Appendix

A1. Data collection sheet

Sudan University of Science and Technology (SUST)

College of Graduated Studies

Submitted for Fulfillment of Academic Requirements for the Degree of Master in Radiation Therapy Technology

Data Collection Sheet

Computerized Automatic Verification of Light and Radiation Field Superimposition

Date: ……. **Radiotherapy Center: …….**

No.	Medical Physicist	Reading (score) (cm)				
		Upper *(x1)*	Lower *(x2)*	Right *(y1)*	Left *(y2)*	Center

Appendix

Table A-1. Manual Reading Score of Radiation field size (cm).

No.	Medical Physicist	Manual Reading Score (cm)				
		Upper *(x1)*	Lower *(x2)*	Right *(y1)*	Left *(y2)*	Center
1	A	5.1	5.1	5.0	5.2	.2
2	A	5.0	5.1	5.2	5.0	.2
3	A	5.1	5.1	5.1	5.1	.1
4	A	4.9	5.2	5.0	5.2	.1
1	B	5.1	5.2	5.2	5.1	.1
2	B	5.1	5.0	5.1	5.0	.2
3	B	5.0	5.1	5.3	5.1	.2
4	B	5.1	5.1	5.1	5.2	.1

Table A-2. Computerized Reading Score of Radiation field size (cm).

No.	Medical Physicist	Computerized Reading (score) (cm)				
		Upper *(x1)*	Lower *(x2)*	Right *(y1)*	Left*(y2)*	Center
1	A	4.45	4.45	4.45	4.45	.1
2	A	4.45	4.45	4.45	4.45	.1
3	A	4.45	4.45	4.45	4.45	.1
4	A	4.45	4.45	4.45	4.45	.1
1	B	4.45	4.45	4.45	4.45	.1
2	B	4.45	4.45	4.45	4.45	.1
3	B	4.45	4.45	4.45	4.45	.1
4	B	4.45	4.45	4.45	4.45	.1

Table A-3. Light Field Reading Score of Radiation field size (cm).

No.	Medical Physicist	Light field size (score) (cm)				
		Upper*(x1)*	Lower*(x2)*	Right *(y1)*	Left *(y2)*	Center
1	A	5.0	5.0	5.0	5.0	0
2	A	5.0	5.0	5.0	5.0	0
3	A	5.0	5.0	5.0	5.0	0
4	A	5.0	5.0	5.0	5.0	0
1	B	5.0	5.0	5.0	5.0	0
2	B	5.0	5.0	5.0	5.0	0
3	B	5.0	5.0	5.0	5.0	0
4	B	5.1	5.0	5.0	5.0	0

Table A-4. Penumbra Score of Radiation field size (cm).

No.	Medical Physicist	Penumbra (score) (cm)	
		Manual Score (cm)	Computerized Score (cm)
1	A	0.4	0.8
2	A	0.3	0.8
3	A	0.3	0.8
4	A	0.4	0.8
1	B	0.3	0.9
2	B	0.4	0.9
3	B	0.4	0.9
4	B	0.3	0.9

Appendix (B)

