

Cartoon of AS Port

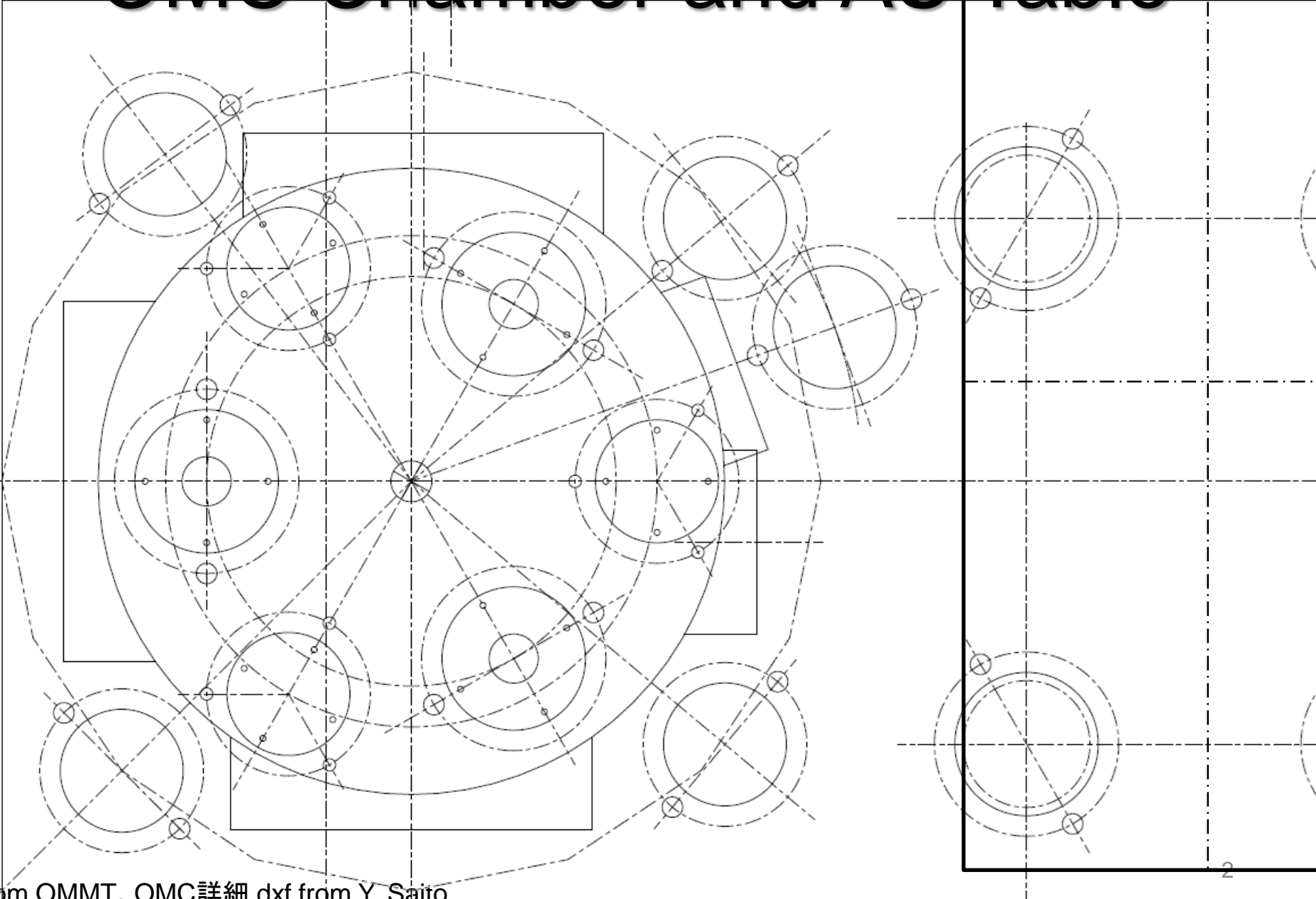
Yuta Michimura

Department of Physics, University of Tokyo

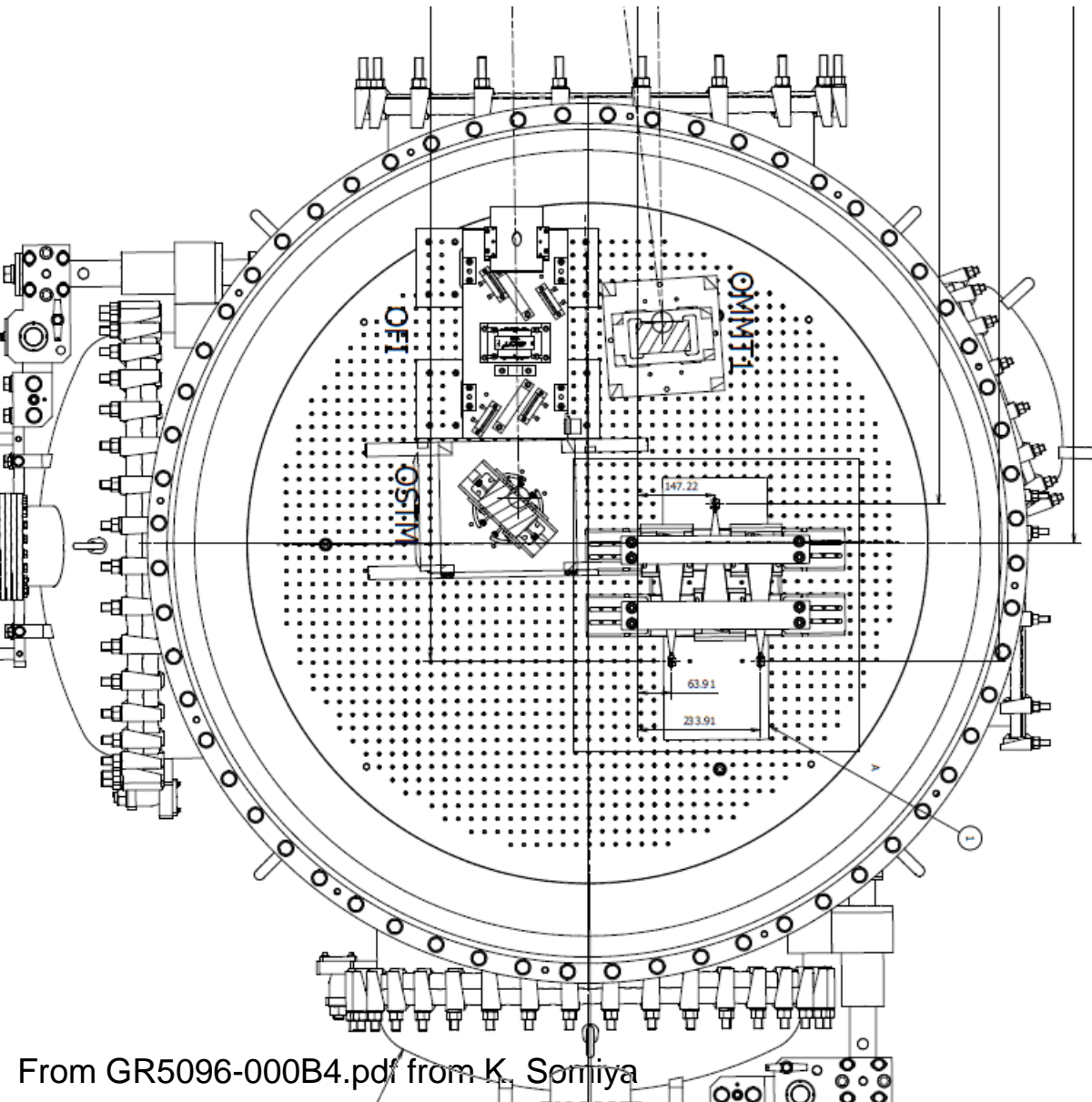
Kentaro Somiya

Department of Physics, Tokyo Institute of Technology

