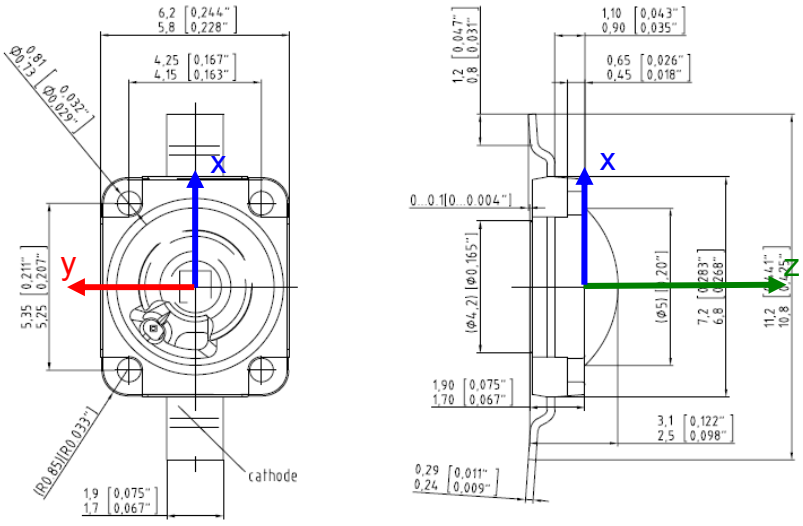
Information for OSRAM rayfile data

LR W5AM, Golden DRAGON Plus, red

This LED is under development. All data is preliminary and may be changed without special notice.

1. Position of global coordinate origin vs. package



Global coordinate origin is at the center of the top surface of the LED package (bottom of lens cab). The CAD model provided with this rayfile package has the same global orientation as the rayfile.

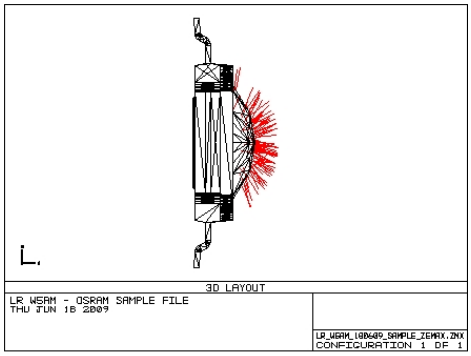
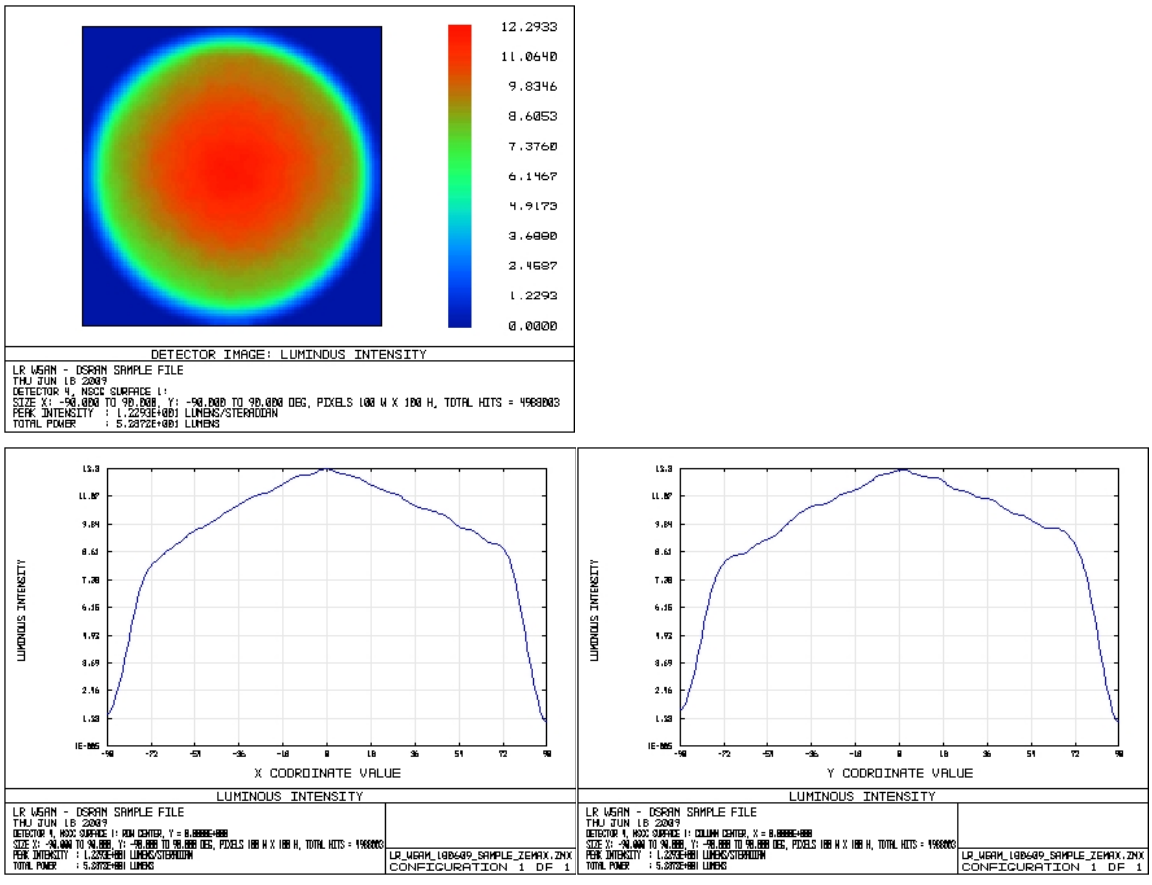


