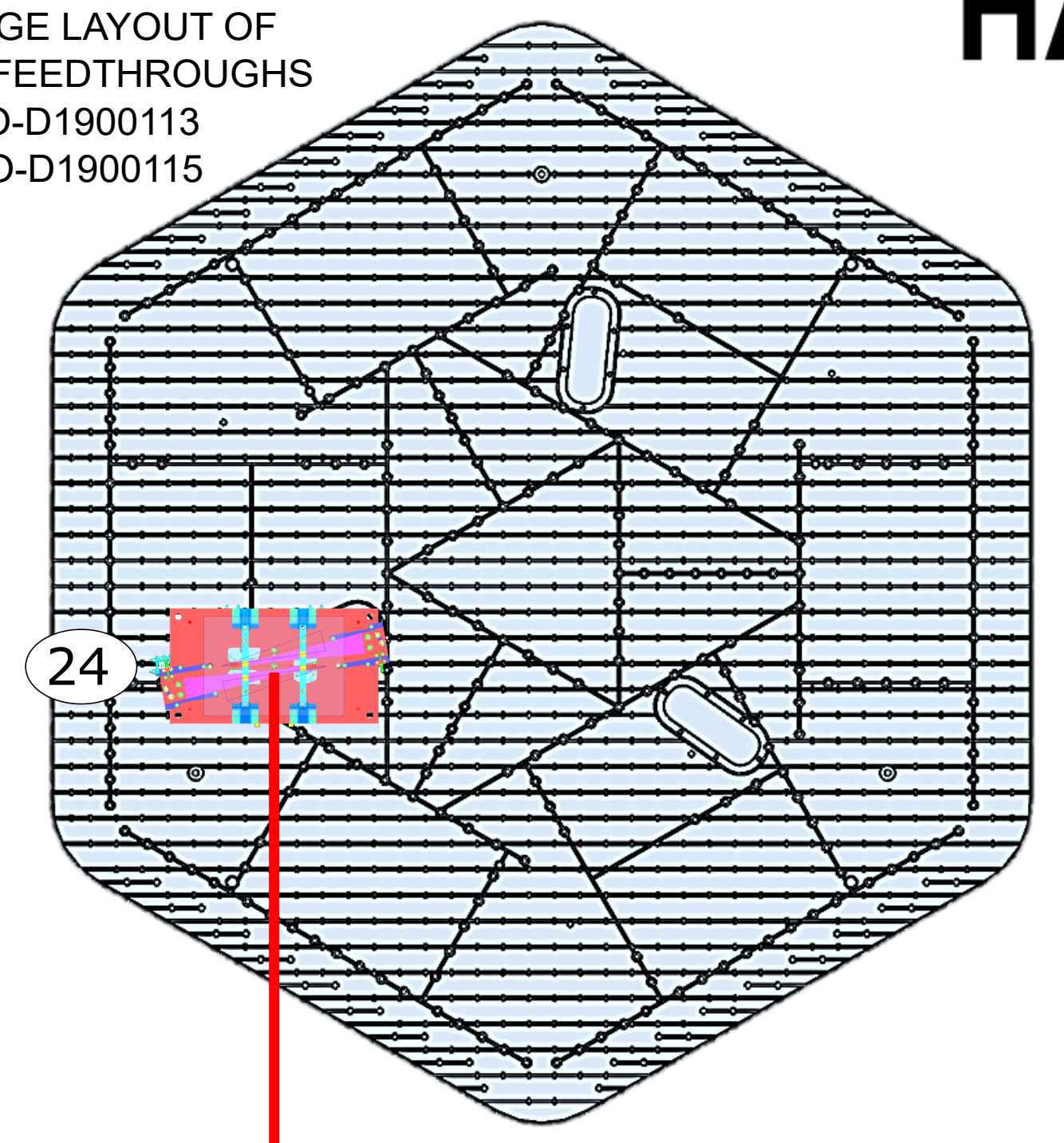
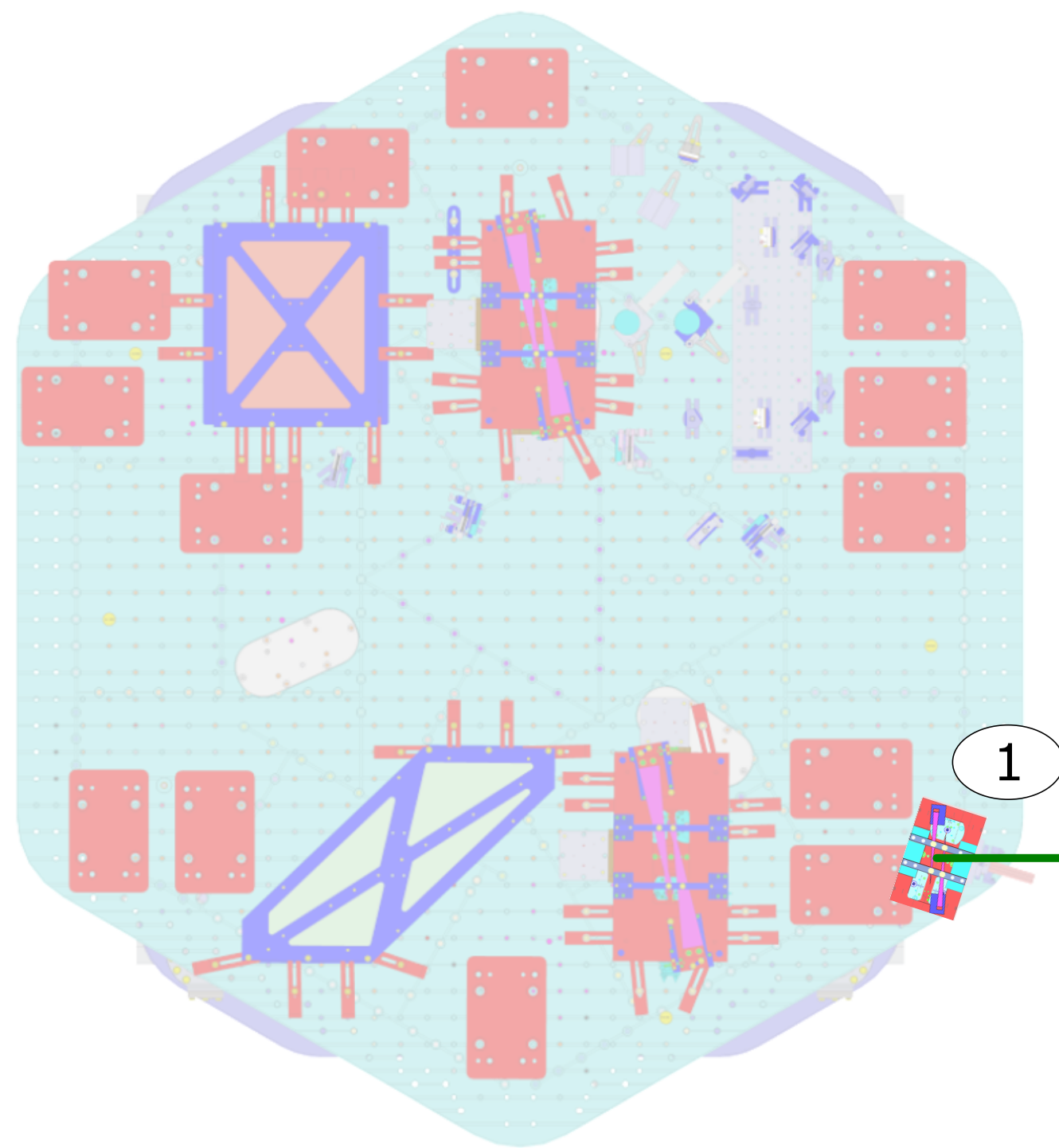


