

LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY  
- LIGO -  
CALIFORNIA INSTITUTE OF TECHNOLOGY  
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<b>Optical Lever Beams Mechanical Layout</b>
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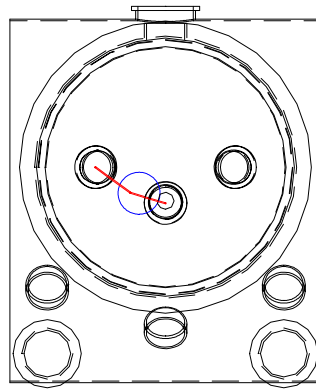
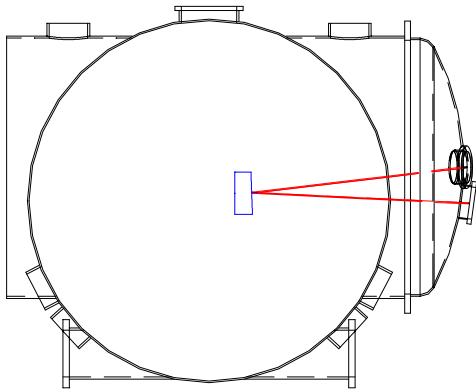
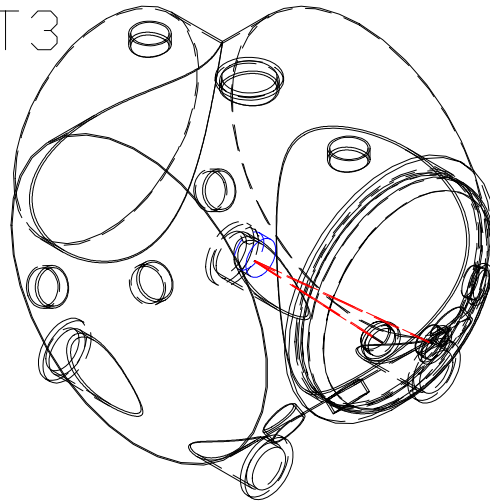
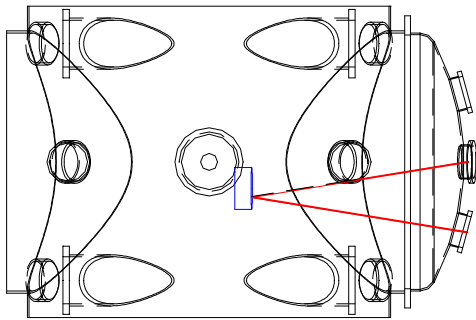
# 1 OPTICAL LEVER BEAMS IN THE 2K IFO

