

**Power: 29 Watt**

**Head Light for railway application**

Alumina case (150x150x52mm)

100% burn-in & parameter test

Osram LED's LM80

Laser trimmed thick film resistors

High total efficiency

Dimable (High - Low)

Extended temperature range

Very low inrush current

Reverse polarity protection

Integrated Power supply

Transparent AA glass 6mm thickness

## LED Lamp XT100

07/11/2017 - Issue 15 - Preliminary Data Sheet



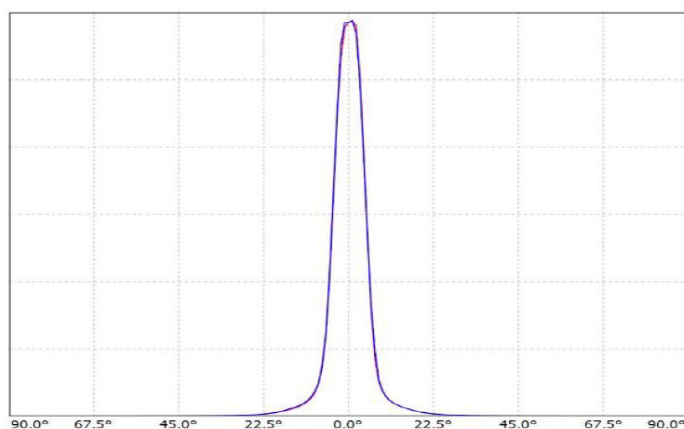
### Technical characteristics

Input power	29 W
Nominal input voltage	72V DC and 110VDC
Input voltage range	According EN50155
Integrated power supply	
Efficiency:	92%
Calculated power on led after power supply	
High	27 W
Low	19 W
Protection category	IP67
Operating temperature	-40°C to +70°C
Storage temperature	-40°C to +105°C
Dimension	150 x 150 x 52mm
Wight	2.075g

### Technical characteristics

LED Type	Osram, Oslon SSL150, LM80
CCT	5.000k
CRI	>80
Light intensity at beam center for single lamp after lens and glass	
Distance 8 m High	> 3.500 lux
Distance 8 m low	> 2.450 lux
Distance 305 m High	> 2,4 lux
Distance 305 m low	> 1,7 lux

### Photometric characteristics



### Wire connection & Dim function

According Length	EN45545-HL3 200cm
Black 1	+ Input
Black 2	Ground (- Input)
Green-yellow	Dim
Dimming function	
Dim not connected	High
Dim connected on +Input	High
Dim connected on Ground	Low



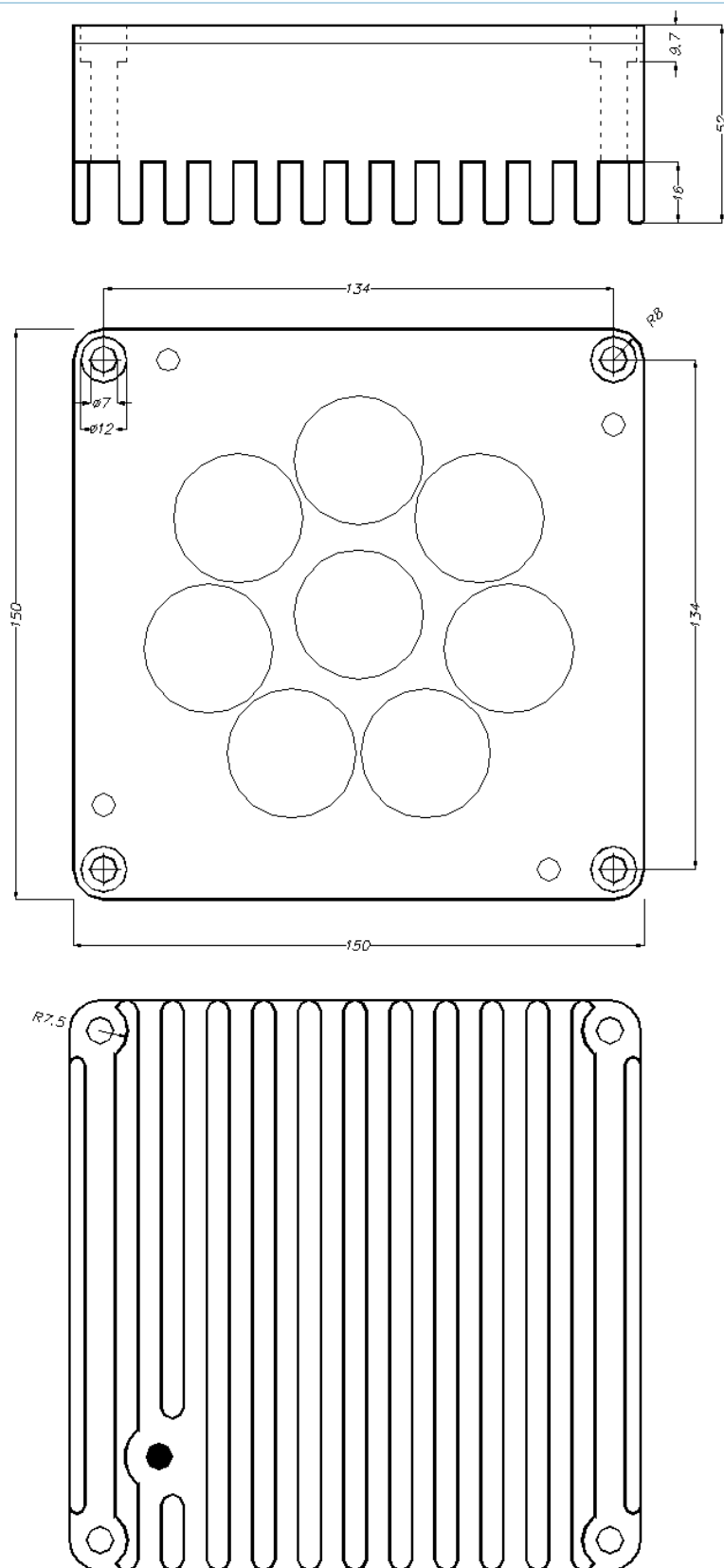
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## Dimensional drawing