HAM8 FLANGE LAYOUT OF ELECTRICAL FEEDTHROUGHS  
L1: LIGO-D1900113  
H1: LIGO-D1900115

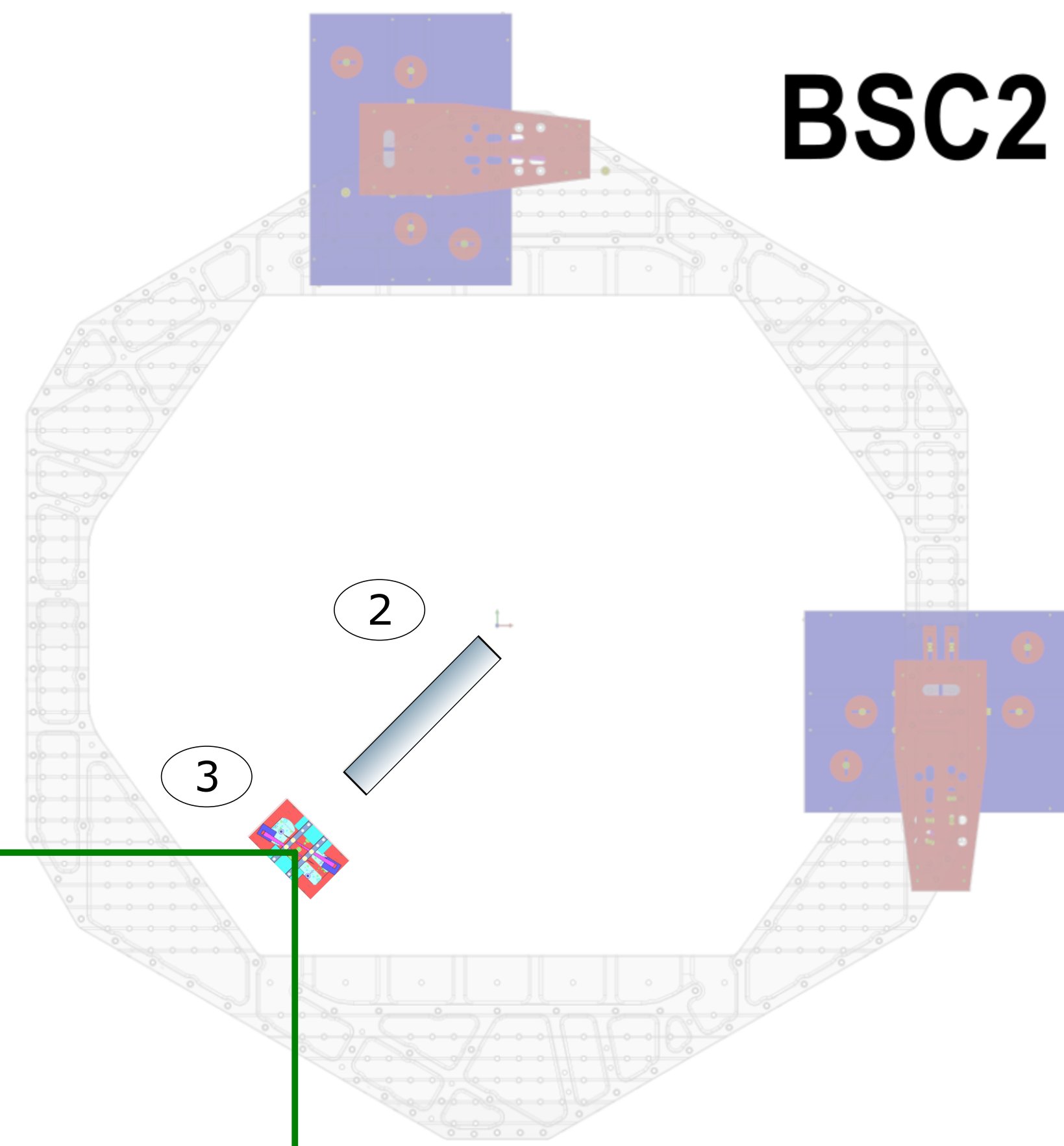


~300m long filter cavity

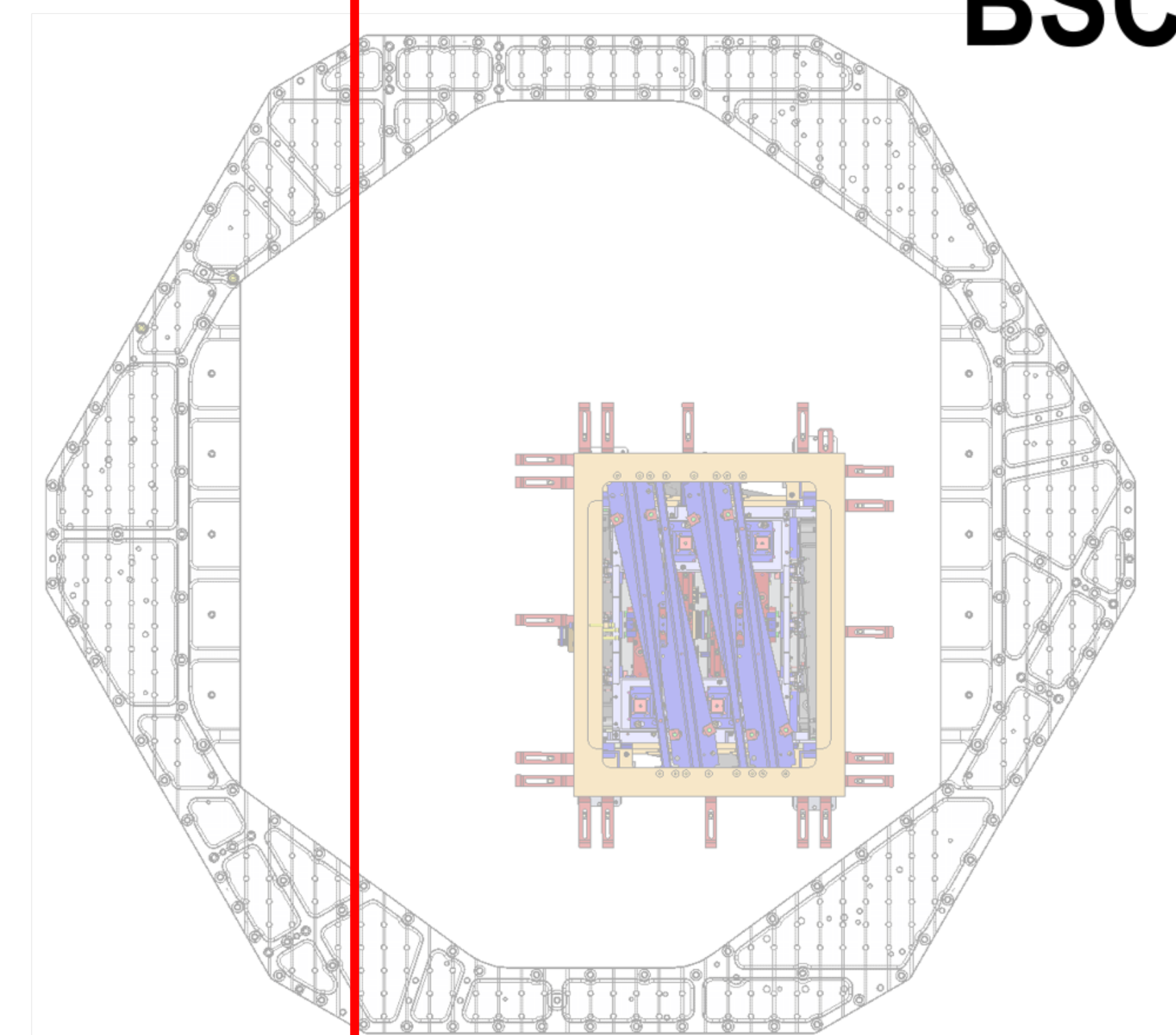
## HAM3



## BSC2



## BSC3



**LIGO-D1800027-v25**  
**Page 1 of 2**

## A+ CONCEPTUAL DESIGN

Completed A+ integrated layout (for observing run O5)

### DETAILS:

#### HAM3

- ① BHDBS1 (HRTS WITH BS, LO BEAM)

#### BSC2

- ② BS (BS 450mm DIAMETER)
- ③ BHDM1 (HRTS WITH MIRROR, LO BEAM)

#### HAM4

- ④ BHDL1 (HRTS WITH LENS, LO BEAM)

#### HAM5

- ⑤ ZM6 (HAM DOUBLE SUSPENSION, HDS)
- ⑥ LOW LOSS FARADAY ISOLATOR

#### HAM6

- ⑦ BHDBS2 (HRTS)
- ⑧ OM0 (HRTS)
- ⑨ OMA1 } (HDS +
- ⑩ OMA2 } ACTIVE MODE MATCHING STAGE, SAMS)
- ⑪ OMA3 } (HDS + DITHER)
- ⑫ OMAS }
- ⑬ OMB1 } (HDS + SAMS)
- ⑭ OMB2 }
- ⑮ OMB3 (HDS)
- ⑯ OMCA } ON SINGLE OMC PLATFORM
- ⑰ OMCB }

