

Optical metrology of epix10kaQuad.1 MEC from 2021-01-27

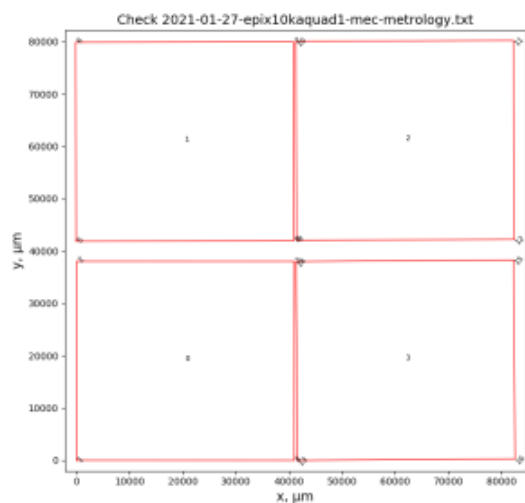
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Metrology data

Chris Kenney: metrology file for MEC Quad-1 detector. Standard orientation.

New metrology was needed as one module was swapped.

- [2021-01-27-epix10kaquad1-mec-metrology.xlsx](#)
- [2021-01-27-epix10kaquad1-mec-metrology.txt](#)



Quality check

optical_metrology_check 2021-01-27-epix10kaquad1-mec-metrology.txt

X-Y quality check for optical metrology measurements

segm:	S1	S2	dS1	dS2	L1	L2	dL1	dL2	angle(deg)	D1	D2	dD	d
(dS)	d(dL)												
segm: 0	38003	38004	-8	-7	40992	41011	0	19	-0.01048	55907	55903		
3	-1	-19											
segm: 1	38001	38006	85	90	41000	40994	-77	-83	0.12229	55902	55901		
1	-5	6											
segm: 2	38004	38006	161	163	40998	40996	-149	-151	0.22640	55903	55903		
0	-2	2											
segm: 3	37998	38002	304	308	40988	41003	-284	-269	0.42766	55905	55894		
10	-4	-15											

Z quality check for optical metrology measurements

segm:	SA	LA	XSize	YSize	dZS1	dZS2	dZL1	dZL2	dZSA	dZLA	ddZS	ddZL	dZX	dZY
angXZ(deg)	angYZ(deg)	dz3(um)												
segm: 0	38003	41001	41001	38003	-13	-33	9	-11	-23	-1	20	20	-1	-23
-0.00140	-0.03468	-20.004												
segm: 1	38003	40997	40997	38003	-109	-118	37	28	-113	32	9	9	32	-113
0.04542	-0.17112	-8.980												
segm: 2	38005	40997	40997	38005	-78	-108	14	-16	-93	-1	30	30	-1	-93
-0.00140	-0.14021	-29.995												
segm: 3	38000	40995	40995	38000	-79	-68	50	61	-73	55	-11	-11	55	-73
0.07757	-0.11082	10.990												

Geometry file

- command: optical_metrology_epix10ka2m -i 2021-01-27-epix10kaquad1-mec-metrology.txt -r3 -A0 -Z-100000 -o 2021-01-27-epix10kaquad1-mec-geometry.txt
- geometry file: /reg/g/psdm/detector/alignment/epix10kaquad/2021-01-27-epix10kaquad1-mec/2021-01-27-epix10kaquad1-mec-geometry.txt

Validation on data

References

- [EPIX10KA2M References](#)