



海克斯康
HEXAGON
MANUFACTURING INTELLIGENCE
制造智能

海克斯康影測股份有限公司

校正報告

依據ISO 10360-2與VDI/VDE 2617規範

名稱：光學影像3D測量儀

機型：Performance 442HA

序號：19514043

用戶單位：名頡工業股份有限公司

校正者：黃彥三

校正日期：2024/03/27

校準單位：海克斯康影測股份有限公司

報告編號：HMV-CA20240327



根據校正結果，此儀器符合規格要求

建議下次校準時間間隔為一年

shaping the future of measurement



HEXAGON METROLOGY

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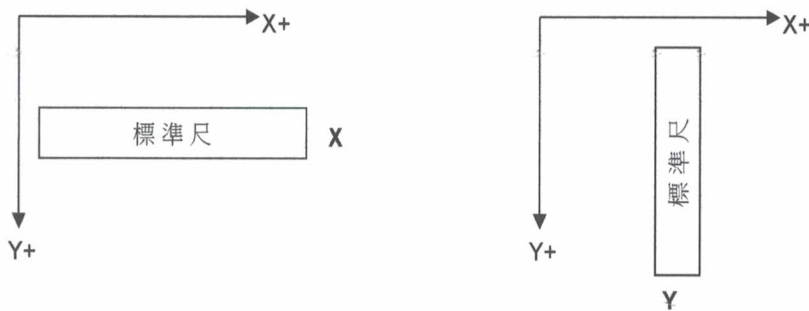
FAX: +886-2-26028802

XY_影像 - 校準說明

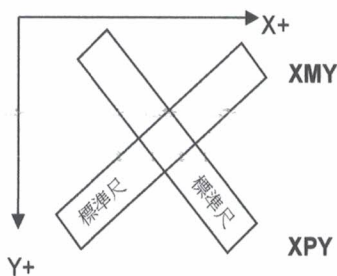
建議環境			
溫度：	22度	相對溼度：	50%
校準使用標準器			
編號	製造商	名稱	備註
HL-500 S/N:103859	Mitutoyo	標準尺	名額提供

校準方法

- 1、校準標準器在現場恆溫8小時以上
- 2、分別將標準線紋尺放在X和Y方向，檢測範圍不小於軸向量測範圍的70%，測量位置不少於5個，得到軸向E1示值誤差。



- 3、分別將標準線紋尺沿著對角線45度方向放置，檢測範圍不小於軸向量測範圍的70%。測量位置不少於5個。得到軸向E2示值誤差。



結論：根據檢測結果，該影像儀符合技術要求：

$E1=1.0+L/200$; $E2=1.4+L/150$ (單位: um,L為mm)

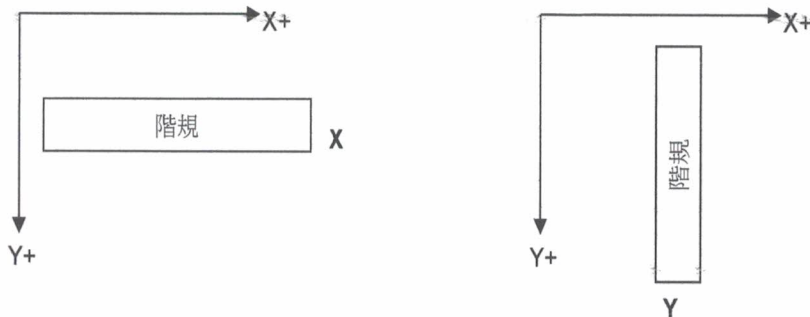
shaping the future of measurement

XY_探針 - 校準說明

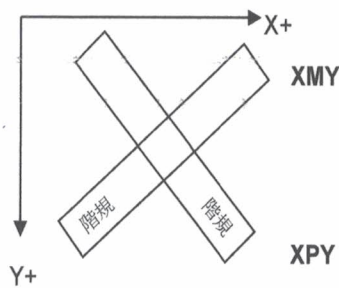
建議環境			
溫度：	22度	相對溼度：	50%
校準使用標準器			
編號	製造商	名稱	備註
515-714(1000008)	Mitutoyo	階規	名額提供

校準方法

- 1、校準標準器在現場恆溫8小時以上
- 2、分別將標準塊規放在X和Y方向，檢測範圍不小於軸向量測範圍的70%，測量位置不少於4個，得到軸向E1示值誤差。



- 3、分別將標準塊規沿著對角線45度方向放置，檢測範圍不小於軸向量測範圍的70%。測量位置不少於4個。得到軸向E2示值誤差。



結論：根據檢測結果，該影像儀符合技術要求：

$E1=1.0+L/200$; $E2=1.4+L/150$ (單位: um,L為mm)

shaping the future of measurement

CMM Type OPTIV Performance 442HA
 CMM Number 19514043
 Client MJ
 Sensor Vision
 Standard Glass scale
 Postion 40
 Cycle 3
 MPEe-E1 1+L/200 µm
 Field X