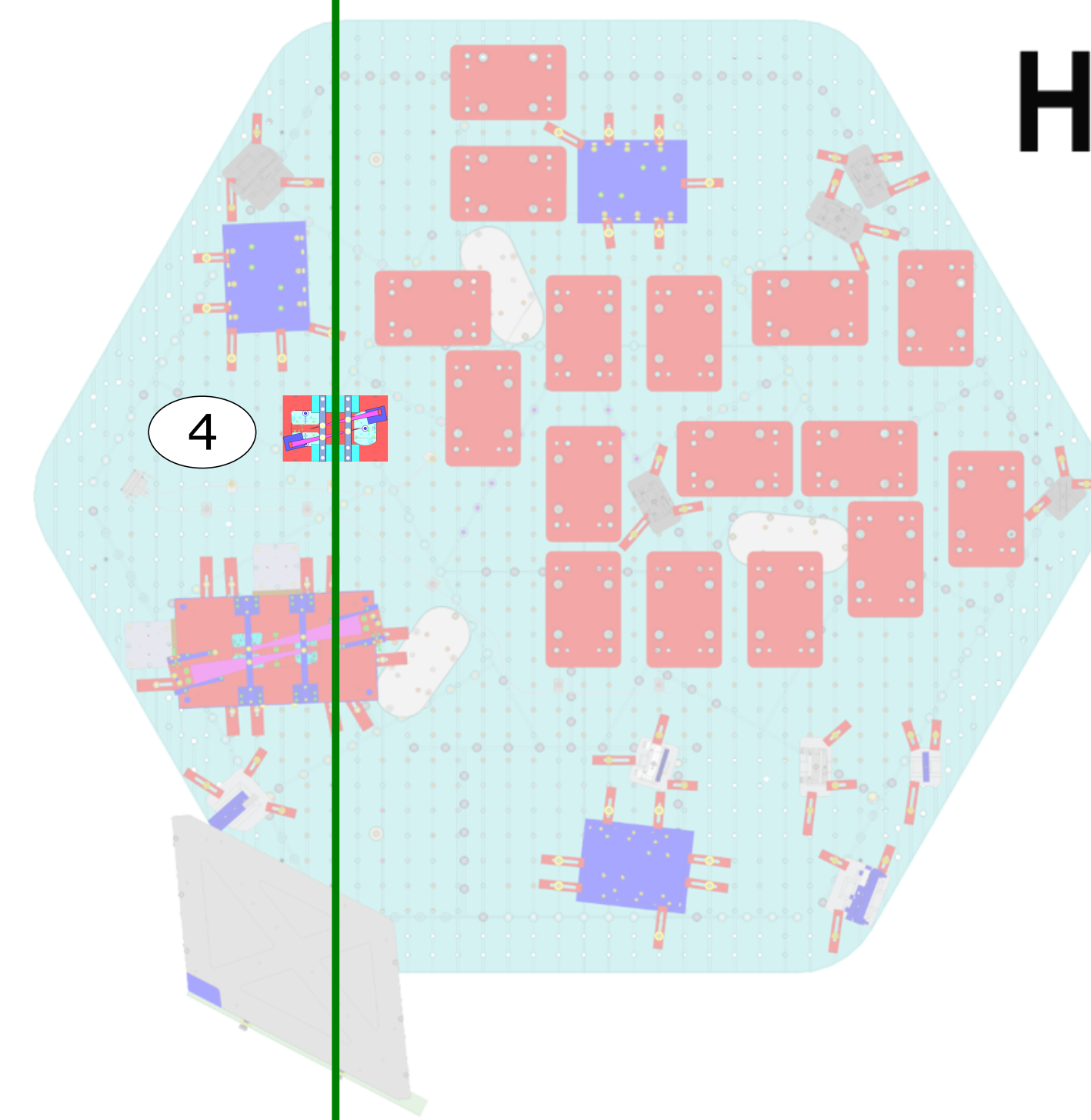
#### HAM7

- ⑱ ZM1 (HDS + DITHER)
- ⑲ ZM2 (HDS + SAMS)
- ⑳ ZM3 (HDS + DITHER)
- ㉑ ZM4 (HDS + SAMS)
- ㉒ ZM5 (HDS + SAMS)
- ㉓ FC1 (HSTS TRIPLE, FILTER CAVITY)

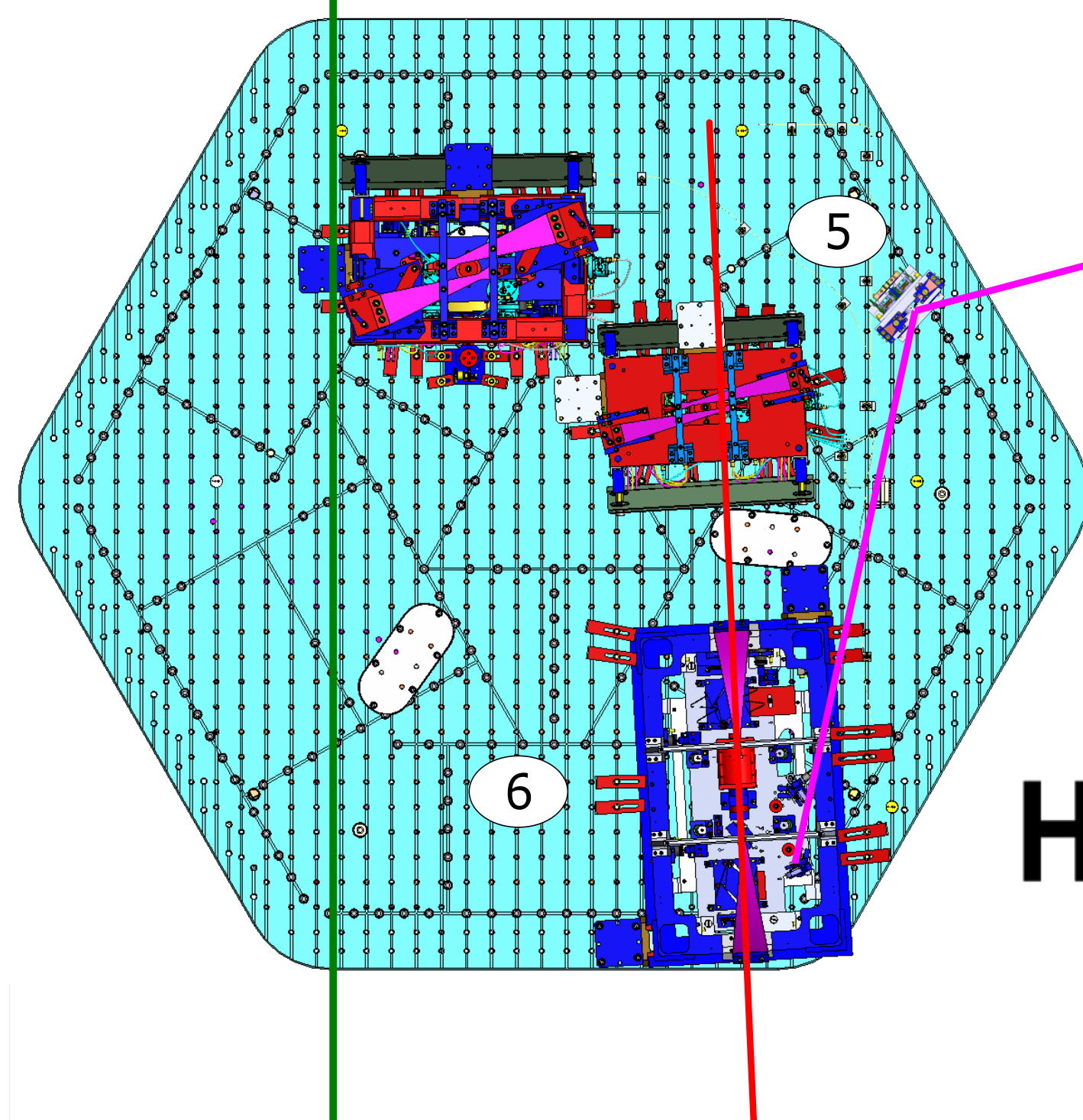
#### HAM8

- ㉔ FC2 (HSTS TRIPLE, FILTER CAVITY)