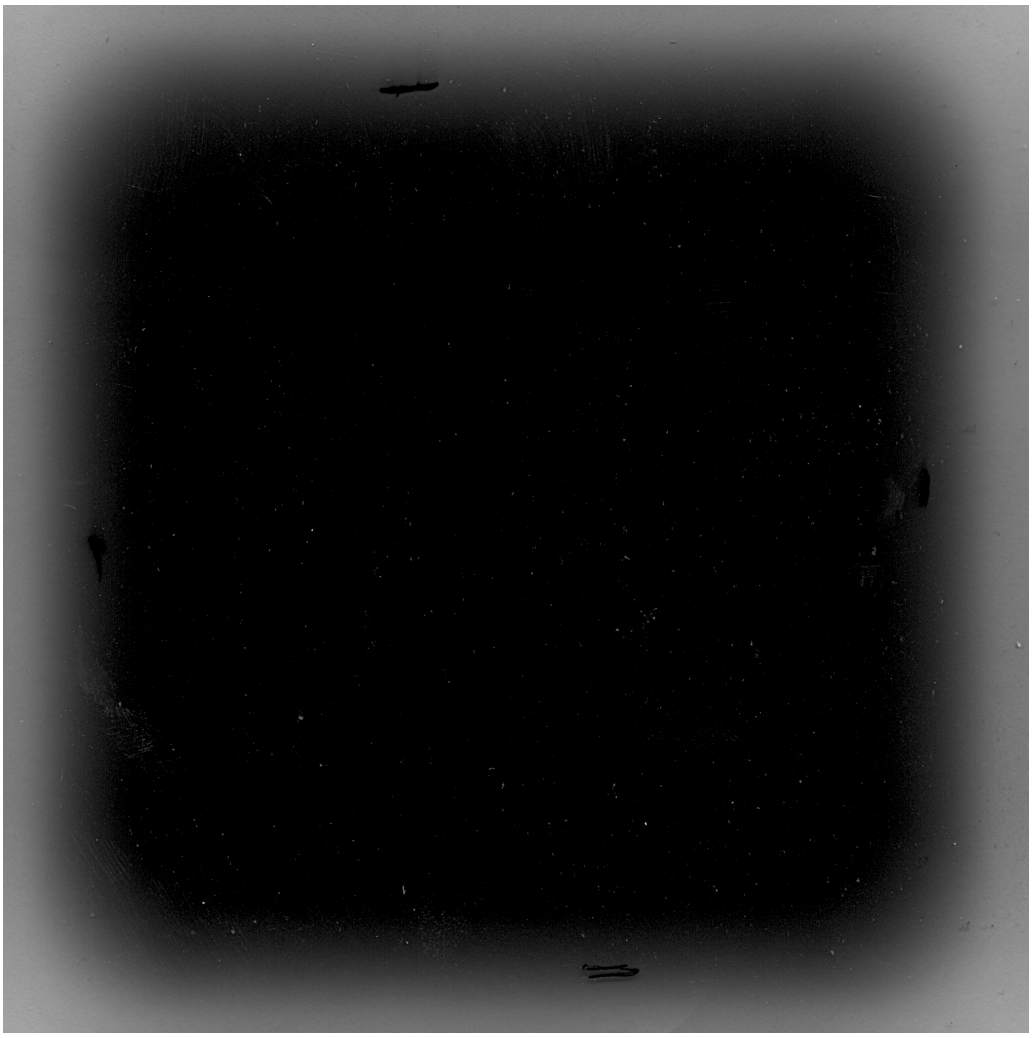

Figure B-1. Original Cobalt-60 radiograph used to study computerized verification of light and radiation field size. (The contrast of this image was enhanced so that it could be better displayed in the printed document).

