Transmitted by the expert from Poland

Informal document GRE-72-23-Rev.1
(72nd GRE, 20-22 October 2014,
agenda item 4 (b) (ii))

To **GRE-72-07**
Comments to GTB draft proposal

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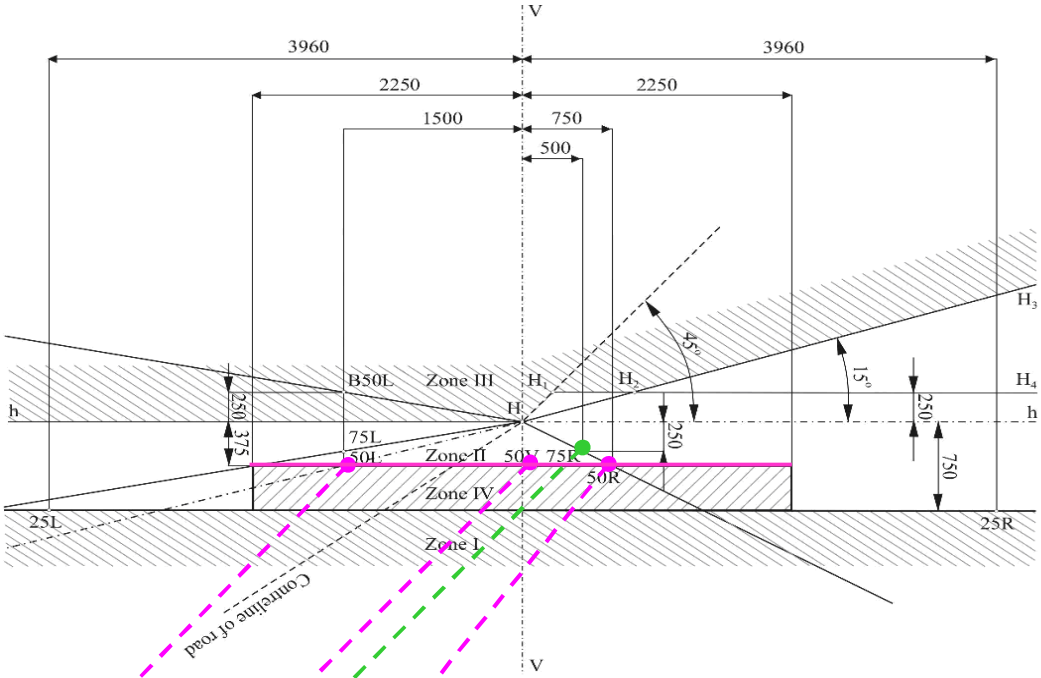
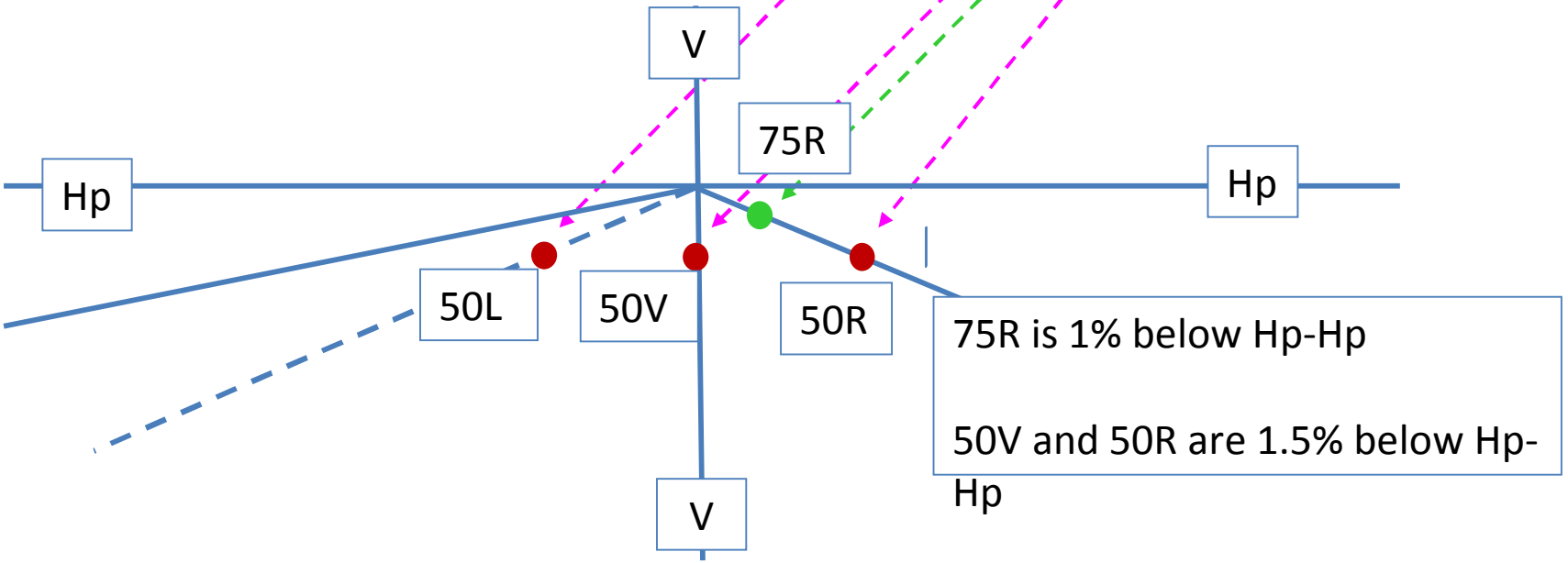
Poland

