



## QUALITY CONTROL REPORT FOR DENTAL X-RAY EQUIPMENT

Report Date	Machine Name	Prepared By:
20-01-2025	Intra-oral	SSTE Team

### Details of the Diagnostic X-ray Equipment

Center Name	Medical Nmae ▲
Manufacturing Date	01-10-2021
Inspection Date	15-01-2025
Device SN	55FFF55
Room Id	Clinic -5
Product name	Dentsply
Device Manufacturer	Sirona

Branch ▲	Doha
F/S mm	0.4 mm
Max mA	7 mA
Total Filtration	1.5 mm Al @70
Tube Serial No.	535399
Tube Type	D444XXX
Tube Voltage	70 kV

### Report Summary

**The QC test results demonstrate that all tested parameters have successfully passed the required examinations**



## Overall Summary of Tests Performed

TestCategory	Result
Beam Quality (HVL)	✓ Pass
Exposure Time Accuracy	✓ Pass
Tube Output Linearity	✓ Pass
Tube Output Reproducibility	✓ Pass
Tube voltage Accuracy	✓ Pass
Visual, Mechanical and Safety Checks	✓ Pass

## Visual, Mechanical and Safety Checks

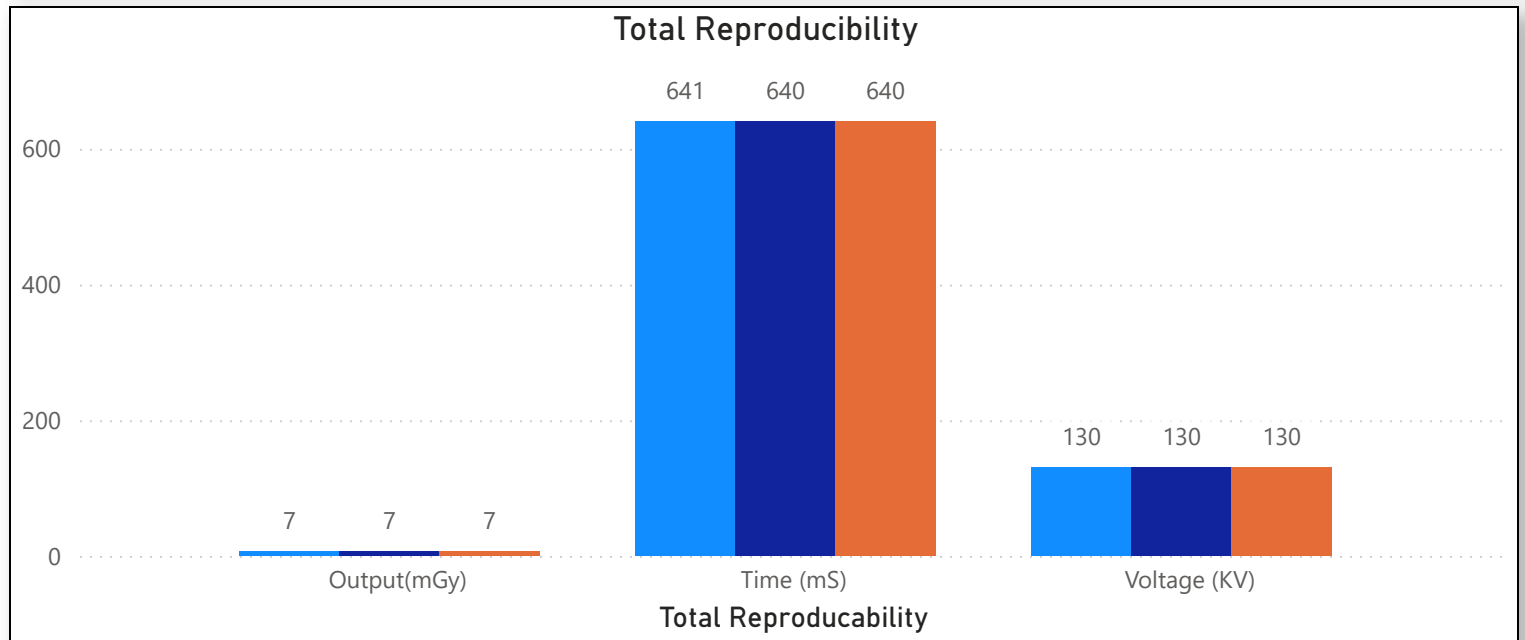
Physical Condition	Pass ▲	Result
Tube head stability and Positioning	✓ 0.5	✓ Pass
Lead protective Devices	✓ A	✓ Pass
Personal monitor	✓ A	✓ Pass
Pregnant Warning signs	✓ A	✓ Pass
Radiation Warning signs	✓ A	✓ Pass
Warning Light	✓ A	✓ Pass