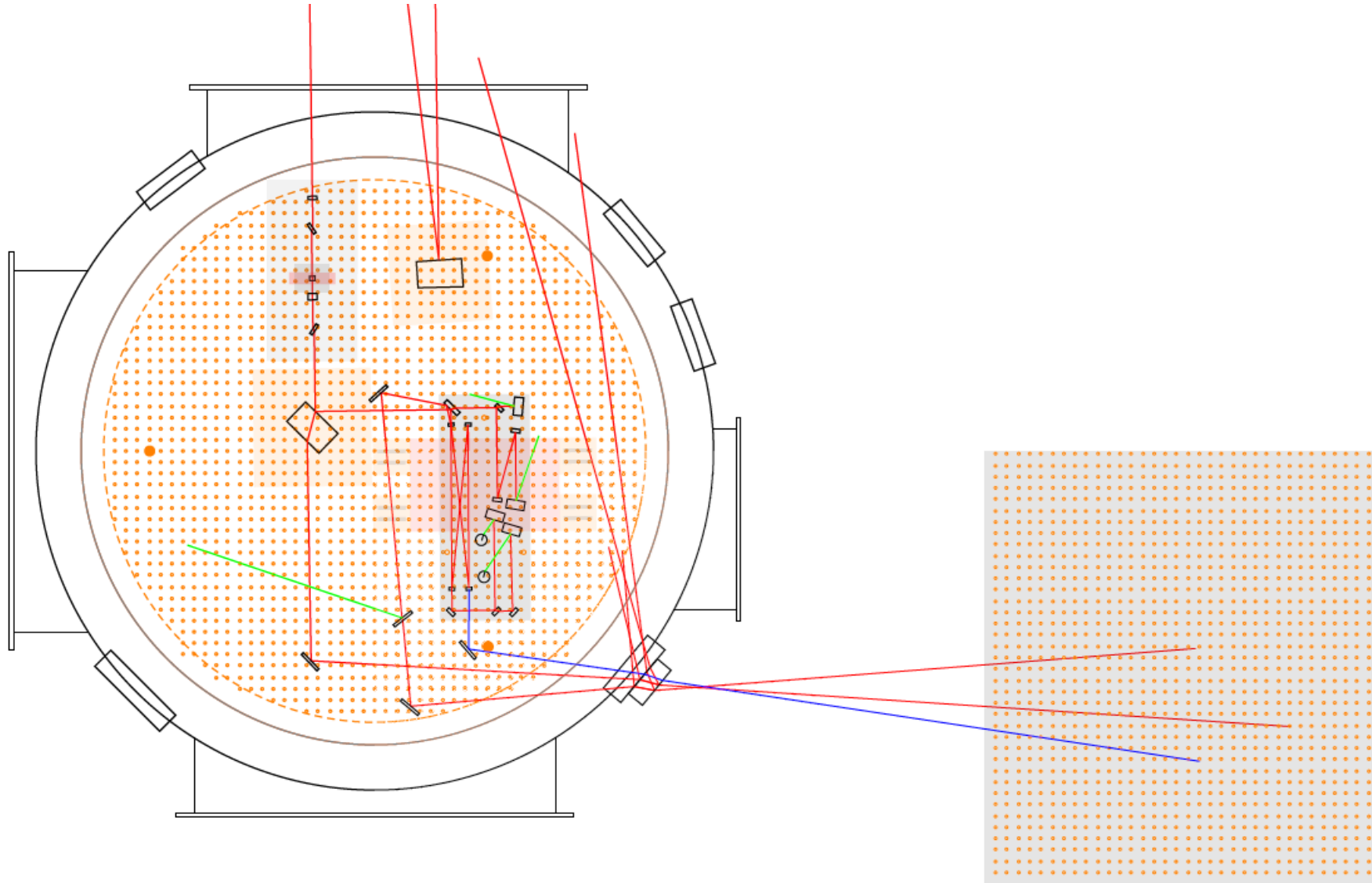
OMC Chamber and AS Table



Inside OMC Chamber



Optical Layout of OMC Chamber



Optical Layout of AS

q-parameters at OSTM HR

$$q_x = (-0.506163896916631 + 0.550033117005247i)$$

$$q_y = (-0.520954059905304 + 0.552811752913173i)$$