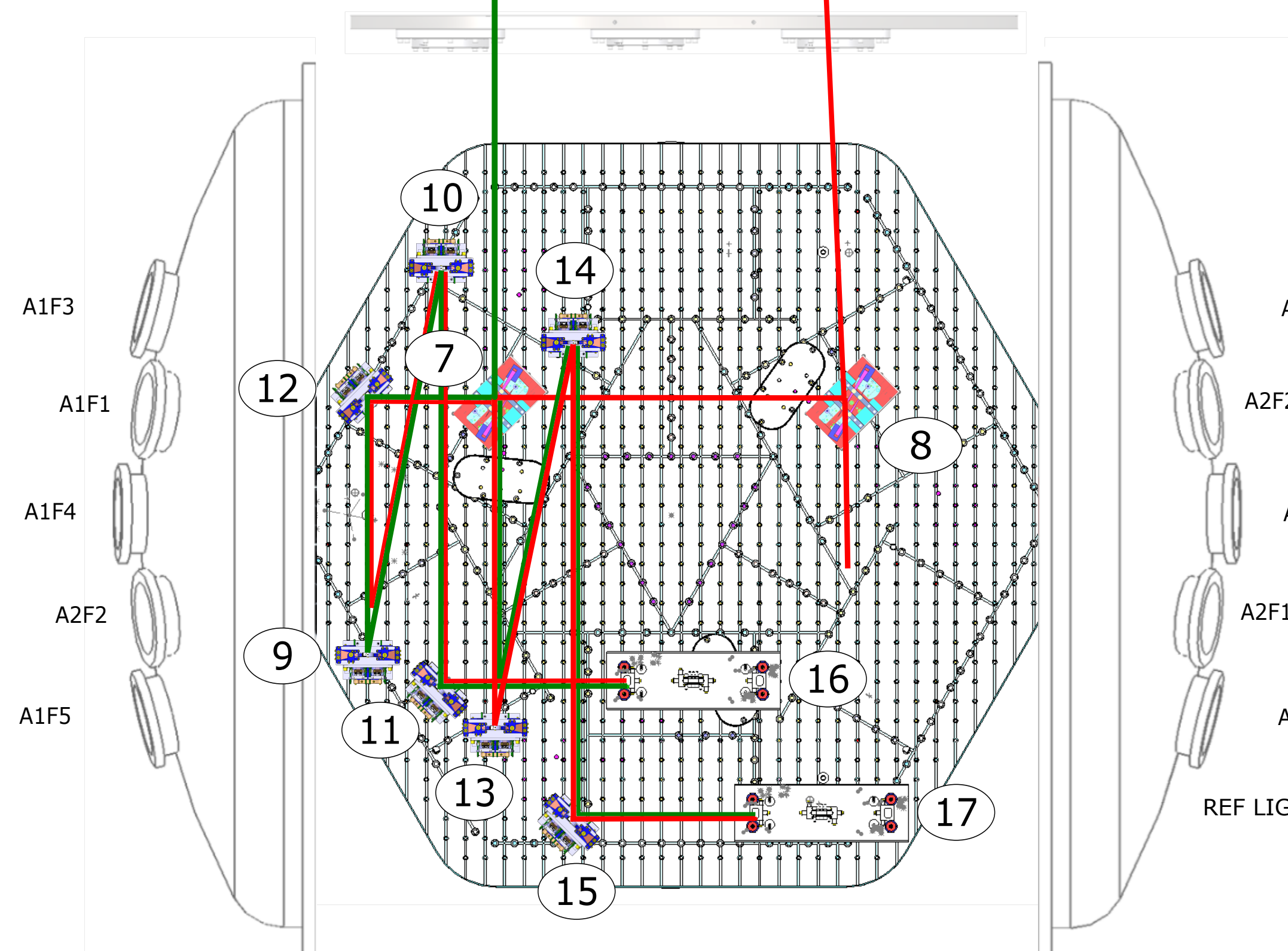
## HAM4



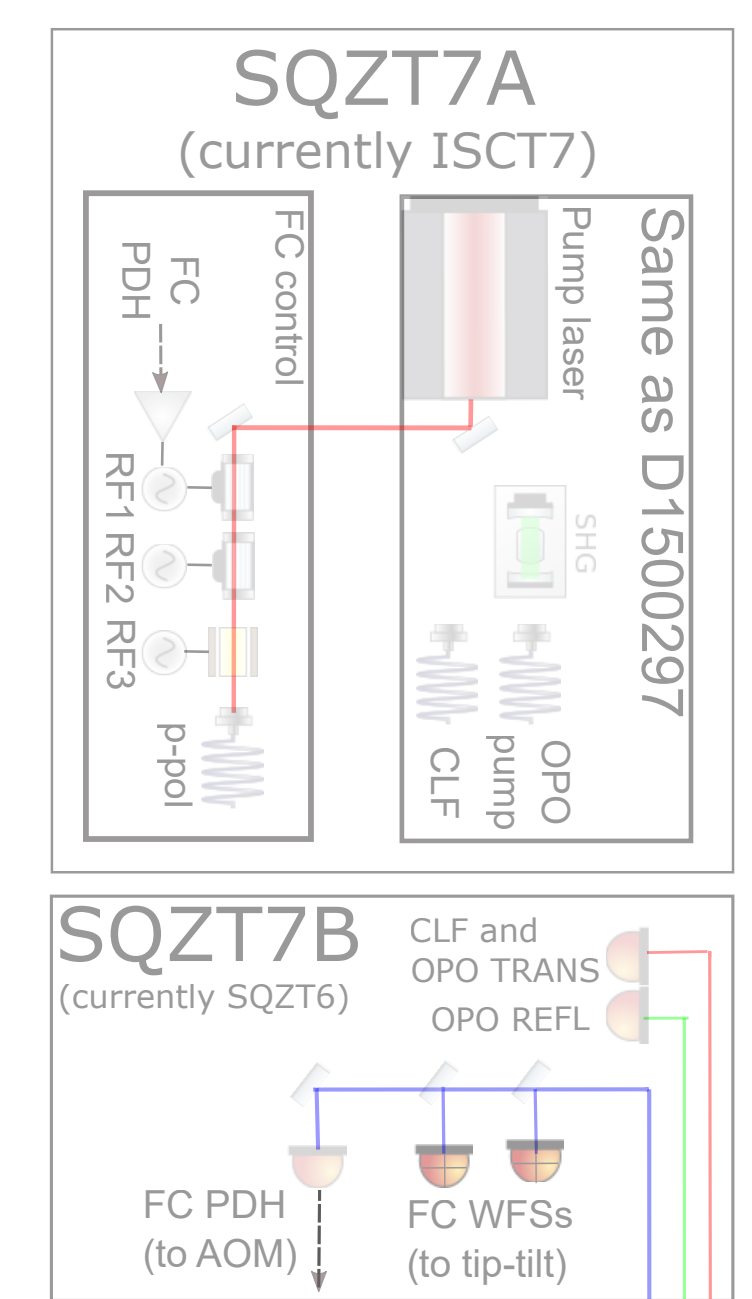
## HAM5



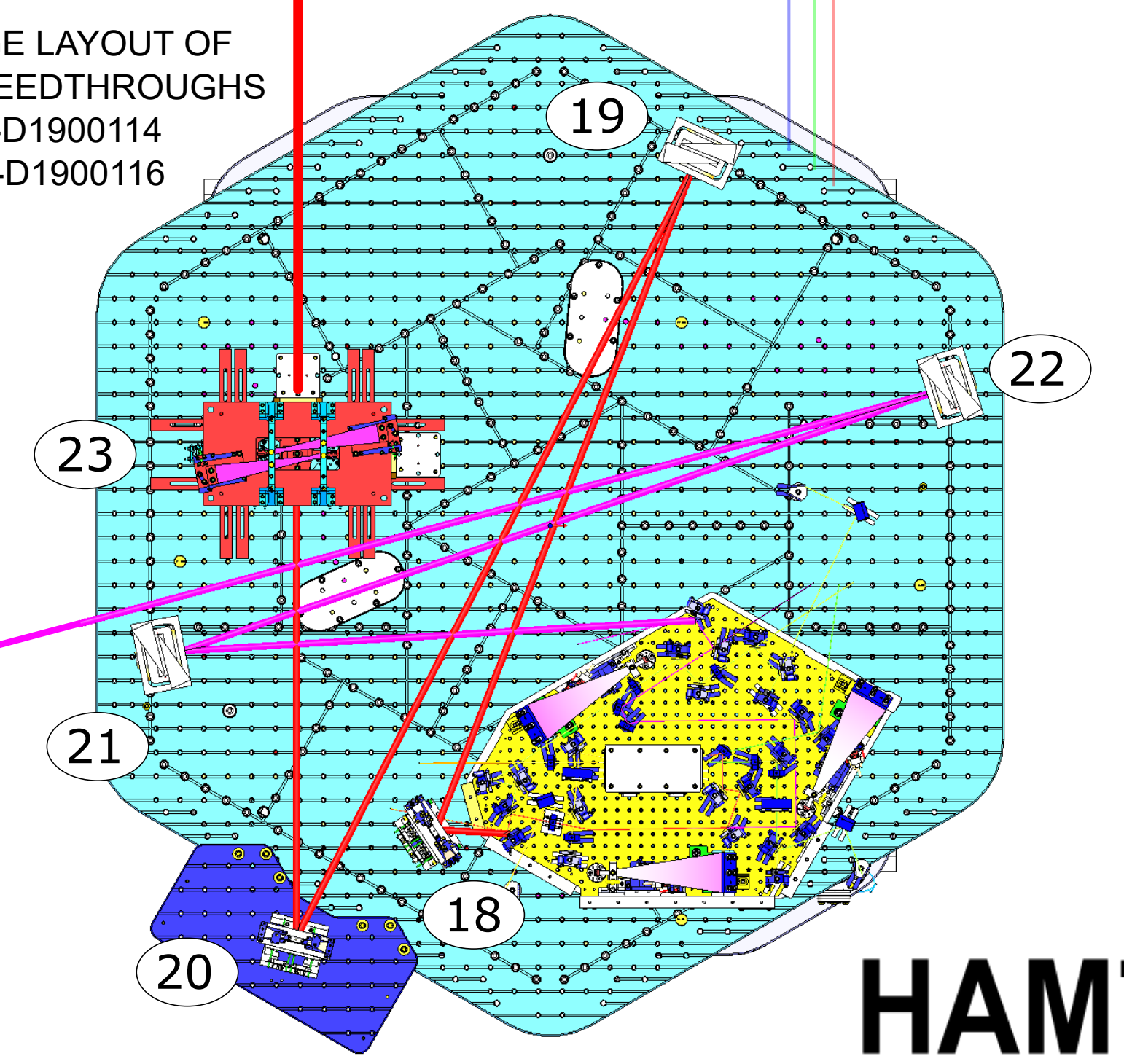
## HAM6



HAM7 FLANGE LAYOUT OF ELECTRICAL FEEDTHROUGHS  
