

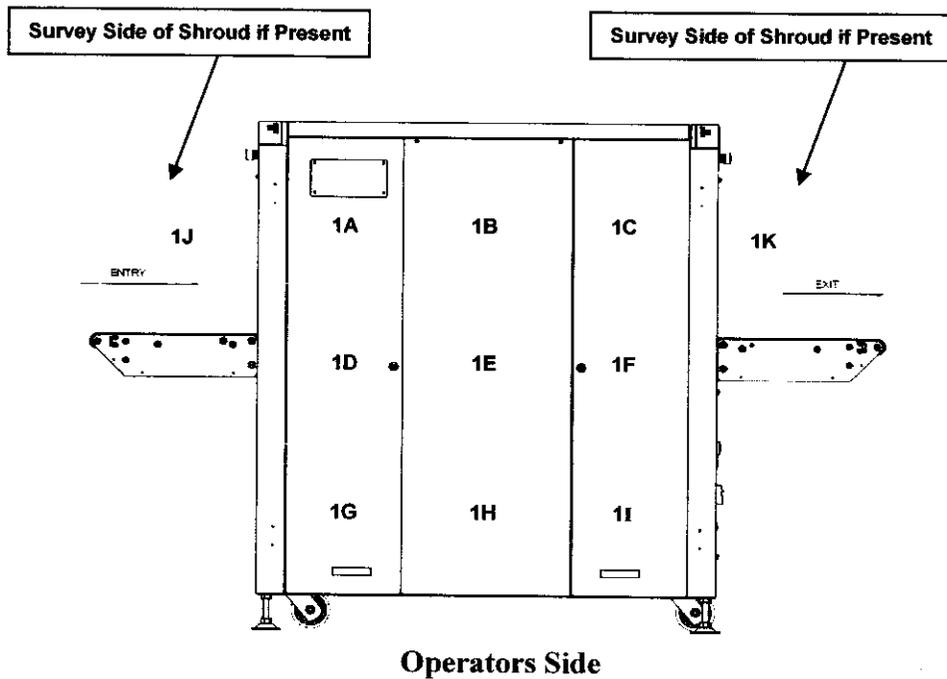
BAGGAGE/PARCEL CABINET X-RAY SYSTEM RADIATION LEAKAGE REPORT		FIELD SERVICE ENGINEERS		Form R-0588-3 9/9/09 3710868 45. RSI W.O.# Deferred W.O.#	
1. Name of Facility LEHIGH VALLEY INT		PA		3. Street Address 3311 AIRPORT RD	
4. City ALLENTOWN		5. State or Province Code PA		6. Zip Code 18109	
7. Room No. or Other Physical Location of System CHECKPOINT		8. Person Inspected		9. Telephone Number 18109	
11. Manufacture Information & Certification Label Present <input checked="" type="checkbox"/> Yes - Pass <input type="checkbox"/> No - Fail		12. Radiation Measuring Instrument: PSE Shall Attach Copy of Calibration Certificate to This Form			
Manufacturer Rapsican Systems Inc.		Model: RADEYE Serial No. 0992		Calibration Due Date: 3-9-11	
13. System Model No. 6200V		14. Single Source <input type="checkbox"/> Dual Source <input checked="" type="checkbox"/>		15. System Serial No. 7083202	
16. Date of Manufacture Mo. Yr. AUG 2008		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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
17. X-ray Tube Serial Number(s) 108-44-27 / 07-37-08		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 type="checkbox"/> Yes <input checked="" 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			
Rapsican Systems Test Procedure Used: Rapsican Systems WT-0023-4		31. Scatter Block Description: <input type="checkbox"/> Two (2) Reams Copy Paper <input checked="" type="checkbox"/> Other, Describe: WOOD BLOCK		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 160.8 kVp 110 uA 160.8 992		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 Stroud Extension Openings. Scatter Block shall be Stacked and Positioned Centerline of Primary Beam.			
34.1. Background Radiation: 12 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) WHSNER JAMES C		40. Signature		41. Date of Survey 3-7-11	
42. Time of Survey 12:15		43. I have received a copy of this Radiation Survey Report and understand its report for State inspection. Signature: [Redacted] Date: 3-7-11			
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.					