## 1.1. MMT3, HAM7

•MMT3 wedge orientation

thick side down

Optical\_Lever\_MMT3

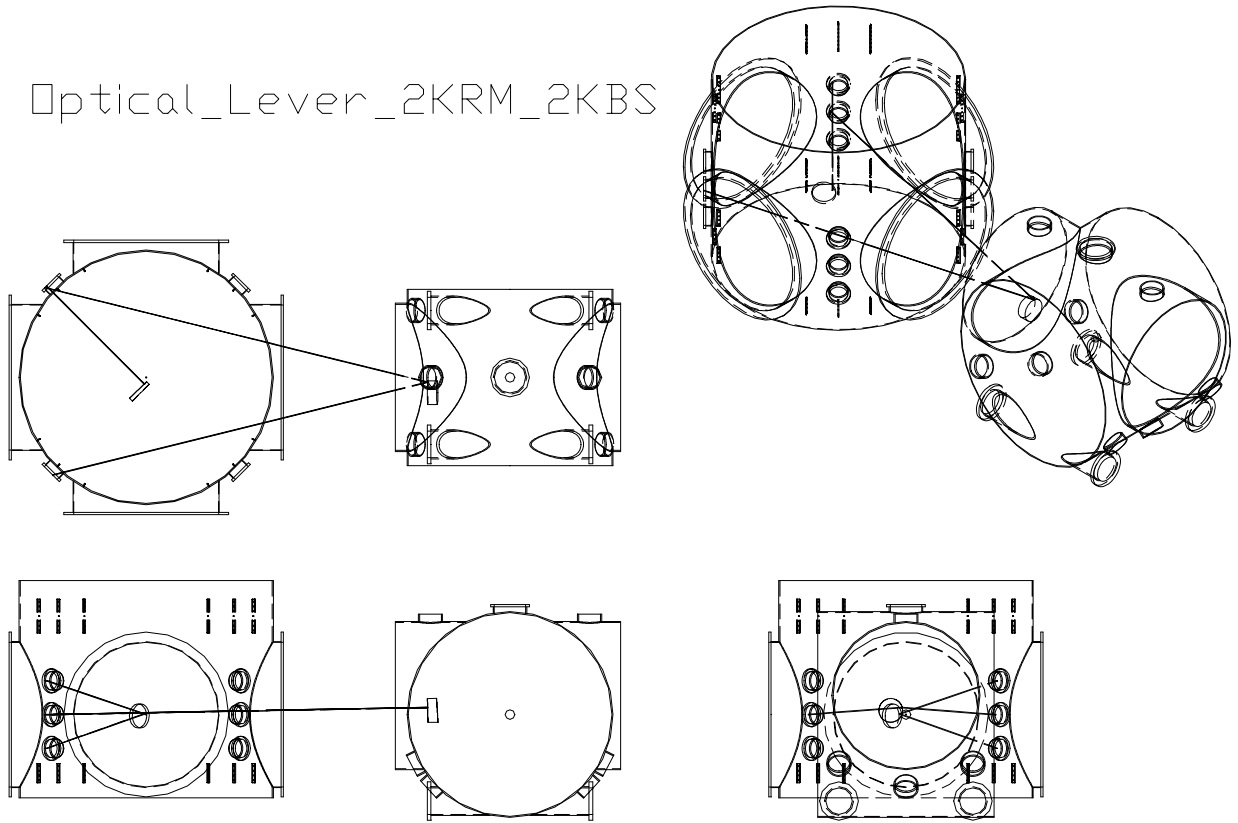


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## 1.2. RM & BS, BSC4

- RM wedge orientation                      thick side down
- BS wedge orientation                      thick side up

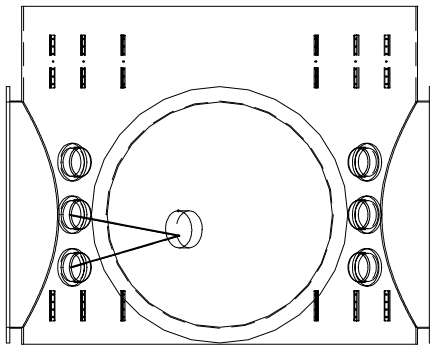
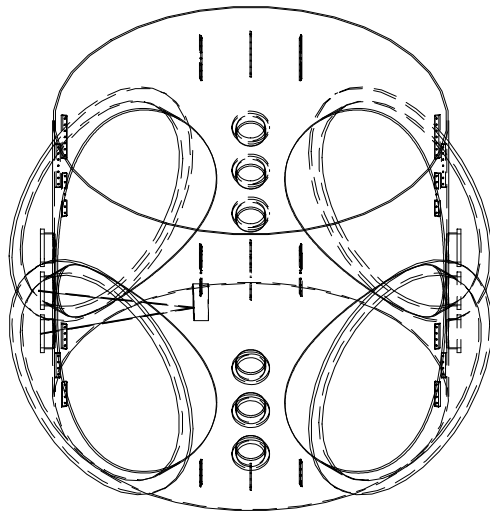
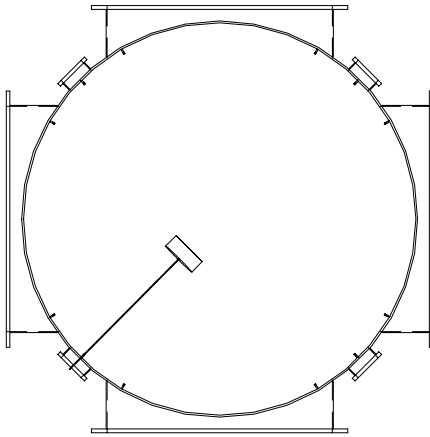
Optical\_Lever\_2KRM\_2KBS