L1: LIGO-D1900114  
H1: LIGO-D1900116



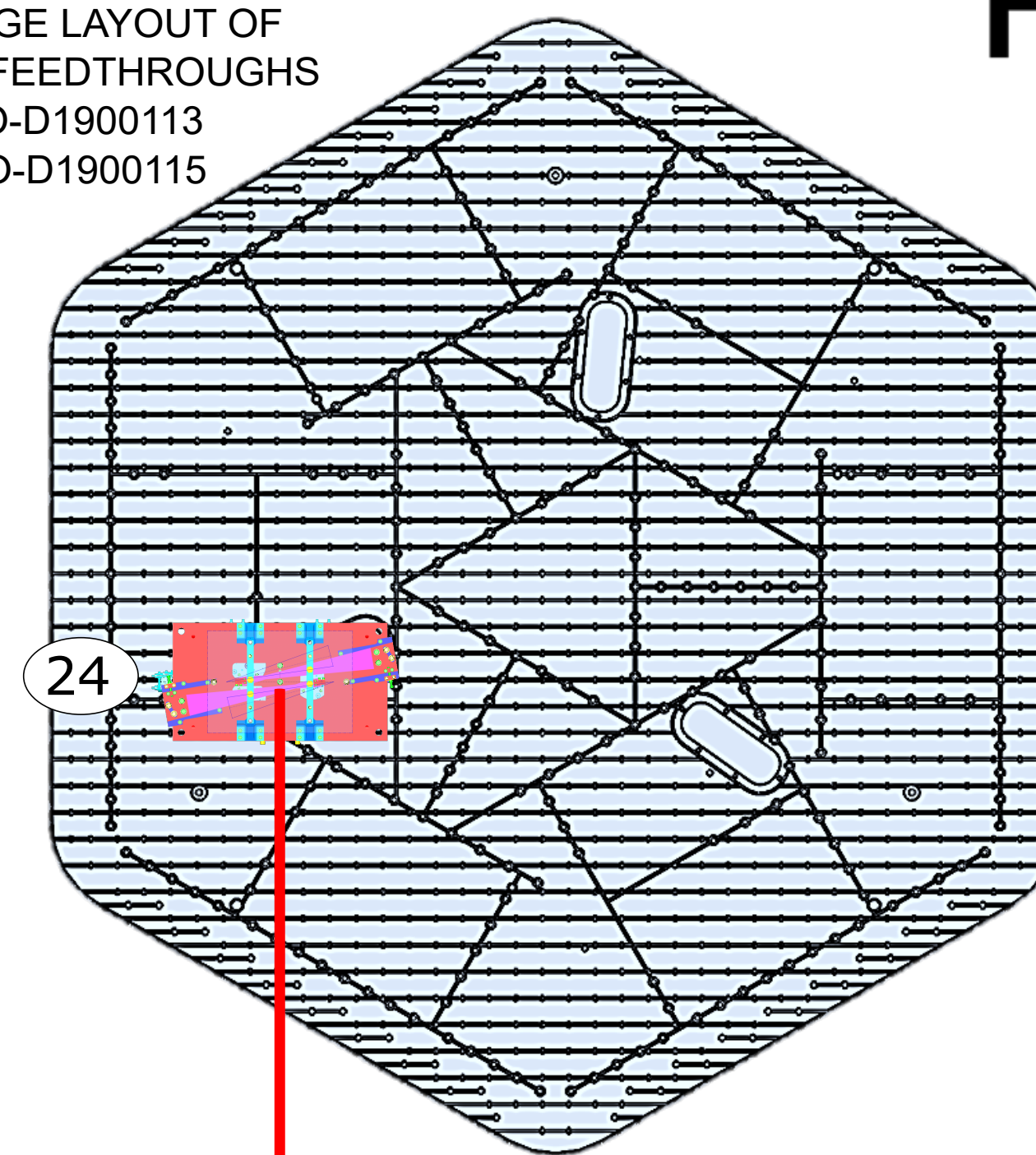
## HAM7





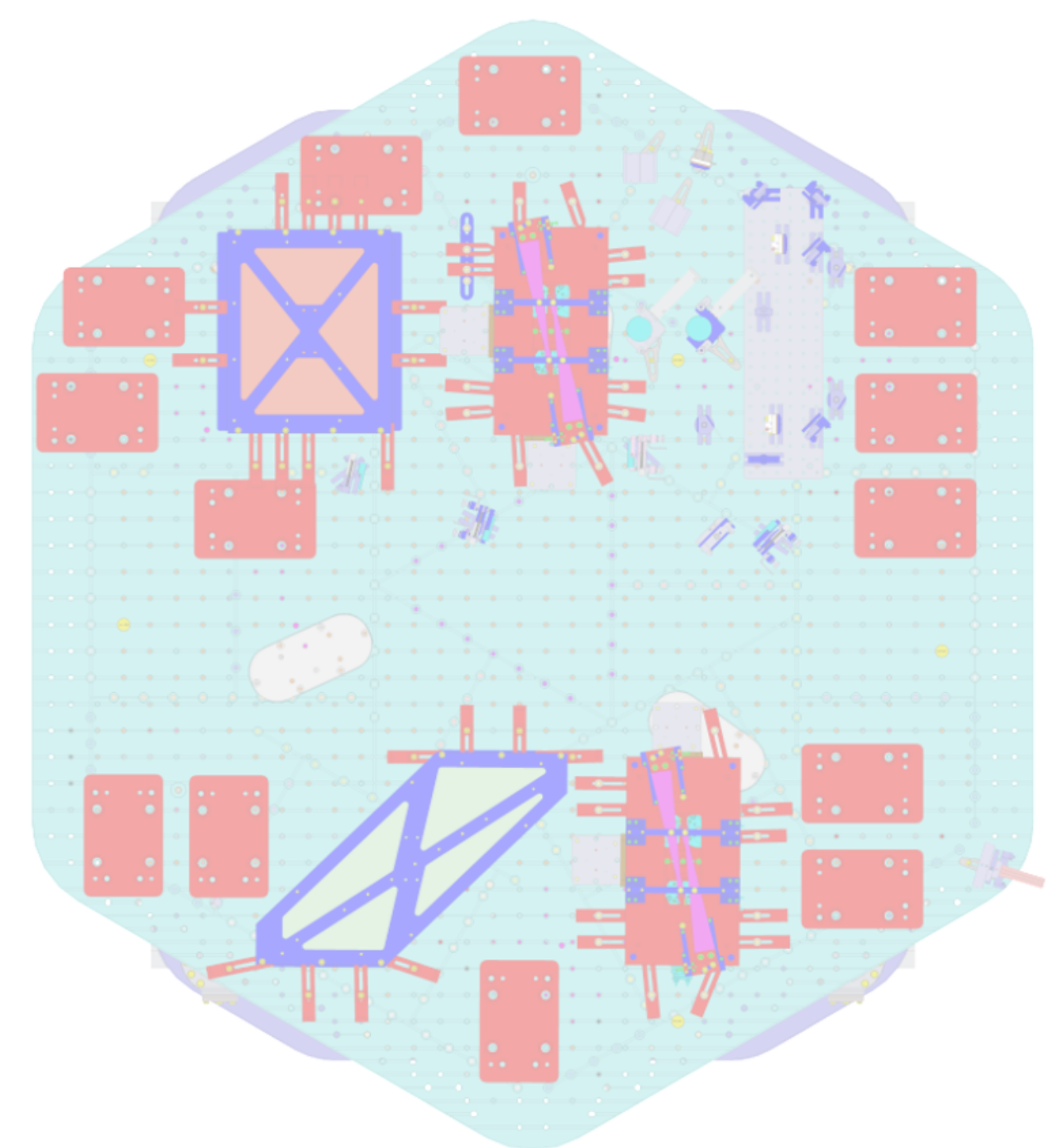
HAM8 FLANGE LAYOUT OF ELECTRICAL FEEDTHROUGHS  
L1: LIGO-D1900113  
H1: LIGO-D1900115

