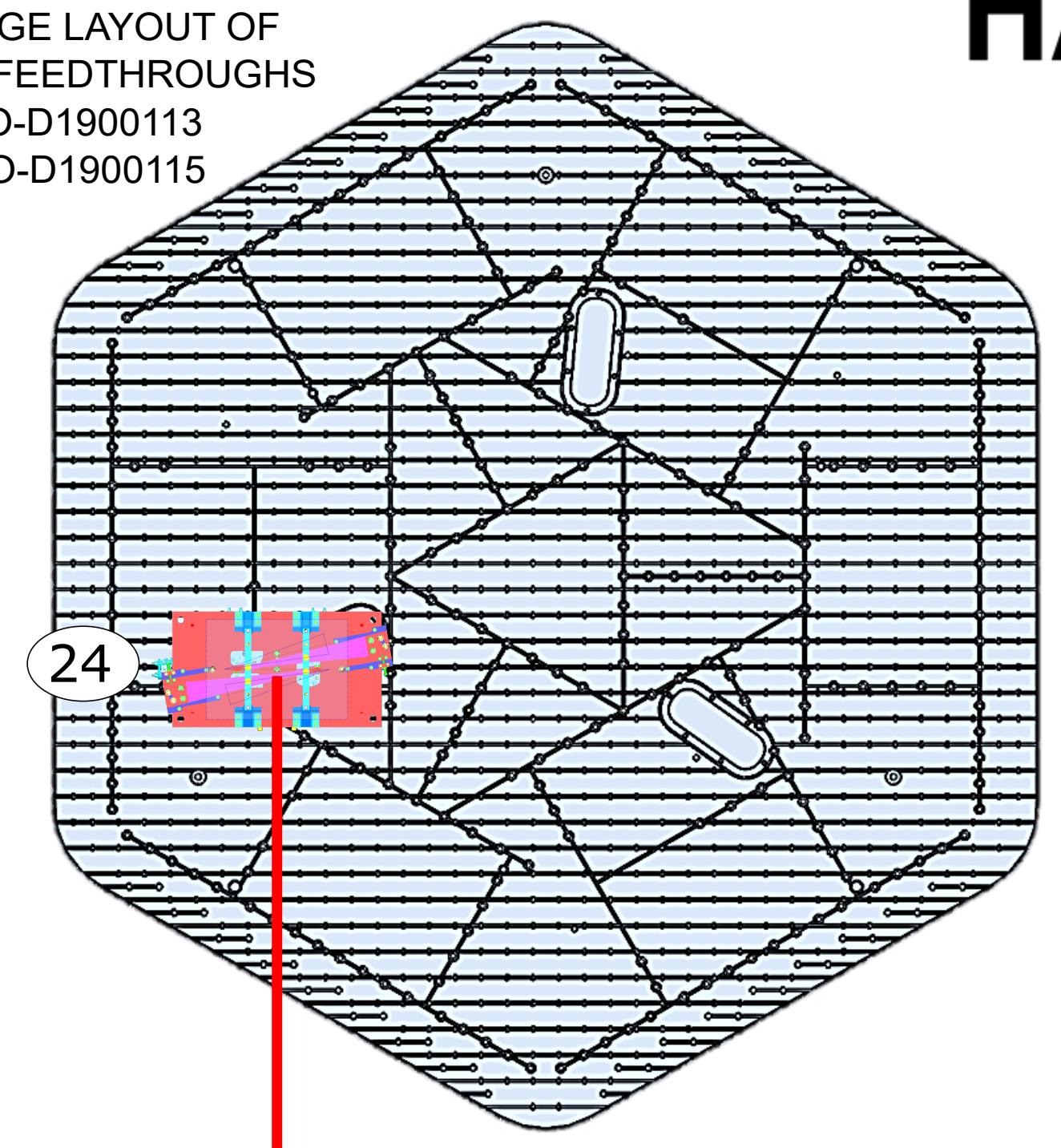
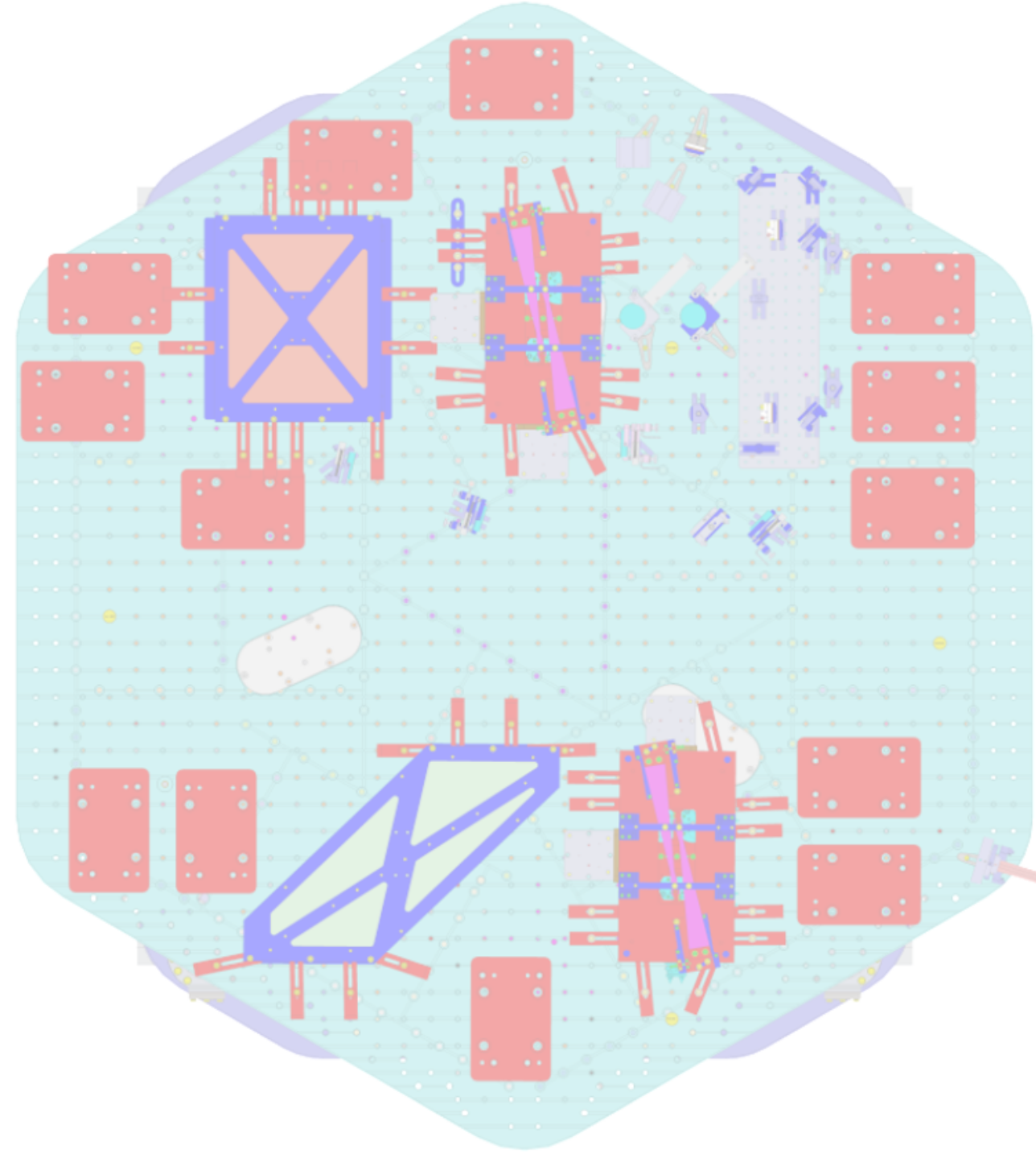


