

1. Name of Facility <u>O'hare Int'l Airport</u>		2. Region <u>IL</u>		3. Street Address <u>13 Basement Maintenance Room</u>	
4. City <u>Chicago</u>		5. State or Province Code <u>IL</u>		6. Zip Code <u>60666</u>	
7. Room No. or Other Physical Location of System <u>T5 (P10 CN)</u>		8. [Redacted]		10. Fax Number	
11. Manufacture Information & Certification Label Present <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail		12. Radiation Measuring Instrument: <b>FSE Shall Attach Copy of Calibration Certificate to This Form</b> Model: <u>Inovision</u> Serial No. <u>451P SN 455</u> Calibration Due Date: <u>4/11/12</u>			
Manufacturer <u>Rapiscan Systems Inc.</u>		13. System Model No. <u>6200V</u>		15. System Serial No. <u>7090306</u>	
16. Date of Manufacture Mo. Yr. <u>Jan. 2009</u>		18. Facility Owner Has been notified of responsibility for "Application for Registration" with their State Radiation Control Agency <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		19. Customer has been notified of their responsibility for posting their State "Notice to Employees" Document and Posted in Several Conspicuous Locations so Employees Can View <input type="checkbox"/> Yes <input type="checkbox"/> No	
17. X-ray Tube Serial Number(s) <u>6557 / P6562</u>		20. Operator Instructions Available <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail		21. Maintenance Schedule Available <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail	
22. Warning Label Present at Controls Stating: "Caution: X-Rays Produced When Energized" <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail		23. Warning Labels Present at Ports Stating: "Caution: Do Not Insert Any Part of the Body When System is Energized, X-Ray Hazard" <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail		24. Two Indicators Labeled "X-Ray On" Present at Controls (including software user interface) <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail	
25. At Least One Indicator, Marked "X-Ray On" is Visible from Each Port <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail		26. Captured Key: The Key for the Key Actuated Control Cannot be Removed in Any Mode that Allows X-Ray Generation <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail			
27. All Doors and Access Panels To the X-Ray Beam Prevent Generation of X-Radiation <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail		28. Some Part of the Body Can Be Inserted through a Port Into The Primary Beam <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
29. Use of X-Ray Control Necessary to Resume Operation Following Interruption <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		30. Means Provided to Ensure Operator Presence at the Control Area X-ray located in a public access area <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail Or X-ray located in a non-public access area <input type="checkbox"/> Not Required			
Rapiscan Systems Test Procedure Used: <u>Rapiscan Systems WI-0023-4</u>		31. Scatter Block Description: <input type="checkbox"/> Two (2) Reams Copy Paper <input checked="" type="checkbox"/> Other, Describe: <u>pelican case</u>		32. Means Provided to Operator for Terminating Exposures of Greater than One-Half Second and Preventing X-rays (E-Stop Test) <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail	
33. X-Ray Generator Settings <u>160.8 kVp 1.007 mA</u> <u>160.8 1.007</u>		Note: All Survey Measurements Shall be Obtained at 5 cm from All External Surfaces and at 5 cm from the Plane of All Access Port Openings or Shroud Extension Openings. Scatter Block shall be Stacked and Positioned Centerline of Primary Beam.			
34.1. Background Radiation: <u>5</u> uR/hr		Maximum External Surface Dose Rate Not to Exceed 500 uR/hr at 5 cm from all external surfaces.			
<b>34.3 Record All Readings in uR/hr Unless Otherwise Noted</b>					
<i>Please see model specific diagram (attached)</i>					
36. Overall Condition of Lead Drapes: <input checked="" type="checkbox"/> SAT - Pass <input type="checkbox"/> UNSAT - Fail Description		37. Overall Condition of Machine: <input checked="" type="checkbox"/> SAT - Pass <input type="checkbox"/> UNSAT - Fail		38. Comments, Corrective Active Actions and/or Recommendations:	
39. Surveyor Name (Print, L, F, M) [Redacted]		40. Surveyor Signature [Redacted]		41. Date of Survey <u>3-3-2011</u>	
42. Time of Survey: <u>1230</u>		The Surveyor has inspected, tested and certified this x-ray machine is in compliance with U.S. FDA 21 CFR 1020.40 and equivalent international radiation emission leakage standards.			
43. [Redacted] have received a copy of this Radiation Survey Report and understand their responsibility to retain this report for State inspection.		Signature [Redacted] Date <u>3/3/11</u>			