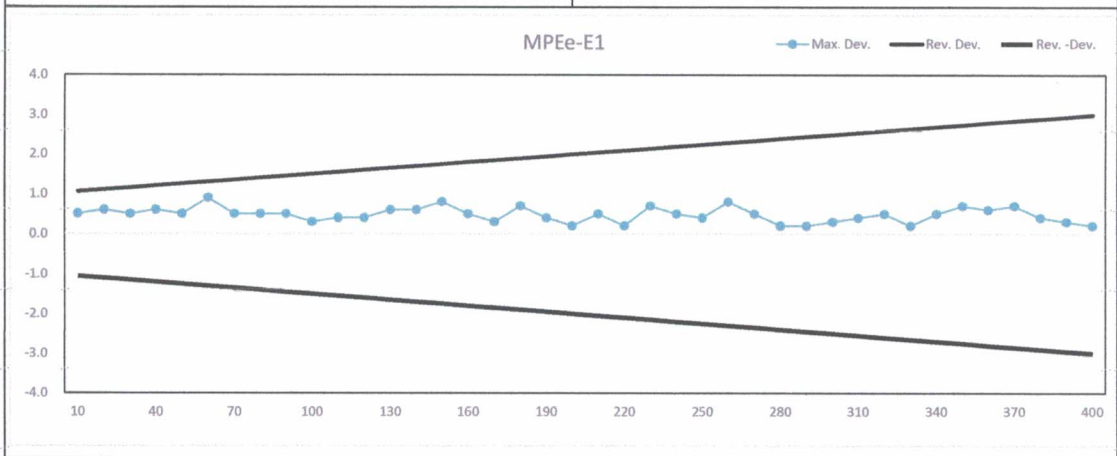
Temperature : 20.6 °C

No.	Meas. Pos.	Ref. dist.	Meas 1st	Meas 2nd	Meas 3rd	Max. Dev.	Rev. Dev.	Rev. -Dev.	Result
1	10	10	9.9995	9.9998	9.9998	0.5	1.1	-1.1	PASS
2	20	20	20.0006	20.0002	19.9999	0.6	1.1	-1.1	PASS
3	30	30	30.0005	30.0002	29.9997	0.5	1.2	-1.2	PASS
4	40	40	39.9996	40.0006	40.0005	0.6	1.2	-1.2	PASS
5	50	50	50.0000	50.0005	49.9999	0.5	1.3	-1.3	PASS
6	60	60	60.0009	60.0002	60.0001	0.9	1.3	-1.3	PASS
7	70	70	70.0005	70.0000	69.9999	0.5	1.4	-1.4	PASS
8	80	80	80.0002	80.0005	80.0000	0.5	1.4	-1.4	PASS
9	90	90	90.0005	90.0003	90.0000	0.5	1.5	-1.5	PASS
10	100	100	99.9997	99.9998	100.0001	0.3	1.5	-1.5	PASS
11	110	110	109.9996	110.0004	109.9998	0.4	1.6	-1.6	PASS
12	120	120	120.0001	120.0000	120.0004	0.4	1.6	-1.6	PASS
13	130	130	129.9999	130.0006	130.0004	0.6	1.7	-1.7	PASS
14	140	140	140.0006	140.0005	140.0001	0.6	1.7	-1.7	PASS
15	150	150	150.0006	150.0005	150.0008	0.8	1.8	-1.8	PASS
16	160	160	160.0005	159.9999	160.0004	0.5	1.8	-1.8	PASS
17	170	170	170.0003	170.0000	170.0003	0.3	1.9	-1.9	PASS
18	180	180	179.9997	180.0007	180.0004	0.7	1.9	-1.9	PASS
19	190	190	189.9999	189.9998	189.9996	0.4	2.0	-2.0	PASS
20	200	200	199.9999	199.9998	200.0001	0.2	2.0	-2.0	PASS
21	210	210	210.0000	210.0005	210.0001	0.5	2.1	-2.1	PASS
22	220	220	220.0001	219.9998	219.9998	0.2	2.1	-2.1	PASS
23	230	230	229.9996	230.0000	230.0007	0.7	2.2	-2.2	PASS
24	240	240	240.0001	240.0005	240.0003	0.5	2.2	-2.2	PASS
25	250	250	250.0004	250.0002	249.9997	0.4	2.3	-2.3	PASS
26	260	260	260.0004	260.0008	260.0004	0.8	2.3	-2.3	PASS
27	270	270	270.0001	269.9995	269.9997	0.5	2.4	-2.4	PASS
28	280	280	279.9998	279.9999	279.9999	0.2	2.4	-2.4	PASS
29	290	290	290.0002	289.9999	289.9998	0.2	2.5	-2.5	PASS
30	300	300	300.0001	299.9999	300.0003	0.3	2.5	-2.5	PASS
31	310	310	309.9997	310.0004	309.9999	0.4	2.6	-2.6	PASS
32	320	320	320.0005	320.0000	320.0003	0.5	2.6	-2.6	PASS
33	330	330	330.0002	329.9999	330.0001	0.2	2.7	-2.7	PASS
34	340	340	340.0004	340.0005	339.9998	0.5	2.7	-2.7	PASS
35	350	350	350.0002	350.0007	350.0001	0.7	2.8	-2.8	PASS
36	360	360	360.0002	360.0000	360.0006	0.6	2.8	-2.8	PASS
37	370	370	370.0007	370.0004	370.0004	0.7	2.9	-2.9	PASS
38	380	380	380.0000	379.9998	380.0004	0.4	2.9	-2.9	PASS
39	390	390	390.0003	390.0002	390.0000	0.3	3.0	-3.0	PASS
40	400	400	399.9999	400.0000	400.0002	0.2	3.0	-3.0	PASS

E1-X

ALL Result

PASS



服務工程師 Service Engineer:	黃彥三	日期 Date:	2024/3/26
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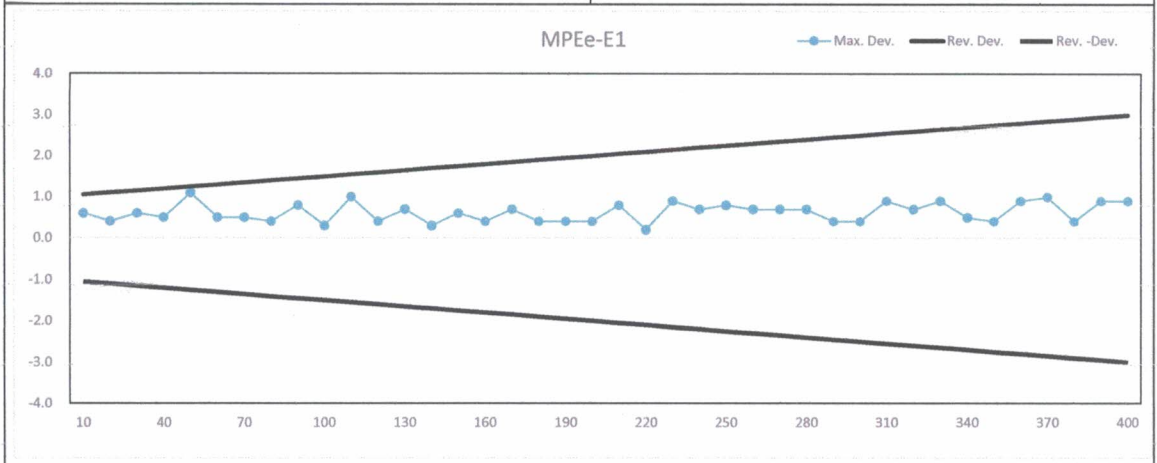
CMM Type OPTIV Performance 442HA
 CMM Number 19514043
 Client MJ
 Sensor Vision
 Standard Glass scale
 Position 40
 Cycle 3
 MPEc-E1 1+L/200 μm
 Field Y