**HAM8**

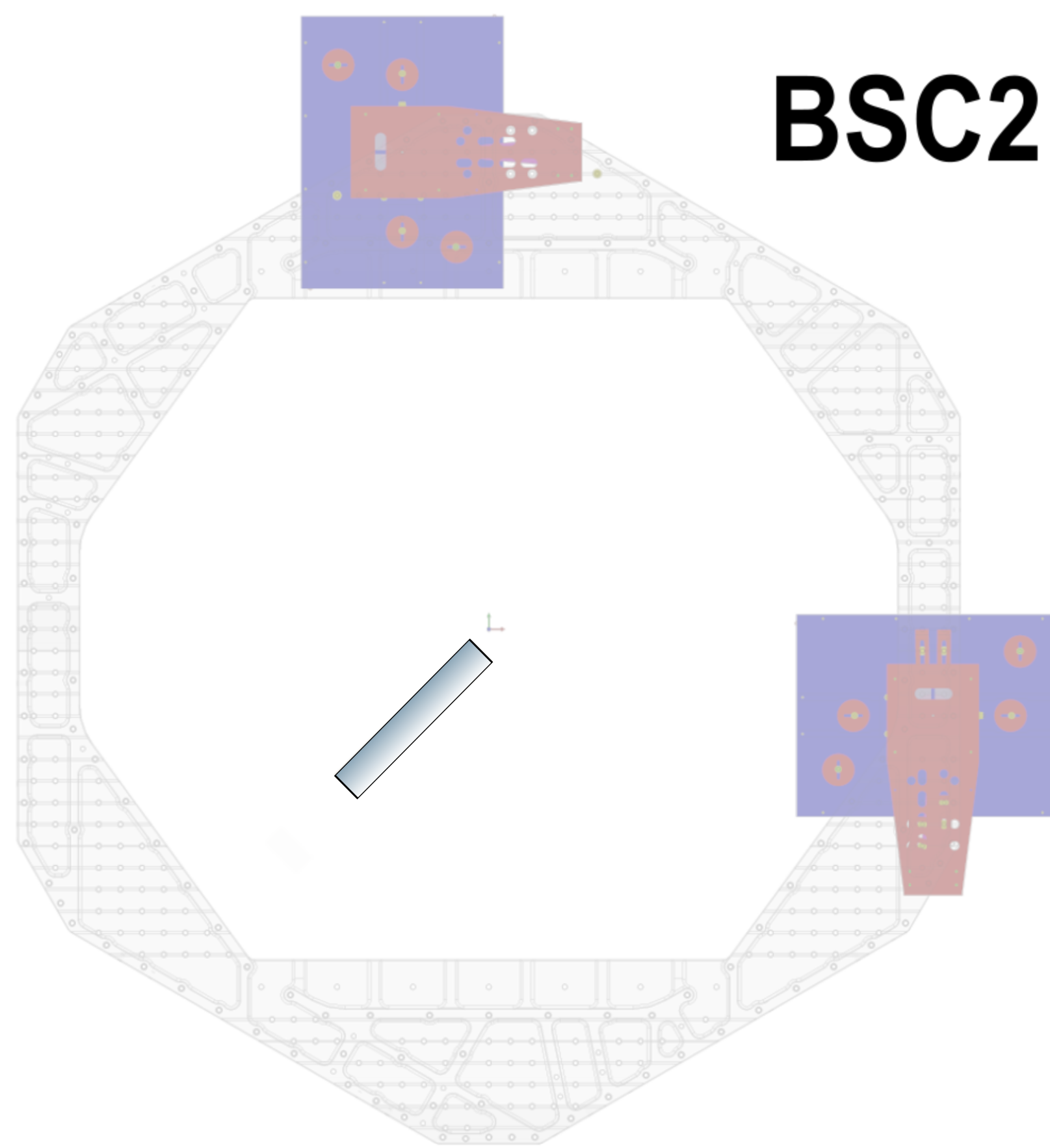


~300m long filter cavity

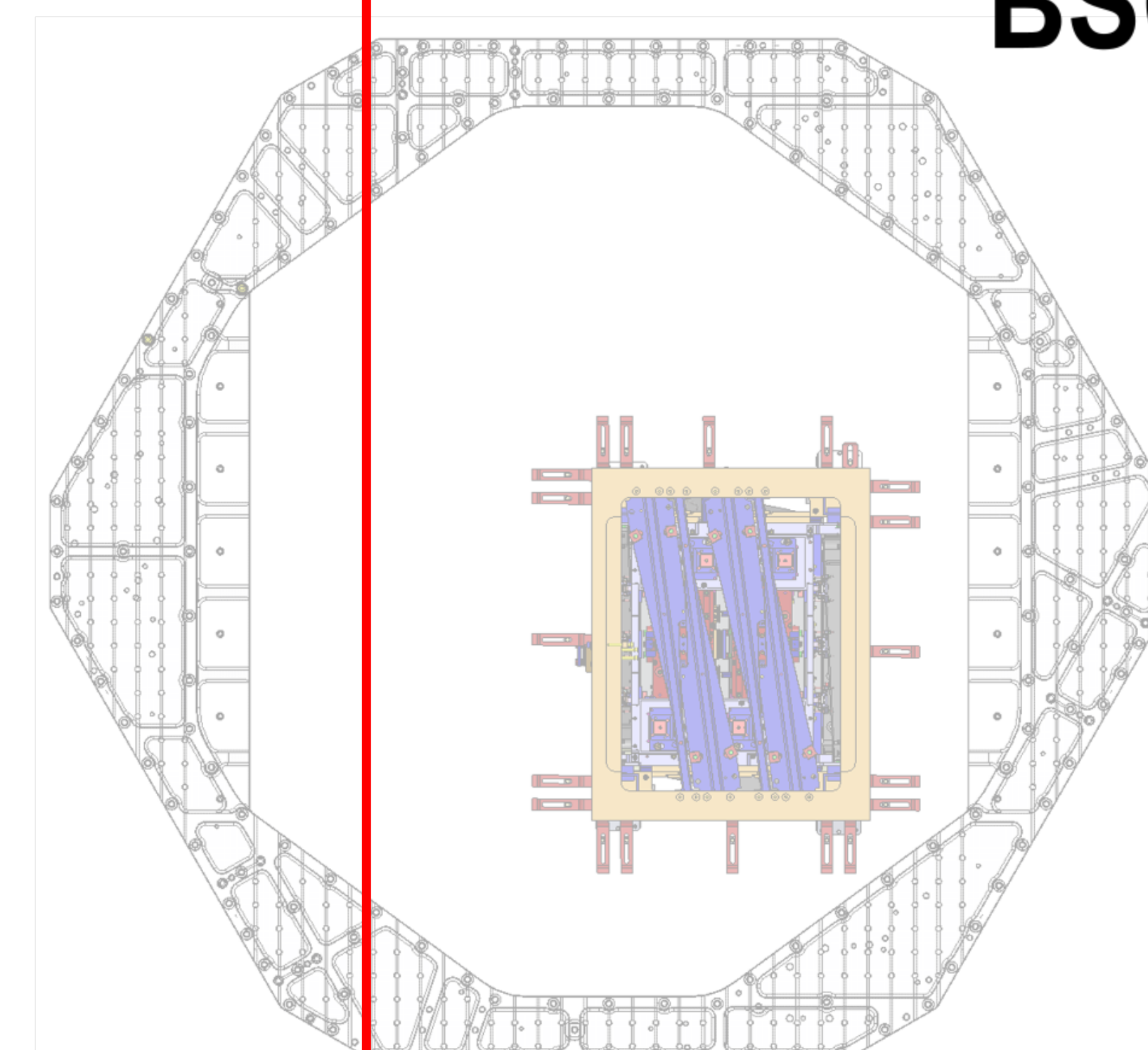
**HAM3**



**BSC2**



**BSC3**



**LIGO-D1800027-v25**  
**Page 2 of 2**

**A+ CONCEPTUAL DESIGN**

Partial A+ integrated layout  
(planned for observing run 04)

**DETAILS:**

**HAM3**

**BSC2**

**HAM4**

**HAM5**

- 5 ZM6 (HAM DOUBLE SUSPENSION, HDS or TIP-TILT)
- 6 LOW LOSS FARADAY ISOLATOR

**HAM6**

- 25 OM1 (HDS or TIP-TILT)
- 26 OM2 (HDS + SAMS)
- 27 OM3 (HDS or TIP-TILT)