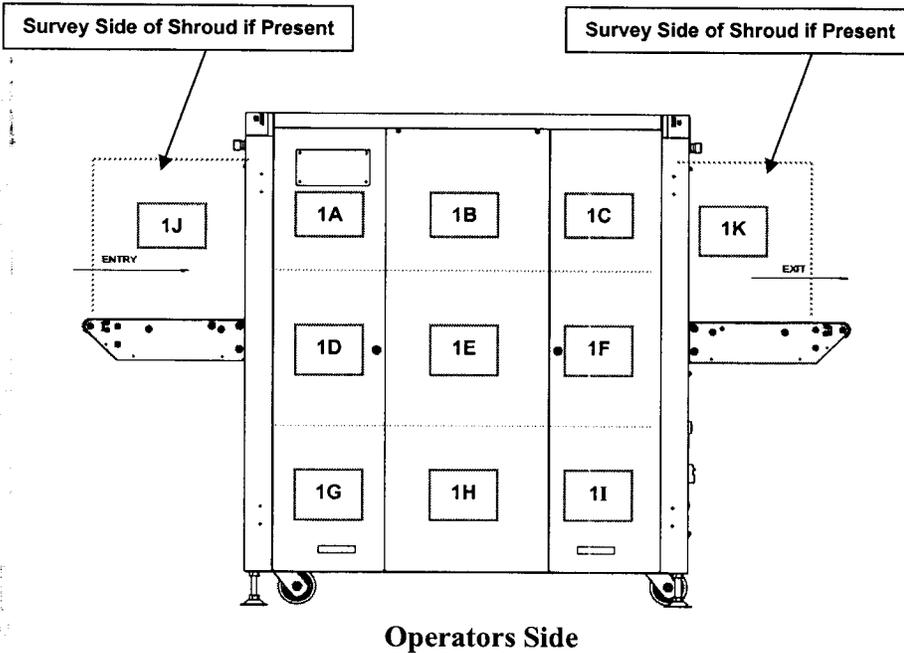
This report is to certify this x-ray unit has been surveyed for radiation leakage emissions and found to be within the regulatory radiation emission limit. The safety features, controls and indicators incorporated in the x-ray unit have been satisfactorily tested and/or inspected. The owner of this x-ray unit is responsible for State Radiation Control Agency compliance (not applicable for facilities exclusively operated by the Federal Government) and for the safe use and routine inspection, general maintenance and cleanliness of this x-ray unit. Only trained and qualified individuals should operate this equipment.