HAM8 FLANGE LAYOUT OF ELECTRICAL FEEDTHROUGHS  
L1: LIGO-D1900113  
H1: LIGO-D1900115

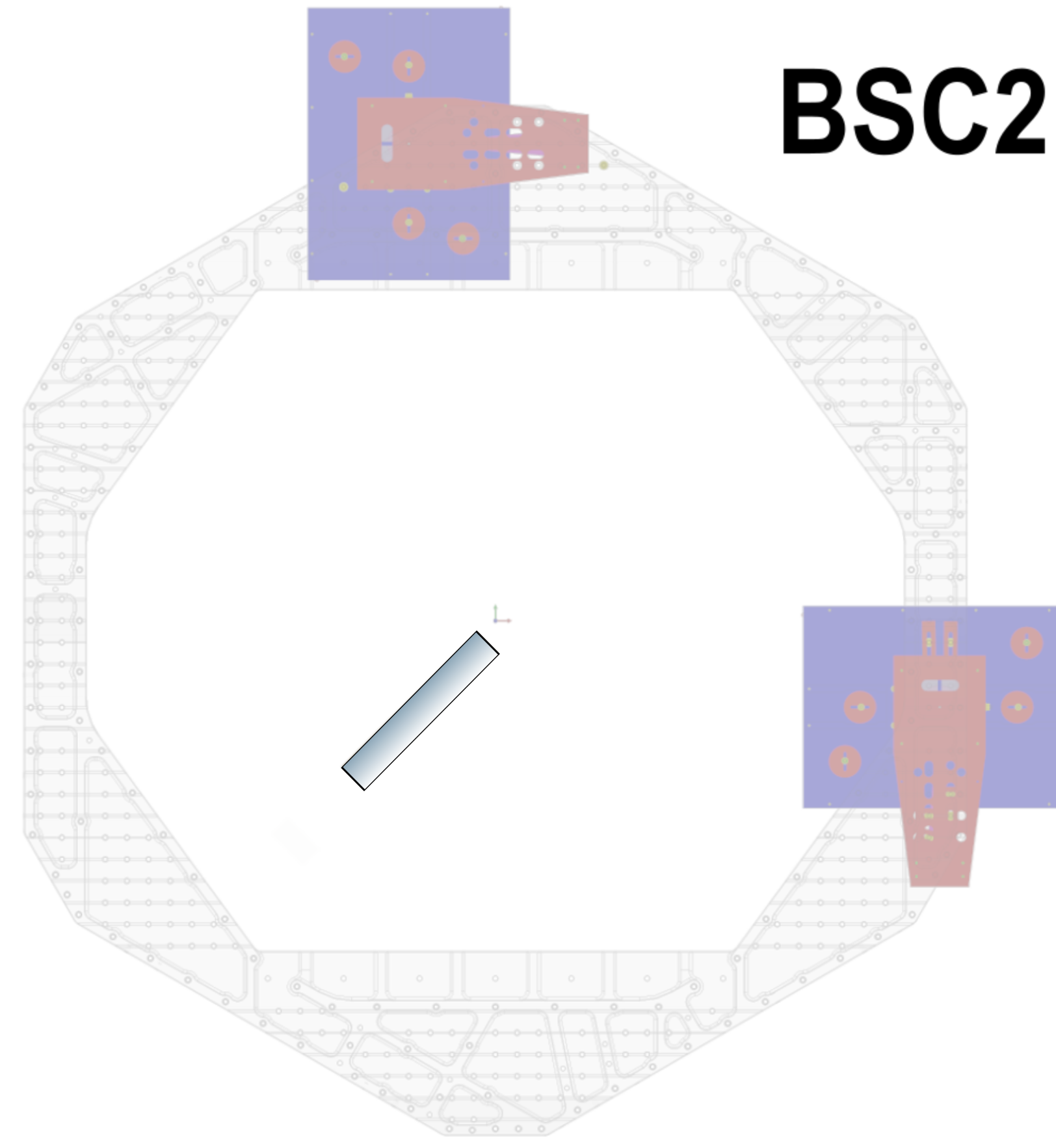


~300m long filter cavity