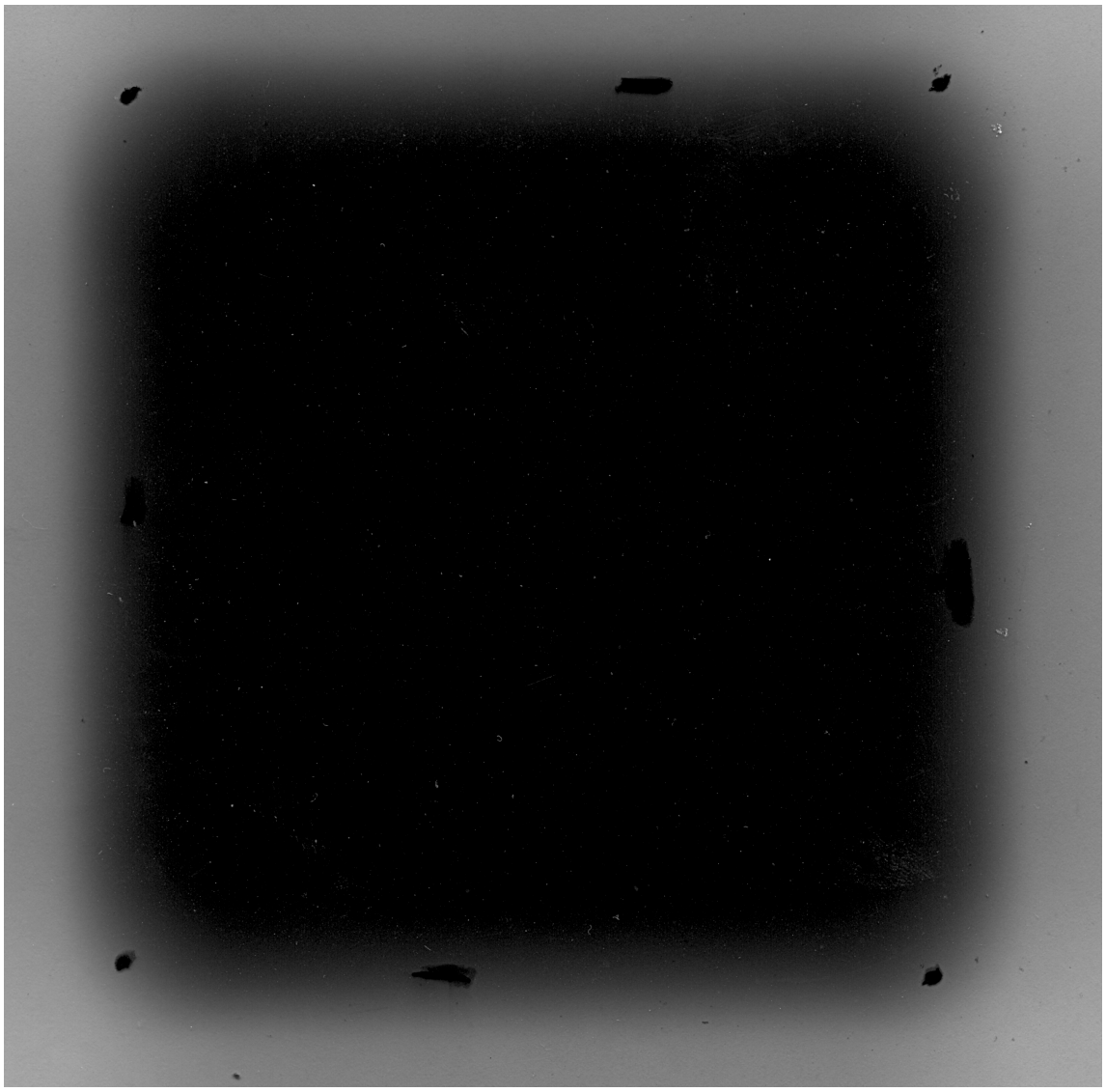

Figure B-2. Original Cobalt-60 radiograph used to study computerized verification of light and radiation field size. (The contrast of this image was enhanced so that it could be better displayed in the printed document).