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

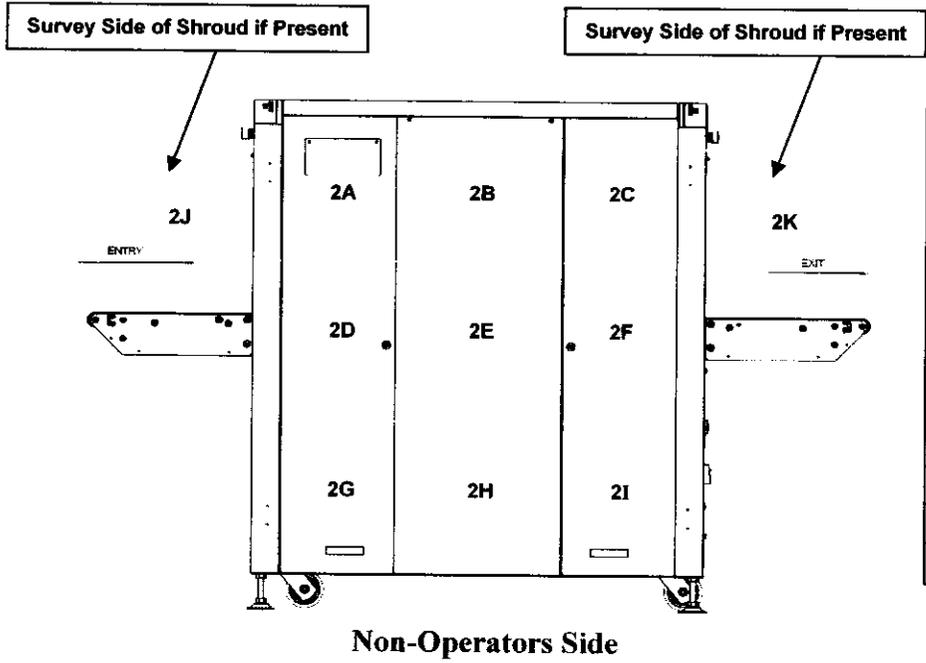
**United States and Canada External Surface Radiation Leakage Limit is 5.0 uSv/hr at 5 cm (500 uR/hr)**  
**Global External Surface Radiation Leakage Limit is 1.0 uSv/hr at 5 cm (100 uR/hr at 5 cm)**

Date: <u>3-7-11</u>	Location Manufactured: (Check One) Malaysia <input type="checkbox"/> UK <input type="checkbox"/> <b>US</b> <input checked="" type="checkbox"/>	Instrument Model No: <u>RadEye</u>
Time: <u>12:15pm</u>	Date of Mfg: <u>Aug 2008</u>	Instrument Serial No: <u>0092</u>
Background: uSv/hr ( <u>12</u> uR/hr)	Serial No: <u>7083200</u>	Instrument Calibration Due: <u>3-9-11</u>
All Measurements Recorded In: uSv/hr <input checked="" type="checkbox"/> uR/hr (Check One)	Settings: <u>160.8</u> kVt <u>1.10</u> mA Settings: <u>160.8</u> kVp <u>.90</u> mA	Description of Scatter Body: (Check One) <input type="checkbox"/> Paper (2 Reams, 500 sheets each) <input checked="" type="checkbox"/> Wood Block (4" x 4" x 12" L) <input type="checkbox"/> Other