72 GRE 20-22 October 2014

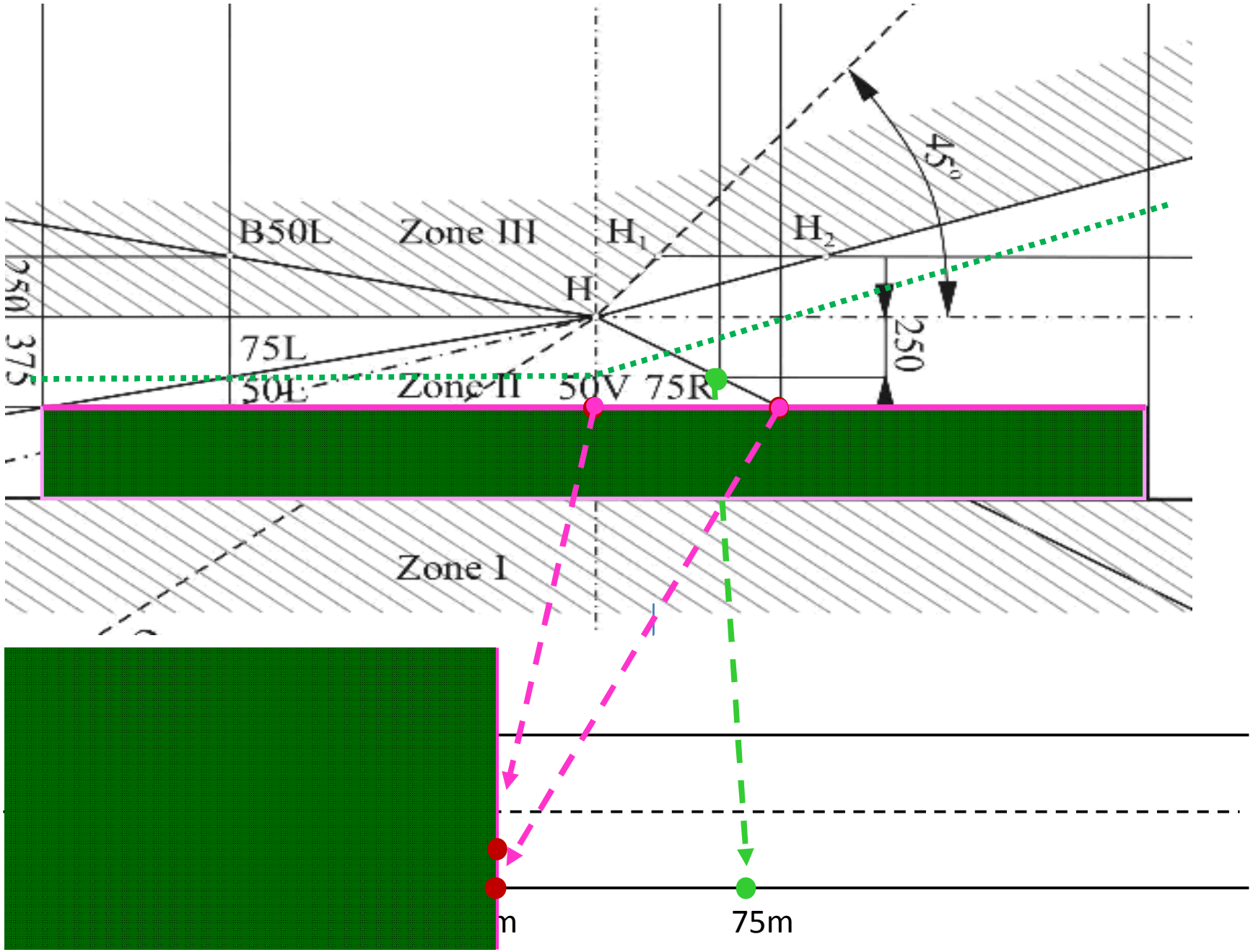




75R is 1% below Hp-Hp

50V and 50R are 1.5% below Hp-Hp

TRANSLATION OF **SCREEN PHOTOMETRY** TO ROAD **H=0.75m, I=1%D**



Illuminances from 25 m screen translated to the road byheadlamp mounting height (h) of 75 cm

For 75R the minimum value is 16.8 lux @25m

Illuminance at 75 m = 16.8/ $(75/25)^2$ = **1.87 Lux** at the road surface.

