLNPR2254KZ	9.1
1200mm	High Rack Reflector	LNPHR1504KZ	10.6	ELLNPHR1504KZ	10.6
1800mm	High Rack Reflector	LNPHR2254KZ	12.1	ELLNPHR2254KZ	12.1
Emergency Luminaire - for mounting heights up to 20m					
1200mm	Wide area Reflector			ELHLNPA1504KZ	6.2
1800mm	Wide area Reflector			ELHLNPA2254KZ	9
1200mm	Narrow Reflector			ELHLNPN1504KZ	6.2
1800mm	Narrow Reflector			ELHLNPN2254KZ	9
1200mm	Rack Reflector			ELHLNPR1504KZ	6.4
1800mm	Rack Reflector				
1200mm	High Rack Reflector			ELHLNPHR1504KZ	10.6
1800mm	High Rack Reflector			ELHLNPHR2254KZ	12.1
Luminaire with switching high level sensor (up to 16m mounting height)					
1200mm	Wide area Reflector	ULNPA1504KZ	5.7	ELULNPA1504KZ	6.4
1800mm	Wide area Reflector	ULNPA2254KZ	8.5	ELULNPA2254KZ	9.4
1200mm	Narrow Reflector	ULNPN1504KZ	5.7	ELULNPN1504KZ	6.4
1800mm	Narrow Reflector	ULNPN2254KZ	8.5	ELULNPN2254KZ	9.4
1200mm	Rack Reflector	ULNPR1504KZ	5.9	ELULNPR1504KZ	6.6
1800mm	Rack Reflector	ULNPR2254KZ	8.6	ELULNPR2254KZ	9.5
1200mm	High Rack Reflector	ULNPHR1504KZ	10.8	ELULNPR1504KZ	10.8
1800mm	High Rack Reflector	ULNPHR2254KZ	12.5	ELULNPR2254KZ	12.5
Luminaire with switching high level sensor (up to 9m mounting height)					
1200mm	Wide area Reflector	MLNPA1504KZ	5.7	ELMLNPA1504KZ	6.4
1800mm	Wide area Reflector	MLNPA2254KZ	8.5	ELMLNPA2254KZ	9.4
1200mm	Narrow Reflector	MLNPN1504KZ	5.7	ELMLNPN1504KZ	6.4
1800mm	Narrow Reflector	MLNPN2254KZ	8.5	ELMLNPN2254KZ	9.4
1200mm	Rack Reflector	MLNPR1504KZ	5.9	ELMLNPR1504KZ	6.6
1800mm	Rack Reflector	MLNPR2254KZ	8.6	ELMLNPR2254KZ	9.5
1200mm	High Rack Reflector	MLNPHR1504KZ	10.8	ELMLNPHR1504KZ	10.8
1800mm	High Rack Reflector	MLNPHR2254KZ	12.5	ELMLNPHR2254KZ	12.5
Luminaire with switching high level sensor (up to 3m mounting height)					
1200mm	Wide area Reflector	CLNPA1504KZ	5.7	ELCLNPA1504KZ	6.4
1800mm	Wide area Reflector	CLNPA2254KZ	8.5	ELCLNPA2254KZ	9.4
1200mm	Narrow Reflector	CLNPN1504KZ	5.7	ELCLNPN1504KZ	6.4
1800mm	Narrow Reflector	CLNPN2254KZ	8.5	ELCLNPN2254KZ	9.4
1200mm	Rack Reflector	CLNPR1504KZ	5.9	ELCLNPR1504KZ	6.6
1800mm	Rack Reflector	CLNPR2254KZ	8.6	ELCLNPR2254KZ	9.5
1200mm	High Rack Reflector	CLNPHR1504KZ	10.8	ELCLNPHR1504KZ	10.8
1800mm	High Rack Reflector	CLNPHR2254KZ	12.5	ELCLNPHR2254KZ	12.5

For DALI dimming option, replace part number character Z with DD, e.g. LNPA1504KZ becomes LNPA1504KDD

CE IP20 EasiCheck™ DIMMING CONTROLS