Temperature : 20.6 °C

No.	Meas. Pos.	Ref. dist.	Meas 1st	Meas 2nd	Meas 3rd	Max. Dev.	Rev. Dev.	Rev. -Dev.	Result
1	10	10	9.9997	10.0006	9.9996	0.6	1.1	-1.1	PASS
2	20	20	19.9996	19.9997	20.0000	0.4	1.1	-1.1	PASS
3	30	30	30.0006	29.9998	29.9998	0.6	1.2	-1.2	PASS
4	40	40	39.9996	40.0002	39.9995	0.5	1.2	-1.2	PASS
5	50	50	50.0011	50.0000	50.0010	1.1	1.3	-1.3	PASS
6	60	60	60.0005	59.9998	60.0001	0.5	1.3	-1.3	PASS
7	70	70	69.9998	70.0005	70.0003	0.5	1.4	-1.4	PASS
8	80	80	80.0004	79.9998	79.9998	0.4	1.4	-1.4	PASS
9	90	90	89.9999	90.0007	90.0008	0.8	1.5	-1.5	PASS
10	100	100	100.0001	100.0000	99.9997	0.3	1.5	-1.5	PASS
11	110	110	110.0008	110.0002	110.0010	1.0	1.6	-1.6	PASS
12	120	120	120.0004	120.0001	120.0000	0.4	1.6	-1.6	PASS
13	130	130	130.0002	130.0004	130.0007	0.7	1.7	-1.7	PASS
14	140	140	140.0003	140.0000	140.0003	0.3	1.7	-1.7	PASS
15	150	150	150.0001	150.0006	150.0004	0.6	1.8	-1.8	PASS
16	160	160	160.0002	160.0004	160.0002	0.4	1.8	-1.8	PASS
17	170	170	170.0007	170.0002	170.0004	0.7	1.9	-1.9	PASS
18	180	180	180.0000	180.0001	180.0004	0.4	1.9	-1.9	PASS
19	190	190	190.0004	190.0002	190.0001	0.4	2.0	-2.0	PASS
20	200	200	200.0000	199.9997	199.9996	0.4	2.0	-2.0	PASS
21	210	210	210.0006	210.0008	210.0008	0.8	2.1	-2.1	PASS
22	220	220	219.9999	220.0002	220.0001	0.2	2.1	-2.1	PASS
23	230	230	230.0009	230.0008	230.0008	0.9	2.2	-2.2	PASS
24	240	240	240.0007	239.9998	240.0006	0.7	2.2	-2.2	PASS
25	250	250	250.0002	250.0000	250.0008	0.8	2.3	-2.3	PASS
26	260	260	259.9998	260.0001	260.0007	0.7	2.3	-2.3	PASS
27	270	270	270.0005	270.0007	270.0006	0.7	2.4	-2.4	PASS
28	280	280	280.0005	279.9997	280.0007	0.7	2.4	-2.4	PASS
29	290	290	290.0004	290.0004	290.0001	0.4	2.5	-2.5	PASS
30	300	300	300.0002	300.0003	300.0004	0.4	2.5	-2.5	PASS
31	310	310	310.0009	310.0000	310.0006	0.9	2.6	-2.6	PASS
32	320	320	319.9993	319.9996	319.9993	0.7	2.6	-2.6	PASS
33	330	330	330.0009	329.9999	330.0008	0.9	2.7	-2.7	PASS
34	340	340	340.0004	340.0005	340.0002	0.5	2.7	-2.7	PASS
35	350	350	350.0001	350.0004	350.0004	0.4	2.8	-2.8	PASS
36	360	360	360.0006	360.0005	360.0009	0.9	2.8	-2.8	PASS
37	370	370	369.9999	370.0010	370.0005	1.0	2.9	-2.9	PASS
38	380	380	380.0004	380.0001	379.9999	0.4	2.9	-2.9	PASS
39	390	390	390.0003	390.0009	390.0008	0.9	3.0	-3.0	PASS
40	400	400	400.0008	399.9999	400.0009	0.9	3.0	-3.0	PASS

E1-Y ALL Result PASS



服務工程師 Service Engineer: 黃彥三 日期 Date: 2024/3/26

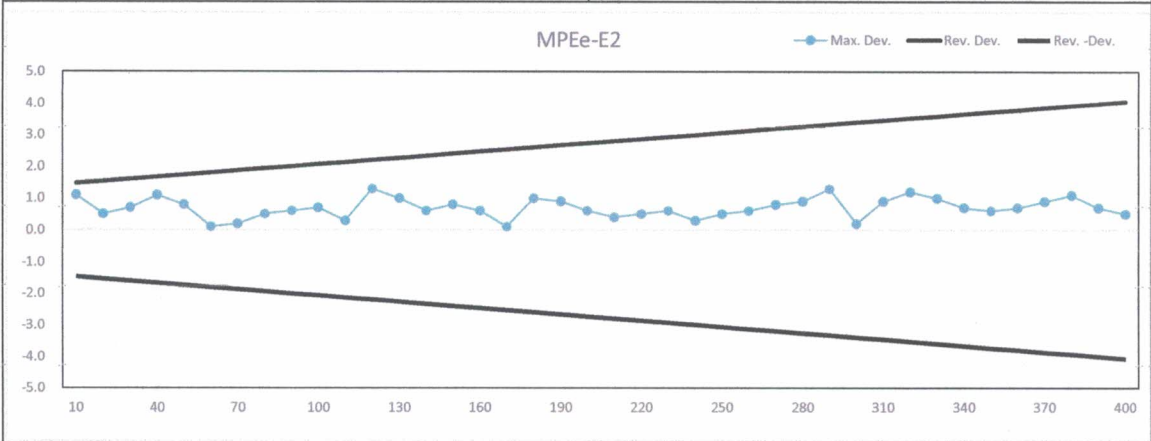
CMM Type OPTIV Performance 442HA
 CMM Number 19514043
 Client MJ
 Sensor Vision
 Standard Glass scale
 Postion 40
 Cycle 3
 MPEe-E2 1.4+L/150 µm
 Field XPY