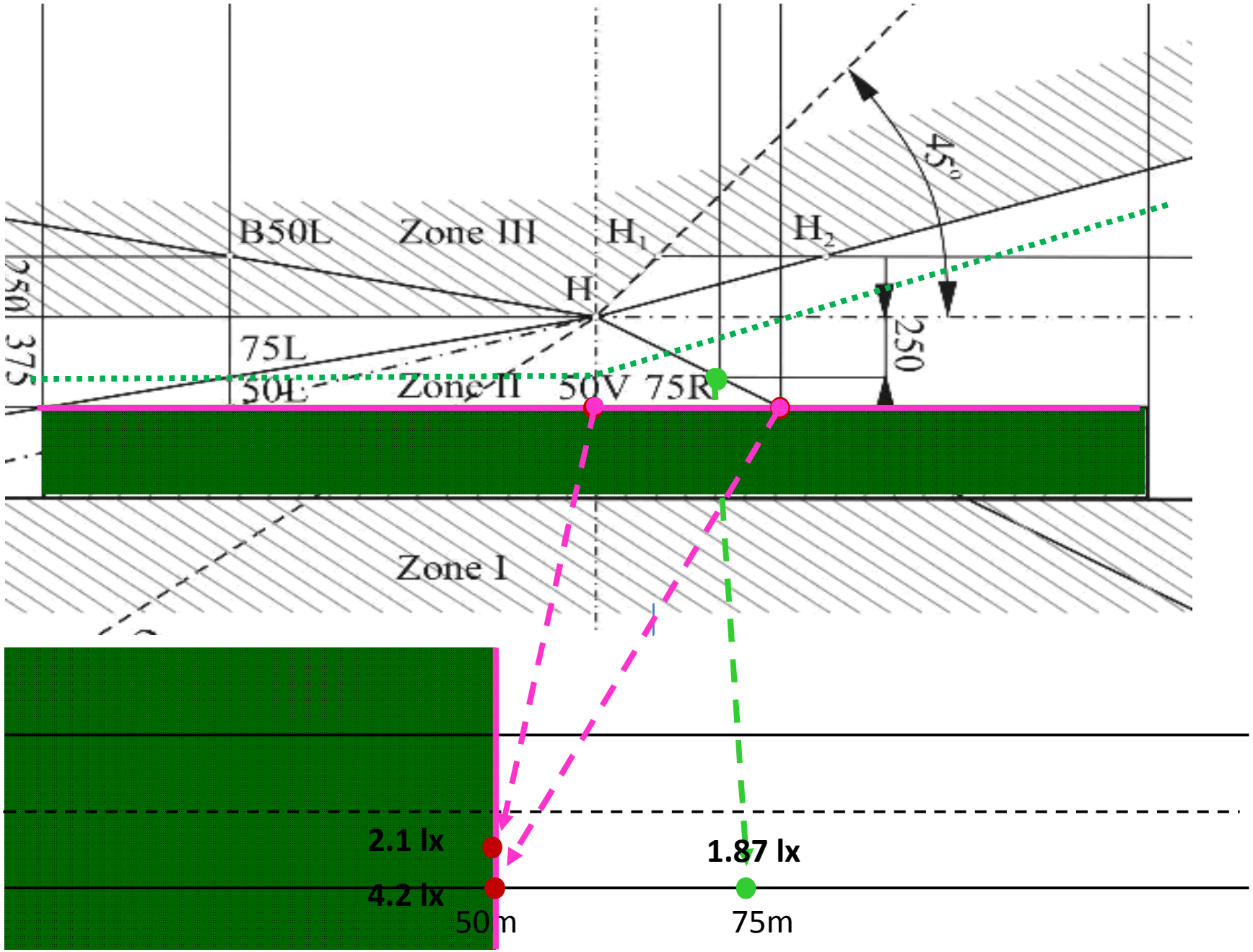
For 50R the minimum value is 16.8 lux @25m

Illuminance at 50m = 16.8/ $(50/25)^2$ = **4.2 Lux** at the road surface.

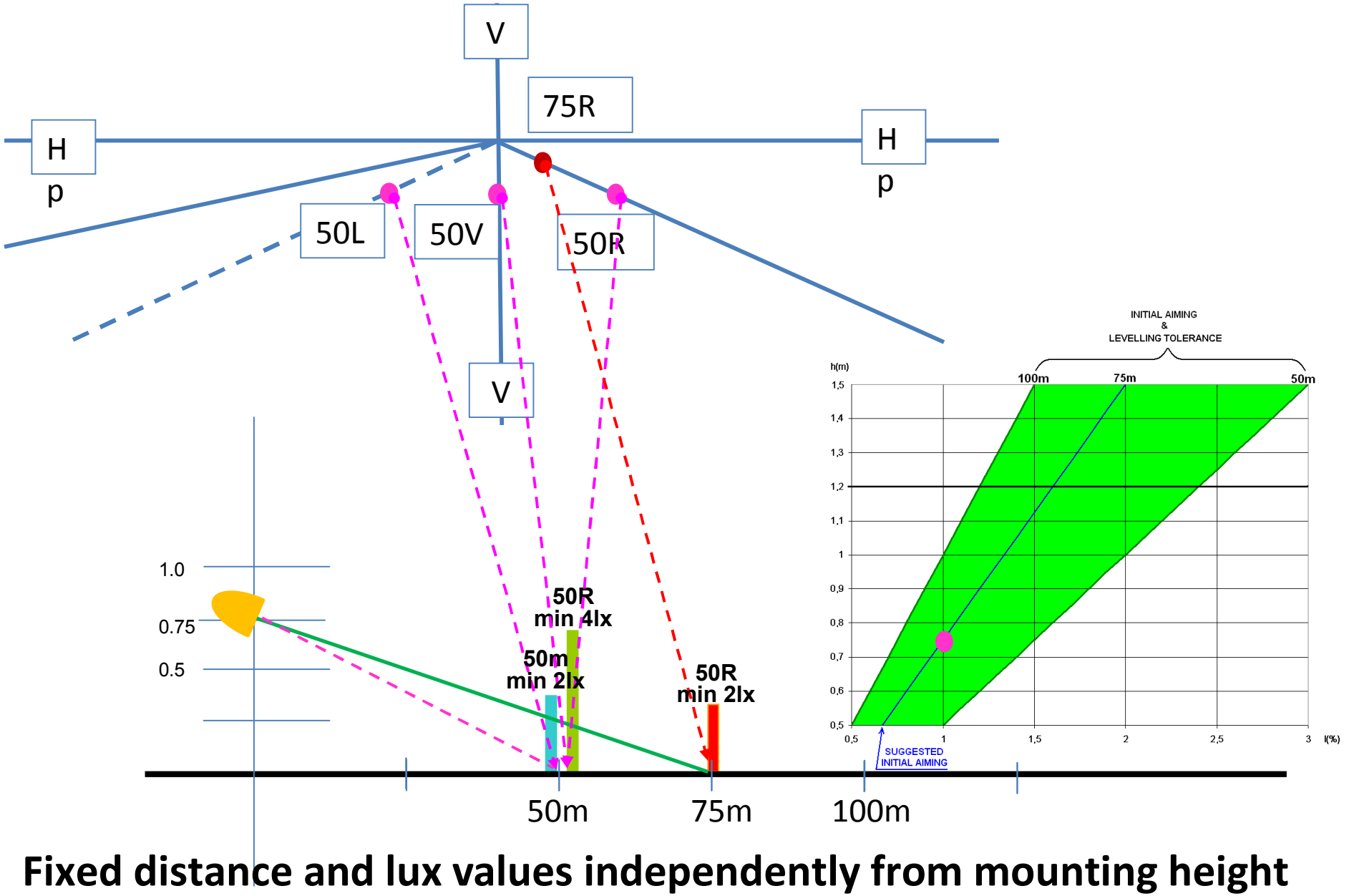
For 50V the minimum value is 8.4 lux @25m

Illuminance at 50m = 8.4/ $(50/25)^2$ = **2.1 Lux** at the road surface.