Fig. 1: Orientation of LED

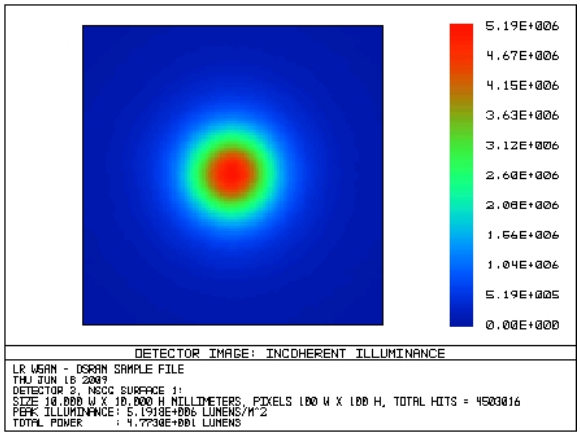
2. General Properties of the Rayfile

- the starting points of the rays need to be in air
- the rays are randomly ordered in the rayfile
- the CAD model provided with this rayfile package is intended for the design of mechanical components and not valid for optical raytracing calculations
- the global coordinate origin as well as the starting points of the rays are not the position of the virtual focus and are not the position of the LED chip
- the units used for the coordinates in the rayfile and for the CAD model are mm
- the virtual focus of this rayfile (5M rays) with respect to the above coordinate origin is:
  x = -0.028 mm
  y = 0.007 mm
  z = -0.083 mm

3. **Luminous intensity** *(units: cd, LED Luminous flux Φ_V=53 lm)*



4. *Near field illuminance* (units: lx, LED Luminous flux Φ_V=53 lm, z=1.2mm)



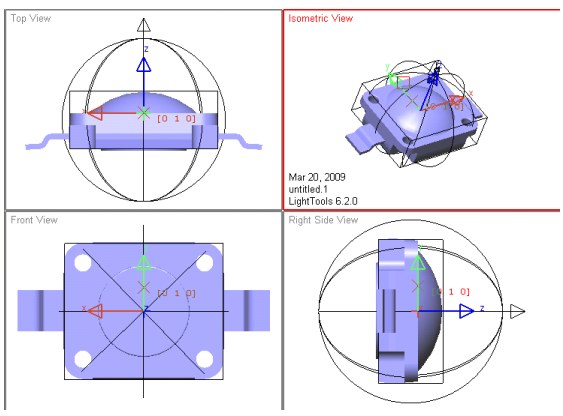
5. *Information for Lighttools Users*

This rayfile package contains additionally the LED as a Lighttools library element. This provides the following information:

- link to rayfile with 100k rays, the rayfile should be placed in the same folder as the Lighttools file
- CAD model
- rayfile and CAD model are grouped. In case the grouping is resolved, the correct positioning of rayfile vs. CAD model must be ensured
- typical spectrum of the LED

For importing the library element into an existing Lighttools project, please consider the following:

- File → Restore Library… → select path and file
- indicate scaling factor: “1”
- indicate position: e.g. “XYZ 0,0,0”
- indicate z axis direction: e.g. “XYZ 0,0,1”
- indicate y axis direction: e.g. “XYZ 0,1,0”



6. Provided files

file type	file name
rayfile	preliminary_rayfile_LR_W5AM_[number of rays]_[DDMMYY]_[data format].[extension]
CAD geometry	preliminary_LR_W5AM_[DDMMYY]_geometry.IGS preliminary_LR_W5AM_[DDMMYY]_geometry.STEP preliminary_LR_W5AM_[DDMMYY]_geometry.SLDPRT
library elements	preliminary_LR_W5AM_[DDMMYY]_sample_[data format].[extension]
information (this file)	LR_W5AM_[DDMMYY]_info.pdf

7. Disclaimer and User Agreement

OSRAM assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided rayfile data. The rayfile data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all component parameters. Therefore, in certain cases a deviation between the real emission characteristic and the emission characteristic which is encoded in the provided rayfile data could occur.

OSRAM reserves the right to undertake technical changes of the component without further notification which could lead to changes in the provided rayfile data.

OSRAM assumes no liability of any kind for the loss of data or any other damage resulting from the usage of the provided rayfile data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

8. Revision History

date	type	code
14.04.2008	rayfiles generated	US
18.06.2009	rayfiles updated	US
20.08.2009	infofile (this file) improved	US