q-parameters at OMC1 AR, reflected

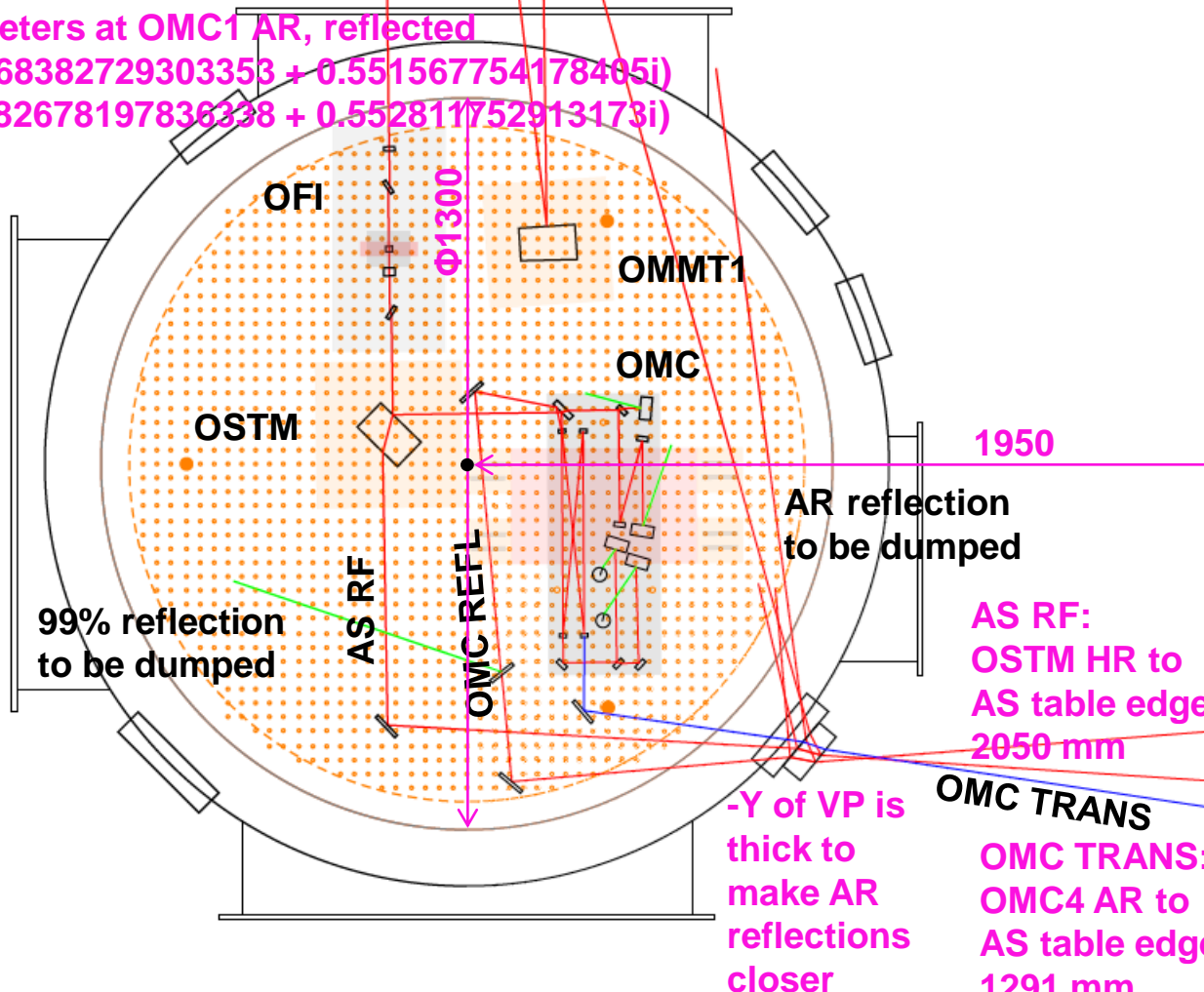
$$q_x = (-0.168382729303353 + 0.551567754178485i)$$

$$q_y = (-0.182678197836338 + 0.552811752913173i)$$

q-parameters at OMC4 AR, transmitted

$$q_x = (0.401847995511897 + 0.90203907670674i)$$

$$q_y = (0.4009436885051 + 0.901511595909675i)$$



AS Table (1200 x 2400)
 Drawn within +/- ~2 cm
 with respect to the actual
 position. NOTE that the
 designed position is
 different from the actual
 position (see [klog #2625](#)).