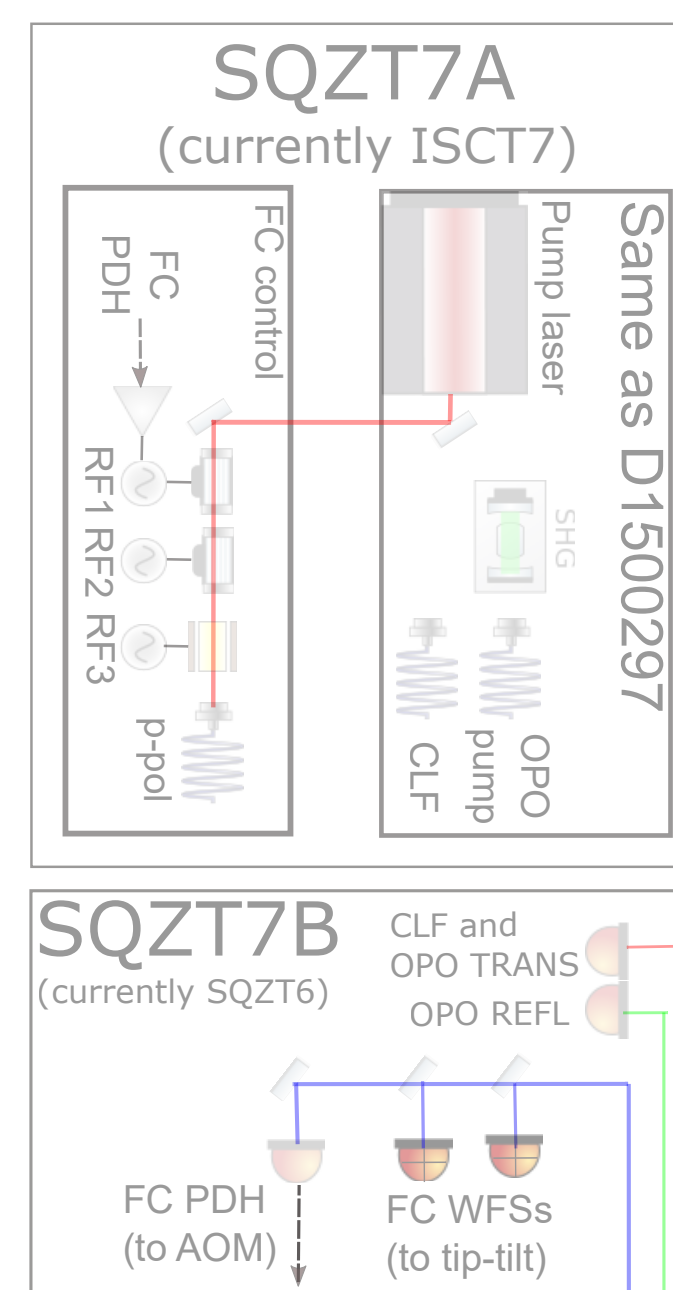
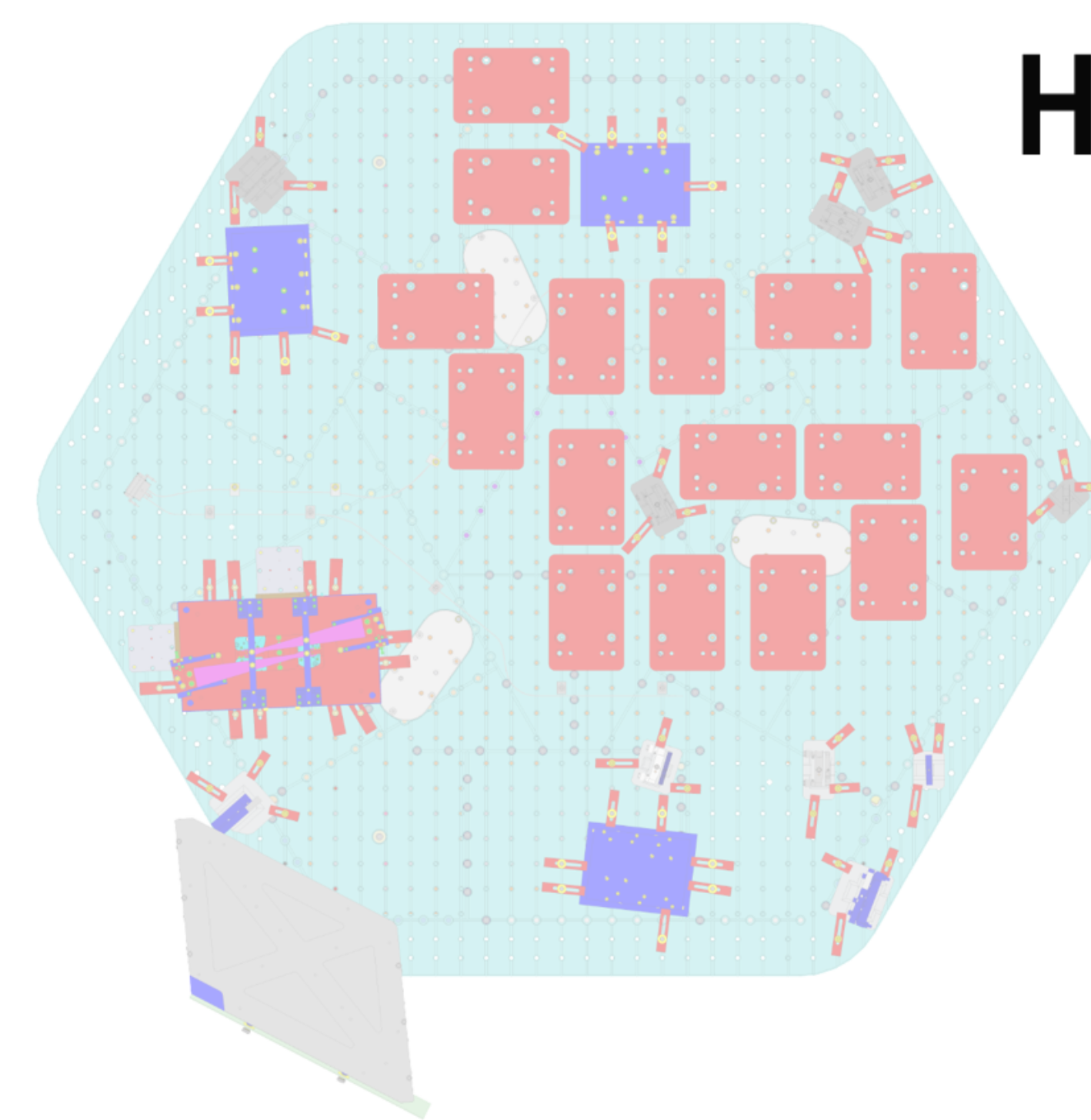
**HAM7**

- 18 ZM1 (HDS + DITHER or TIP-TILT)
- 19 ZM2 (HDS + SAMS)
- 20 ZM3 (HDS + DITHER or TIP-TILT)
- 21 ZM4 (HDS + SAMS)
- 22 ZM5 (HDS + SAMS)
- 23 FC1 (HSTS TRIPLE, FILTER CAVITY)

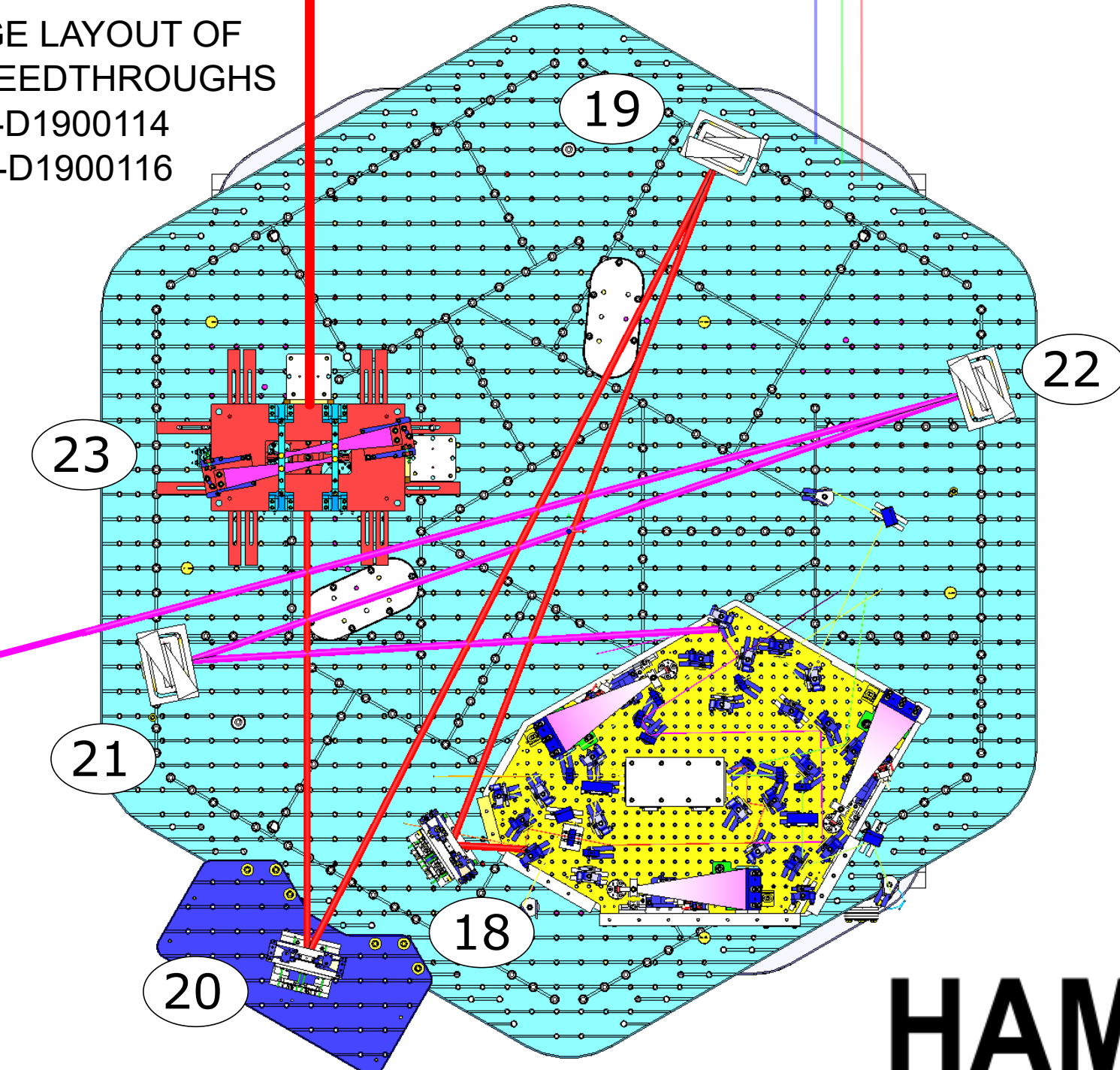
**HAM8**

- 24 FC2 (HSTS TRIPLE, FILTER CAVITY)