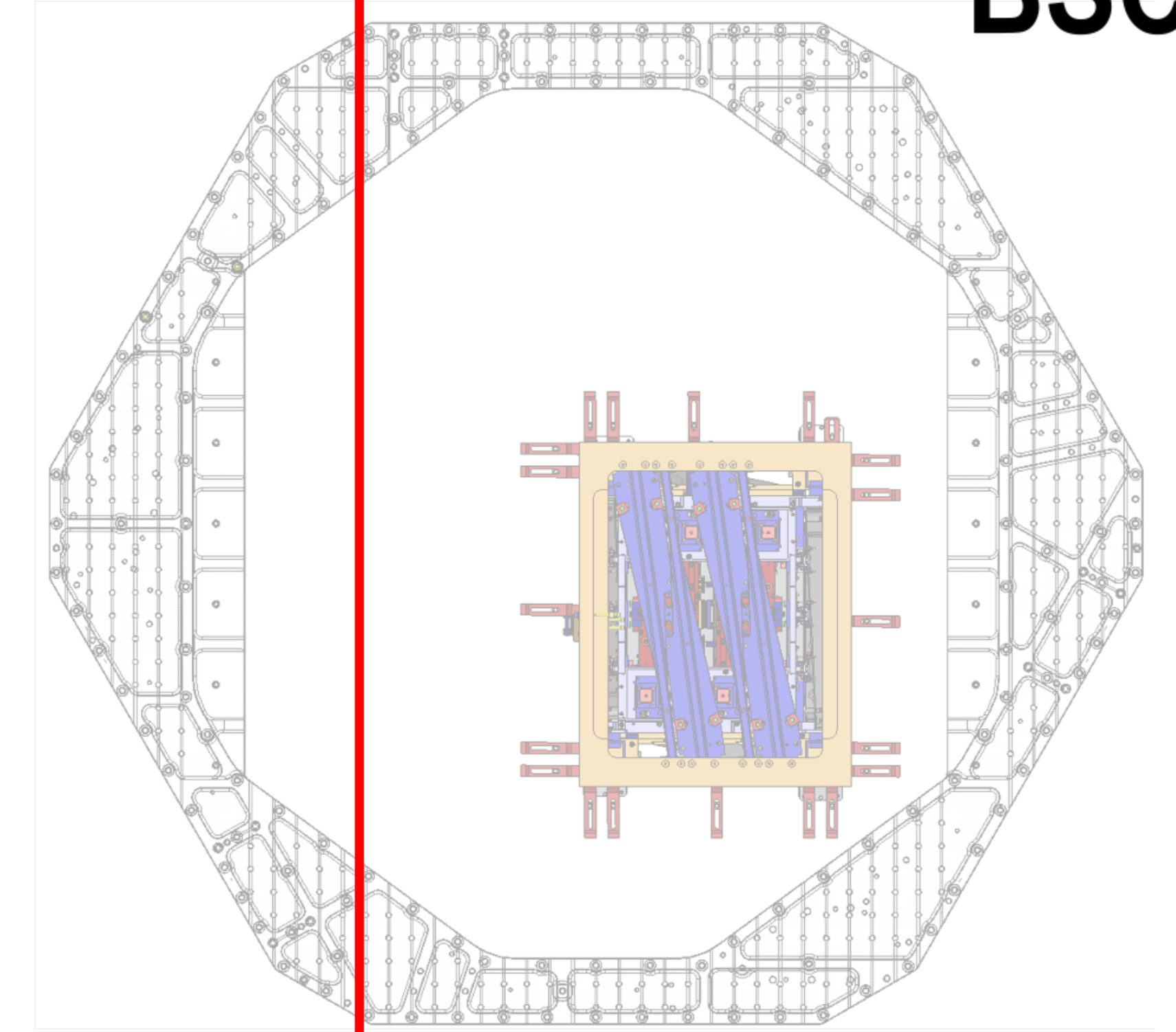
## HAM3



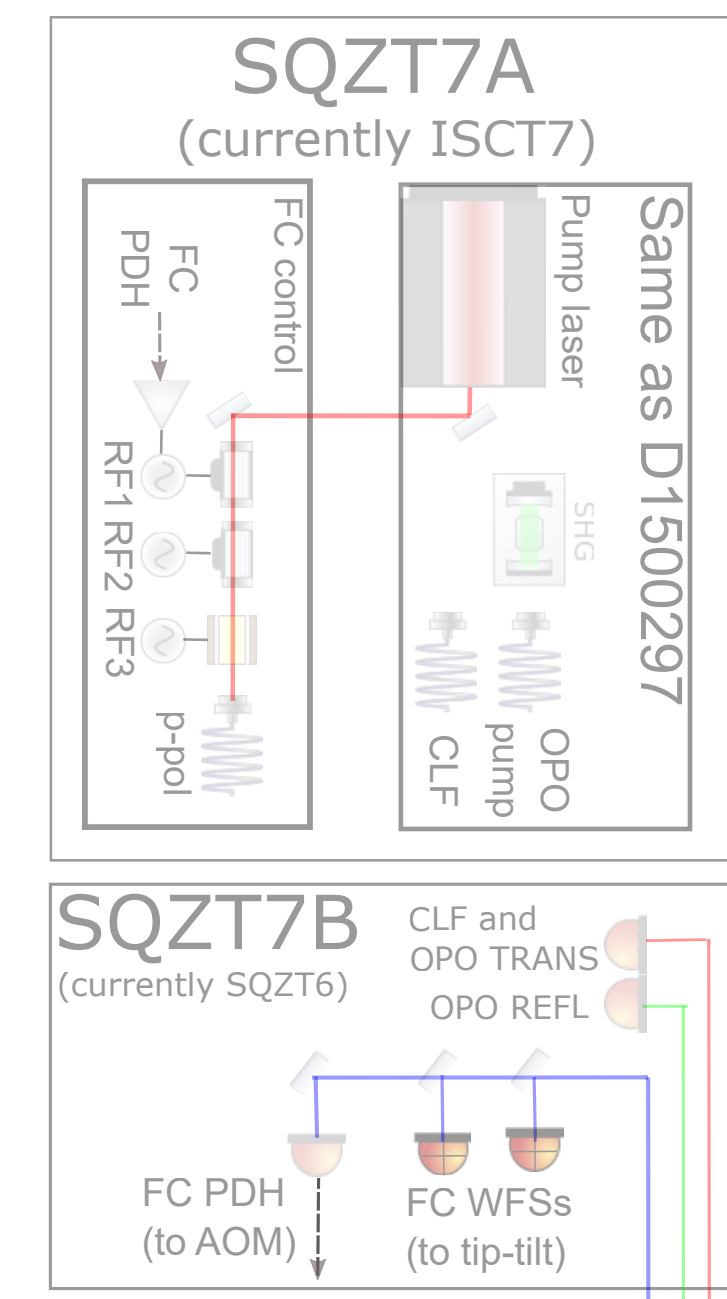
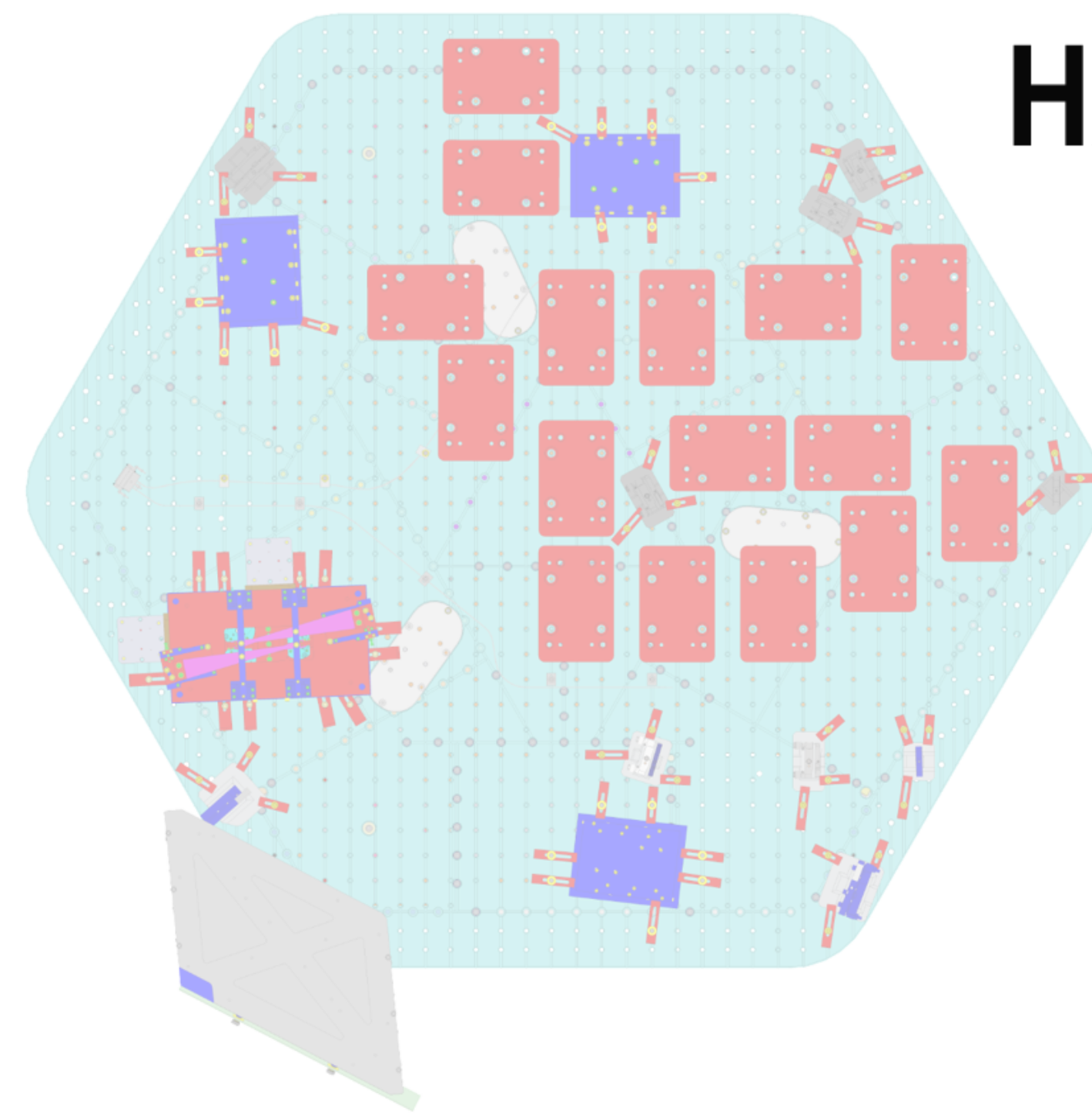
## BSC2