**FIELD SERVICE ENGINEERS RADIATION EMISSION SURVEY**

**United States and Canada External Surface Radiation Leakage Limit is 5.0 uSv/hr at 5 cm (500 uR/hr)**

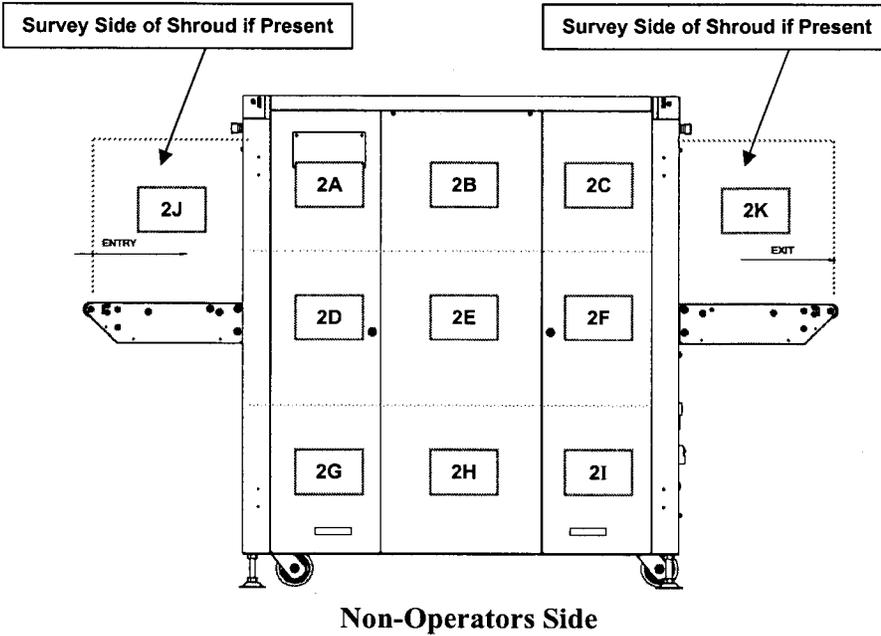
**Global External Surface Radiation Leakage Limit is 1.0 uSv/hr at 5 cm (100 uR/hr at 5 cm)**

Date: <u>3-3-2011</u>	Location Manufactured: (Check One) <input checked="" type="checkbox"/> Malaysia <input type="checkbox"/> UK <input checked="" type="checkbox"/> US	Instrument Model No: <u>Invision 451P</u>
Time: <u>1230</u>	Date of Mfg: <u>Jan. 2009</u>	Instrument Serial No: <u>455</u>
Background: uSv/hr ( <u>5</u> uR/hr)	Serial No: <u>7040306</u>	Instrument Calibration Due: <u>1-11-12</u>
All Measurements Recorded In: uSv/hr <input checked="" type="checkbox"/> uR/hr (Check One)	Settings: <u>160.8</u> kVp <u>1.007</u> mA Settings: <u>160.8</u> kVp <u>1.007</u> mA	Description of Scatter Body: (Check One) <input type="checkbox"/> Paper (2 Reams, 500 sheets each) <input type="checkbox"/> Wood Block (4" x 4" x 12" L) <input checked="" type="checkbox"/> Other <u>petican case</u>

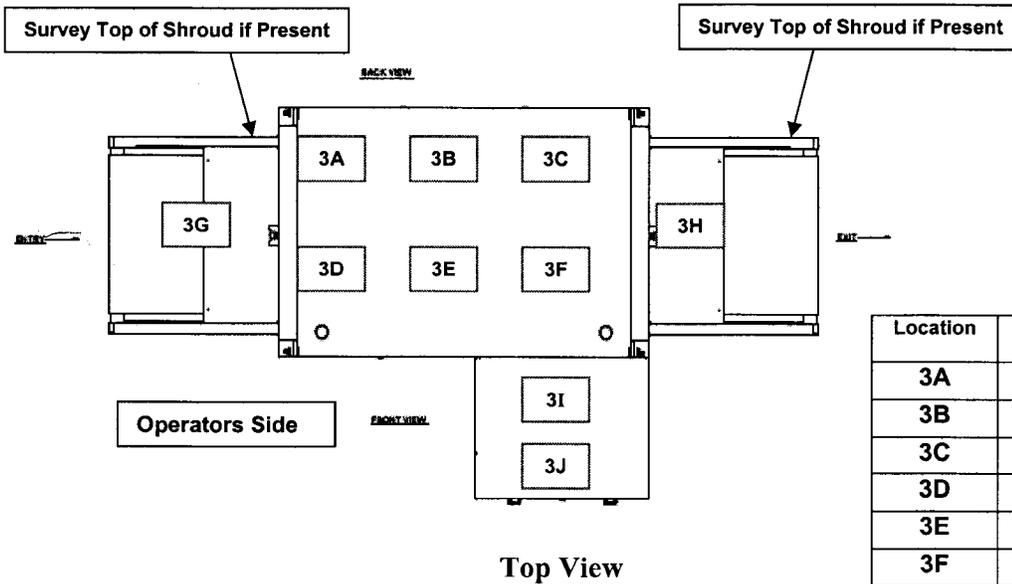


Location	Results NO Scatter Body	Results WITH Scatter Body
1A	4	10
1B	15	12
1C	5	21
1D	19	20
1E	9	18
1F	11	19
1G	15	17
1H	21	10
1I	5	11
1J	30	200
1K	119	73