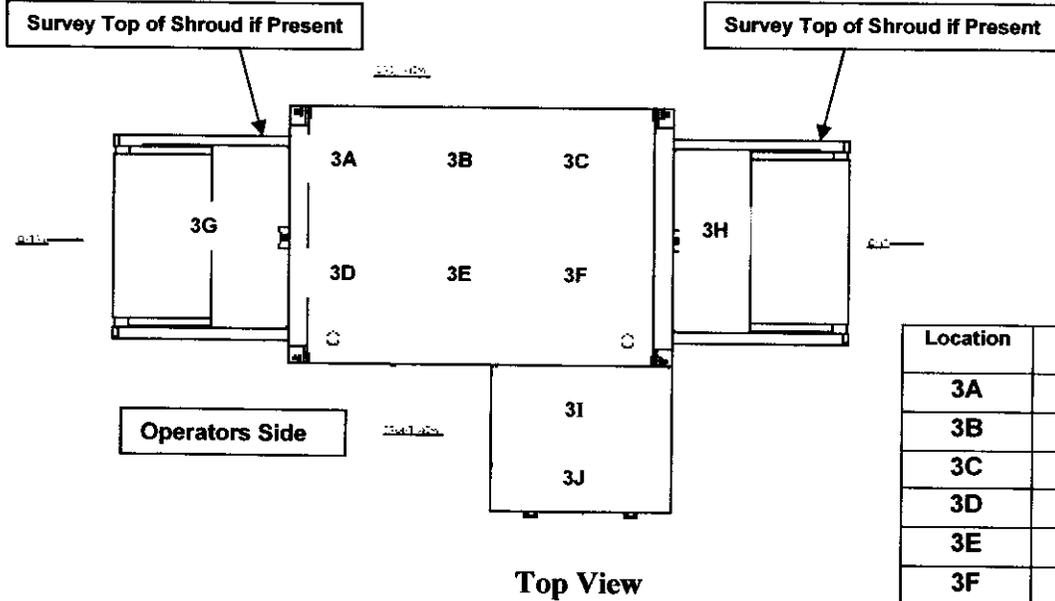


Location	Results NO Scatter Body	Results WITH Scatter Body
1A	<u>33</u>	<u>10</u>
1B	<u>33</u>	<u>10</u>
1C	<u>33</u>	<u>10</u>
1D	<u>33</u>	<u>10</u>
1E	<u>33</u>	<u>10</u>
1F	<u>33</u>	<u>10</u>
1G	<u>33</u>	<u>10</u>
1H	<u>33</u>	<u>10</u>
1I	<u>33</u>	<u>10</u>
1J	<u>33</u>	<u>10</u>
1K	<u>33</u>	<u>10</u>

### FIELD SERVICE ENGINEERS RADIATION EMISSION SURVEY



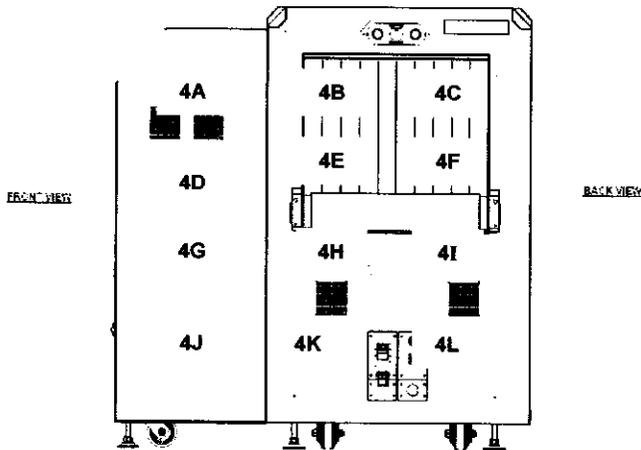
Location	Results NO Scatter Body	Results WITH Scatter Body
2A	10	10
2B	27	11
2C	20	10
2D	20	10
2E	10	10
2F	15	10
2G	10	7
2H	7	10
2I	11	10
2J	11	10
2K	36	41



Location	Results NO Scatter Body	Results WITH Scatter Body
3A	11	11
3B	11	11
3C	11	11
3D	11	11
3E	11	11
3F	11	11
3G	11	11
3H	11	11
3I	11	11
3J	11	11

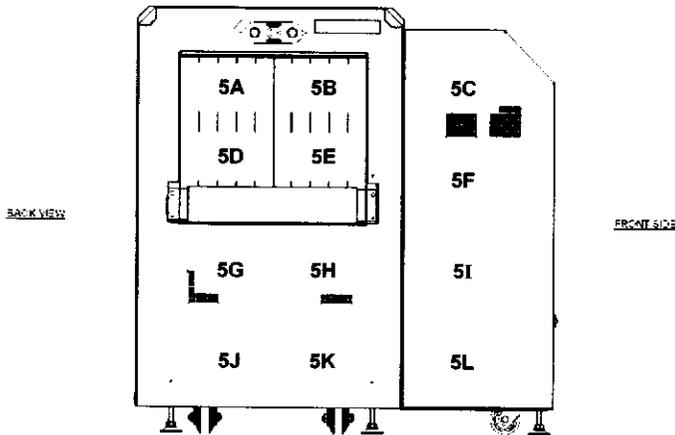
### FIELD SERVICE ENGINEERS RADIATION EMISSION SURVEY

#### EXIT TUNNEL



Location	Results NO Scatter Body	Results WITH Scatter Body
4A	23	21
4B	28	20
4C	22	20
4D	22	20
4E	22	20
4F	22	20
4G	22	20
4H	7	3
4I	2	3
4J	2	3
4K	13	7
4L	7	7

#### ENTRANCE TUNNEL



Location	Results NO Scatter Body	Results WITH Scatter Body
5A	45	48
5B	43	48
5C	27	27
5D	37	27
5E	31	27
5F	20	27
5G	4	27
5H	23	27
5I	26	18
5J	4	17
5K	13	8
5L	17	8

**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: 3-7-11