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### 1.3. FMx, BSC7

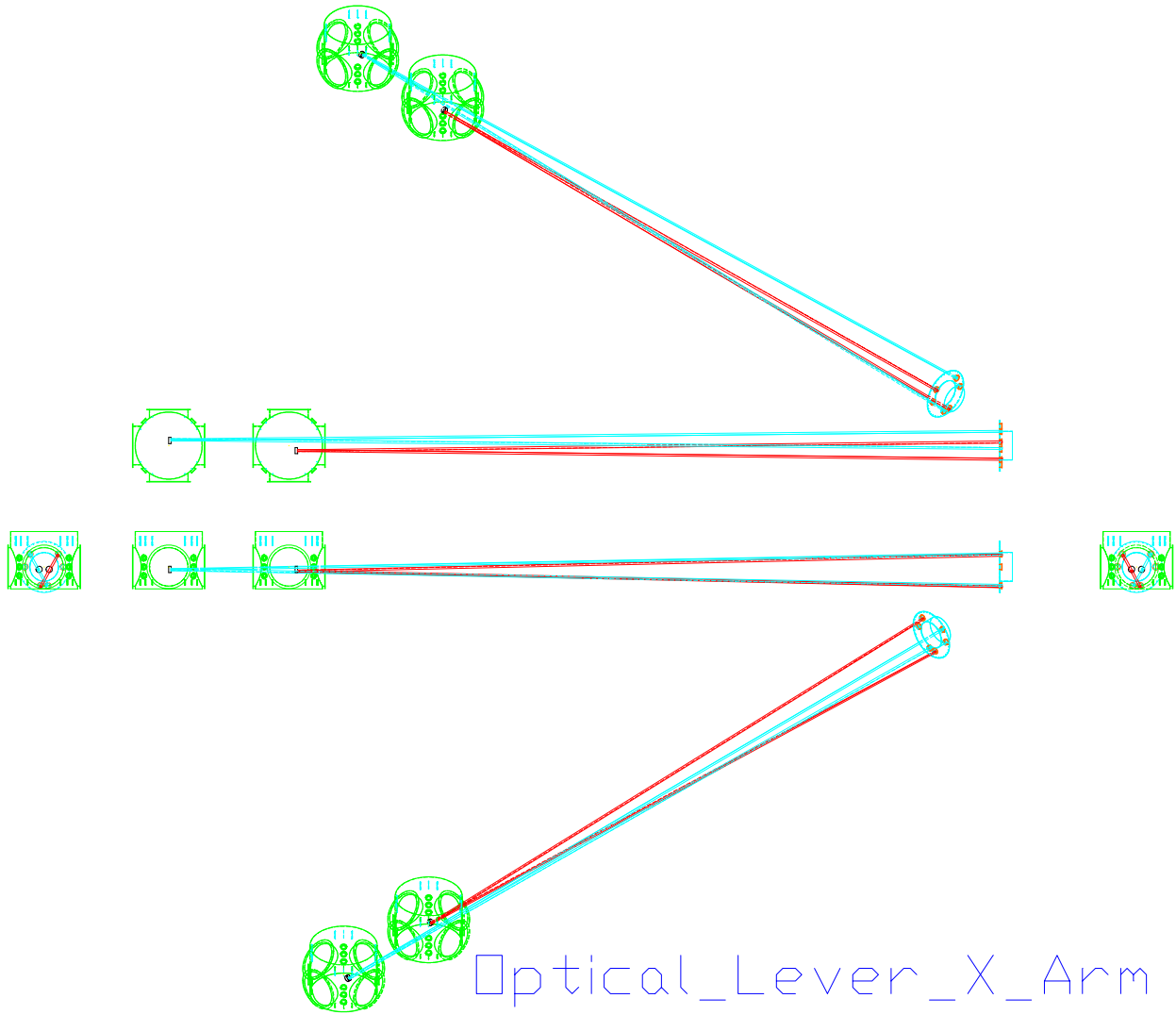
- FMx wedge orientation                      thick side up



