Sketch OL1 – Bill of Material

Sketch OL1: Typical building roof obstruction lighting layout.

These suggestions represent our opinion and interpretation of FAA obstruction lighting practices. The owner is responsible for the selection of lighting required to comply with FAA AC 70/7460-1 latest revision. If there exists an FAA site survey Letter of Determination, Point Lighting can provide an interpretation and suggest a bill of material. There are countless variations that are impossible to specify in the FAA AC and will require an educated recommendation based on the AC, common practice and experience.

FAA Advisory Circular 70/7460-1L paragraph 5.8.3 has an exception for prominent buildings allowing the use of steady-burning red FAA L-810 obstruction lights regardless of height assuming other special conditions do not exist. Mark every corner of the building with double obstruction lights and do not to exceed 150-ft between lights on any side. If the distance exceeds 150-ft, place an additional obstruction light at the horizontal midpoint. Paragraph 5.3 requires that each circuit of obstruction lights be switched automatically using an FAA photoelectric control. The POC system controller will be switched by the PPC automatically.

For buildings taller than 150-ft, paragraph 5.8.3 requires mid-level lights at vertical spacing not to exceed 150-ft. Paragraph 5.2.2.c allows elimination of lower level lights in urban settings where adjacent buildings would obscure the lights. Paragraph 4.7.5 allows the top of other buildings to redefine the ground plane to determine the number of light levels. In practice, in urban settings, we rarely see red lights installed at lower elevations unless there is a protruding roofline that enlarges the horizontal profile of the building.

Note 1: In this example, the horizontal distance exceeds 150-ft, so a light is required at the mid-point of this side. Each light must have the lenses extend above any obstacles in the immediate area such the roof parapet. Typically, each light is mounted on and supported by rigid steel conduit.

Note 2: This extension outward is treated as part of the overall roofline even if it is slightly higher or lower than the main roof. The corners are marked which serves to subdivide the long side of the roof. The object is to present to air traffic the full extent of the building.

Note 3: Elevator shafts, utility penthouses, tanks and other appurtenances less than 20-ft above roof parapet or surface are not required to be separately marked.

Note 4: Attaching an air terminal for lightning protection to a Point Lighting obstruction light and/or its support may result in failure of the light and constitutes a modification that voids the warranty. The air terminal may be mounted nearby with the down conductor routed below the light’s support.

 Description Quantity Product Download Catalog

FAA L-810 Red LED Double Obstruction Light 7 POL-21006-1F-R-34B-D3 OL191POLv6

Primary and standby heads with alarm upon transfer.

Includes cover mounted amber pilot light which

visually indicates transfer to the standby head

FAA Photocontrol 1 PPC-40700-1-34T OL410PPC

Lighting System Controller NEMA 4X 1 POC-68002-08-1-LA OL302POC

Includes PPC override switch

Includes alarm light on the door

Includes lightning arrestor