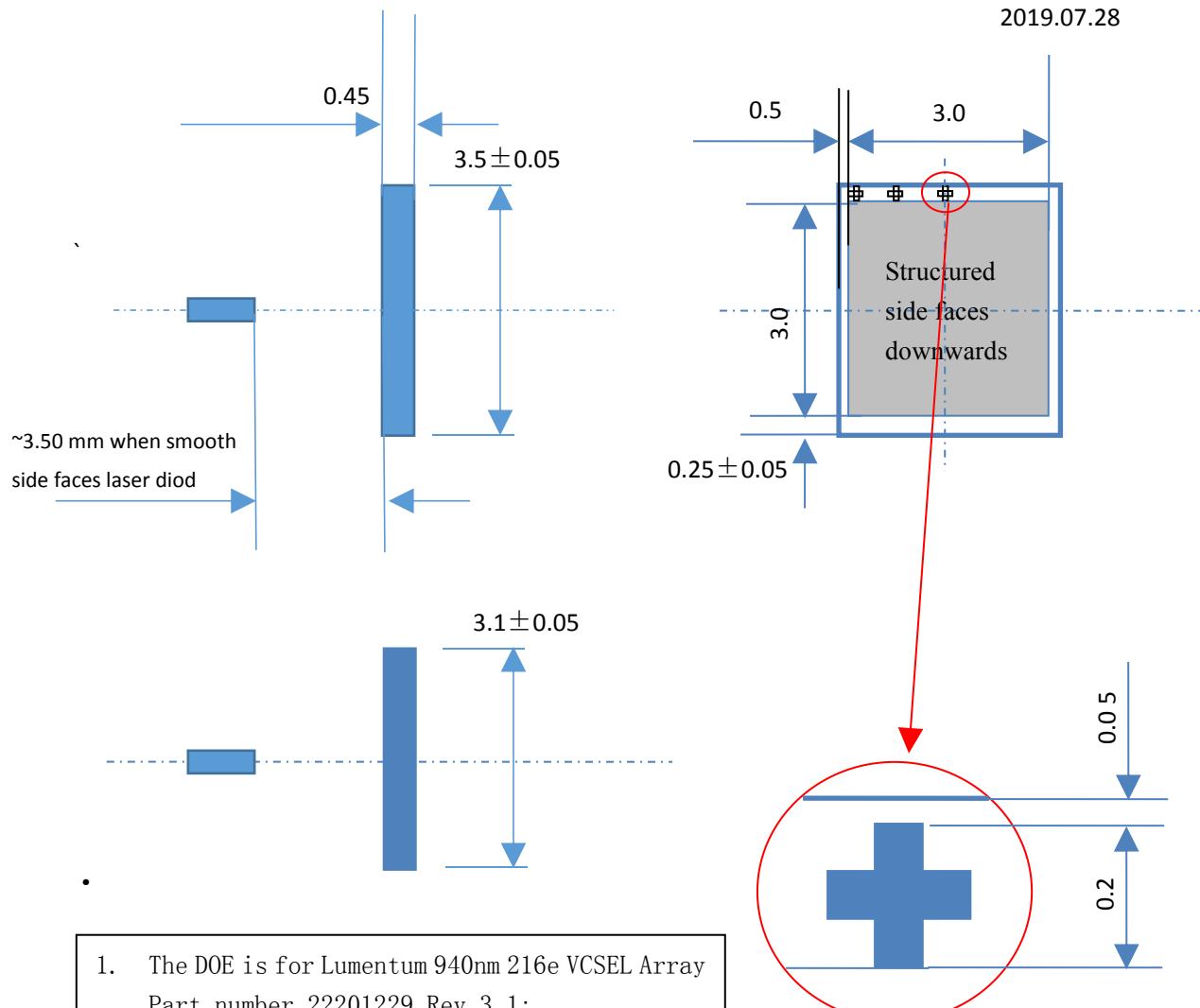


Wuxi OptonTech Ltd

Collimation integrated DOE for

Lumentum 940nm 216e VCSEL Array Part number: 22201229 Rev3.1

2019.07.28



1. The DOE is for Lumentum 940nm 216e VCSEL Array Part number 22201229 Rev 3.1;
2. The Element size 3.1x3.5 mm, and the diffractive receiving area is 3.0 x 3.0 mm;
3. 3.1 mm corresponds to 11 repetitions (70 deg FOV), and 3.5 mm corresponds to 13 repetition (72 deg FOV) ;
4. Material: Fused silica;
5. Three marks are visible with naked eyes;
6. When three marks are at the upper right of the structured area, it indicates the structured side faces upwards;
7. The middle line of one mark coincides with the middle line of the pattern and the elements
8. The edge of one mark is aligned with the edge of the pattern.

Magnified image of the mark

No	Item	Typical value	Remarks
1	Laser type	VCSEL	
2	Light emitting area	427 x 371 μm	
3	Working wavelength	940 nm @ 25°C	
3	Wavelength tolerance	$\pm 10 \text{ nm}$	
4	Material	Whole fused silica	
4	Material softening point	> 1000 °C	
5	Working temperature	> 1000 °C	
7	Element dimensions	3.1 x 3.5 mm	$\pm 0.05 \text{ mm}$
8	DOE receiving size	3.0 x 3.0 mm	$\pm 0.05 \text{ mm}$
9	Element thickness	0.45 mm	
10	Repetition (vertical, horizontal)	11 x 13	
11*	FOV (D/V/H)	90 / 70 / 72 deg	$\pm 0.5 \text{ deg}$
12	Total dots number	30888	

* 3.1mm corresponds to 11 replications and 70° FOV, and 3.5 mm corresponds to 13 replications and 72° FOV.