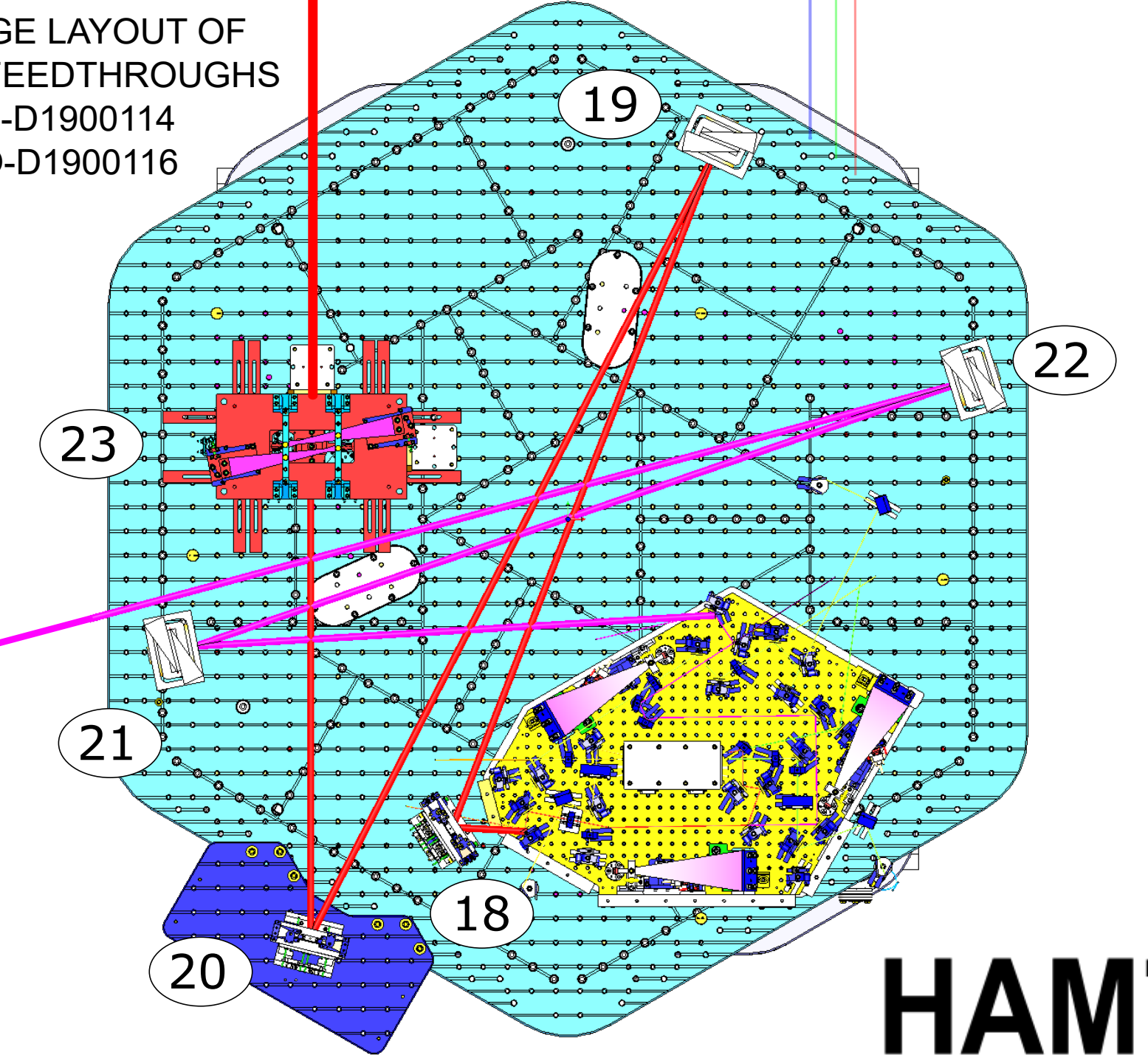
## BSC3



## HAM4

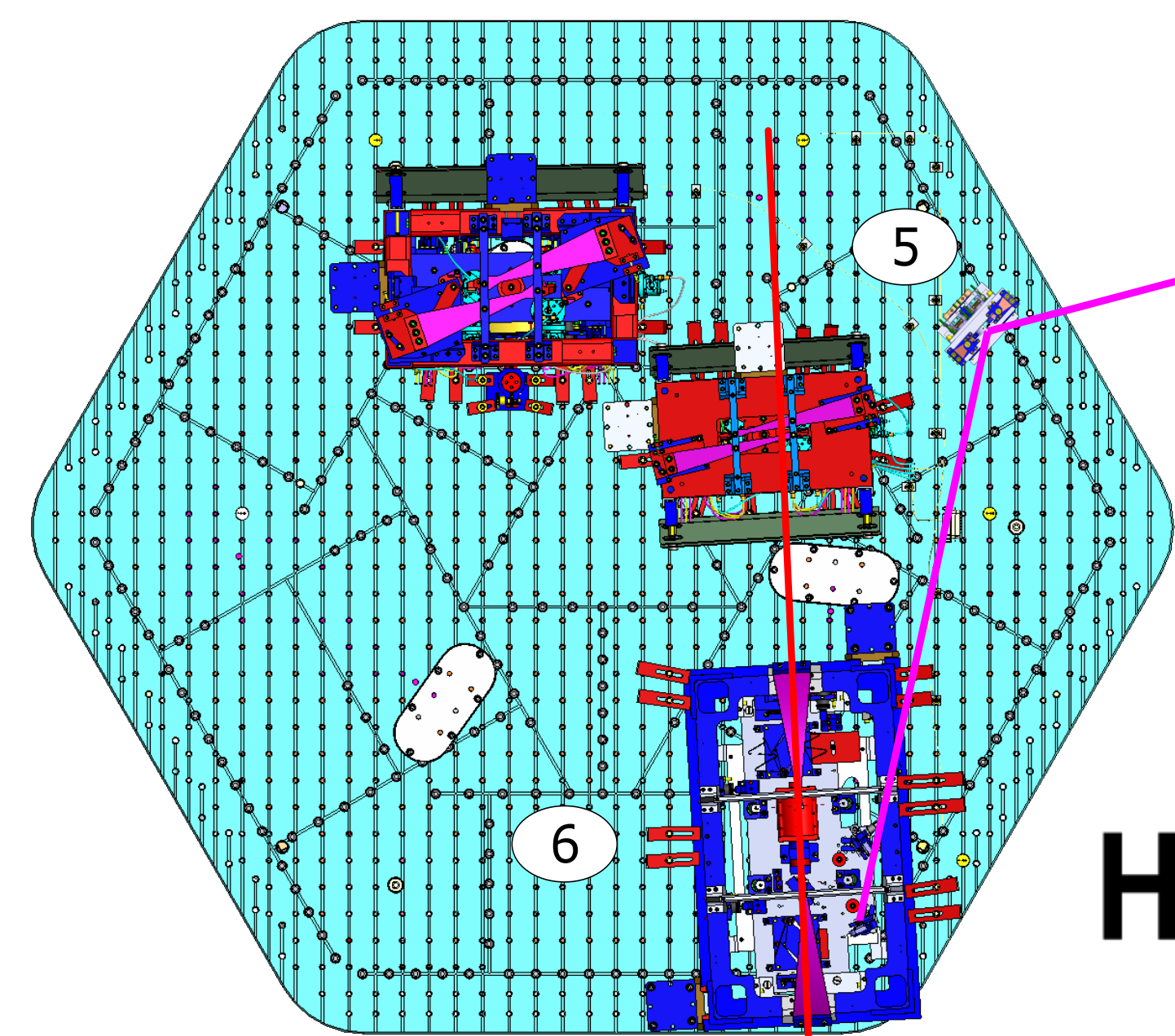


HAM7 FLANGE LAYOUT OF ELECTRICAL FEEDTHROUGHS  
L1: LIGO-D1900114  
H1: LIGO-D1900116



## HAM7

## HAM5



# LIGO-D1800027-v26

Page 1 of 2

## A+ CONCEPTUAL DESIGN

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

### DETAILS:

#### HAM3

#### BSC2

#### HAM4

#### HAM5

- 5 ZM6 (HSDS, Double SUS)
- 6 LOW LOSS FARADAY ISOLATOR

#### HAM6

SEE BELOW

#### HAM7

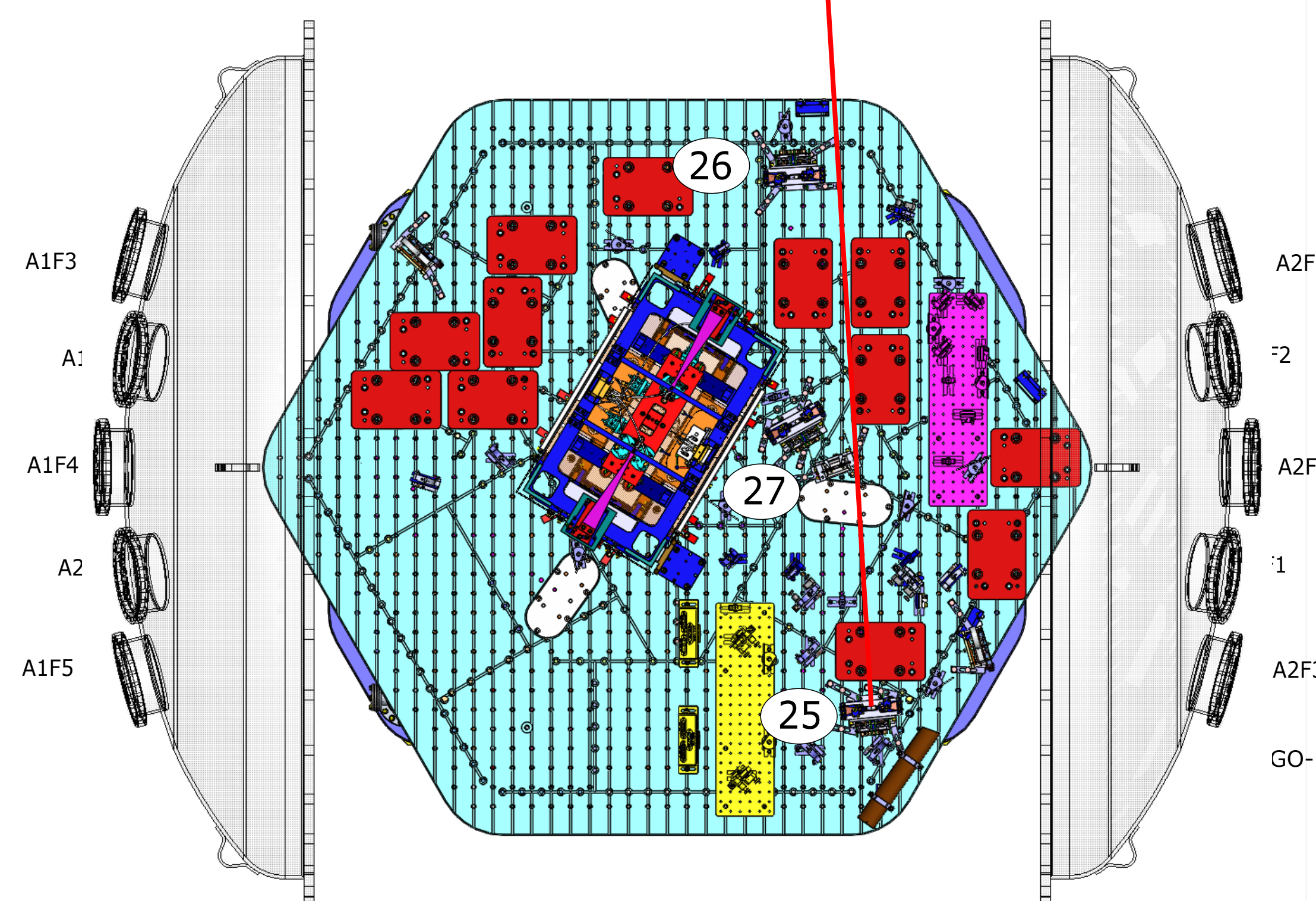
- 18 ZM1 (HDDS, Double SUS w/ Dither)
- 19 ZM2 (HPDS, Double SUS w/ Piezo SAMS)
- 20 ZM3 (HDDS, Double SUS w/ Dither)
- 21 ZM4 (HPDS, Double SUS w/ Piezo SAMS)
- 22 ZM5 (HPDS, Double SUS w/ Piezo SAMS)
- 23 FC1 (HSTS TRIPLE, FILTER CAVITY)

#### HAM8

- 24 FC2 (HSTS TRIPLE, FILTER CAVITY)