Optical\_Lever\_FMx

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### 1.4. ITM<sub>x</sub>, WA1-A

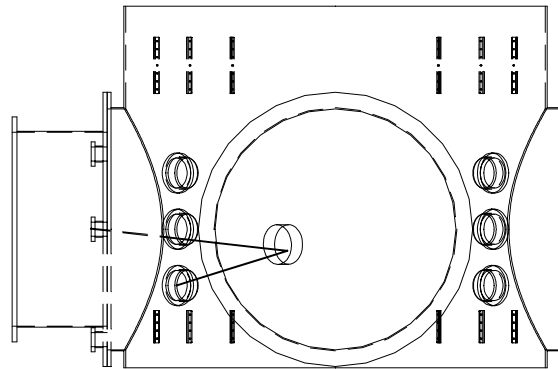
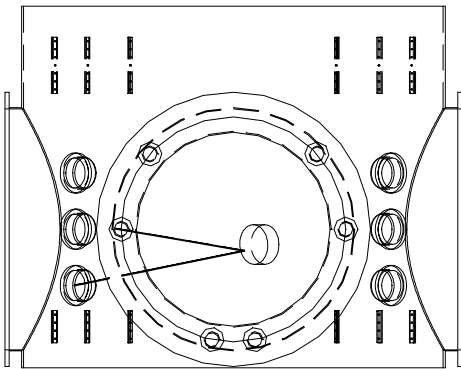
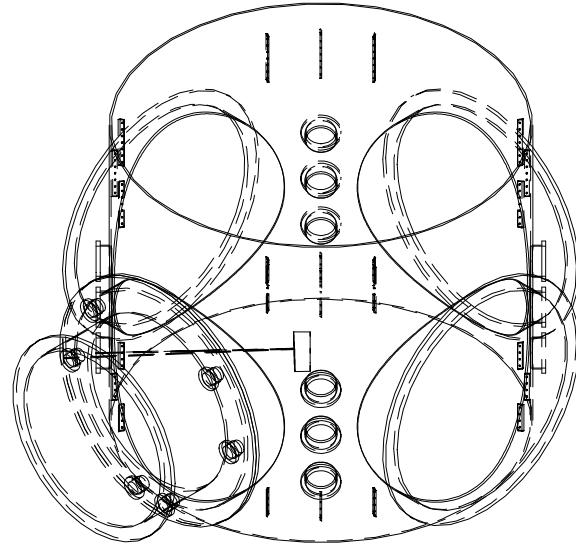
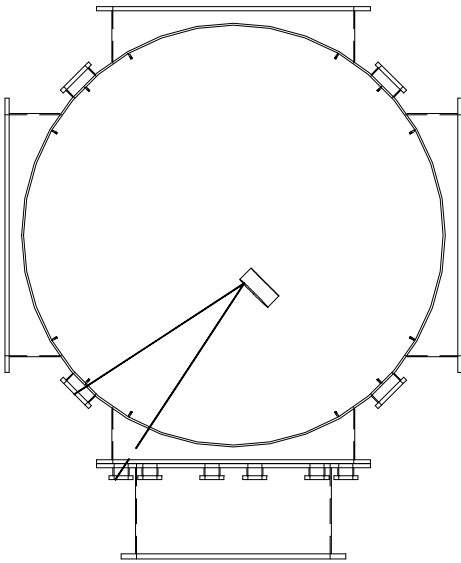