**HAM4**

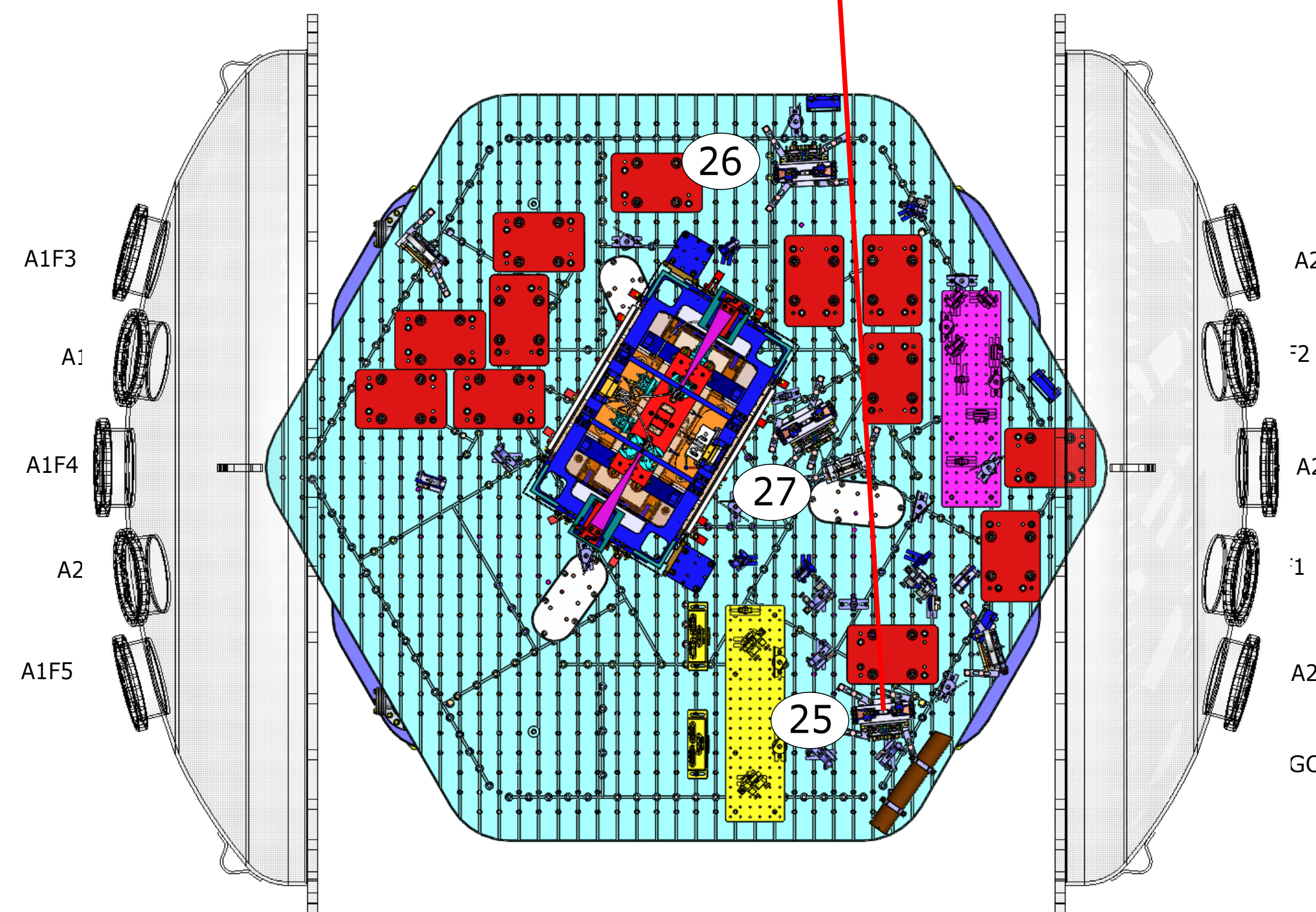
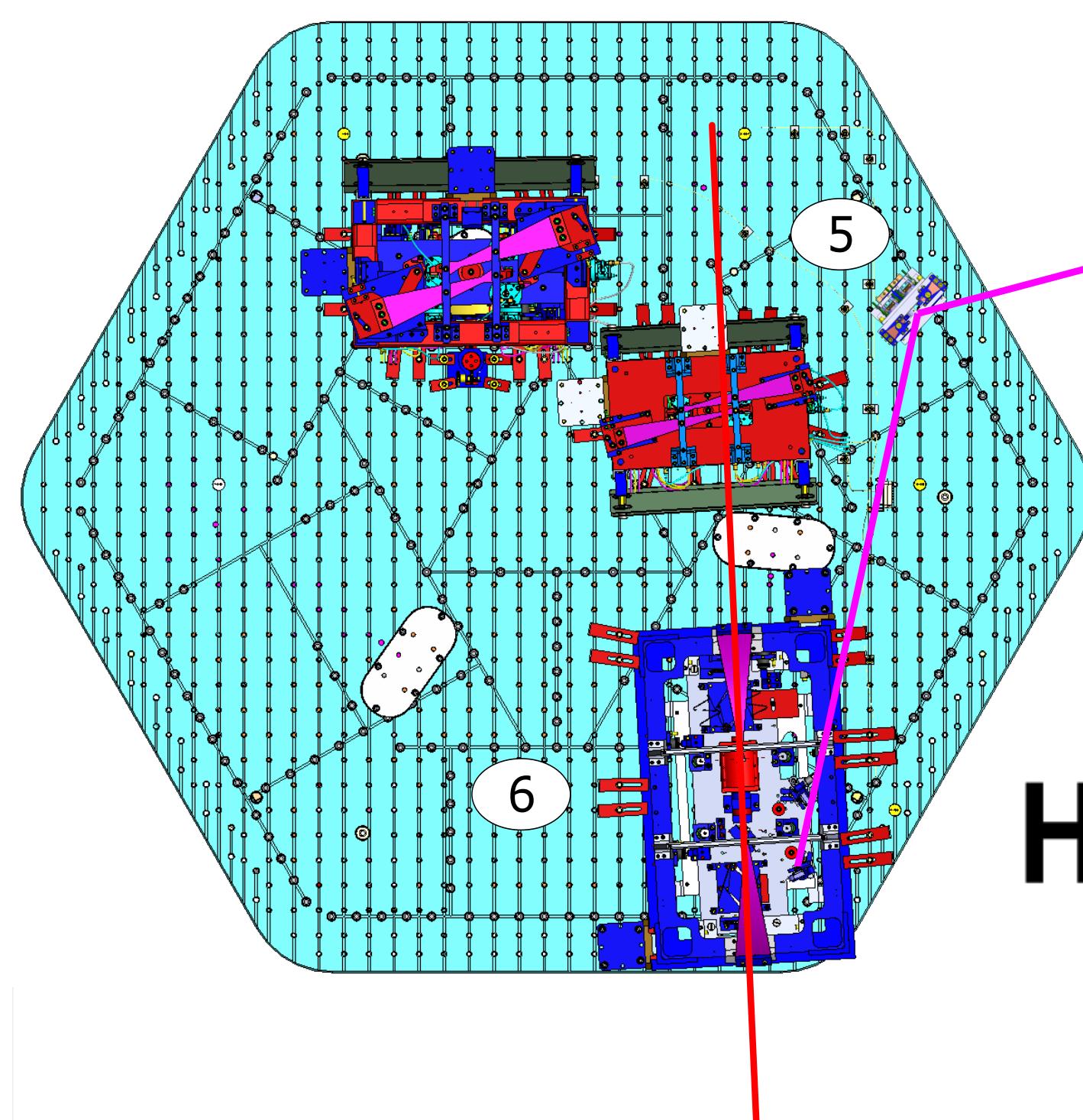


HAM7 FLANGE LAYOUT OF ELECTRICAL FEEDTHROUGHS  
L1: LIGO-D1900114  
H1: LIGO-D1900116



**HAM7**

**HAM5**



**HAM6**