All dimensions  $\pm 0,25\text{mm}$



Test result on a XT100 Lamp with production 30.10.2017

**Electrical general input parameters**

Undervoltage switch On	41,0V DC
Undervoltage switch Off	39,2V DC
Overvoltage switch On	158,0V DC
Overvoltage switch Off	161,8V DC
Reverse polarity protection	OK (tested with 200V DC)
Surge EN50155	OK (tested with 2.000V)
Burst EN50155	OK (Tested with 4.000V)

**Electrical input parameters - voltage, current, power, lux-level 8m**

Input voltage [V]	Input current [A]	Input power [W]	Lux level at 8m
45,0	0,621	27,9	3600
45,1	0,445	20,1	2850 (low)
72,0	0,384	27,6	3580
72,0	0,287	20,7	2870 (low)
110,0	0,264	29,0	3570
110,0	0,198	21,8	2910 (low)
128,0	0,233	29,8	3600
128,0	0,176	22,5	2940 (low)
154,0	0,198	30,5	3610
154,0	0,154	23,7	2990 (low)

**Long distance light intensity with Input voltage 110V DC (High)**

Distance [m]	Light intensity [lux]
8	3570
50	91
100	23
150	10,1
200	5,8
250	3,7
300	2,5
305	2,5

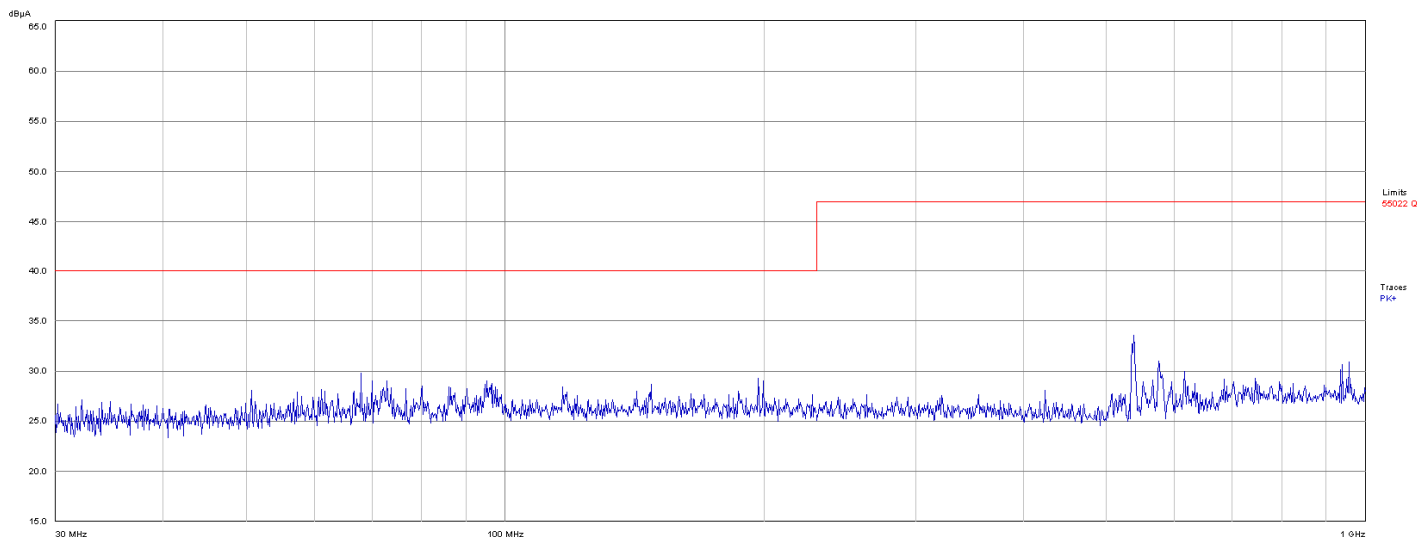
**Temperature test and environment test**