**FIELD SERVICE ENGINEERS RADIATION EMISSION SURVEY**



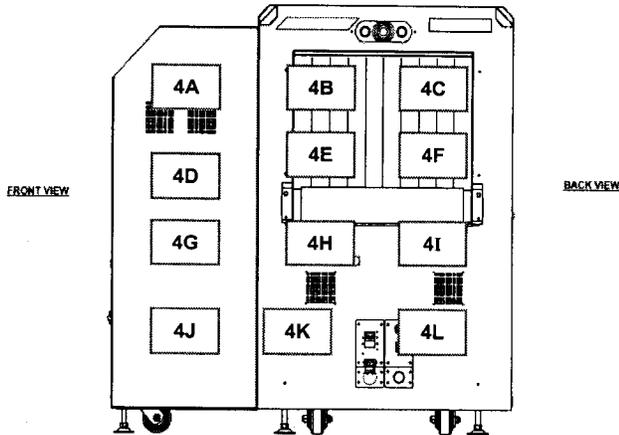
Location	Results NO Scatter Body	Results WITH Scatter Body
2A	14	3
2B	12	7
2C	21	10
2D	25	11
2E	28	26
2F	23	10
2G	17	15
2H	15	40
2I	9	20
2J	41	44
2K	28	69



Location	Results NO Scatter Body	Results WITH Scatter Body
3A	6	13
3B	11	16
3C	14	11
3D	6	7
3E	5	12
3F	11	11
3G	123	90
3H	58	89
3I	91	79
3J	21	45

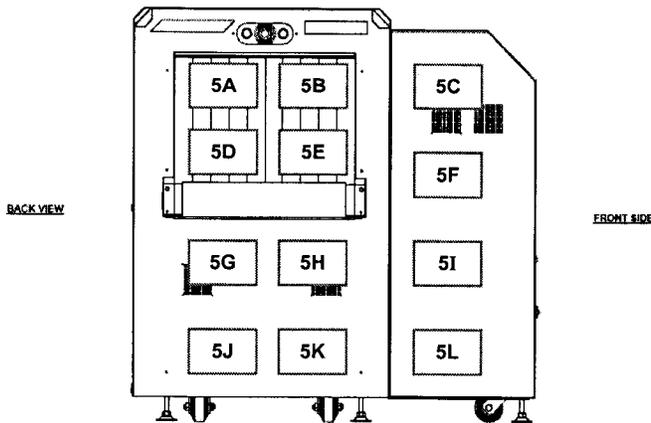
**FIELD SERVICE ENGINEERS RADIATION EMISSION SURVEY**

**EXIT TUNNEL**



Location	Results NO Scatter Body	Results WITH Scatter Body
4A	19	17
4B	17	42
4C	35	48
4D	21	24
4E	50	64
4F	35	88
4G	18	21
4H	14	25
4I	20	66
4J	14	15
4K	8	41
4L	10	33

**ENTRANCE TUNNEL**



Location	Results NO Scatter Body	Results WITH Scatter Body
5A	22	37
5B	13	42
5C	7	31
5D	26	31
5E	21	44
5F	20	30
5G	18	12
5H	15	17
5I	11	40
5J	13	18
5K	14	15
5L	8	9

**Instructions:**

- If shrouds are NOT installed, radiation measurements shall be taken 5 cm from the lead drapes.
- If shrouds are installed, radiation measurements shall be taken at the imaginary plane of the shroud opening.
- Lead Drapes should touch the conveyor. If they do not, check to verify x-ray radiation is not traveling down the conveyor where the gap exists between the lead drapes and the conveyor surface.
- Survey below the conveyor up against the cabinet near any gaps, mating surfaces, and photo sensor cut-outs.

SURVEY PERFORMED BY:



DATE: 3-3-11