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Aerodrome lights: key figures

24 figures in 8 groups. Read the cue, say the figure, then check. Each group ends with a recap. Rules change: check the regulation in force.

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Paved instrument runway length that brings an aerodrome into EU scope

800 m

With public use and commercial air transport

Scope of the EU aerodrome rules: recap

CUE	FIGURE	DETAIL
Paved instrument runway length that brings an aerodrome into EU scope	800 m	With public use and commercial air transport

Aerodrome beacon total flash rate

20–30 flashes per minute

White only, or white with green, at a land aerodrome

Identification beacon Morse speed

6–8 words per minute

Identification characters in green Morse code at a land aerodrome

Beacons: recap

CUE	FIGURE	DETAIL
Aerodrome beacon total flash rate	**20–30 flashes per minute**	White only, or white with green, at a land aerodrome
Identification beacon Morse speed	**6–8 words per minute**	Identification characters in green Morse code at a land aerodrome

> **Beacon: 20–30 flashes per minute. Identification: 6–8 words per minute.**

Simple approach lighting length from threshold

at least 420 m

Whenever possible

Crossbar distance from threshold

300 m

Also the minimum length of a simple system if 420 m is impossible

CAT I and CAT II/III approach lighting length

900 m

Wherever possible

CAT I crossbar length

30 m

Placed at 300 m from the threshold

Rate of sequenced flashing lights

twice per second

Runs from outer to inner on the barrette centre lines

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Approach lighting: recap

CUE	FIGURE	DETAIL
Simple approach lighting length from threshold	**at least 420 m**	Whenever possible
Crossbar distance from threshold	**300 m**	Also the minimum length of a simple system if 420 m is impossible
CAT I and CAT II/III approach lighting length	**900 m**	Wherever possible
CAT I crossbar length	**30 m**	Placed at 300 m from the threshold
Rate of sequenced flashing lights	**twice per second**	Runs from outer to inner on the barrette centre lines

> **Simple system: 420 m long. CAT I: 900 m long.**

Units in a PAPI wing bar

4 units / 2 units

PAPI has four units; APAPI has two

Units on slope in a PAPI

2 red + 2 white

More red lights mean the aircraft is lower than the slope

Units slightly high in a PAPI

1 red + 3 white

One red and three white lights

Units slightly low in a PAPI

3 red + 1 white

Three red and one white light

Red and white transition angle of a unit

not more than 3′

Measured as a vertical angle, for an observer at not less than 300 m

Unit settings in the illustrated 3° example

2°30′ / 2°50′ / 3°10′ / 3°30′

Illustration only, not a rule

PAPI and APAPI: recap

CUE	FIGURE	DETAIL
Units in a PAPI wing bar	**4 units / 2 units**	PAPI has four units; APAPI has two
Units on slope in a PAPI	**2 red + 2 white**	More red lights mean the aircraft is lower than the slope
Units slightly high in a PAPI	**1 red + 3 white**	One red and three white lights
Units slightly low in a PAPI	**3 red + 1 white**	Three red and one white light
Red and white transition angle of a unit	**not more than 3′**	Measured as a vertical angle, for an observer at not less than 300 m
Unit settings in the illustrated 3° example	**2°30′ / 2°50′ / 3°10′ / 3°30′**	Illustration only, not a rule

> **Two red and two white is on slope. More red means low.**

Threshold identification light flash rate

60–120 flashes per minute

Optional pair of white lights in line with the threshold

Edge light spacing on an instrument runway

not more than 60 m

Full runway length

Edge light spacing on a non-instrument runway

not more than 100 m

Full runway length

Yellow edge-light section at the far end

600 m or one-third of runway length, whichever is less

Toward the end away from the take-off start

Runway edge, threshold and end lights: recap

CUE	FIGURE	DETAIL
Threshold identification light flash rate	**60–120 flashes per minute**	Optional pair of white lights in line with the threshold
Edge light spacing on an instrument runway	**not more than 60 m**	Full runway length
Edge light spacing on a non-instrument runway	**not more than 100 m**	Full runway length
Yellow edge-light section at the far end	**600 m or one-third of runway length, whichever is less**	Toward the end away from the take-off start

> **Edge lights: 60 m on instrument runways, 100 m on others.**

Runway length below which the alternating section starts at midpoint

1 800 m

Touchdown zone lights also stop at the midpoint

Touchdown zone lights length from threshold

900 m

On a runway 1 800 m or longer

Centre line red and white section

900 m to 300 m from end

Red and white lights alternate in this section

Centre line red section

Last 300 m

Centre line lights show red here

Runway centre line and touchdown zone: recap

CUE	FIGURE	DETAIL
Runway length below which the alternating section starts at midpoint	**1 800 m**	Touchdown zone lights also stop at the midpoint
Touchdown zone lights length from threshold	**900 m**	On a runway 1 800 m or longer
Centre line red and white section	**900 m to 300 m from end**	Red and white lights alternate in this section
Centre line red section	**last 300 m**	Centre line lights show red here

> **Alternating from 900 m. All red in the last 300 m.**

Rapid exit indicator light sequence

3-2-1 at 100 m intervals

Yellow lights give distance to go before the exit

Rapid exit indicator lights: recap

CUE	FIGURE	DETAIL
Rapid exit indicator light sequence	**3-2-1 at 100 m intervals**	Yellow lights give distance to go before the exit

> **RETILs: 3-2-1 at 100 m intervals.**

Stop bar light spacing

not more than 3 m

A row of red lights across the taxiway

Holding position lights: recap

CUE	FIGURE	DETAIL
Stop bar light spacing	**not more than 3 m**	A row of red lights across the taxiway