#### HAM6

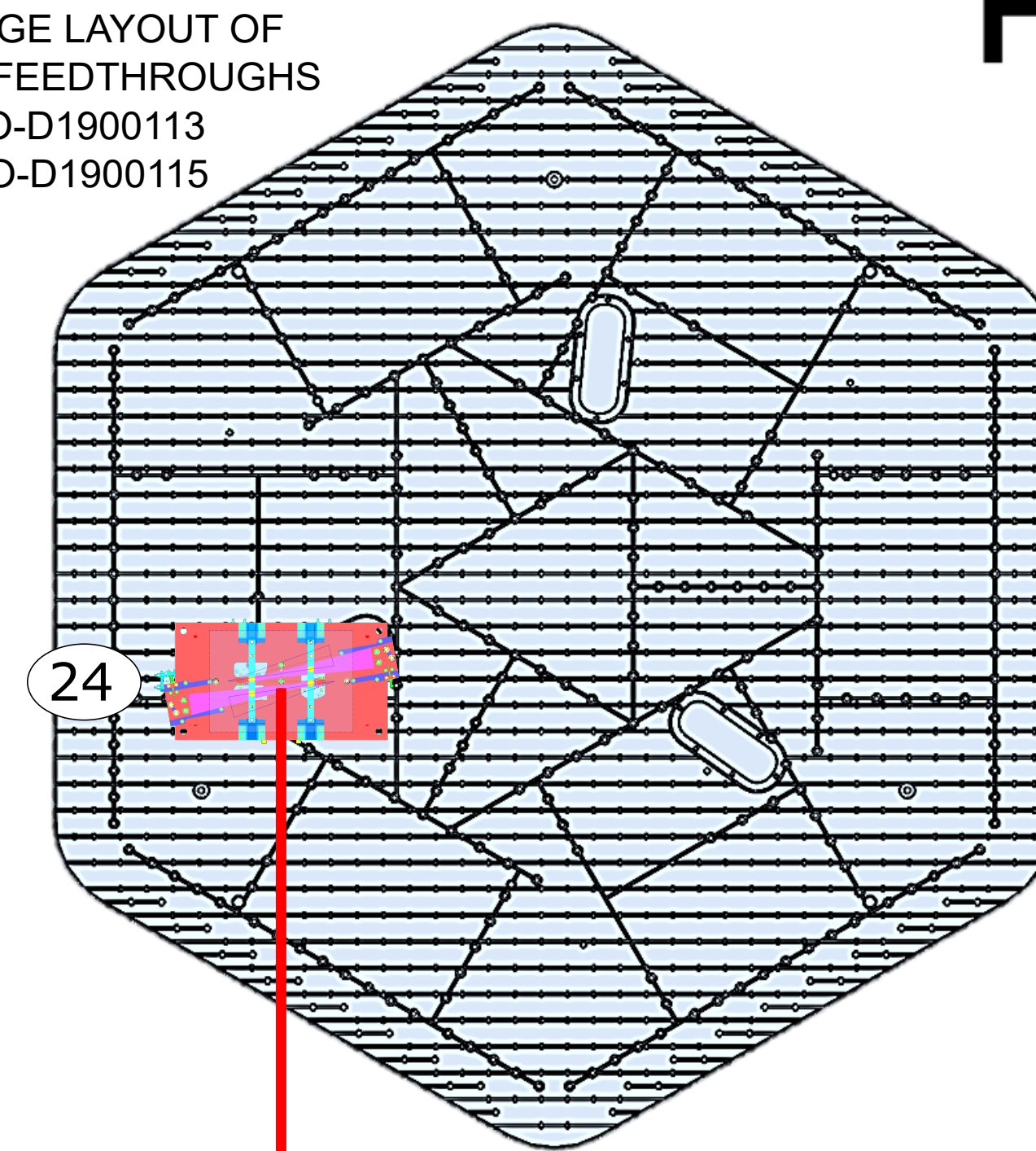
- 25 OM1 (HTTS, TIP-TILT)
- 26 OM2 (HTDS, Double SUS w/ Thermal SAMS)
- 27 OM3 (HTTS, TIP-TILT)



## HAM6

# HAM8

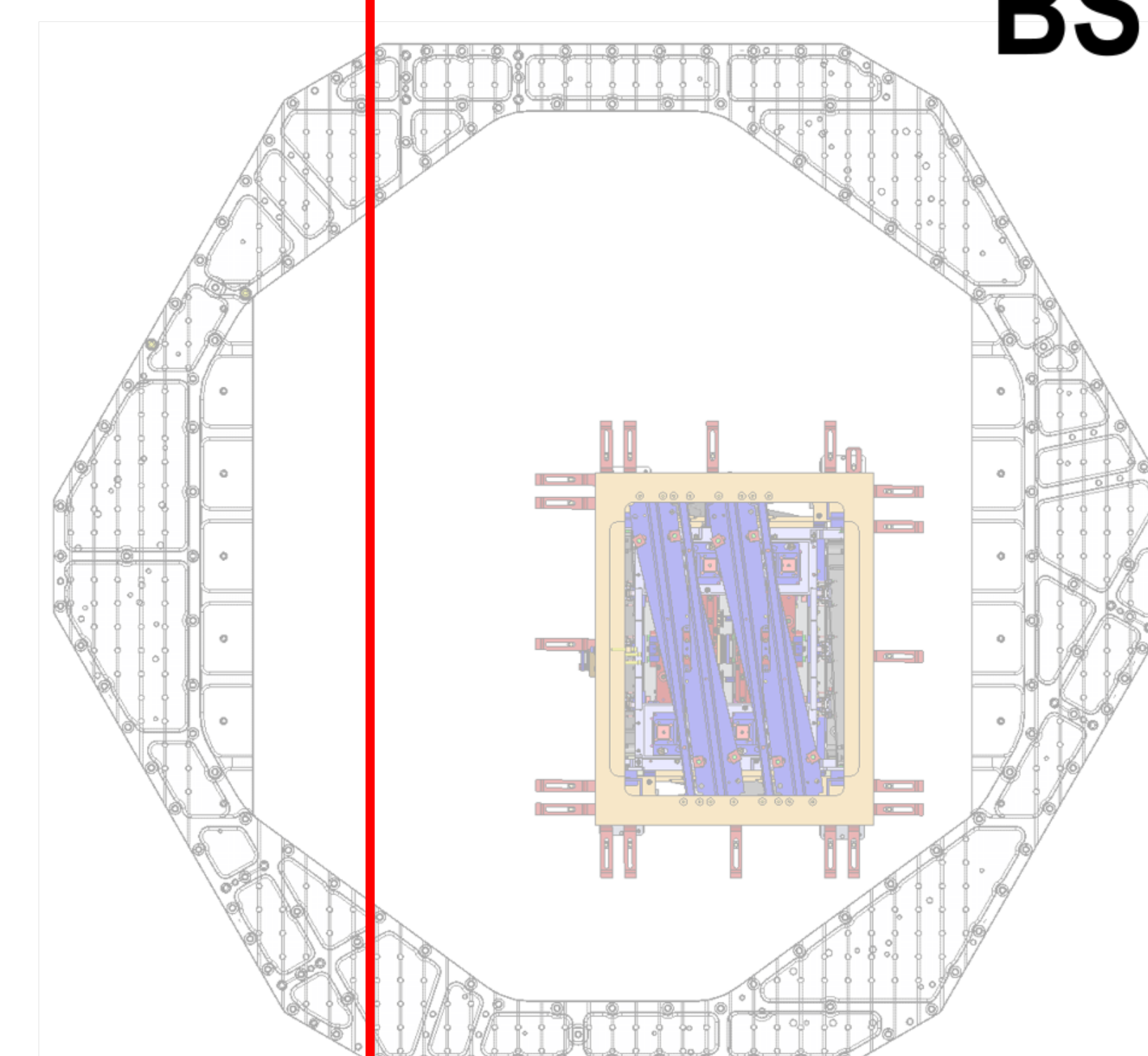
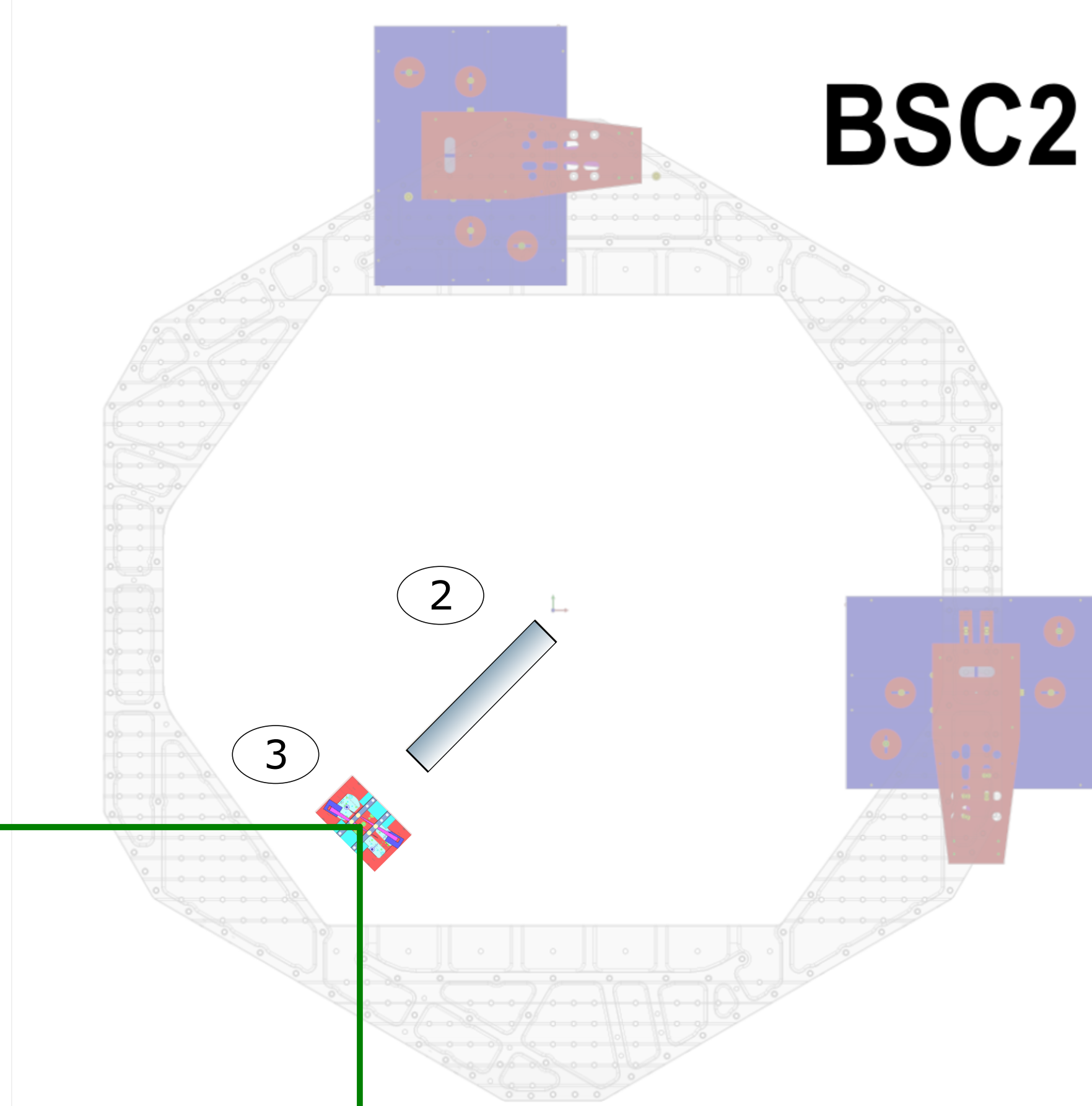
HAM8 FLANGE LAYOUT OF ELECTRICAL FEEDTHROUGHS  
L1: LIGO-D1900113  
H1: LIGO-D1900115