Switch on at -40°C	OK
Temperature rise after 5 hours in power on condition at 70° ambient	13°C
Water proof - 2 hours at 30cm depth	OK

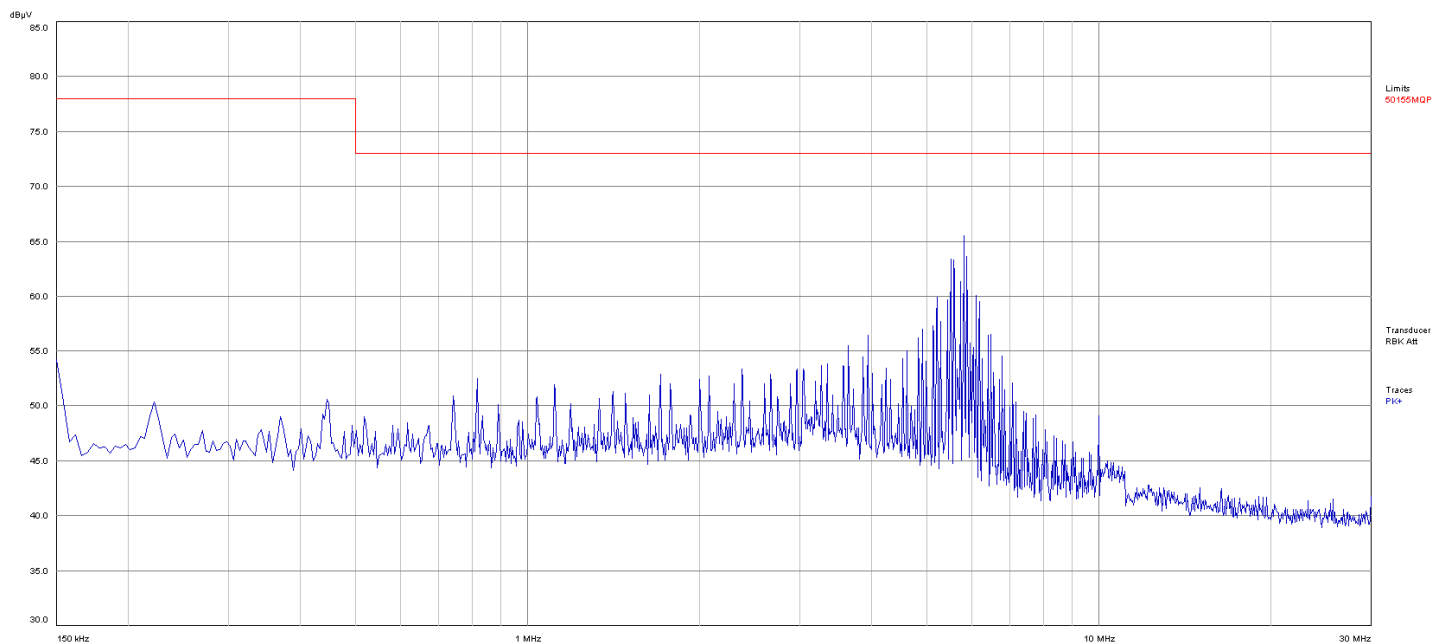


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## Radiated emissions EN50155



## Conducted emissions EN50155



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