Temperature : 20.6 °C

No.	Meas. Pos.	Ref. dist.	Meas 1st	Meas 2nd	Meas 3rd	Max. Dev.	Rev. Dev.	Rev. -Dev.	Result
2	10	10	9.9997	9.9998	9.9989	1.1	1.5	-1.5	PASS
3	20	20	20.0000	20.0002	19.9995	0.5	1.5	-1.5	PASS
4	30	30	29.9993	29.9998	29.9998	0.7	1.6	-1.6	PASS
5	40	40	39.9989	39.9991	39.9999	1.1	1.7	-1.7	PASS
6	50	50	49.9992	49.9995	49.9996	0.8	1.7	-1.7	PASS
7	60	60	59.9999	60.0001	59.9999	0.1	1.8	-1.8	PASS
8	70	70	70.0000	70.0002	70.0002	0.2	1.9	-1.9	PASS
9	80	80	79.9998	80.0005	80.0005	0.5	1.9	-1.9	PASS
10	90	90	89.9996	89.9994	89.9996	0.6	2.0	-2.0	PASS
11	100	100	99.9996	99.9997	99.9993	0.7	2.1	-2.1	PASS
12	110	110	109.9999	110.0000	109.9997	0.3	2.1	-2.1	PASS
13	120	120	119.9987	119.9989	119.9992	1.3	2.2	-2.2	PASS
14	130	130	129.9998	129.9994	129.9990	1.0	2.3	-2.3	PASS
15	140	140	139.9999	139.9994	140.0000	0.6	2.3	-2.3	PASS
16	150	150	149.9999	149.9997	149.9992	0.8	2.4	-2.4	PASS
17	160	160	160.0001	159.9998	159.9994	0.6	2.5	-2.5	PASS
18	170	170	169.9999	169.9999	169.9999	0.1	2.5	-2.5	PASS
19	180	180	179.9990	179.9995	179.9990	1.0	2.6	-2.6	PASS
20	190	190	189.9991	189.9994	190.0002	0.9	2.7	-2.7	PASS
21	200	200	199.9994	199.9998	199.9997	0.6	2.7	-2.7	PASS
22	210	210	210.0000	209.9996	209.9999	0.4	2.8	-2.8	PASS
23	220	220	219.9995	220.0001	219.9995	0.5	2.9	-2.9	PASS
24	230	230	229.9994	229.9999	229.9996	0.6	2.9	-2.9	PASS
25	240	240	239.9997	239.9998	239.9999	0.3	3.0	-3.0	PASS
26	250	250	250.0001	249.9999	249.9995	0.5	3.1	-3.1	PASS
27	260	260	259.9994	259.9995	259.9999	0.6	3.1	-3.1	PASS
28	270	270	270.0002	269.9992	269.9994	0.8	3.2	-3.2	PASS
29	280	280	279.9992	279.9991	279.9999	0.9	3.3	-3.3	PASS
30	290	290	289.9987	289.9991	289.9989	1.3	3.3	-3.3	PASS
31	300	300	299.9998	299.9999	300.0000	0.2	3.4	-3.4	PASS
32	310	310	309.9991	309.9999	309.9996	0.9	3.5	-3.5	PASS
33	320	320	319.9990	319.9988	319.9988	1.2	3.5	-3.5	PASS
34	330	330	329.9997	329.9990	329.9998	1.0	3.6	-3.6	PASS
35	340	340	339.9994	339.9993	339.9999	0.7	3.7	-3.7	PASS
36	350	350	349.9995	349.9994	349.9997	0.6	3.7	-3.7	PASS
37	360	360	360.0000	359.9998	359.9993	0.7	3.8	-3.8	PASS
38	370	370	369.9992	369.9991	369.9992	0.9	3.9	-3.9	PASS
39	380	380	379.9994	379.9994	379.9989	1.1	3.9	-3.9	PASS
40	390	390	389.9997	389.9993	389.9999	0.7	4.0	-4.0	PASS
41	400	400	399.9997	399.9998	399.9995	0.5	4.1	-4.1	PASS

E2-XPY ALL Result PASS



服務工程師 Service Engineer: 黃彥三 Date: 2024/3/26

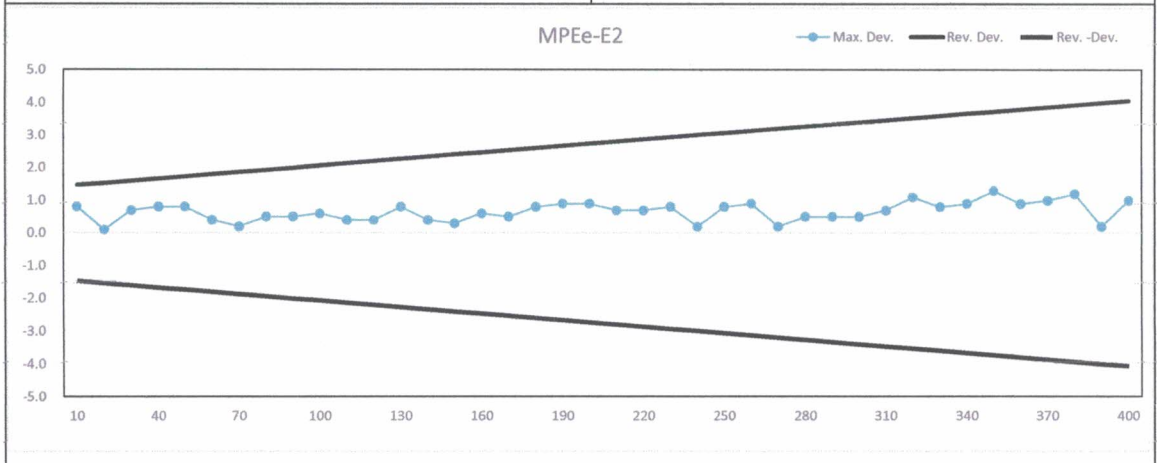
CMM Type OPTIV Performance 442HA
 CMM Number 19514043
 Client MJ
 Sensor Vision
 Standard Glass scale
 Position 40
 Cycle 3
 MPEe-E2 1.4+L/150 µm
 Field XMY