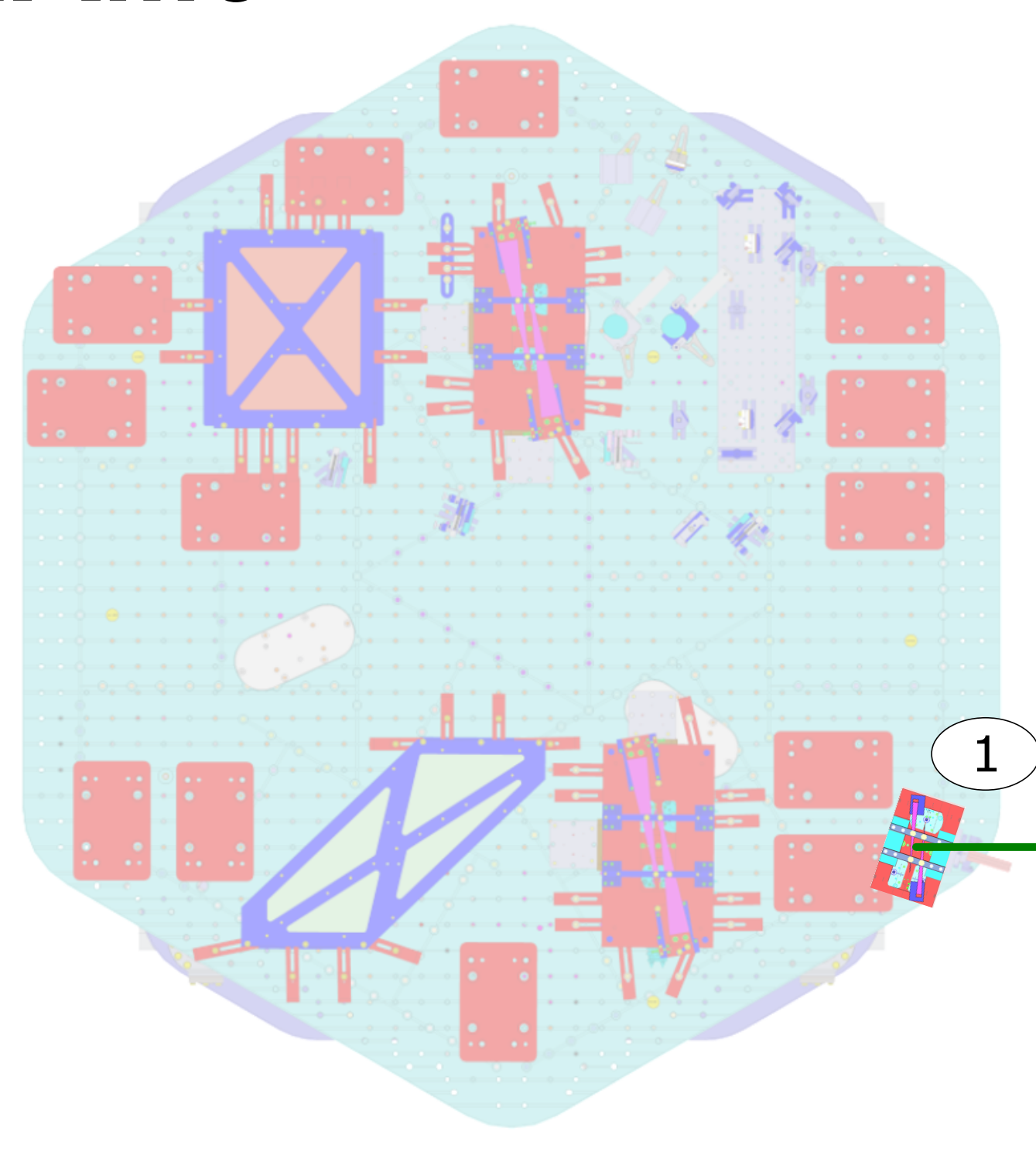
~300m long filter cavity

# BSC2

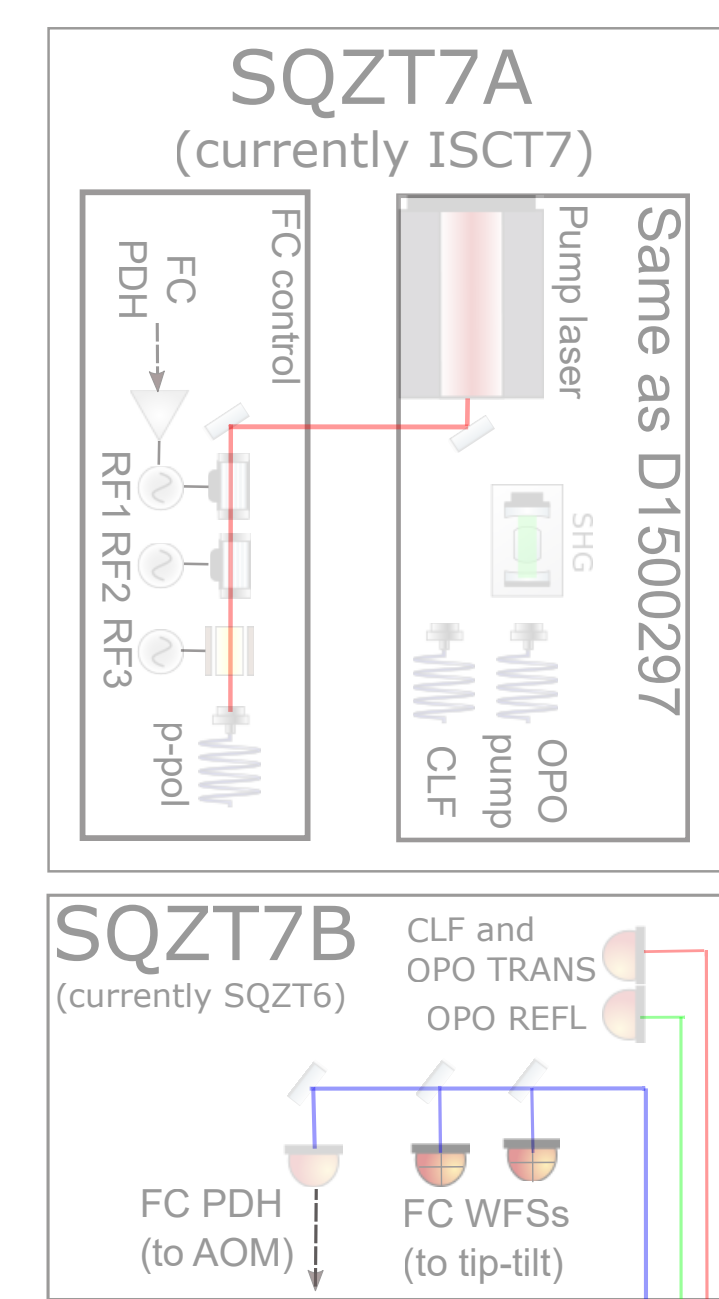
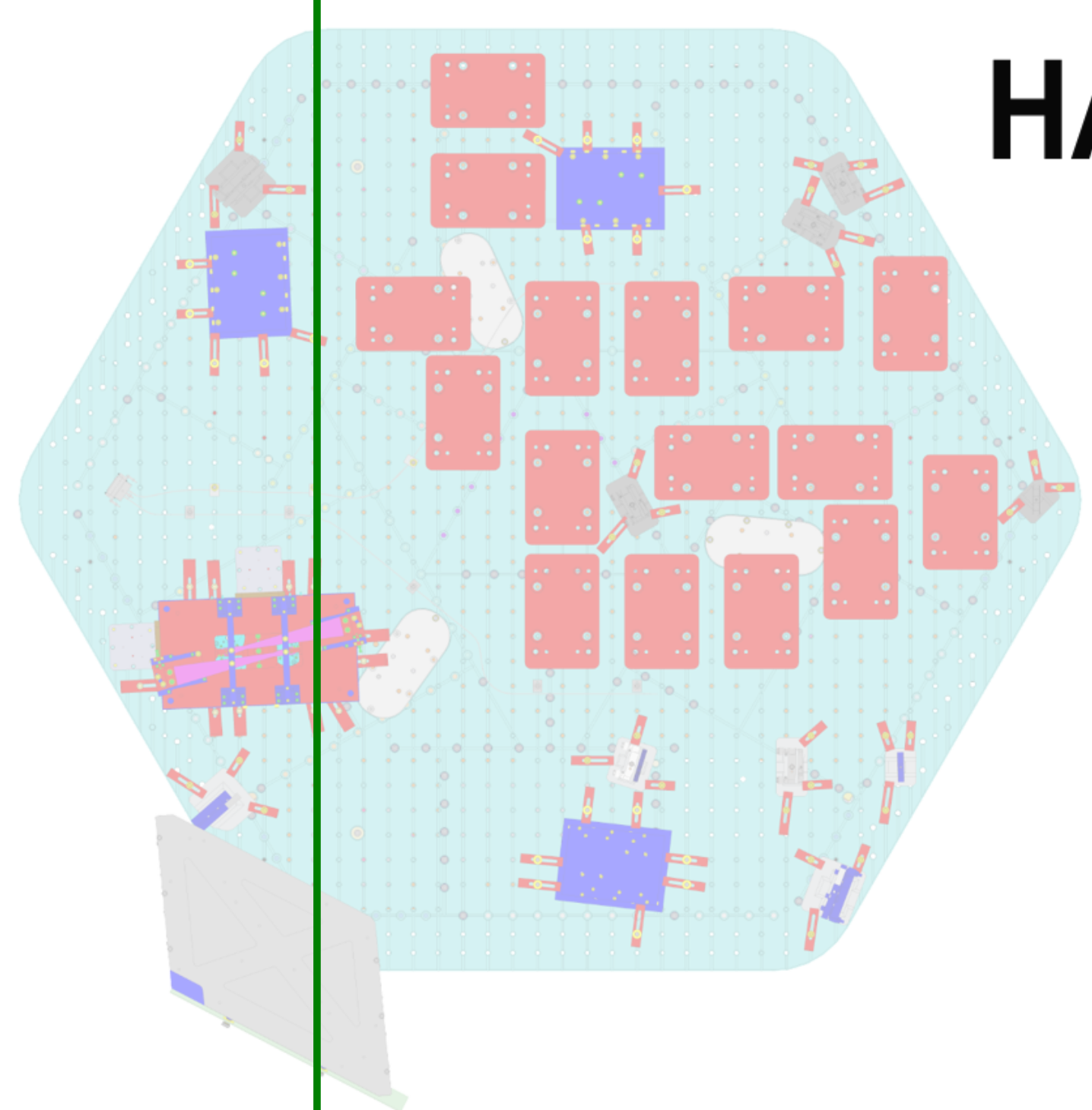
# BSC3