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## 1.5. FMy, BSC8

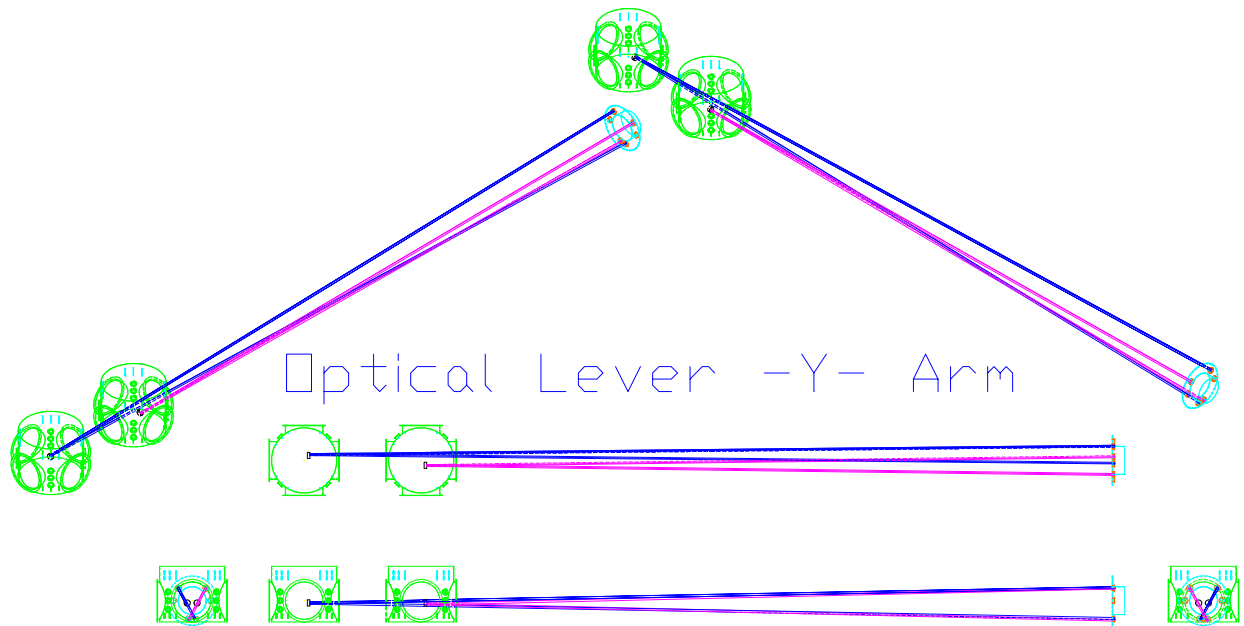
- FMy wedge orientation                      thick side up