Temperature : 20.6 °C

No.	Meas. Pos.	Ref. dist.	Meas 1st	Meas 2nd	Meas 3rd	Max. Dev.	Rev. Dev.	Rev. -Dev.	Result
2	10	10	9.9998	9.9994	9.9992	0.8	1.5	-1.5	PASS
3	20	20	20.0000	20.0001	20.0000	0.1	1.5	-1.5	PASS
4	30	30	29.9993	29.9999	29.9996	0.7	1.6	-1.6	PASS
5	40	40	39.9996	39.9992	39.9997	0.8	1.7	-1.7	PASS
6	50	50	49.9994	49.9998	49.9992	0.8	1.7	-1.7	PASS
7	60	60	59.9999	59.9996	59.9998	0.4	1.8	-1.8	PASS
8	70	70	69.9999	69.9998	70.0002	0.2	1.9	-1.9	PASS
9	80	80	79.9995	79.9998	80.0000	0.5	1.9	-1.9	PASS
10	90	90	89.9995	89.9997	89.9998	0.5	2.0	-2.0	PASS
11	100	100	99.9998	99.9994	100.0002	0.6	2.1	-2.1	PASS
12	110	110	110.0000	109.9997	109.9996	0.4	2.1	-2.1	PASS
13	120	120	120.0003	119.9996	119.9999	0.4	2.2	-2.2	PASS
14	130	130	129.9998	130.0000	129.9992	0.8	2.3	-2.3	PASS
15	140	140	140.0004	140.0003	140.0003	0.4	2.3	-2.3	PASS
16	150	150	150.0001	149.9997	150.0000	0.3	2.4	-2.4	PASS
17	160	160	159.9994	160.0003	159.9995	0.6	2.5	-2.5	PASS
18	170	170	170.0002	169.9997	169.9995	0.5	2.5	-2.5	PASS
19	180	180	179.9998	179.9992	179.9993	0.8	2.6	-2.6	PASS
20	190	190	190.0005	190.0009	189.9998	0.9	2.7	-2.7	PASS
21	200	200	200.0009	200.0004	199.9999	0.9	2.7	-2.7	PASS
22	210	210	210.0003	209.9993	209.9995	0.7	2.8	-2.8	PASS
23	220	220	220.0007	220.0000	220.0007	0.7	2.9	-2.9	PASS
24	230	230	230.0006	230.0003	230.0008	0.8	2.9	-2.9	PASS
25	240	240	239.9998	240.0002	239.9998	0.2	3.0	-3.0	PASS
26	250	250	250.0001	250.0008	250.0001	0.8	3.1	-3.1	PASS
27	260	260	260.0003	260.0009	260.0003	0.9	3.1	-3.1	PASS
28	270	270	270.0002	270.0000	269.9998	0.2	3.2	-3.2	PASS
29	280	280	280.0002	280.0005	279.9996	0.5	3.3	-3.3	PASS
30	290	290	289.9996	289.9998	289.9995	0.5	3.3	-3.3	PASS
31	300	300	300.0005	300.0003	300.0003	0.5	3.4	-3.4	PASS
32	310	310	309.9993	309.9993	309.9993	0.7	3.5	-3.5	PASS
33	320	320	319.9997	319.9989	319.9991	1.1	3.5	-3.5	PASS
34	330	330	329.9993	329.9992	329.9992	0.8	3.6	-3.6	PASS
35	340	340	339.9994	339.9991	339.9997	0.9	3.7	-3.7	PASS
36	350	350	349.9995	349.9994	349.9987	1.3	3.7	-3.7	PASS
37	360	360	359.9996	359.9991	359.9994	0.9	3.8	-3.8	PASS
38	370	370	369.9996	369.9990	369.9990	1.0	3.9	-3.9	PASS
39	380	380	379.9991	379.9992	379.9988	1.2	3.9	-3.9	PASS
40	390	390	389.9999	390.0001	389.9998	0.2	4.0	-4.0	PASS
41	400	400	399.9990	399.9993	399.9995	1.0	4.1	-4.1	PASS

E2-XMY ALL Result PASS



服務工程師 Service Engineer: 黃彥三 Date: 2024/3/26

CMM Type OPTIV Performance 442HA
 CMM Number 19514043
 Client MJ
 Sensor Probe
 Standard Step guage
 Postion 38
 Cycle 3
 MPEe-E1 1.0+L/200 µm
 Field X



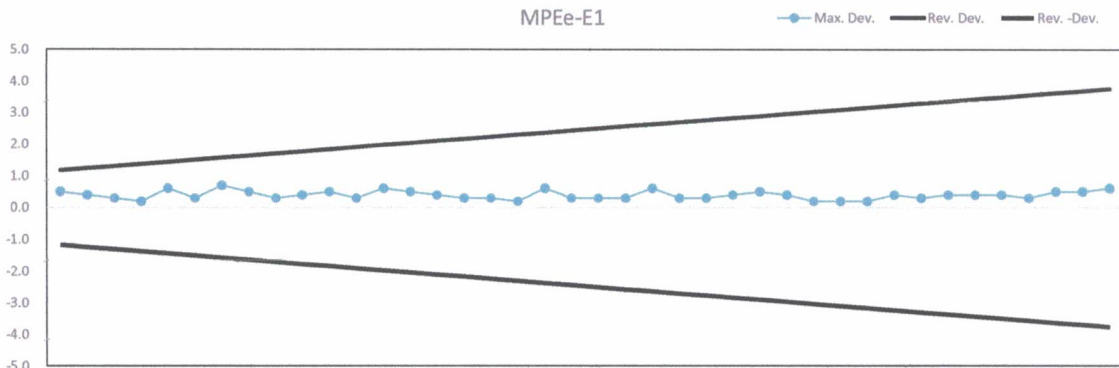
Temperature : 20.7 °C

No.	Meas. Pos.	Ref. dist.	Meas 1st	Meas 2nd	Meas 3rd	Max. Dev.	Rev. Dev.	Rev. -Dev.	Result
1	10	10	10.0000	9.9995	9.9999	0.5	1.2	-1.2	PASS
2	20	20	20.0004	20.0000	20.0004	0.4	1.2	-1.2	PASS
3	30	30	30.0003	30.0000	30.0003	0.3	1.3	-1.3	PASS
4	40	40	40.0001	39.9998	40.0002	0.2	1.4	-1.4	PASS
5	50	50	50.0006	50.0004	50.0005	0.6	1.4	-1.4	PASS
6	60	60	60.0003	60.0000	60.0003	0.3	1.5	-1.5	PASS
7	70	70	70.0007	70.0004	70.0005	0.7	1.6	-1.6	PASS
8	80	80	80.0005	80.0001	80.0003	0.5	1.6	-1.6	PASS
9	90	90	90.0003	89.9999	90.0001	0.3	1.7	-1.7	PASS
10	100	100	100.0004	99.9999	100.0001	0.4	1.8	-1.8	PASS
11	110	110	110.0005	110.0001	110.0001	0.5	1.8	-1.8	PASS
12	120	120	120.0003	120.0000	120.0001	0.3	1.9	-1.9	PASS
13	130	130	130.0006	129.9999	130.0002	0.6	2.0	-2.0	PASS
14	140	140	140.0005	140.0001	140.0003	0.5	2.0	-2.0	PASS
15	150	150	150.0004	149.9999	150.0002	0.4	2.1	-2.1	PASS
16	160	160	160.0003	160.0000	160.0002	0.3	2.2	-2.2	PASS
17	170	170	170.0003	170.0000	170.0003	0.3	2.2	-2.2	PASS
18	180	180	180.0002	180.0000	180.0000	0.2	2.3	-2.3	PASS
19	190	190	190.0006	190.0002	190.0001	0.6	2.4	-2.4	PASS
20	200	200	200.0003	200.0002	200.0001	0.3	2.4	-2.4	PASS
21	210	210	210.0003	210.0002	210.0000	0.3	2.5	-2.5	PASS
22	220	220	220.0003	220.0001	220.0000	0.3	2.6	-2.6	PASS
23	230	230	230.0006	230.0004	230.0001	0.6	2.6	-2.6	PASS
24	240	240	240.0003	240.0003	240.0002	0.3	2.7	-2.7	PASS
25	250	250	250.0002	250.0003	250.0001	0.3	2.8	-2.8	PASS
26	260	260	260.0004	260.0004	260.0001	0.4	2.8	-2.8	PASS
27	270	270	270.0005	270.0003	270.0001	0.5	2.9	-2.9	PASS
28	280	280	280.0002	280.0004	279.9999	0.4	3.0	-3.0	PASS
29	290	290	289.9999	290.0001	289.9998	0.2	3.0	-3.0	PASS
30	300	300	300.0001	300.0002	299.9999	0.2	3.1	-3.1	PASS
31	310	310	310.0002	310.0002	309.9999	0.2	3.2	-3.2	PASS
32	320	320	320.0002	320.0004	320.0000	0.4	3.2	-3.2	PASS
33	330	330	330.0001	330.0001	329.9997	0.3	3.3	-3.3	PASS
34	340	340	340.0004	340.0003	340.0000	0.4	3.4	-3.4	PASS
35	350	350	350.0004	350.0003	349.9997	0.4	3.4	-3.4	PASS
36	360	360	360.0004	360.0004	359.9999	0.4	3.5	-3.5	PASS
37	370	370	370.0002	370.0002	369.9997	0.3	3.6	-3.6	PASS
38	380	380	380.0004	380.0005	379.9999	0.5	3.6	-3.6	PASS
39	390	390	390.0004	390.0005	389.9999	0.5	3.7	-3.7	PASS
40	400	400	400.0000	400.0001	399.9994	0.6	3.8	-3.8	PASS

