Phone: +91-22-2559 8713
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Mumbai– 400 094

Government of India
Bhabha Atomic Research Centre
Radiological Physics & Advisory Division

Ref: RPAD/MPS/Pb-Eq/BIS/2023/212 July, 4 2023

Sub: Lead equivalence test certificate

Please find enclosed herewith the lead equivalence test certificates for four X-ray radiation protection products submitted by your company.

(S. D. Sharma) 4/7/2023

Encl: As above

Bharat Imaging Systems
C-373, Ground Floor
Old No. D-162NR AK Chamber
Delhi-110 096
Phone: +91-9710233145
+91-8882545244

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Mumbai– 400 094

Government of India
Bhabha Atomic Research Centre
Radiological Physics & Advisory Division

Company: Bharat Imaging Systems, C-373, Ground Floor, Old No. D-162NR AK Chamber, Delhi-110 096

Date of submission: 22-06-2023

Specification of X-ray unit used for carrying out the test: Siemens Polydoros-LX with high frequency generator (max. 150 kV, max. 800 mA), kV Variation: ± 1 kV, Output Variation (COV): < 0.05

Test protocol used: IS/IEC 61331: PART 3:2014

Specifications of submitted X-ray radiation protective "BIS INDIA-W 0.5" apron:

Sr. No.	Particular	"BIS INDIA-W 0.5" apron
1	Weight	3.9 kg
2	Length	100 cm
3	Width	60 cm

Measured lead equivalence of "BIS INDIA-W 0.5" apron: 0.50 mm at 100 kVp of X-ray beam

Tested by: Dr. (Smt) Reena Sharma, RPAD, BARC

Signature: Reena Sharma 04-07-2023

Checked by: Philomina A., RPAD, BARC

Signature: Philomina 04/07/2023

S Sharma 4/7/2023
(S. D. Sharma)
Head,
Medical Physics Section

Note: This certificate is issued on the condition that emblem of BARC shall not be used on the tested product or its catalogue. We do not issue duplicate copy of the certificate in any circumstances

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Bhabha Atomic Research Centre
Radiological Physics & Advisory Division

Company: Bharat Imaging Systems, C-373, Ground Floor, Old No. D-162NR AK Chamber, Delhi-110 096

Date of submission: 22-06-2023

Specification of X-ray unit used for carrying out the test: Siemens Polydoros-LX with high frequency generator (max. 150 kV, max. 800 mA), kV Variation: ± 1 kV, Output Variation (COV): < 0.05

Test protocol used: IS/IEC 61331: PART 3:2014

Specifications of submitted X-ray radiation protective "BIS INDIA-F 0.5" apron:

Sr. No.	Particular	"BIS INDIA-F 0.5" apron
1	Weight	3.4 kg
2	Length	100 cm
3	Width	60 cm

Measured lead equivalence of "BIS INDIA-F 0.5" apron: 0.50 mm at 100 kVp of X-ray beam

Tested by: Dr. (Smt) Reena Sharma, RPAD, BARC

Signature: Reena Sharma
04-07-2023

Checked by: Philomina A., RPAD, BARC

Signature: Philomina
04/07/2023

S D Sharma
24/7/2023
(S. D. Sharma)
Head,
Medical Physics Section

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Company: Bharat Imaging Systems, C-373, Ground Floor, Old No. D-162NR AK Chamber, Delhi-110 096

Date of submission: 22-06-2023

Specification of X-ray unit used for carrying out the test: Siemens Polydoros-LX with high frequency generator (max. 150 kV, max. 800 mA), kV Variation: ± 1 kV, Output Variation (COV): < 0.05

Test protocol used: IS/IEC 61331: PART 3:2014

Specifications of submitted X-ray radiation protective "BIS INDIA-0.25" apron:

Sr. No.	Particular	"BIS INDIA-0.25" apron
1	Weight	2.6 kg
2	Length	100 cm
3	Width	60 cm

Measured lead equivalence of "BIS INDIA-0.25" apron: 0.25 mm at 100 kVp of X-ray beam

Tested by: Dr. (Smt) Reena Sharma, RPAD, BARC

Signature: Reena Sharma 04-07-2023

Checked by: Philomina A., RPAD, BARC

Signature: Philomina 04/07/2023

4/7/2023
(S. D. Sharma)
Head,
Medical Physics Section

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Radiological Physics & Advisory Division

Company: Bharat Imaging Systems, C-373, Ground Floor, Old No. D-162NR AK Chamber, Delhi-110 096

Date of submission: 22-06-2023

Specification of X-ray unit used for carrying out the test: Siemens Polydoros-LX with high frequency generator (max. 150 kV, max. 800 mA), kV Variation: ± 1 kV, Output Variation (COV): < 0.05

Test protocol used: IS/IEC 61331: PART 3:2014

Specifications of submitted X-ray radiation protective "BIS INDIA-Lead Glass":

Sr. No.	Particular	"BIS INDIA-Lead Glass"
1	Weight	4.3 kg
2	Length	30 cm
3	Width	30 cm
4	Thickness	1.0 cm

Measured lead equivalence of "BIS INDIA- Lead Glass": 2.0 mm at 100 kVp of X-ray beam

Tested by: Dr. (Smt) Reena Sharma, RPAD, BARC

Signature: Reenasharma 04-07-2023

Checked by: Philomina A., RPAD, BARC

Signature: Philomina 04/07/2023

SDSharma 4/7/2023

(S. D. Sharma)
Head,
Medical Physics Section

Note: This certificate is issued on the condition that emblem of BARC shall not be used on the tested product or its catalogue. We do not issue duplicate copy of the certificate in any circumstances