TLI50

Application

- EREX – enhanced rapid exit taxiway centre line lights
- RCL – runway centre line lights
- REL – runway entrance lights
- RETIL – runway rapid exit taxiway indicator lights
- RGL – runway guard lights (low intensity in configuration B)
- SBLC – stop bar lights (curved section)
- SBLS – stop bar lights (straight section)
- TCLC – taxiway centre line lights (curved section)
- TCLS – taxiway centre line lights (straight section)
- TDZ – runway touchdown zone lights
- THL – runway take-off hold lights

Classification

- FAA AC 150/5345-46; Class 2, Mode 1*, Style 3
- IEC TS 61827: Style 3, Size 1

*does not apply to 2,2 A power supply

Accordance with

- Engineering Brief No. 67D
- IEC TS 61827
- ICAO Annex 14, Vol. I
  Figure: A1-1b, A2-5, A2-6, A2-7 Cat. III, A2-12, A2-13, A2-14, A2-15, A2-16, A2-26
- EASA CS-ADR-DSN
  Figure: U-1B, U-9, U-10, U-11 Cat. III, U-16, U-17, U-18, U-19, U-20, U-29
- TP-312
  Figure: A-1(b), B-5, B-7 Cat III, B-12, B-14, B-24(a)

Properties

- designed for simplicity and serviceability
- light diameter size 8" (203 mm)
- easy winter maintenance of the aerodrome thanks to 6,35 mm protrusion
- can be produced with two or four fixing holes
- light depth in shallow base 67 mm
- simple aluminium construction with stainless steel fasteners with a watertight IP68
- no negative slope before prisms
- non-glued, easily replaceable prisms
- velve for watertighness test
- only one type of prism for all light series TLI50, TLI80 and TLI81
- optimal parts made of borosilicate glass
- operation with any CCR designed in accordance with IEC or FAA requirement
- excellent efficiency and colour charakteristics due to the use of LED technology
- light output is variable as for halogen lamps, according to the requirements of Engineering Brief No. 67D
- lifetime of at least 110 000 h operation
- efficient maintenance thanks to the common parts of the light series TLI50, TLI80 and TLI81
- additional heating possible with ARC (arctic kit), according to the requirements of Engineering Brief No. 67D
- LED fail detection, according to the requirements Engineering Brief No. 67D
- optional MONITORING with function to disconnect the light from the transformer (series loop) when LED failure is detected, according to the requirements of Engineering Brief No. 67D

Resistance to

- temperature -55 - +55 °C and thermal shock
- humidity, snow, ice and water, watertight IP68
- salt fog, solar and UV radiation
- static and shear load, recurrent mechanical and hydraulic impact according to the IEC TS 61827
- vibration 20 - 2 000 Hz with acceleration 10/15 G
- shock wave 10 kV on 5 kA, according to the requirements of Engineering Brief No. 67D
- EMC according to the requirements of IEC 61000-6-2 and IEC 61000-6-4

Power source

- power lead(s) with termination FAA AC 150/5345-26, L-823Type II, Class A, Style 6
- isolation transformer 6,6 A or 2,2 A at the output from the secondary line (power of the isolating transformer according to the power input of the light)

Mounting

- shallow bases, size 8" (002 562, 002 563)
- shallow bases, size 12" (002 560, 002 561, 002 566, 002 567) + adapter TIA1-F (8"/12")

Mechanical parameters

- weight (cardboard box) ± 3,2 kg
- dimensions (cardboard box) 250x250x115 mm

TLI50

ELECTRONIC SYSTEMS TRANSCON®

Ordering code

TLI503 - TCLS - GY - S2 - H
TLI501 - SBLC /L - R - S6

light fixture group
1 - unidirectional (EREX, RCL, REL, RETIL, RGL, SBLC, SBLS, TCLC, TCLS, TDZ, THL)
2 - bidirectional (EREX, RCL, SBLC, SBLS, TCLC, TCLS)
3 - bidirectional with separate power leads (EREX, RCL, SBLC, SBLS, TCLC, TCLS)

light fixture function
EREX - enhanced rapid exit taxiway centre line light
RCL - runway centre line light
REL - runway entrance light
RETIL - runway rapid exit taxiway indicator light
RGL - runway guard light (low intensity in configuration B)
SBLC - stop bar light (curved section)
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TDZ - runway touchdown zone light
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toe-in (L/R defined for first specified color)
* toe-in is only required for unidirectional lights
/L - toe-in left
/R - toe-in right

beam color(s)
G - green
R - red
W - white
Y- yellow

power supply
S6 - power supply 6,6 A
S2 - power supply 2,2 A

other specification
* code for „other specification“ must be written in alphabetical order
H - four fixing holes
SPC - on-demand specification