E1-X

ALL Result

PASS



服務工程師
Service Engineer:

黃彥三

日期
Date:

2024/3/26

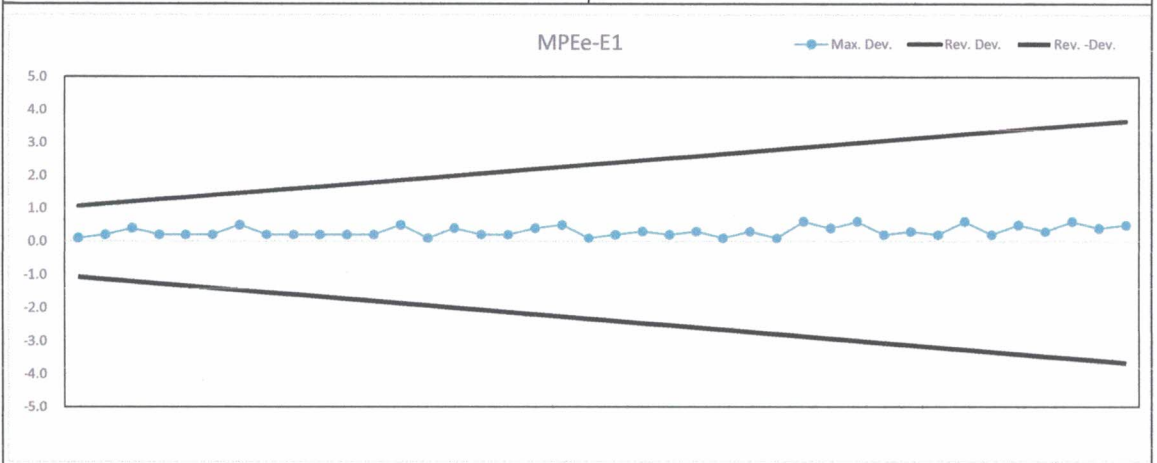
CMM Type OPTIV Performance 442HA
 CMM Number 19514043
 Client MJ
 Sensor Probe
 Standard Step guage
 Position 38
 Cycle 3
 MPEc-E1 1.0+L/200 µm
 Field Y



Temperature : 20.6 °C

No.	Meas. Pos.	Ref. dist.	Meas_1st	Meas_2nd	Meas_3rd	Max. Dev.	Rev. Dev.	Rev. -Dev.	Result
1	10	10	10.0001	10.0001	10.0001	0.1	1.1	-1.1	PASS
2	20	20	20.0001	20.0001	20.0002	0.2	1.1	-1.1	PASS
3	30	30	30.0004	30.0004	30.0004	0.4	1.2	-1.2	PASS
4	40	40	39.9998	39.9999	40.0000	0.2	1.3	-1.3	PASS
5	50	50	50.0001	50.0002	50.0002	0.2	1.3	-1.3	PASS
6	60	60	59.9998	60.0000	60.0000	0.2	1.4	-1.4	PASS
7	70	70	70.0004	70.0004	70.0005	0.5	1.5	-1.5	PASS
8	80	80	80.0000	80.0001	80.0002	0.2	1.5	-1.5	PASS
9	90	90	90.0002	90.0001	90.0002	0.2	1.6	-1.6	PASS
10	100	100	99.9998	99.9999	100.0000	0.2	1.7	-1.7	PASS
11	110	110	110.0002	110.0002	110.0002	0.2	1.7	-1.7	PASS
12	120	120	119.9998	119.9998	119.9999	0.2	1.8	-1.8	PASS
13	130	130	130.0004	130.0005	130.0004	0.5	1.9	-1.9	PASS
14	140	140	140.0000	140.0001	140.0001	0.1	1.9	-1.9	PASS
15	150	150	150.0003	150.0002	150.0004	0.4	2.0	-2.0	PASS
16	160	160	159.9998	159.9999	159.9999	0.2	2.1	-2.1	PASS
17	170	170	170.0000	170.0001	170.0002	0.2	2.1	-2.1	PASS
18	180	180	179.9996	179.9997	179.9998	0.4	2.2	-2.2	PASS
19	190	190	190.0003	190.0003	190.0005	0.5	2.3	-2.3	PASS
20	200	200	199.9999	199.9999	200.0001	0.1	2.3	-2.3	PASS
21	210	210	210.0000	210.0001	210.0002	0.2	2.4	-2.4	PASS
22	220	220	219.9997	219.9998	219.9999	0.3	2.5	-2.5	PASS
23	230	230	230.0001	230.0001	230.0002	0.2	2.5	-2.5	PASS
24	240	240	239.9998	239.9997	239.9999	0.3	2.6	-2.6	PASS
25	250	250	250.0000	249.9999	250.0001	0.1	2.7	-2.7	PASS
26	260	260	259.9997	259.9997	259.9998	0.3	2.7	-2.7	PASS
27	270	270	270.0000	270.0000	270.0001	0.1	2.8	-2.8	PASS
28	280	280	279.9994	279.9994	279.9996	0.6	2.9	-2.9	PASS
29	290	290	289.9997	289.9996	289.9998	0.4	2.9	-2.9	PASS
30	300	300	299.9994	299.9994	299.9995	0.6	3.0	-3.0	PASS
31	310	310	310.0000	310.0000	310.0002	0.2	3.1	-3.1	PASS
32	320	320	319.9997	319.9997	319.9998	0.3	3.1	-3.1	PASS
33	330	330	329.9998	329.9998	330.0000	0.2	3.2	-3.2	PASS
34	340	340	339.9994	339.9994	339.9995	0.6	3.3	-3.3	PASS
35	350	350	349.9998	349.9999	350.0000	0.2	3.3	-3.3	PASS
36	360	360	359.9995	359.9996	359.9997	0.5	3.4	-3.4	PASS
37	370	370	369.9997	369.9999	369.9999	0.3	3.5	-3.5	PASS
38	380	380	379.9994	379.9995	379.9996	0.6	3.5	-3.5	PASS
39	390	390	389.9996	389.9997	389.9998	0.4	3.6	-3.6	PASS
40	400	400	399.9995	399.9995	399.9997	0.5	3.7	-3.7	PASS