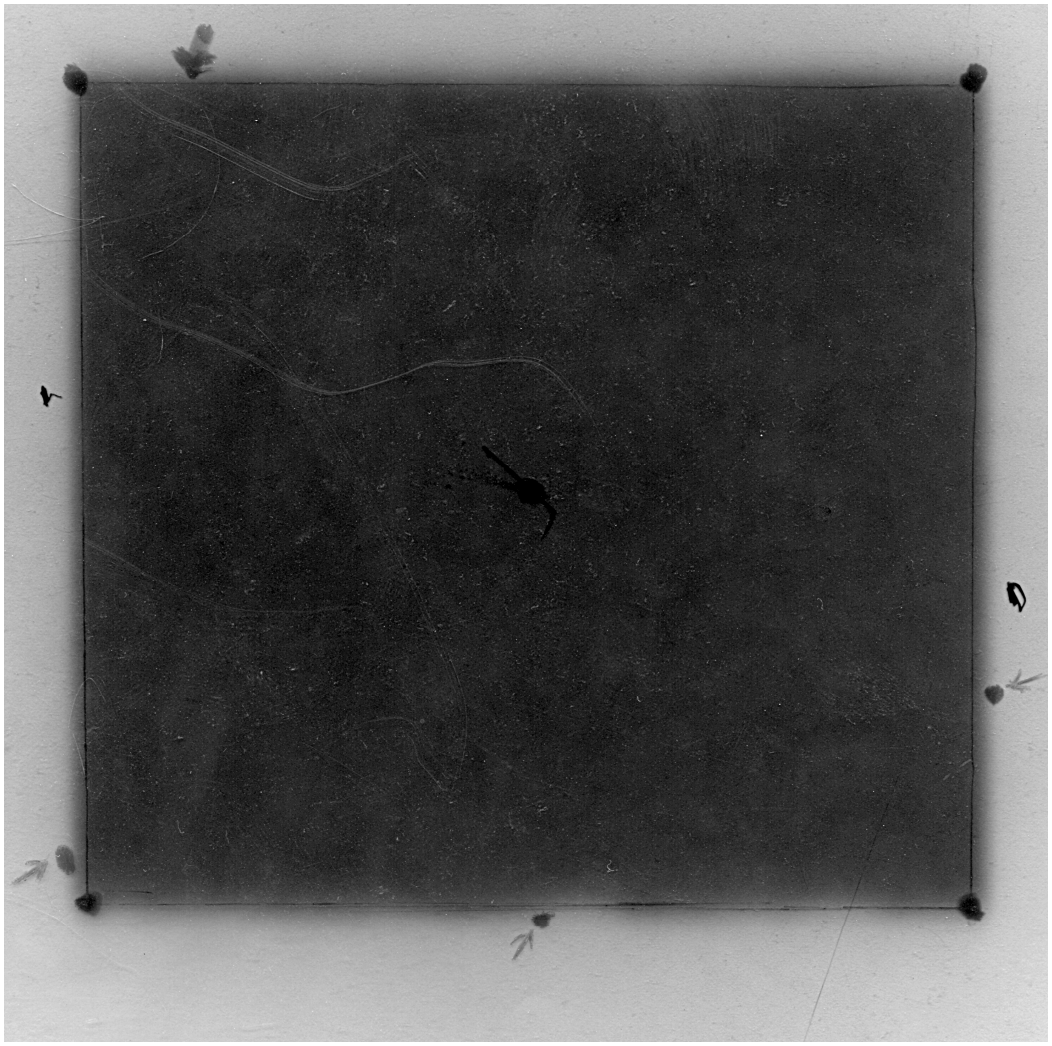

Figure B-3. Original Cobalt-60 radiograph used to study computerized verification of light and radiation field size. (The contrast of this image was enhanced so that it could be better displayed in the printed document).