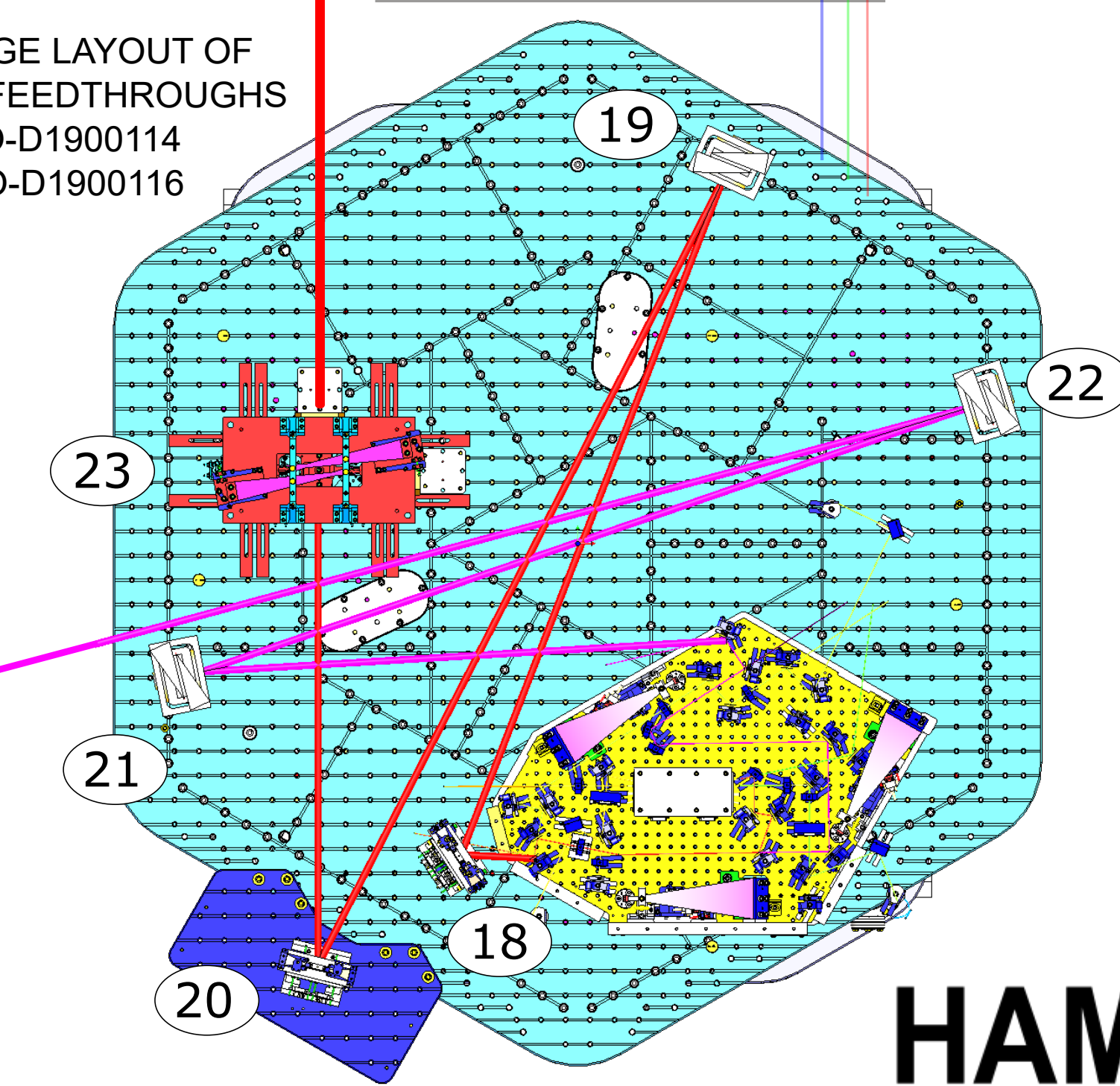
# HAM3



# HAM4

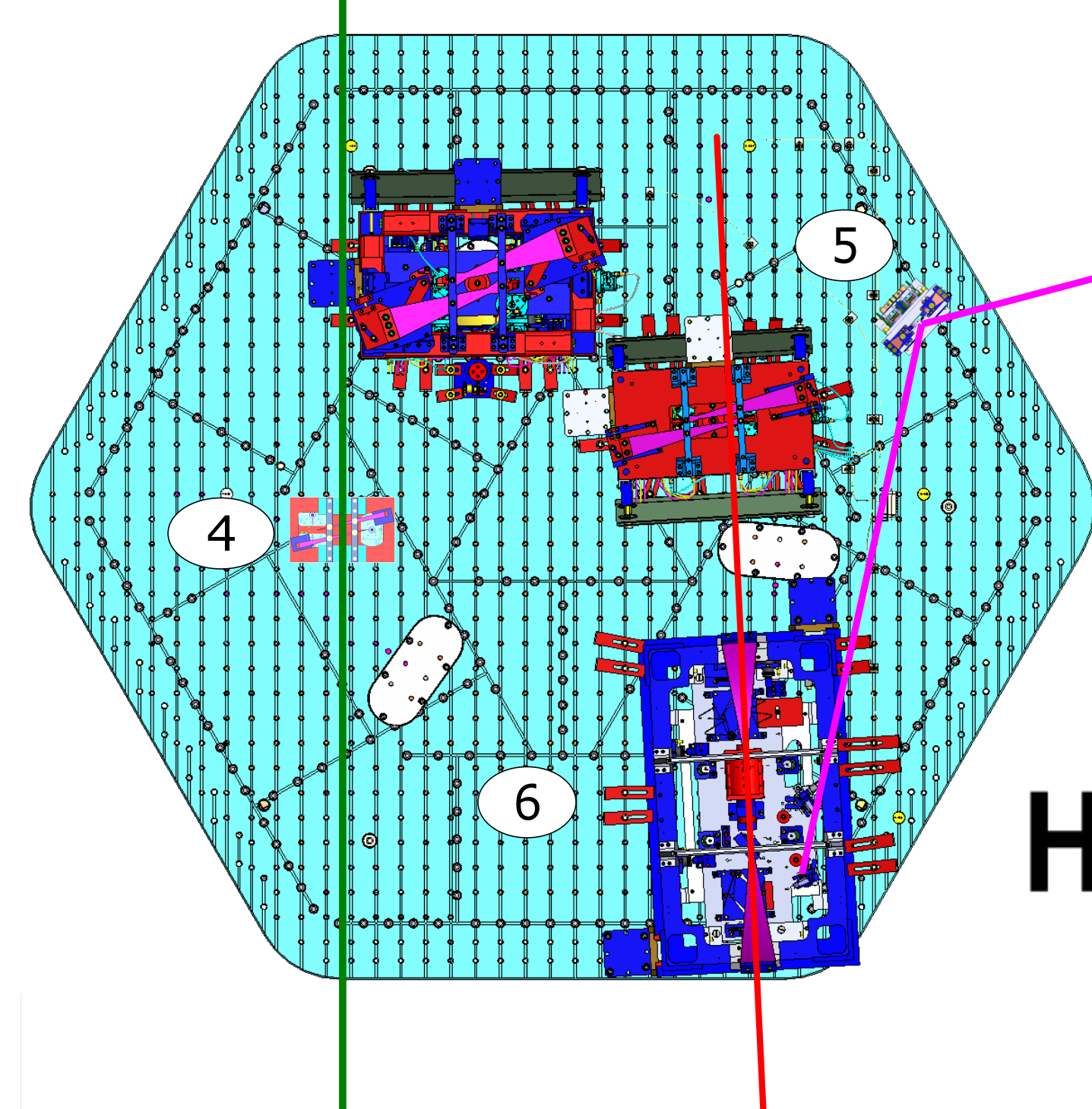


HAM7 FLANGE LAYOUT OF ELECTRICAL FEEDTHROUGHS  
L1: LIGO-D1900114  
H1: LIGO-D1900116

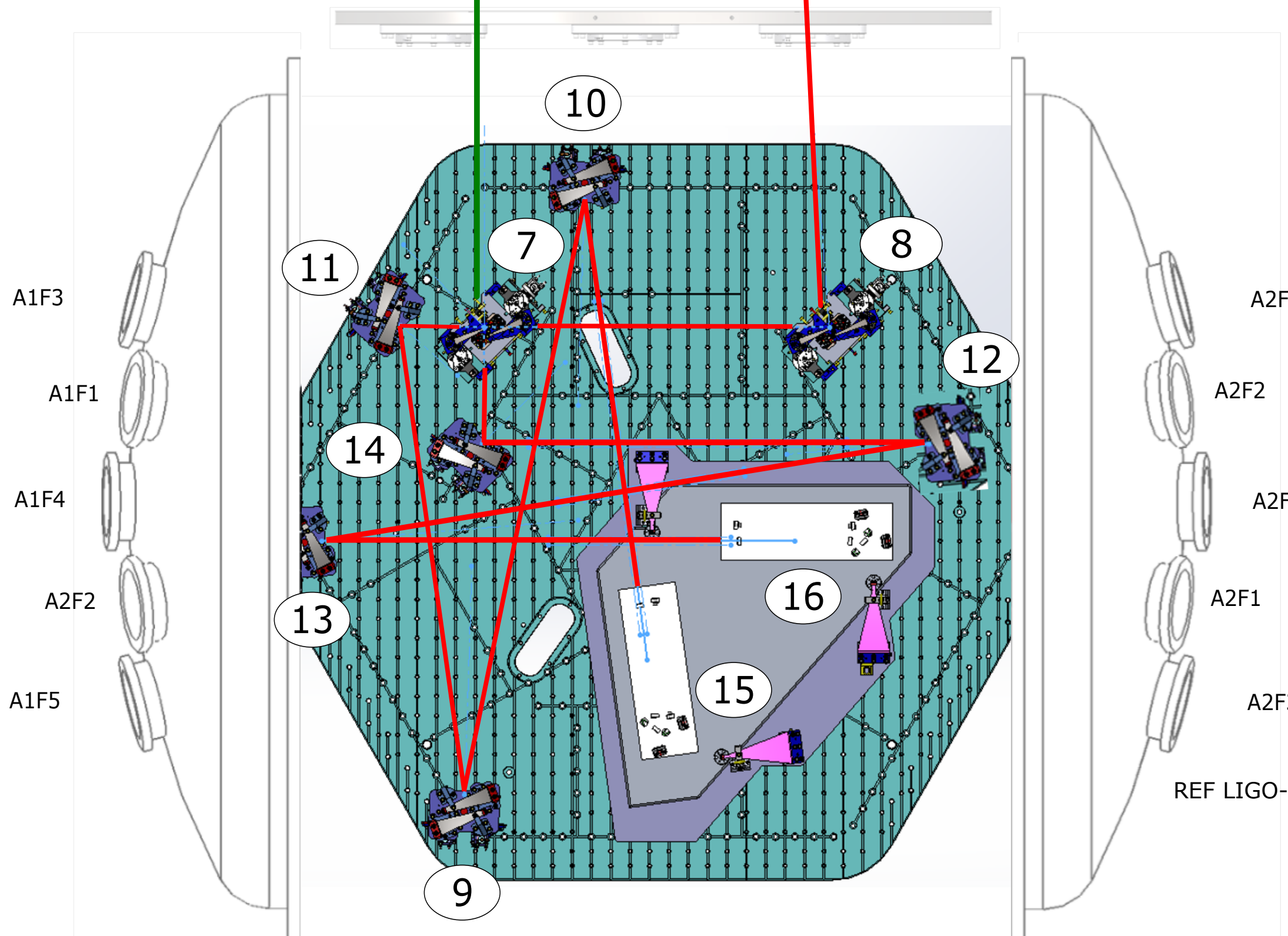


# HAM7

# HAM5



# HAM6



REF LIGO-D0901812

## LIGO-D1800027-v26

Page 2 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

#### HAM5

- 4 BHDL1 (HRTS WITH LENS, LO BEAM)
- 5 ZM6 (HSDS, Double SUS)
- 6 LOW LOSS FARADAY ISOLATOR

#### HAM6

- 7 BS2 (HRTS, Triple SUS)
- 8 OM0 (HRTS, Triple SUS)
- 9 OMA1 (HTDS, Double SUS w/ Thermal SAMS)
- 10 OMA2 (HRDS, Double SUS w/ Piezo SAMS and Dither)
- 11 OMAS (HDDS, Double SUS w/ Dither)
- 12 OMB1 (HTDS, Double SUS w/ Thermal SAMS)
- 13 OMB2 (HRDS, Double SUS w/ Piezo SAMS and Dither)
- 14 OMBS (HDDS, Double SUS w/ Dither)
- 15 OMCA } ON SINGLE OMC PLATFORM
- 16 OMCB }

#### HAM7

- 18 ZM1 (HDDS, Double SUS w/ Dither)
- 19 ZM2 (HPDS, Double SUS w/ Piezo SAMS)
- 20 ZM3 (HDDS, Double SUS w/ Dither)
- 21 ZM4 (HPDS, Double SUS w/ Piezo SAMS)
- 22 ZM5 (HPDS, Double SUS w/ Piezo SAMS)
- 23 FC1 (HSTS TRIPLE, FILTER CAVITY)

#### HAM8

- 24 FC2 (HSTS TRIPLE, FILTER CAVITY)

A1F3  
A1F1  
A1F4  
A2F2  
A1F5

A2F5  
A2F2  
A2F4  
A2F1  
A2F3