

CHAPTER Q — VISUAL AIDS FOR DENOTING OBSTACLES

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Light type	Colour	Signal type/ (Flash Rate)	Peak intensity (cd) at given Background Luminance (b)			
			Day (Above 500 cd/m2)	Twilight (50-500 cd/m2)	Night (Below 50 cd/m2)	Table
Low-intensity Type A (fixed obstacle)	Red	Fixed	N/A	N/A	10	Table Q-2
Low-intensity Type B (fixed obstacle)	Red	Fixed	N/A	N/A	32	Table Q-2
Low-intensity Type C (mobile obstacle)	Yellow/ Blue (a)	Flashing (60-90 fpm)	N/A	40	40	Table Q-2
Low-intensity Type D (follow-me vehicle)	Yellow	Flashing (60-90 fpm)	N/A	200	200	Table Q-2
Low-intensity, Type E	Red	Flashing (c)	N/A	N/A	32	Table Q-2 (Type B)
Medium-intensity Type A	White	Flashing (20-60 fpm)	20 000	20 000	2 000	Table Q-3
Medium-intensity Type B	Red	Flashing (20-60 fpm)	N/A	N/A	2 000	Table Q-3
Medium-intensity Type C	Red	Fixed	N/A	N/A	2 000	Table Q-3
High-intensity Type A	White	Flashing (40-60 fpm)	200 000	20 000	2 000	Table Q-3
High-intensity Type B	White	Flashing (40-60 fpm)	100 000	20 000	2 000	Table Q-3

(a) <u>CS ADR-DSN.Q.850(b)</u>

(b) For flashing lights, effective intensity as determined in accordance with ICAO Doc 9157, Aerodrome Design Manual, Part 4, Visual Aids.

(c) For wind turbine application, to flash at the same rate as the lighting on the nacelle.

Table Q-1. Characteristics of obstacle lights



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			Vertical beam spread (f)		
	Winimum Intensity (a)	Maximum Intensity (a)	Minimum beam spread	Intensity	
Туре А	10 cd (b)	N/A	10°	5 cd	
Туре В	32 cd (b)	N/A	10°	16 cd	
Туре С	40 cd (b)	400 cd	12(d)	20 cd	
Type D	200 cd (c)	400 cd	N/A(e)	N/A	

Note: This table does not include recommended horizontal beam spreads. <u>CS ADR-DSN.Q.846(c)</u> requires 360° coverage around an obstacle. Therefore, the number of lights needed to meet this requirement will depend on the horizontal beam spreads of each light as well as the shape of the obstacle. Thus, with narrower beam spreads, more lights will be required.

- (a) 360° horizontal. For flashing lights, the intensity is read into effective intensity, as determined in accordance with ICAO, Aerodrome Design Manual, Part 4, Visual Aids.
- (b) Between 2 and 10° vertical. Elevation vertical angles are referenced to the horizontal when the light is levelled.
- (c) Between 2 and 20° vertical. Elevation vertical angles are referenced to the horizontal when the light is levelled.
- (d) Peak intensity should be located at approximately 2.5° vertical.
- (e) Peak intensity should be located at approximately 17° vertical.
- (f) Beam spread is defined as the angle between the horizontal plan and the directions for which the intensity exceeds that mentioned in the 'intensity' column.

Table Q-2. Light distribution for low-intensity obstacle lights