OMC REFL:
 OMC1 AR to
 AS table edge

2172 mm

85.6 deg

93.9 deg

81.5 deg

343

390

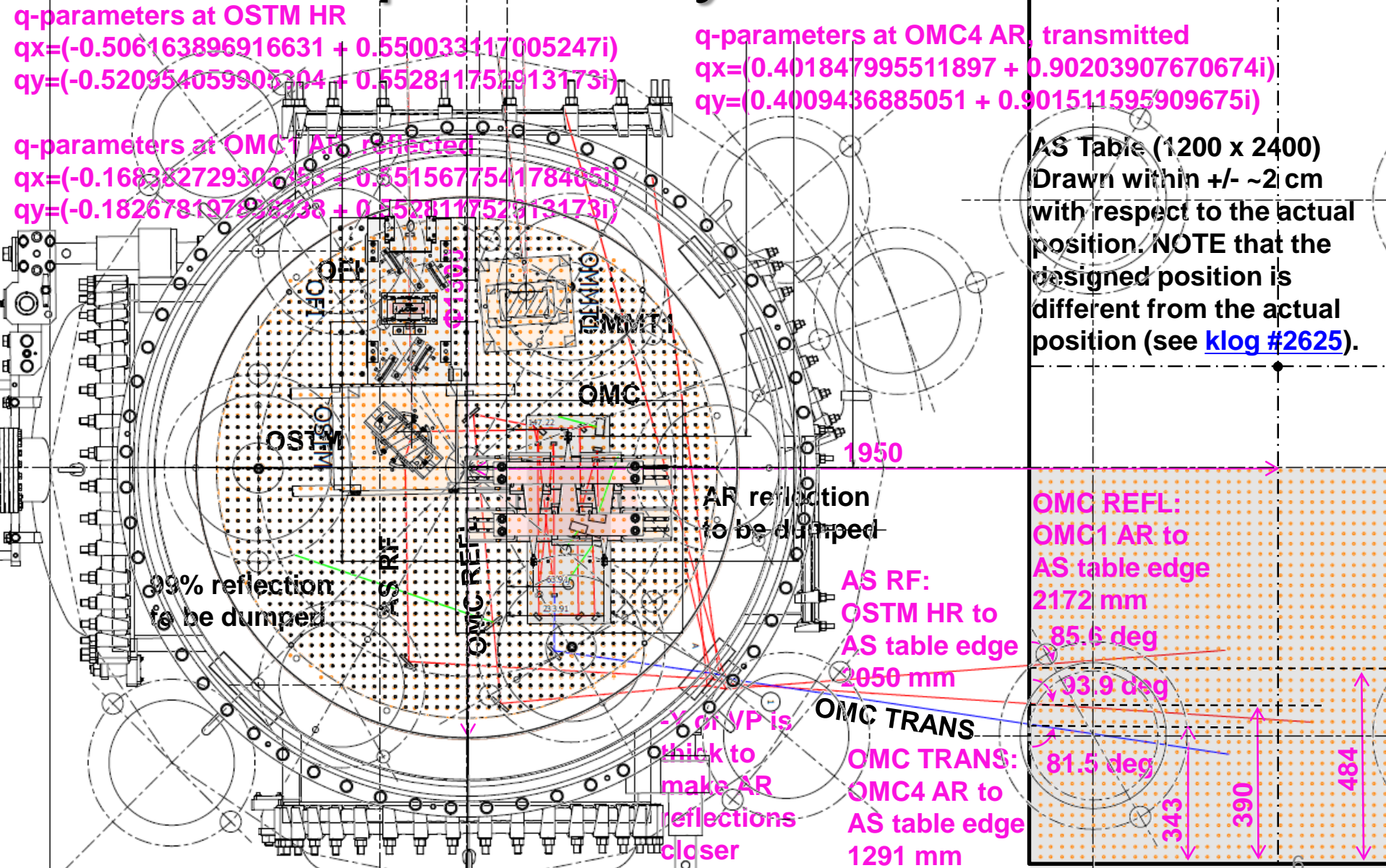
484

AS RF:
 OSTM HR to
 AS table edge
 2050 mm

OMC TRANS

OMC TRANS:
 OMC4 AR to
 AS table edge
 1291 mm

Optical Layout of AS



q-parameters at OSTM HR
 $q_x = (-0.506163896916631 + 0.550033117005247i)$
 $q_y = (-0.520954059905304 + 0.552811752913173i)$

q-parameters at OMC4 AR, transmitted
 $q_x = (0.401847995511897 + 0.90203907670674i)$
 $q_y = (0.4009436885051 + 0.901511595909675i)$

q-parameters at OMC1 AR, reflected
 $q_x = (-0.168382729302155 + 0.551567754178485i)$
 $q_y = (-0.182678197922338 + 0.552811752913173i)$

AS Table (1200 x 2400)
 Drawn within +/- ~2 cm
 with respect to the actual
 position. NOTE that the
 designed position is
 different from the actual
 position (see [klog #2625](#)).

99% reflection
 to be dumped

AR reflection
 to be dumped

AS RF:
 OSTM HR to
 AS table edge
 2050 mm

OMC REF:
 OMC1 AR to
 AS table edge
 2172 mm
 85.6 deg

-Y of VP is
 thick to
 make AR
 reflections
 closer

OMC TRANS:
 OMC4 AR to
 AS table edge
 1291 mm

93.9 deg
 81.5 deg
 343
 390
 484