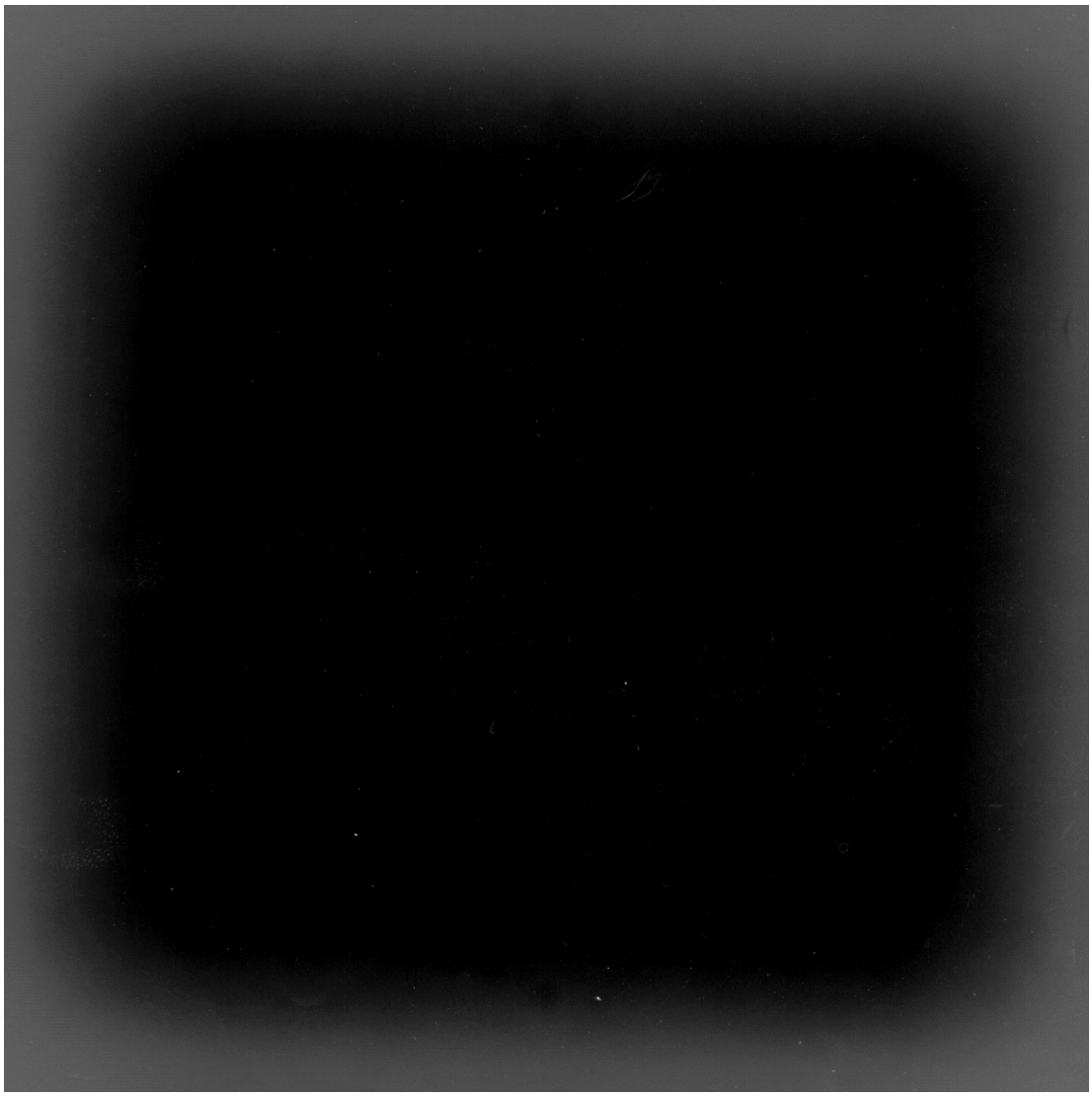

Figure B-4. Original Cobalt-60 radiograph used to study computerized verification of light and radiation field size. (The contrast of this image was enhanced so that it could be better displayed in the printed document).