Optical\_Lever\_FMy



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### 1.6. ITMy, WA1-B



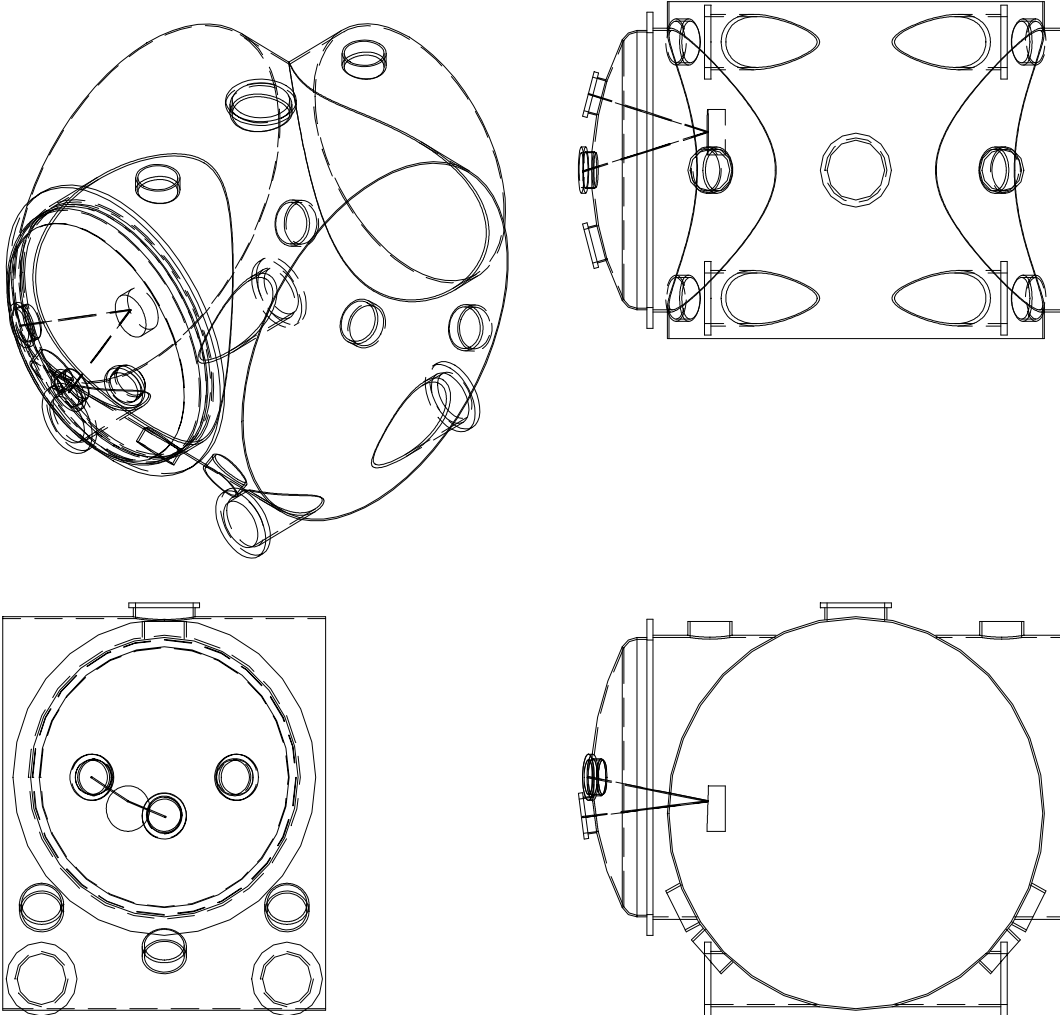
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## 2 OPTICAL LEVER BEAMS IN THE 4K IFO

