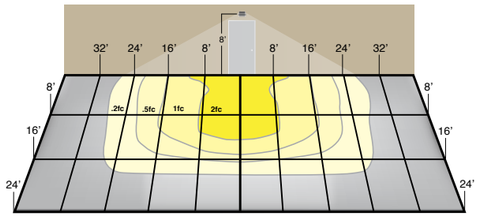
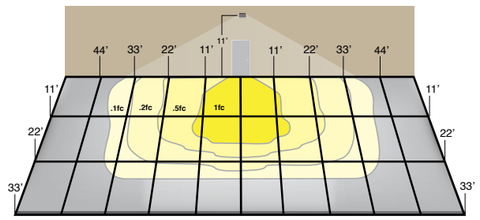
HUBBELL Outdoor Lighting

Typical performance in emergency mode

LMC Type 3

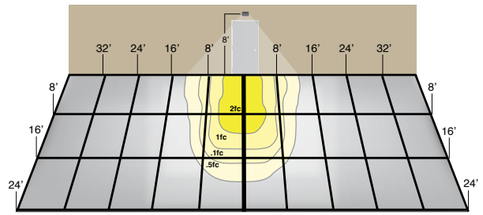


8' Mounting Height

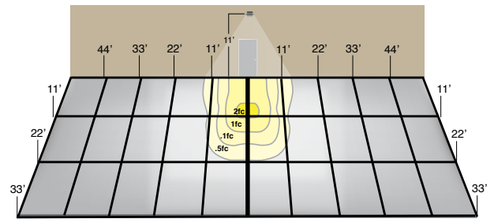


11' Mounting Height

LNC2, LNC3, LNC4 and GeoPak Size 1 & 2



8' Mounting Height



11' Mounting Height

Common standards and requirements:

NEC NFPA 70 2017 Edition – 700.16 Emergency Illumination Emergency lighting systems shall be designed and installed so that the failure of any individual lighting element, such as the burning out of a lamp, cannot leave in total darkness any space that requires emergency illumination.

2015 International Building Code Section 1008 – 1008.3.5 Illumination level under emergency power. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1fc and a minimum at any point of 0.1fc measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6fc average and a minimum at any point of 0.06fc at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

2015 NFPA 101 Life Safety Code – 7.9.2 Performance of System. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1fc and, at any point, not less than 0.1fc measured along the path of egress at floor level. Illumination levels shall be permitted to decline to not less than an average of 0.6fc and, at any point, not less than 0.06fc at the end of 1.5 hours. The maximum-to-minimum illumination shall not exceed a ratio of 40 to 1.

Common local general requirements – Redundancy

- **Light Source** – Failure of one light element does not eliminate the rest of the light sources
- **Power Source** – Fixture has more than one power source

LED Emergency/Egress Guide

HUBBELL Outdoor Lighting

HUBBELL Lighting

Hubbell Outdoor LED Emergency/Egress Guide

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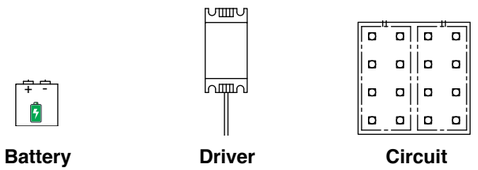
Hubbell Outdoor Lighting offers a variety of different designs to meet the various standards and requirements for outdoor emergency/egress illumination.
Below is detailed information on the designs to assist understanding and interpreting compliance with the different standards and local ordinances.

Fixture Family		Driver and Lighting Element Configuration		Minimum Operating Temperature	
		Units without Battery Powered Emergency LED Driver Circuit (Back up generator or inverter required for emergency mode)	Units with Battery Powered LED Driver Circuit	0˚	Cold Weather
SLING SG2		B	D	✔	-30˚C
LNC2-Standard		A	D	✔	-30˚C
LNC2-Prismatic		A	D	✔	-30˚C
LNC2-18L-2DR (option)		C	G	✔	-30˚C
LNC3-24		B	F 350, 500, 750mA only	✔	-30˚C
LNC3 - 2DR (option)		C	G 750mA only	✔ 750mA only	-30˚C 750mA only
LNC4-36		C	G 350, 650mA only	✔ 350, 650mA only	-30˚C 350, 650mA only
LNC4-44		C	N/A	N/A	N/A
Geopak Size 1		A	F	✔	-30˚C
PGM3/PVL3 180L - 350mA		B	E	N/A	-20˚C
PGM3/PVL3 180L - 700mA		C	E	N/A	-20˚C
LMC3-30L - 350mA		B	E	N/A	-20˚C
LMC3-30L - 700mA		C	N/A	N/A	N/A
GeoPak Size 2 24L/32L		B	F	✔	-30˚C
24L/32L2DR (option)		C	G	✔	-30˚C
LSQ2		B	E	✔	-30˚C

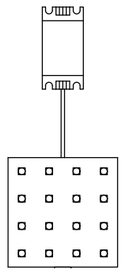
Multiple Circuit Redundancy:
Multiple LEDs with multiple circuits

Single Circuit Redundancy:
Multiple LEDs on single circuit

LEDs fail closed 80% of the time which does not impact the balance of the LEDs in the circuit



A Single Driver Single Circuit



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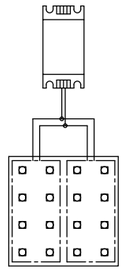
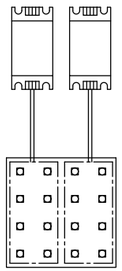
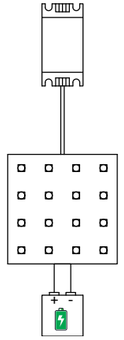


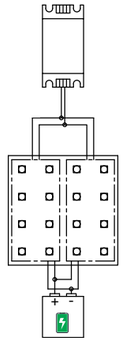
C Multiple Driver Multiple Circuit



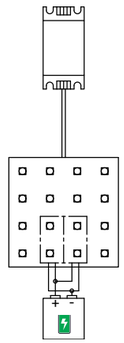
D Single Driver Single Circuit Battery



E Single Driver Multiple Circuit Battery



F Single Driver Multiple Circuit Battery with Egress Array



G Multiple Driver Multiple Circuit Battery with Egress Array