

FAC 1361 Airfield Pavement Lighting

RUC: \$67.97 LF

Source: PACES

V10 estimate inflated by deleting previous projected inflation, re-inflating to FY-08 using SPBI, projecting inflation to FY-09 using Green Book, Table 5-6 MCON.

V11 result = \$ 73.99

In V12, Tri-Service and USACE PAX Newsletter values were updated while all other values were inflated only.

SUC: \$7.13 LF

Model shown below, inflated to FY-09 using
Green Book Table 5-6 O&M less DHP.
In V12, values were inflated only.

Assumptions:

11,000 ft runway, 200 ft width, ALSF-1 Approach System
Based upon UFC 3-535-01, Nov 02

Calculate average light spacing:

Lighting System	Length	No. Lamps	Measured
Pre-threshold	28	10	a
Termination Bar	30	6	a
Crossbar	70	16	a
Centerline	14	150	a
Sequenced Flashing Lights	2000	20	b
Threshold	280	57	a
Runway Centerline (RCL)	11000	220	b
Touchdown Zone (TDZL)	600	180	a
Runway Exit	1000	20	a/b
High Intensity Runway Edge Lights (HIDL)	22000	110	b
End Lights	40	10	a
Taxiway Edge, Straight	22000	220	b
Taxiway Edge, Curved	10000	1000	b
Taxiway Centerline	32000	640	b
Total	101062	2659	
<i>Average # Lights/LF</i>		<i>0.02631058</i>	

Measured Notes:

a, measured along axis of lights

b, measured along axis of runway

SUC

Lamp Replacement

Average number of lamps/LF

0.02631058

Cost of lamp

\$18.10

Quote
Flight
Light

Labor @ 0.25 hr/instance

\$13.59

Cost of material and labor

\$31.69

Lamps per year @ 1000 hours/lamp

3.65

Cost per lamp per year

115.676256

Cost per linear foot

3.04350958

Labor
Rate

\$54.37

Fixture Inspection

Labor rate from R.S. Means 2008 using in-house electrician with city index for DC of 97%

Labor

Hr/fixture

Frequency

Monthly (alignment, socket, drain holes)

0.1666667

\$9.06

12

\$108.74

Semi-Annual (elevation, moisture, corrosion)

0.25

\$13.59

2

\$27.18

Annual (cracks, corrosion, contacts, wires)

0.3333333

\$18.12

1

\$18.12

Total per fixture

\$154.04

Cost per linear foot

4.05298943

Fixture

Fixtures = # of lamps

0.02631058

Quote
Flight
Light

Cost of fixture

\$279.74

Labor to replace @ .5 hr/instance

\$19.70

Cost of material and labor

\$299.44

Life of fixture

30

years, assumed value

Cost per fixture per year

\$9.98

Cost per linear foot

0.26261744

Total SUC =

lamp replacement

3.04350958

fixture inspection

4.05298943

fixture replacement

0.26261744

TOTAL, per LF

\$7.3591

Sept 08 Quotation from Flight Light Inc,
Sacramento CA Quote # 30807

Blended Fixture Cost

Centerline, End, Pre-Threshold, etc

1439

0.5411809

Quotation

\$ 361.00

\$ 195.37

Edge	1220	0.4588191	\$ 183.90	\$ 84.38
Total	2659			\$ 279.74