

CERN name (MTF) HCTCLP_001-CQ000410
 CERCA name TCLP_094
 MADX name TCL.4R1.B1

ID
 Angle 0.0
 Material CU
 Length 1.0
 Beam B1
 Family TCLP
 IP IP1

BLMI BLMEI.04R1.B1E10_TCL.4R1.B1
 BLMS BLMES.04R1.B1E10_TCL.4R1.B1

Jaw corner notation

LEFT UP	C
LEFT DOWN	A
RIGHT UP	D
RIGHT DOWN	B

AXIS_A	1
AXIS_B	1
AXIS_C	1
AXIS_D	1
AXIS_E	0

AXIS_LEFT_UP	1
AXIS_LEFT_DOWN	1
AXIS_RIGHT_UP	1
AXIS_RITGH_DOWN	1
AXIS_TANK	0

Mechanical STOPS

	OUT	IN
LEFT UP	-29.99504878	6.033247276
LEFT DOWN	-30.00192188	6.045408413
RIGHT UP	29.99879115	-6.029535497
RIGHT DOWN	30.00031195	-6.026039588
ANTI - UP	0.34579336	-5.666039588
ANTI - DOWN	0.35126211	

Measurements in the metrology frame:

	OUT	IN
Mechanical STOPS A	-30.00192188	6.045408413
B	30.00031195	-6.026039588
C	-29.99504878	6.033247276
D	29.99879115	-6.029535497

Mechanical stops

Max gap	AB	60.00223383
	CD	59.99383993
Min gap	AB	0.35126211
	CD	0.34579336

Switches

	OUT	IN
LEFT UP	-29.66504878	5.693247276
LEFT DOWN	-29.65192188	5.725408413
RIGHT UP	29.68879115	-5.699535497
RIGHT DOWN	29.68031195	-5.666039588
ANTI - UP	0.46579336	
ANTI - DOWN	0.47126211	

Switches

	OUT	IN
Switches A	-29.65192188	5.725408413
B	29.68031195	-5.666039588
C	-29.66504878	5.693247276
D	29.68879115	-5.699535497

Switches

Max gap	AB	59.3322338
	CD	59.3538399
Min gap	AB	0.47126211
	CD	0.46579336

Maximum flatness error

Left	0.060057128
Right	-0.013760534

Maximum flatness error (mm)

AC	0.060057128
BD	-0.013760534

Mechanical plays

Left UP	0.023
Left DOWN	0.044
Right UP	0.008
Right DOWN	0.008

Mechanical plays

A	0.044
B	0.008
C	0.023
D	0.008

Auto-retraction

Left UP	0.004
Left DOWN	0.009
Right UP	0.007
Right DOWN	0

Auto-retraction

A	0.009
B	0.000
C	0.004
D	0.007

Maximum tilt angle

Left Plus	3.90
Left Minus	3.70
Right Plus	3.90
Right Minus	3.70

Maximum tilt angle

AC Plus	3.90
AC Minus	3.70
BD Plus	3.90
BD Minus	3.70

Transverse tank position

Stop UP	
Switch UP	
Set point	
Switch DOWN	
Stop DOWN	

Detailed flatness data

Left jaw on mech. Stop IN

Long. Pos. [cm]	z = -20mm	z = 0 mm	z = +20mm
270	6.04085749	6.045408413	6.051672667
425	6.058173607	6.069161321	6.074940571
580	6.059386714	6.066098518	6.079666855
735	6.07518411	6.093304405	6.087883439
890	6.053195514	6.057210984	6.069423804
1045	6.028132368	6.046810294	6.052708562
1200	6.030041976	6.033247276	6.04790394

Detailed flatness - Jaw AC on mech. Stop IN

Long. Pos. [mm]	z = -20mm	z = 0 mm	z = +20mm
270	6.040857490	6.045408413	6.051672667
425	6.058173607	6.069161321	6.074940571
580	6.059386714	6.066098518	6.079666855
735	6.075184110	6.093304405	6.087883439
890	6.053195514	6.057210984	6.069423804
1045	6.028132368	6.046810294	6.052708562
1200	6.030041976	6.033247276	6.047903940

Detailed flatness data

Right jaw on mech. Stop IN

Long. Pos. [cm]	z = -20mm	z = 0 mm	z = +20mm
270	-6.026451988	-6.026039588	-6.027434656
425	-6.030000132	-6.027519403	-6.030966635
580	-6.025848571	-6.026942368	-6.028513212
735	-6.019923855	-6.029122629	-6.025464891
890	-6.028073683	-6.020817739	-6.024919176
1045	-6.040069052	-6.034578273	-6.029294713
1200	-6.031664779	-6.029535497	-6.021888769

Detailed flatness - Jaw BD on mech. Stop IN

Long. Pos. [cm]	z = -20mm	z = 0 mm	z = +20mm
270	-6.02645199	-6.02603959	-6.02743466
425	-6.03000013	-6.02751940	-6.03096664
580	-6.02584857	-6.02694237	-6.02851321
735	-6.01992386	-6.02912263	-6.02546489
890	-6.02807368	-6.02081774	-6.02491918
1045	-6.04006905	-6.03457827	-6.02929471
1200	-6.03166478	-6.02953550	-6.02188877

Screw Serial Number

LEFT UP	8148403-11
LEFT DOWN	8148403-34
RIGHT UP	8148403-39
RIGHT DOWN	8148403-41

Screw S N

A	8148403-34
B	8148403-41
C	8148403-11
D	8148403-39