TRANSLATION OF SCREEN PHOTOMETRY TO ROAD **H=0.75m, I=1%D**

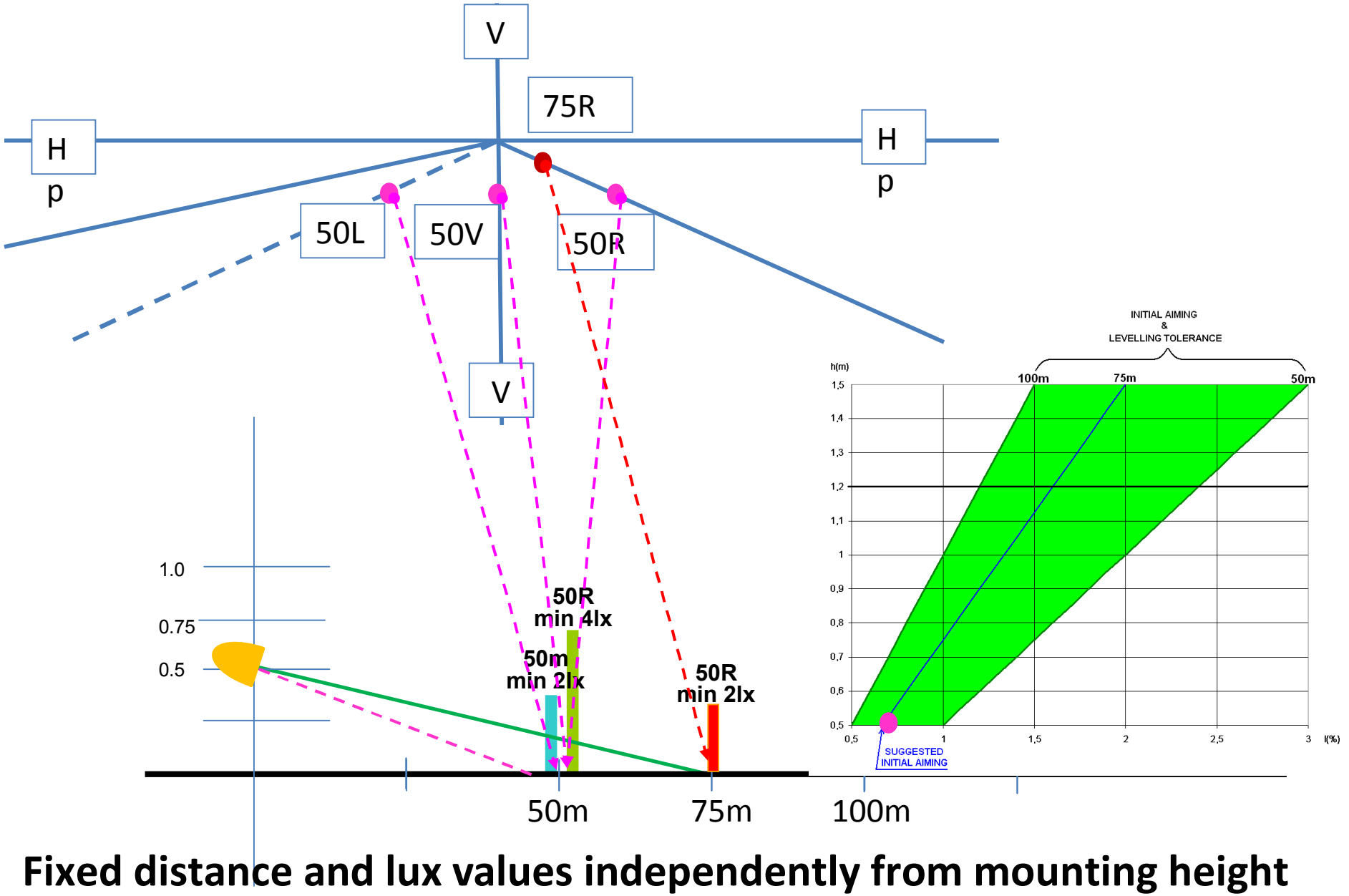


ESSENCE OF POLISH PROPOSAL



Fixed distance and lux values independently from mounting height

ESSENCE OF POLISH PROPOSAL



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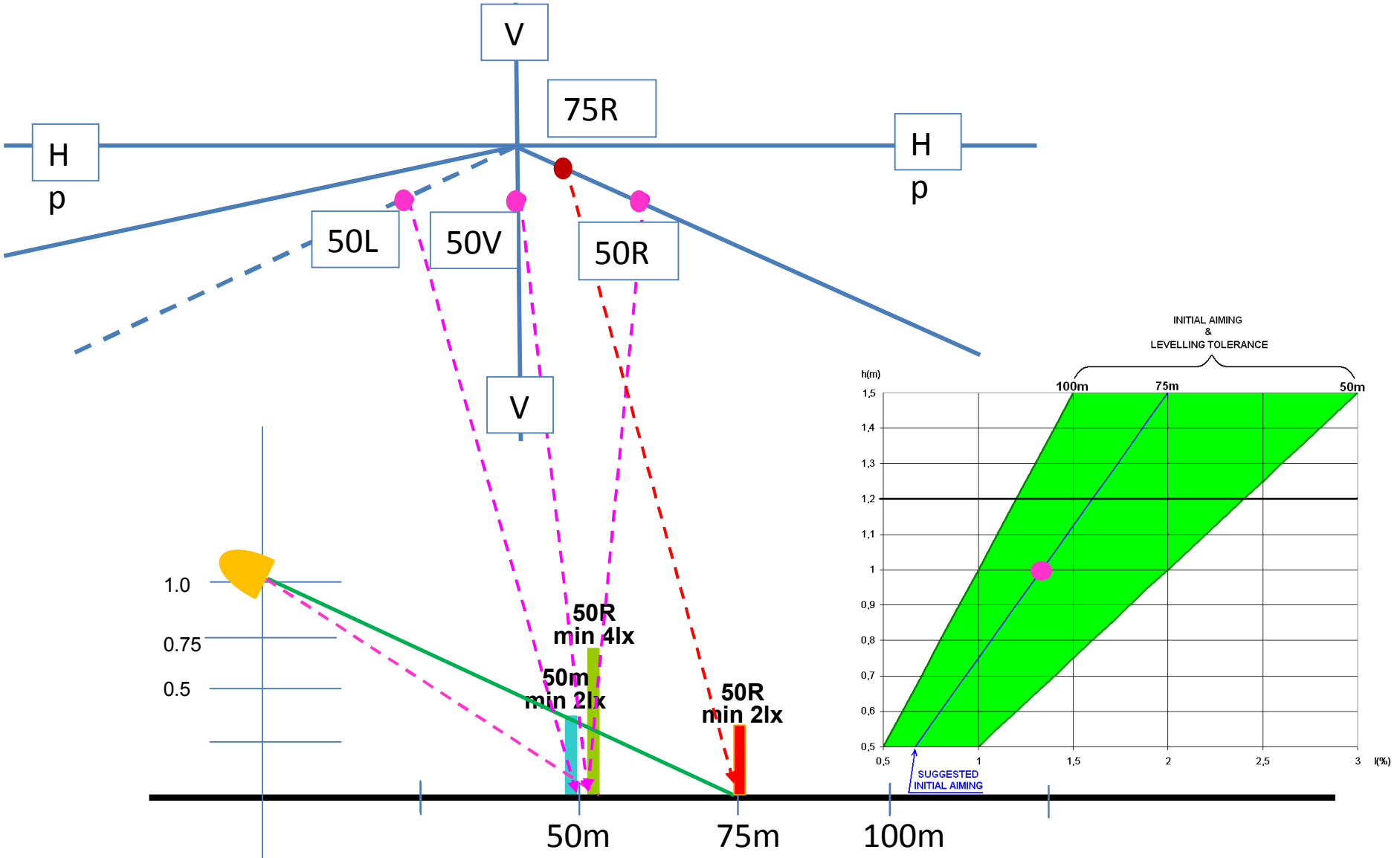
ESSENCE OF POLISH PROPOSAL