E1-Y ALL Result PASS



服務工程師 Service Engineer: 黃彥三 Date: 2024/3/26

CMM Type OPTIV Performance 442HA
 CMM Number 19514043
 Client MJ
 Sensor Probe
 Standard Step guage
 Postion 38
 Cycle 3
 MPEe-E2 1.4+L/150 μm
 Field XPY



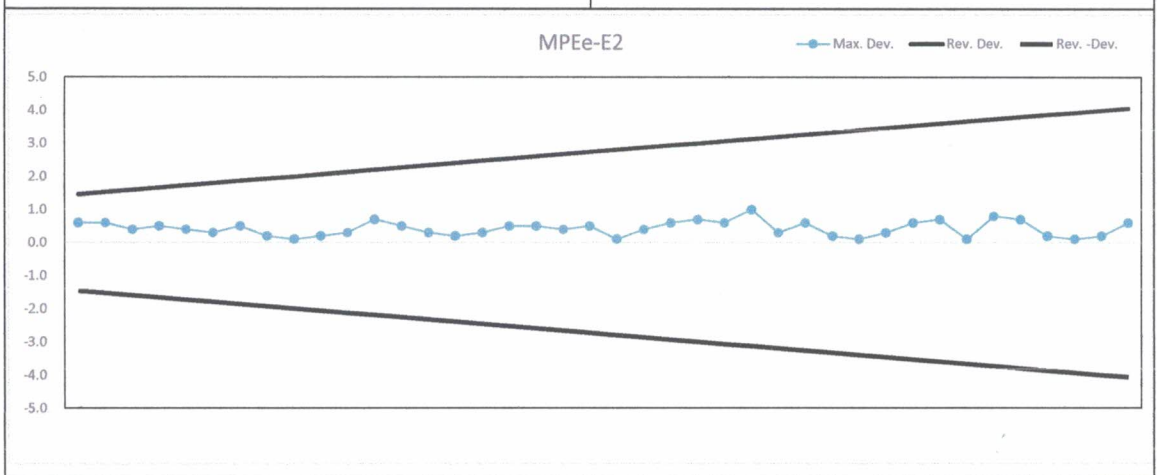
Temperature : 20.7 °C

No.	Meas. Pos.	Ref. dist.	Meas 1st	Meas 2nd	Meas 3rd	Max. Dev.	Rev. Dev.	Rev. -Dev.	Result
1	10	10	10.0005	10.0006	10.0004	0.6	1.5	-1.5	PASS
2	20	20	20.0006	20.0006	20.0004	0.6	1.5	-1.5	PASS
3	30	30	30.0004	30.0002	30.0001	0.4	1.6	-1.6	PASS
4	40	40	40.0005	40.0004	40.0002	0.5	1.7	-1.7	PASS
5	50	50	50.0004	50.0004	50.0002	0.4	1.7	-1.7	PASS
6	60	60	59.9999	59.9998	59.9997	0.3	1.8	-1.8	PASS
7	70	70	70.0005	70.0005	70.0003	0.5	1.9	-1.9	PASS
8	80	80	80.0000	80.0000	79.9998	0.2	1.9	-1.9	PASS
9	90	90	90.0001	90.0000	90.0000	0.1	2.0	-2.0	PASS
10	100	100	100.0002	100.0002	100.0001	0.2	2.1	-2.1	PASS
11	110	110	110.0003	110.0002	110.0001	0.3	2.1	-2.1	PASS
12	120	120	119.9995	119.9994	119.9993	0.7	2.2	-2.2	PASS
13	130	130	130.0005	130.0005	130.0003	0.5	2.3	-2.3	PASS
14	140	140	139.9999	139.9998	139.9997	0.3	2.3	-2.3	PASS
15	150	150	150.0002	150.0002	150.0001	0.2	2.4	-2.4	PASS
16	160	160	160.0003	160.0002	160.0002	0.3	2.5	-2.5	PASS
17	170	170	169.9997	169.9995	169.9995	0.5	2.5	-2.5	PASS
18	180	180	179.9996	179.9996	179.9995	0.5	2.6	-2.6	PASS
19	190	190	190.0004	190.0003	190.0002	0.4	2.7	-2.7	PASS
20	200	200	199.9996	199.9996	199.9995	0.5	2.7	-2.7	PASS
21	210	210	210.0000	209.9999	209.9999	0.1	2.8	-2.8	PASS
22	220	220	219.9998	219.9997	219.9996	0.4	2.9	-2.9	PASS
23	230	230	229.9995	229.9994	229.9994	0.6	2.9	-2.9	PASS
24	240	240	239.9994	239.9993	239.9993	0.7	3.0	-3.0	PASS
25	250	250	249.9996	249.9994	249.9994	0.6	3.1	-3.1	PASS
26	260	260	259.9991	259.9990	259.9990	1.0	3.1	-3.1	PASS
27	270	270	270.0003	270.0002	270.0002	0.3	3.2	-3.2	PASS
28	280	280	279.9996	279.9995	279.9994	0.6	3.3	-3.3	PASS
29	290	290	290.0002	290.0000	289.9999	0.2	3.3	-3.3	PASS
30	300	300	300.0001	300.0001	300.0001	0.1	3.4	-3.4	PASS
31	310	310	309.9998	309.9998	309.9997	0.3	3.5	-3.5	PASS
32	320	320	319.9994	319.9994	319.9994	0.6	3.5	-3.5	PASS
33	330	330	330.0007	330.0006	330.0006	0.7	3.6	-3.6	PASS
34	340	340	339.9999	339.9999	339.9999	0.1	3.7	-3.7	PASS
35	350	350	350.0008	350.0007	350.0007	0.8	3.7	-3.7	PASS
36	360	360	360.0007	360.0007	360.0006	0.7	3.8	-3.8	PASS
37	370	370	370.0002	370.0002	370.0002	0.2	3.9	-3.9	PASS
38	380	380	379.9999	379.9999	379.9999	0.1	3.9	-3.9	PASS
39	390	390	390.0002	390.0002	390.0002	0.2	4.0	-4.0	PASS
40	400	400	399.9994	399.9994	399.9995	0.6	4.1	-4.1	PASS