**A= Available, N/A= Not Available**



## Total Reproducibility

Total Reproducibility	320 ms	1	2	3	Result
Time (mS)	70 kVp	320.40	320.20	320.40	✓ Pass
Time (mS)	60 kVp	320.10	320.10	320.00	✓ Pass
Voltage (KV)	70 kVp	69.70	69.70	69.80	✓ Pass
Voltage (KV)	60 kVp	60.30	60.30	60.10	✓ Pass
Output(mGy)	70 kVp	3.72	3.72	3.72	✓ Pass
Output(mGy)	60 kVp	2.86	2.86	2.86	✓ Pass



### Settings - 60 KvP

Mean	%CV	Limits	Matric	Results
60.23	-0.16	<0.2	kVp	✓ Pass
2.86	-0.03	<0.5	Output	✓ Pass
320.07	-0.01	<0.5	Time	✓ Pass

### Settings - 70 KvP

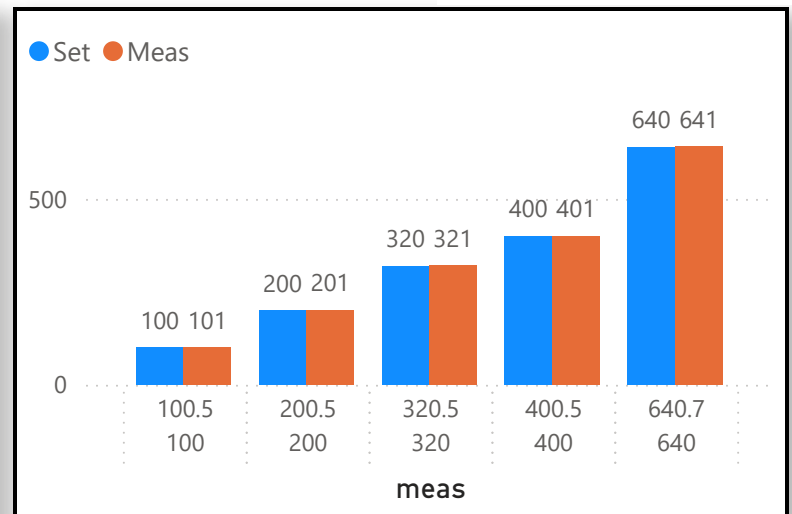
Mean	%CV	Limits	Matric	Results
69.73	-0.07	<0.2	Kvp	✓ Pass
3.72	-0.01	<0.5	Output	✓ Pass
320.33	-0.03	<0.5	Time	✓ Pass



## Exposure Time Accuracy.

KvP=70

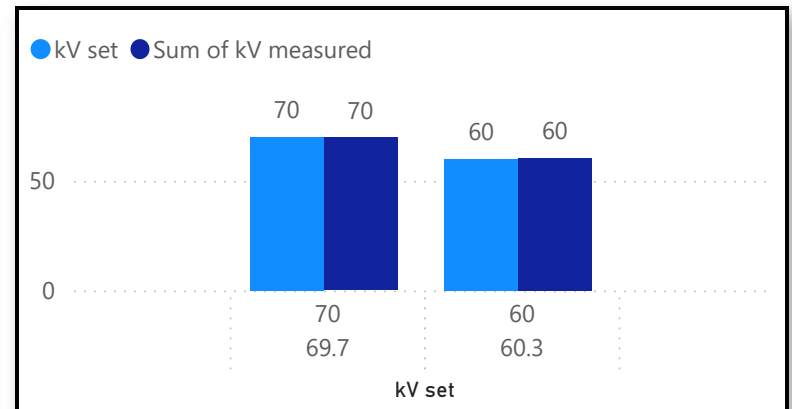
set	meas	diff %	Acceptance Criteria	Result
100	100.50	-0.50	(+ or -) 10	✓ Pass
200	200.50	-0.25	(+ or -) 10	✓ Pass
320	320.50	-0.16	(+ or -) 10	✓ Pass
400	400.50	-0.13	(+ or -) 10	✓ Pass
640	640.70	-0.11	(+ or -) 10	✓ Pass