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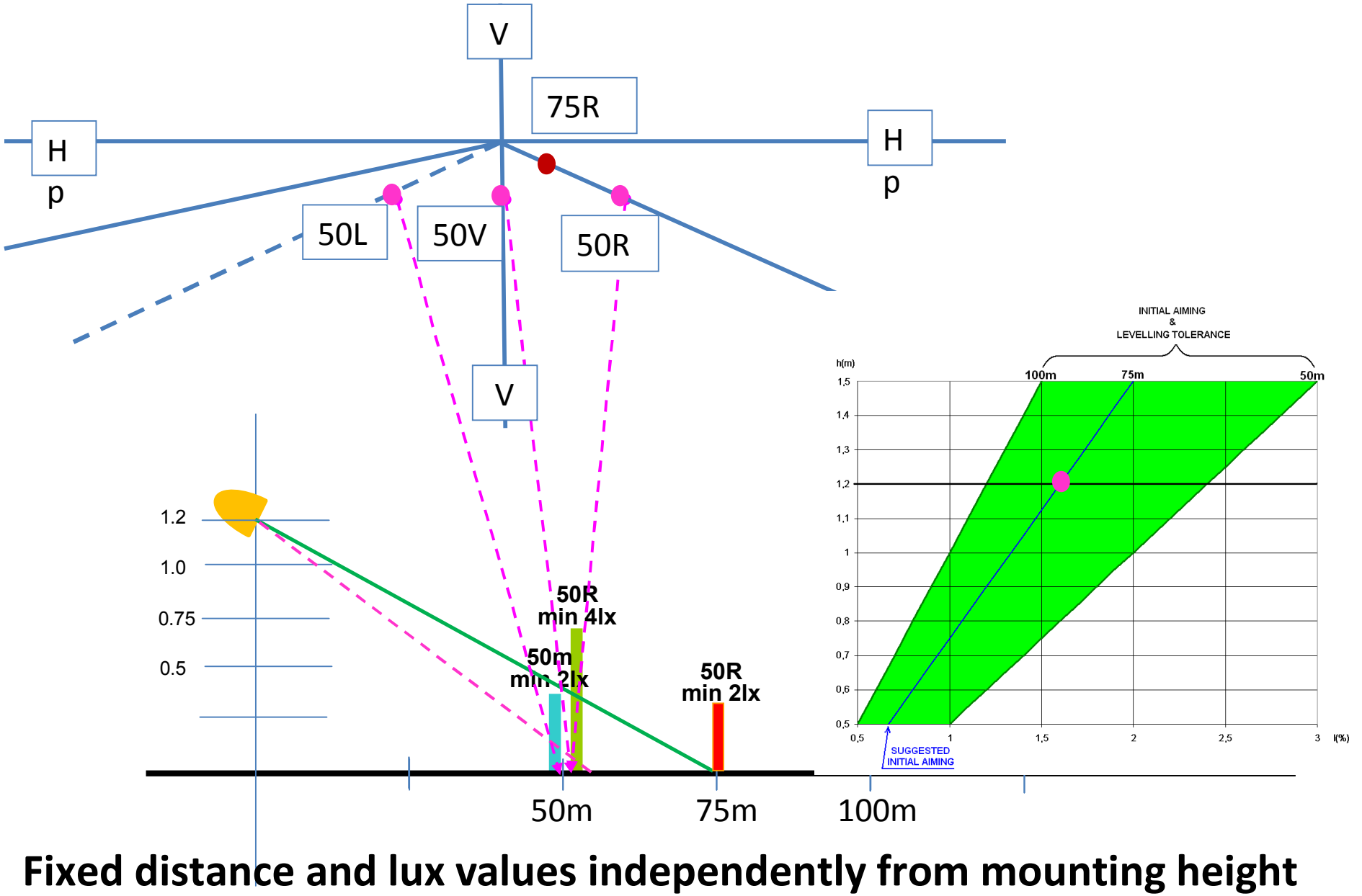