E2-XPY

ALL Result

PASS



服務工程師 Service Engineer:	黃彥三	日期 Date:	2024/3/26
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CMM Type OPTIV Performance 442HA
 CMM Number 19514043
 Client MJ
 Sensor Probe
 Standard Step guage
 Position 38
 Cycle 3
 MPEe-E2 1.4+L/150 µm
 Field XMY



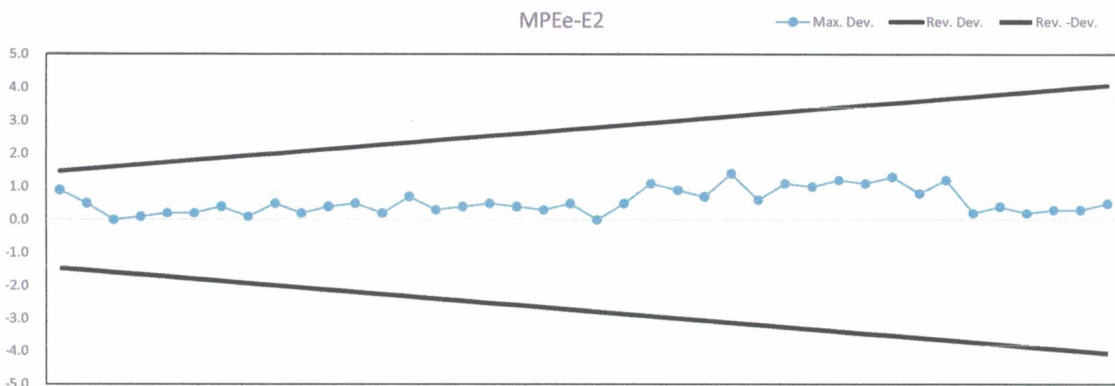
Temperature : 20.7 °C

No.	Meas. Pos.	Ref. dist.	Meas 1st	Meas 2nd	Meas 3rd	Max. Dev.	Rev. Dev.	Rev. -Dev.	Result
1	10	10	9.9994	9.9991	9.9991	0.9	1.5	-1.5	PASS
2	20	20	19.9997	19.9996	19.9995	0.5	1.5	-1.5	PASS
3	30	30	30.0000	30.0000	30.0000	0.0	1.6	-1.6	PASS
4	40	40	40.0000	39.9999	39.9999	0.1	1.7	-1.7	PASS
5	50	50	50.0001	50.0002	50.0001	0.2	1.7	-1.7	PASS
6	60	60	60.0002	60.0002	60.0001	0.2	1.8	-1.8	PASS
7	70	70	70.0000	69.9998	69.9996	0.4	1.9	-1.9	PASS
8	80	80	80.0001	80.0000	79.9999	0.1	1.9	-1.9	PASS
9	90	90	89.9997	89.9997	89.9995	0.5	2.0	-2.0	PASS
10	100	100	99.9998	99.9998	99.9999	0.2	2.1	-2.1	PASS
11	110	110	110.0004	110.0003	110.0004	0.4	2.1	-2.1	PASS
12	120	120	120.0004	120.0004	120.0005	0.5	2.2	-2.2	PASS
13	130	130	130.0001	130.0001	130.0002	0.2	2.3	-2.3	PASS
14	140	140	140.0006	140.0007	140.0006	0.7	2.3	-2.3	PASS
15	150	150	150.0002	150.0003	150.0002	0.3	2.4	-2.4	PASS
16	160	160	160.0003	160.0004	160.0004	0.4	2.5	-2.5	PASS
17	170	170	170.0005	170.0004	170.0005	0.5	2.5	-2.5	PASS
18	180	180	180.0004	180.0004	180.0004	0.4	2.6	-2.6	PASS
19	190	190	190.0001	190.0003	190.0002	0.3	2.7	-2.7	PASS
20	200	200	200.0004	200.0005	200.0005	0.5	2.7	-2.7	PASS
21	210	210	210.0000	210.0000	210.0000	0.0	2.8	-2.8	PASS
22	220	220	220.0005	220.0004	220.0005	0.5	2.9	-2.9	PASS
23	230	230	230.0009	230.0011	230.0010	1.1	2.9	-2.9	PASS
24	240	240	240.0008	240.0009	240.0009	0.9	3.0	-3.0	PASS
25	250	250	250.0007	250.0007	250.0007	0.7	3.1	-3.1	PASS
26	260	260	260.0013	260.0014	260.0014	1.4	3.1	-3.1	PASS
27	270	270	270.0003	270.0005	270.0006	0.6	3.2	-3.2	PASS
28	280	280	280.0009	280.0010	280.0011	1.1	3.3	-3.3	PASS
29	290	290	290.0008	290.0008	290.0010	1.0	3.3	-3.3	PASS
30	300	300	300.0010	300.0010	300.0012	1.2	3.4	-3.4	PASS
31	310	310	310.0010	310.0011	310.0010	1.1	3.5	-3.5	PASS
32	320	320	320.0010	320.0011	320.0013	1.3	3.5	-3.5	PASS
33	330	330	330.0005	330.0008	330.0008	0.8	3.6	-3.6	PASS
34	340	340	340.0010	340.0010	340.0012	1.2	3.7	-3.7	PASS
35	350	350	350.0000	350.0002	350.0001	0.2	3.7	-3.7	PASS
36	360	360	360.0001	360.0001	360.0004	0.4	3.8	-3.8	PASS
37	370	370	370.0000	370.0000	370.0002	0.2	3.9	-3.9	PASS
38	380	380	379.9997	379.9998	380.0000	0.3	3.9	-3.9	PASS
39	390	390	390.0001	390.0000	390.0003	0.3	4.0	-4.0	PASS
40	400	400	400.0002	400.0004	400.0005	0.5	4.1	-4.1	PASS

E2-XMY

ALL Result

PASS



服務工程師
Service Engineer:

黃彥三

日期
Date:

2024/3/26