Power consumption

unidirectional lights (TLI501)	without ARC	with ARC*
RCL/TDZ-W	23 VA	53 VA
RCL/SBLS/SBLC-R	18 VA	48 VA
RETIL-Y, EREX-G	20 VA	50 VA
REL-R, EREX-Y	21 VA	51 VA
THL-R	19 VA	49 VA
TCLS/TCLC-G/Y, RGL-Y	17 VA	47 VA
bidirectional lights (TLI502)	**without ARC**	**with ARC***
RCL-WW	33 VA	63 VA
RCL-WR	27 VA	57 VA
TCLS/TCLC-GG/GY/YG	18 VA	48 VA
EREX-GG, SBLS/SBLC-RR	21 VA	51 VA
EREX-YG	22 VA	52 VA
bidirectional lights with separate power supply (TLI503)	**without ARC**	**with ARC***
RCL-WW	23+23 VA	38+38 VA
RCL-WR	23+18 VA	38+33 VA
TCLS/TCLC-GG/GY/YG	17+17 VA	32+32 VA
SBLS/SBLC-RR	18+18 VA	33+33 VA
EREX-YG	20+17 VA	35+32 VA
EREX-YG	21+17 VA	36+32 VA

*the energy consumption values of lights with ARC are given as maximum

Notes:
- spaces in examples above used for clarity only
- optional parameters to be used if necessary

Ordering code examples:

TLI501-TDZ/L-W-S6
unidirectional runway touchdown zone light with toe-in left, white, one power lead, power supply 6,6 A, with two fixing holes

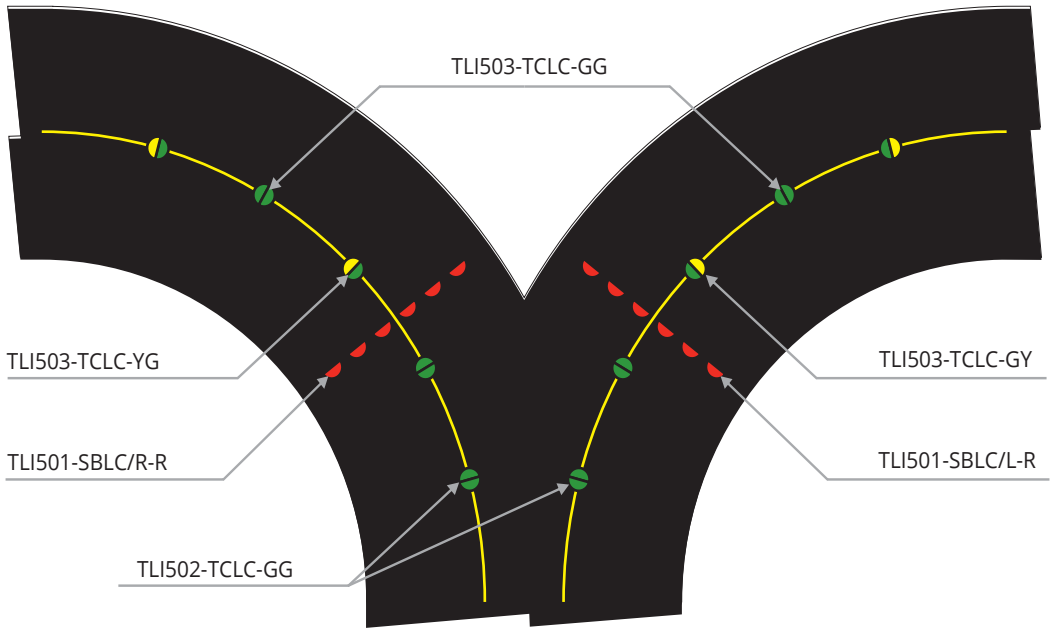
TLI502-RCL-WR-S6-H
bidirectional runway centre line light, white-red, one power lead, power supply 6,6 A, with four fixing holes

TLI503-TCLS-GG-S2
bidirectional taxiway centre line lights (straight section), green-green, two power cabels (with separate power leads), power supply 2,2 A, with two fixing holes

TLI50

Toe-in:

- the axis of the shallow base must be oriented along the tangent axis of the taxiway at the location of each lights



Toe-in:

- applies when using shallow bases installed parallel to the RWY centerline
- when using shallow based with toe-in to the RWY centerline, light without toe-in shall be used