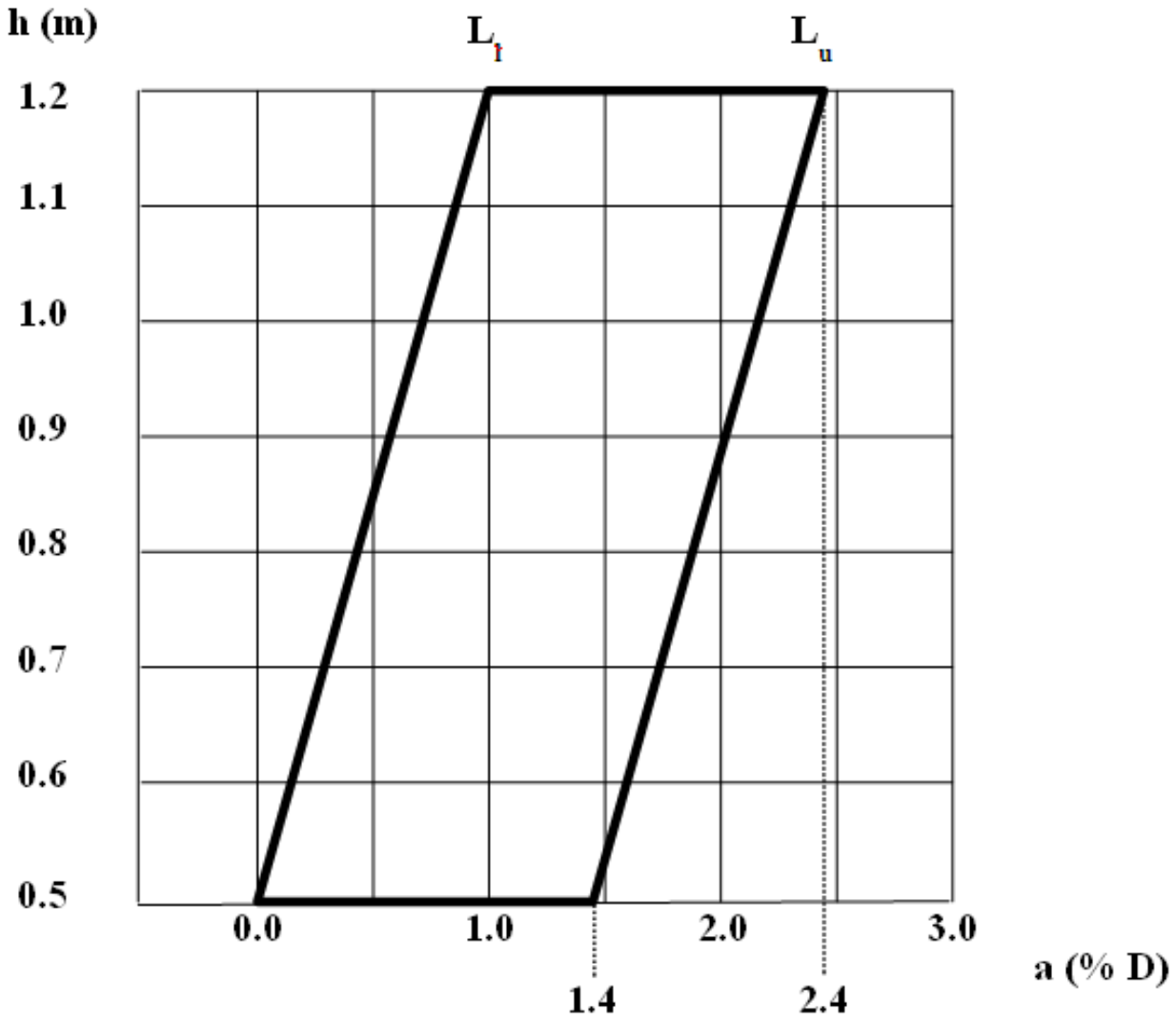
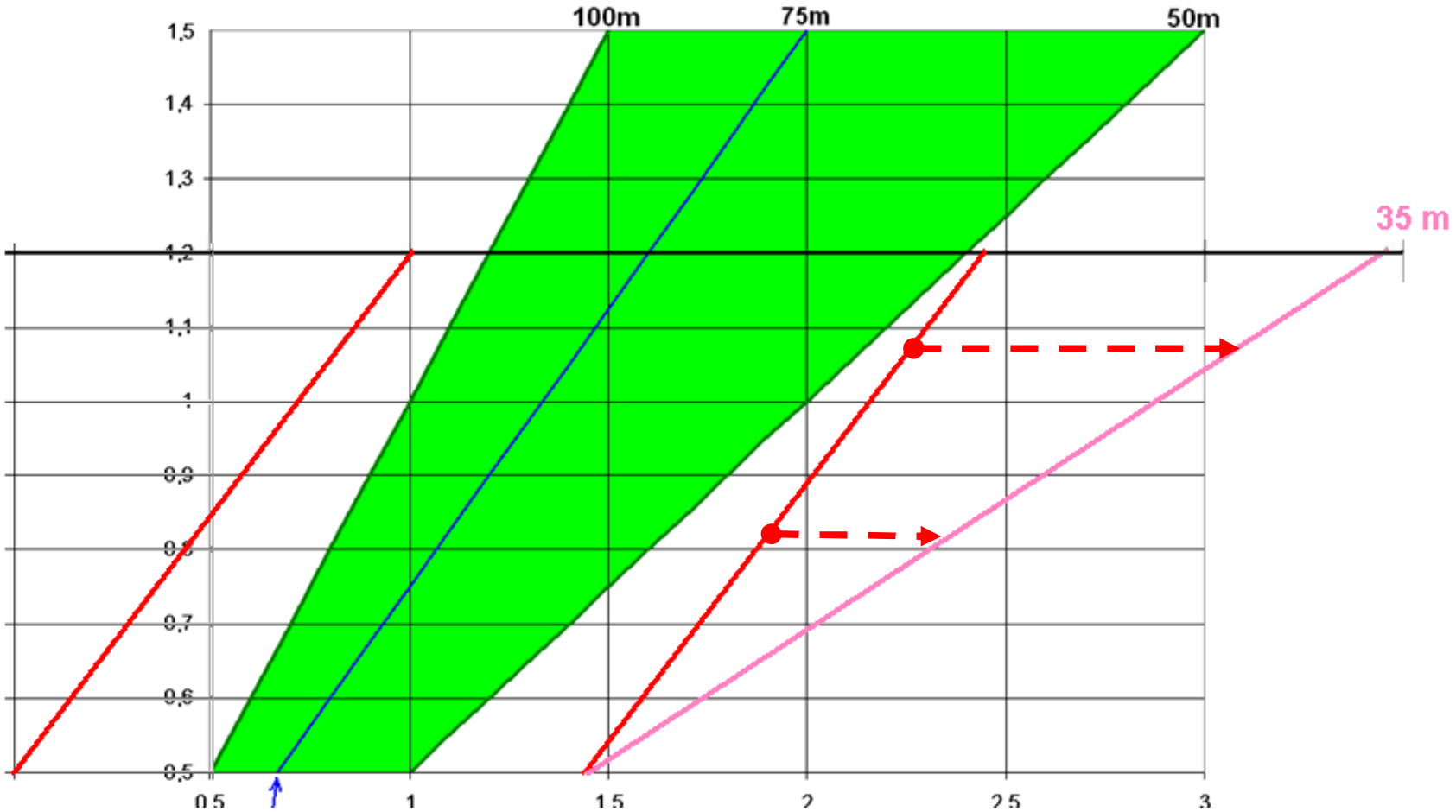