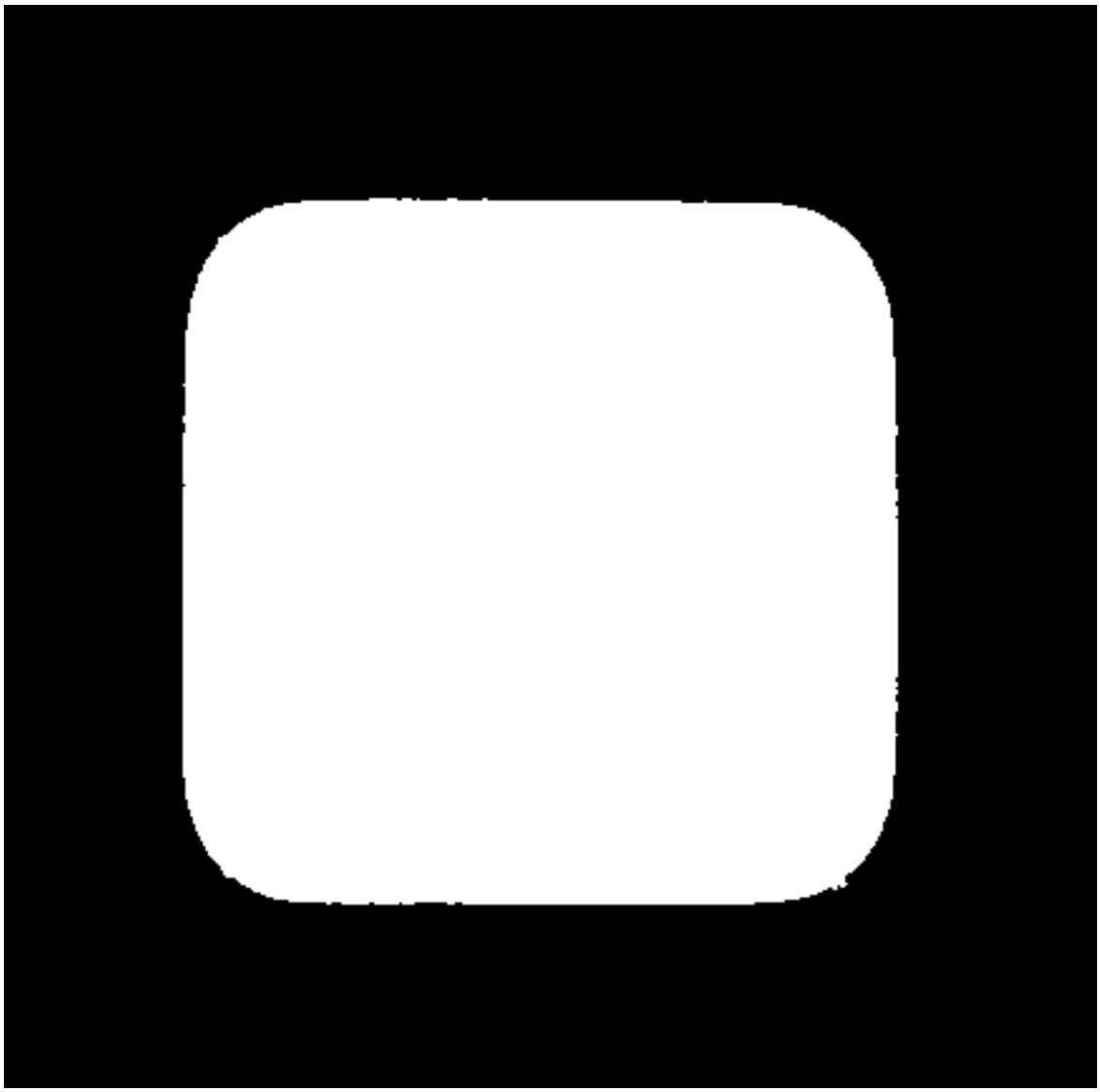

Figure B-5. Original Cobalt-60 radiograph used to study computerized verification of light and radiation field size. (The contrast of this image was enhanced so that it could be better displayed in the printed document).

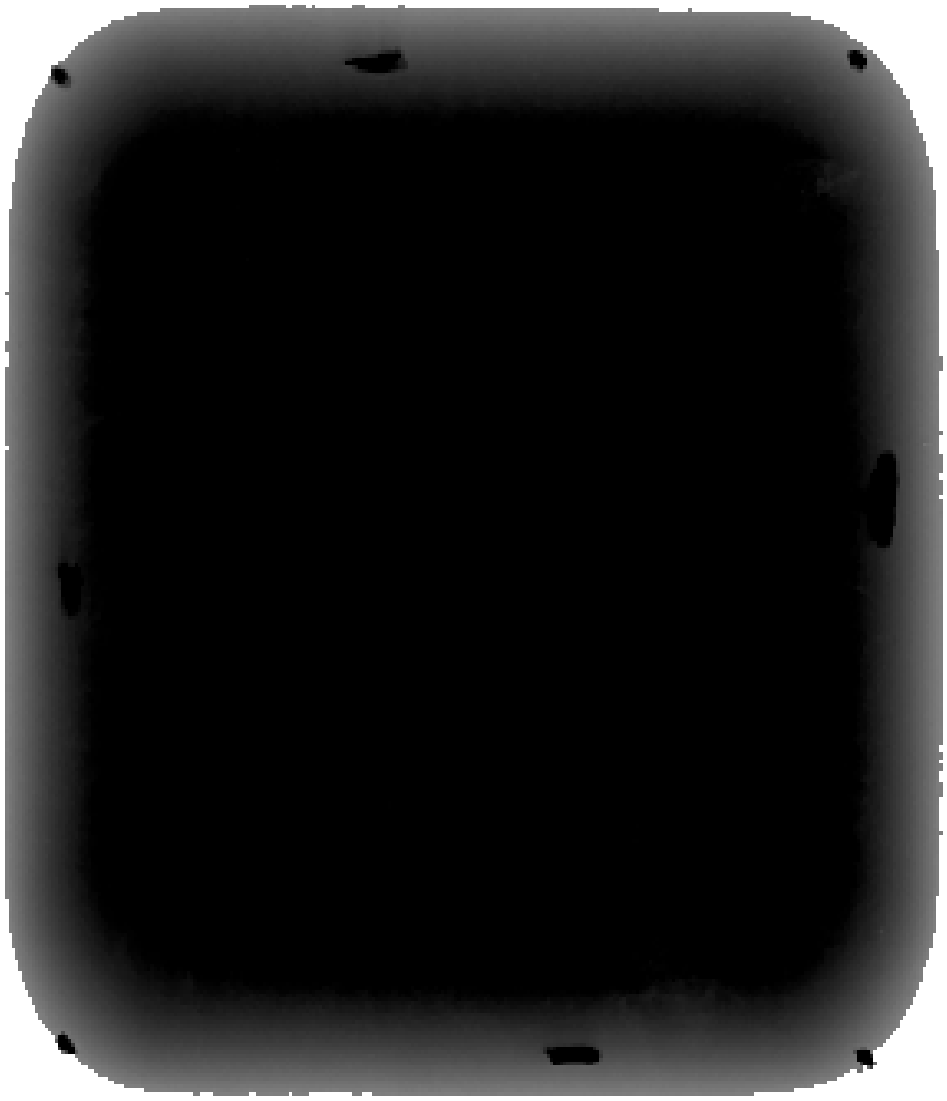

Figure B-6. Original Cobalt-60 radiograph used to study computerized verification of light and radiation field size. (The contrast of this image was enhanced so that it could be better displayed in the printed document).