## Tube Voltage Accuracy.

mA=7

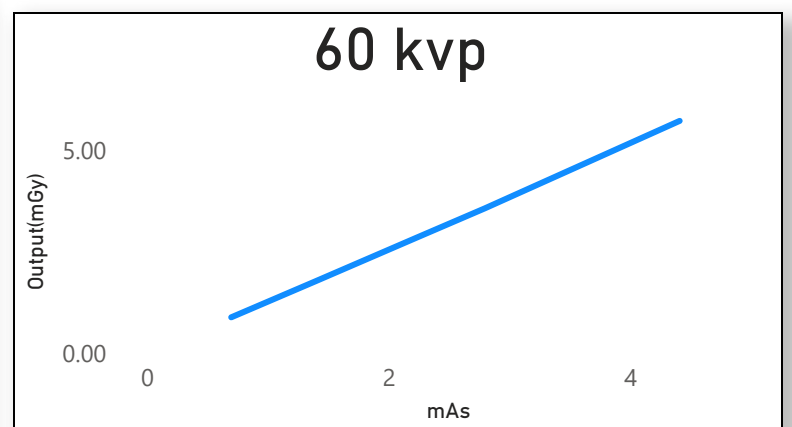
kV set	kV measured	diff %	Acceptance Criteria	Result
60	60.30	-0.50	(+ or -) 10	✓ Pass
70	69.70	0.43	(+ or -) 10	✓ Pass



## Output Linearity.

mA=7

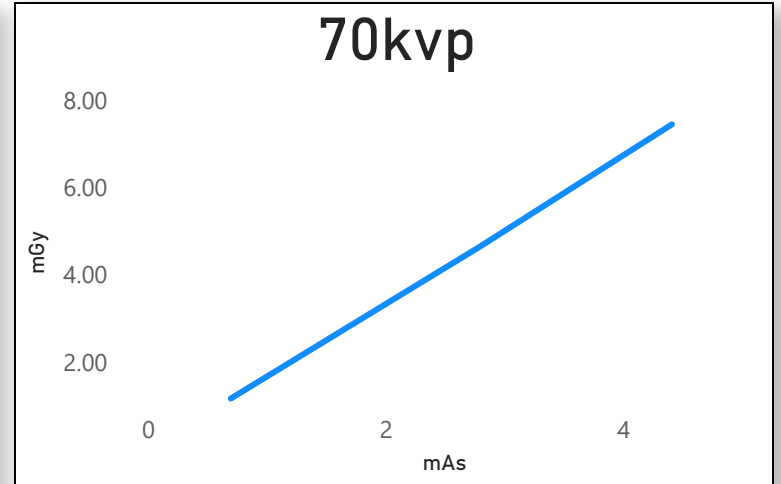
Time	Output	mGy/mAs	mAs	Linearity	Result
0.10	0.89	1.28	0.70	0.009	✓ Pass
0.20	1.79	1.28	1.40	0.009	✓ Pass
0.32	2.86	1.28	2.24	0.009	✓ Pass
0.40	3.58	1.28	2.80	0.009	✓ Pass
0.63	5.73	1.30	4.41	0.009	✓ Pass





mA=7

Time	Output	mGy/ mAs	mAs	Linearity	Result
0.10	1.16	1.66	0.70	0.009	✓ Pass
0.20	2.33	1.66	1.40	0.009	✓ Pass
0.32	3.72	1.66	2.24	0.009	✓ Pass
0.40	4.65	1.66	2.80	0.009	✓ Pass
0.63	7.44	1.69	4.41	0.009	✓ Pass



### Beam Quality (HVL)

Time set:	HVL:	Acceptance	Result
320	(mmAl)	Criteria	
60kvp	1.88	≥ 1.5	✓ Pass
70kvp	2.19	≥ 1.5	✓ Pass

**Conclusion: The QC test results demonstrate that all tested parameters have successfully passed the required examinations.**

**This Report Is Valid for One Year from The Issuing Date**

Reviewed by | Mohamed Mohamed