Fixed distance and lux values independently from mounting height

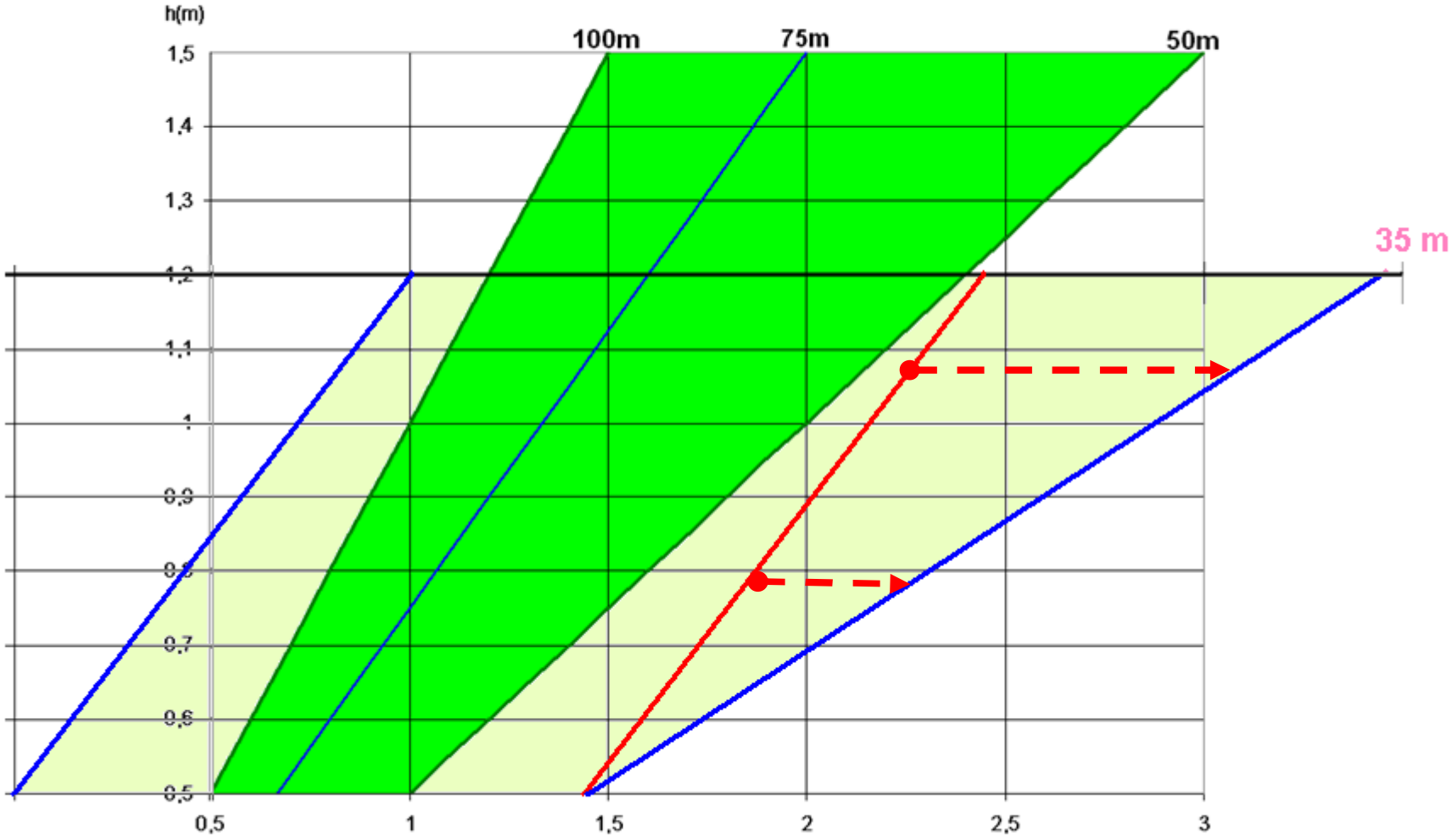
GTB proposed levelling tollerances



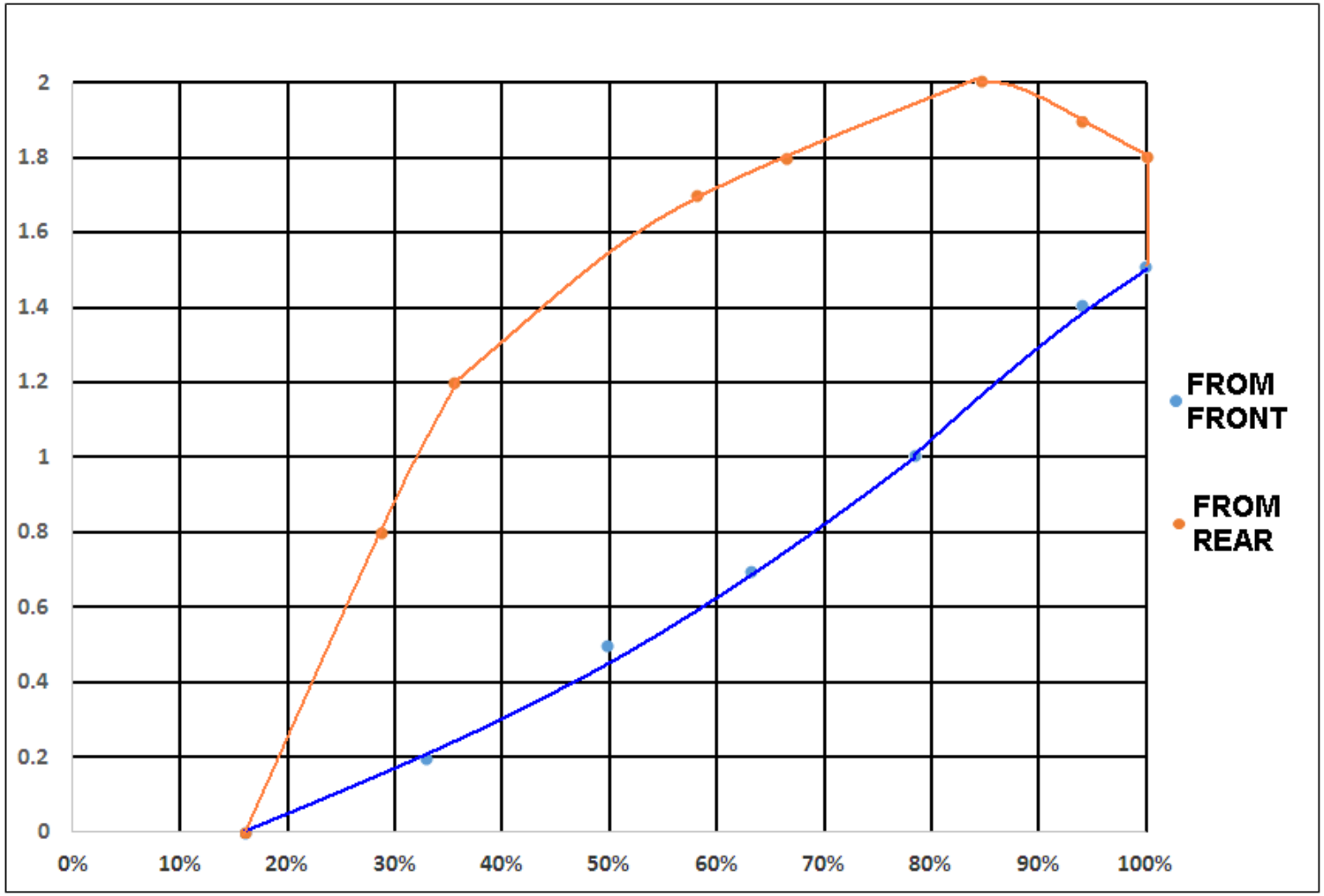
Poland proposed road illumination connected ***extended*** levelling tollerances



Poland proposed road illumination connected ***extended*** levelling tollerances



REAL VEHICLE PITCH CHANGE WITH LOADING



Proposal instead 50% - requirements

Manufacturer should submit characteristics of pitch change with load for two extreme manners of load distribution:

- The first one causing the highest cut-off inclination.
- The second one causing the lowest cut-off inclination.

It should be expressed all distinguished situation of load in the way possible to verify as number of passenger at given seats, load quantity and distribution etc. It should be done with resolution not less than 5% of full load and expressed in % and kilograms.
Fuel quantity in tank should be treated as a load factor in two stage: full and reserve.

Manufacturer should declare the value of cut-off inclination change when switch from "UP" to "DOWN" position.

Proposal instead of 50% - veryfication

Verification should be done by:
- Setting nominal cut-off inclination according manufacturer prescription(suggested one person in driver seat, reserve or less fuel in tank, nominal exploitation fluids, standard equipment, spare wheel, no load)
- Measuring of cut-off inclination in at least 8 different loading conditions causing the highest and lowest cut-off inclination.
1) between 0% and 25%
2) between 25% and 50%
3) between 50% and 75%
4) between 75% and 100%.
If the testhouse will have any doubts should check loading for any additional loading condition according allowed possibilities prescribed by manufacturer in car user manual.

THANK YOU FOR YOUR ATTENTION