



DLM#-1###

APS Upgrade

Module Assembly

Survey Date: Thursday, November 04, 2021
 Surveyor(s): me MYSEFL AND i
 Instrument s/n: 38888
 SA Version: SA 2021.2.71490.1 (x64)
 SA Filename: Tab 1 INFO test.xit64
 Report created on: November 06, 2021
 Units of measure: meters, milliradians

Quadrupole [Q1 Production Magnet - \[DQ105\]](#)
 Fast Corrector [8-Pole Fast Corrector Production Magnet - \[MFC130\]](#)
 Quadrupole [Q2 Production Magnet - \[SQ215\]](#)
 Dipole Magnet [M1 Production Magnet - \[DM127\]](#)
 Quadrupole [Q3 Production Magnet - \[SQ315\]](#)
 Sextupole magnet [S1/S3 Production Magnet - \[DS1150\]](#)
 Quadrupole [Q4 Reverse Bend Quadrupole Magnet - \[DQ478\]](#)
 Sextupole magnet [S2 Sextupole Magnet - \[ES2077\]](#)
 Quadrupole [Q5 Production Magnet - \[DQ569\]](#)
 Fast Corrector [8-Pole Fast Corrector Production Magnet - \[MFC107\]](#)
 Sextupole magnet [S1/S3 Production Magnet - \[DS1113\]](#)

Alignment Summary:

DA04	X (m)	Y (m)	Z (m)	Pitch (mr)	Yaw (mr)	Roll (mr)
DA04_AQ1_0	0.000022	0.000010	-0.000164	-0.037	-0.052	-0.065
DA04_AQ2_0	-0.000012	-0.000011	-0.000162	-0.021	-0.172	0.031
DA04_AQ3_0	-0.000007	-0.000007	-0.000065	-0.081	0.094	0.052
DA04_AS1_0	-0.000021	0.000001	0.000059	-0.092	0.091	-0.007
DA04_AQ4_V	0.000027	0.000009	0.000024	-0.073	0.036	-0.031
DA04_AS2_0	0.000023	-0.000006	0.000161	-0.110	0.072	-0.010
DA04_AQ5_V	-0.000046	-0.000003	0.000085	-0.003	-0.226	0.022
DA04_AS3_0	0.000009	0.000000	0.000159	-0.054	-0.028	0.007
Average	-0.000001	-0.000001	0.000012	-0.059	-0.023	0.000
RMS	0.000024	0.000007	0.000122	0.068	0.116	0.035
ABS Max	0.000000	0.000000	0.000000	0.000	0.000	0.000