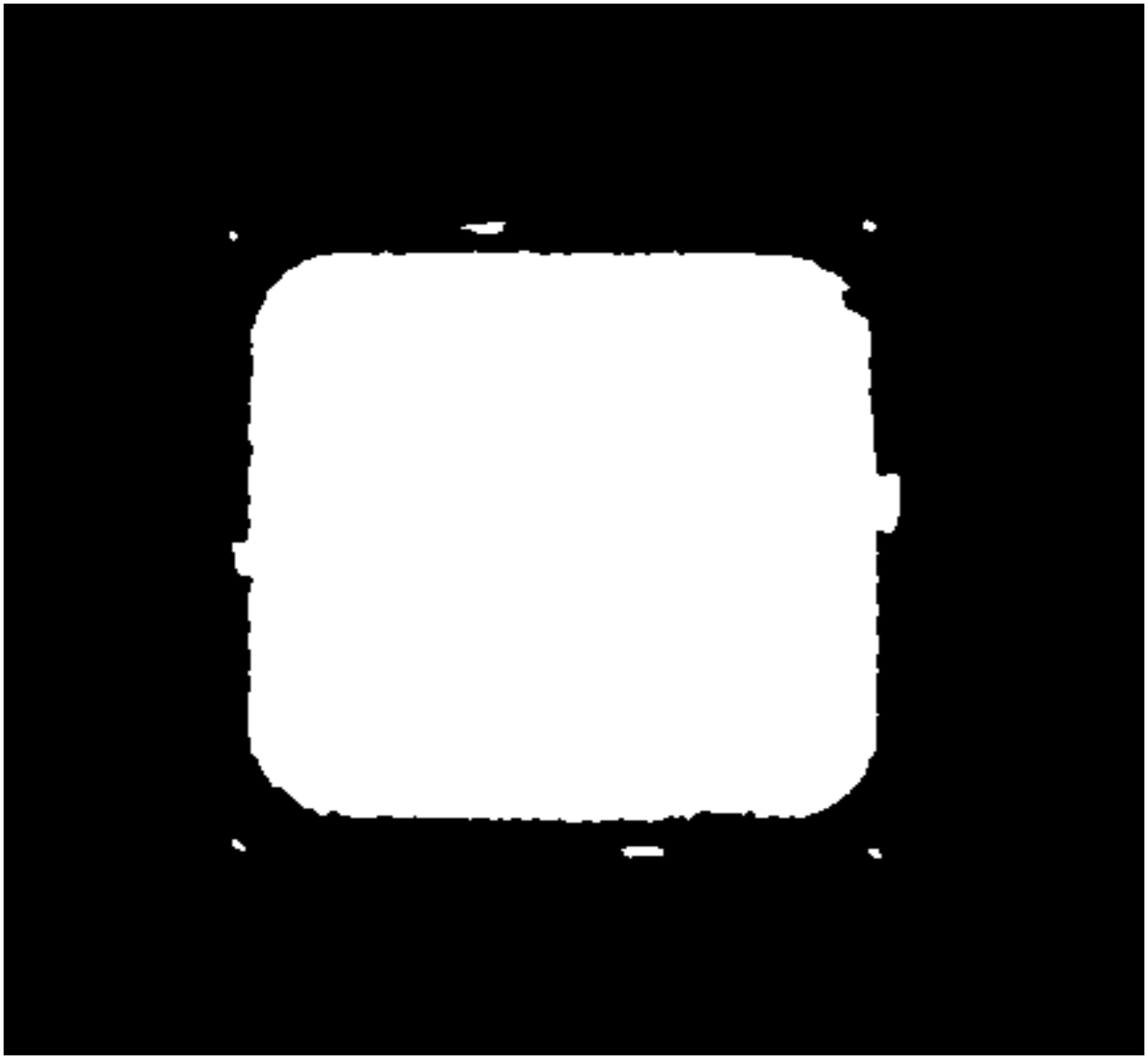

Figure B-7. Original Cobalt-60 radiograph used to study computerized verification of light and radiation field size. (The contrast of this image was enhanced so that it could be better displayed in the printed document).