### 2.1. MMT3, HAM1

- MMT3 wedge orientation                      thick side down

Optical\_Lever\_MMT3\_4K

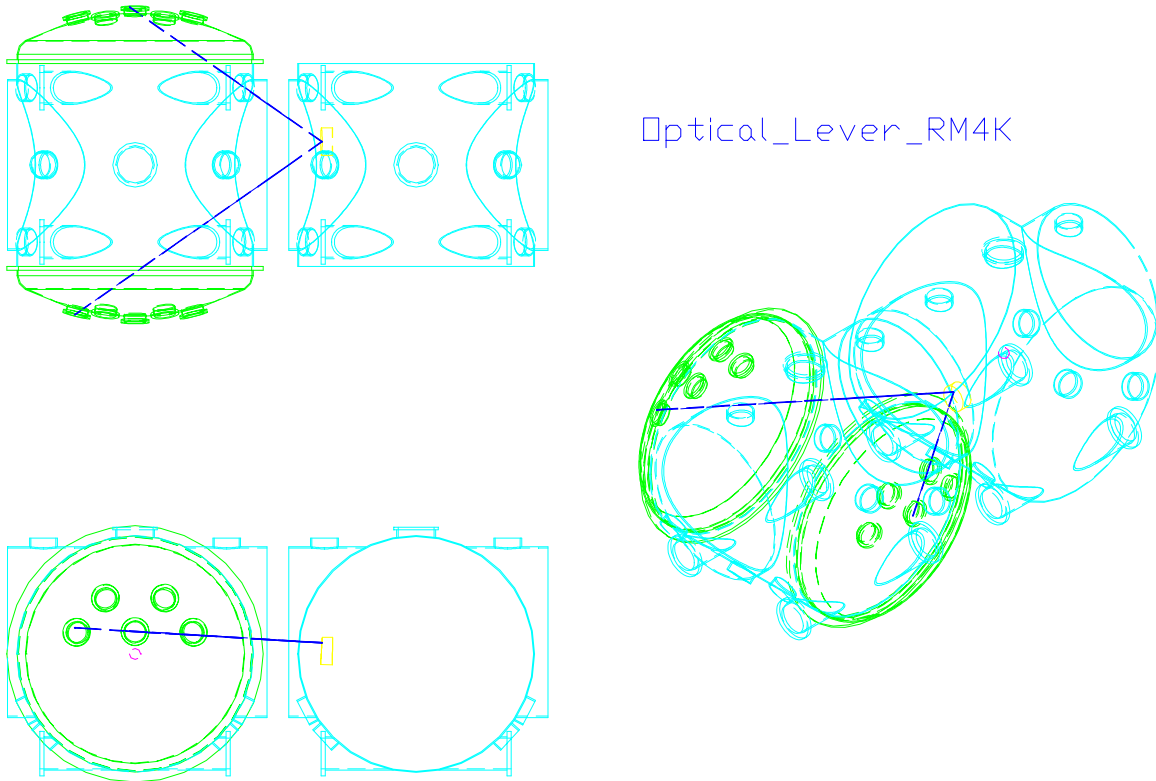


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## 2.2. RM, HAM2

- RM wedge orientation                      thick side down

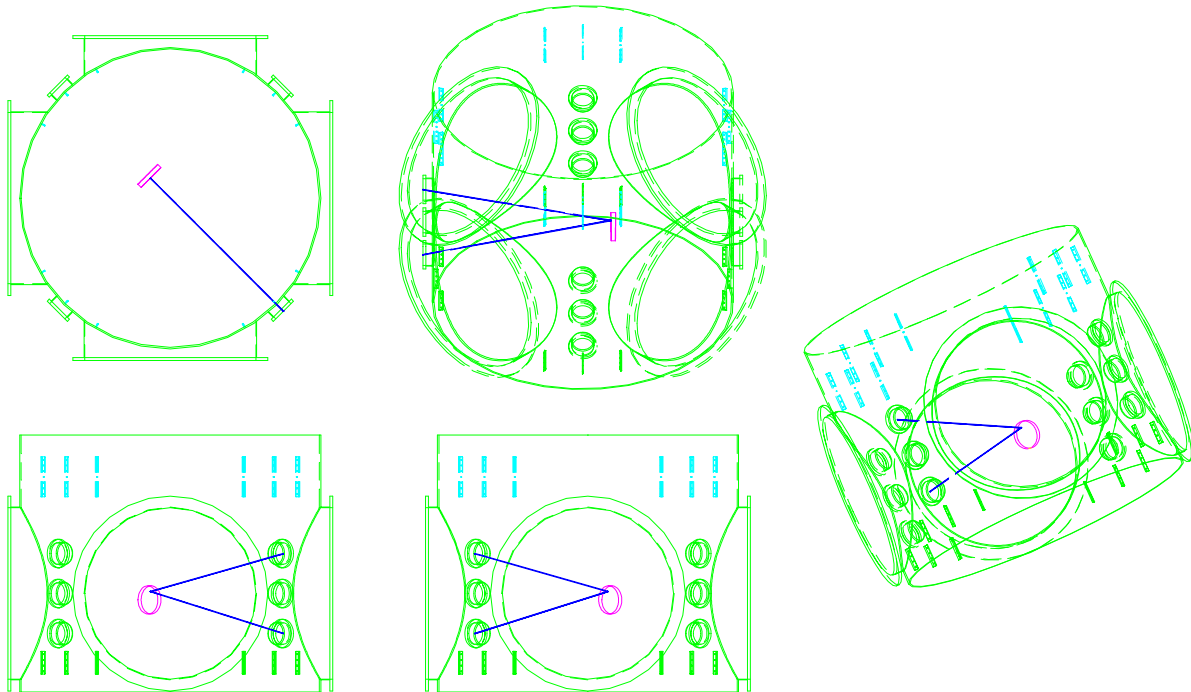


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### 2.3. BS, BSC2

- BS wedge orientation                      thick side up

Optical\_Lever\_4KBS



### 2.4. ITM<sub>x</sub>, WA1-A

See “ITM<sub>x</sub>, WA1-A” on page 5.

### 2.5. ITM<sub>y</sub>, WA1-B

See “ITM<sub>y</sub>, WA1-B” on page 7.

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