

# RADIATION SURVEY WORKSHEET

## eXaminer Radiation Survey Information

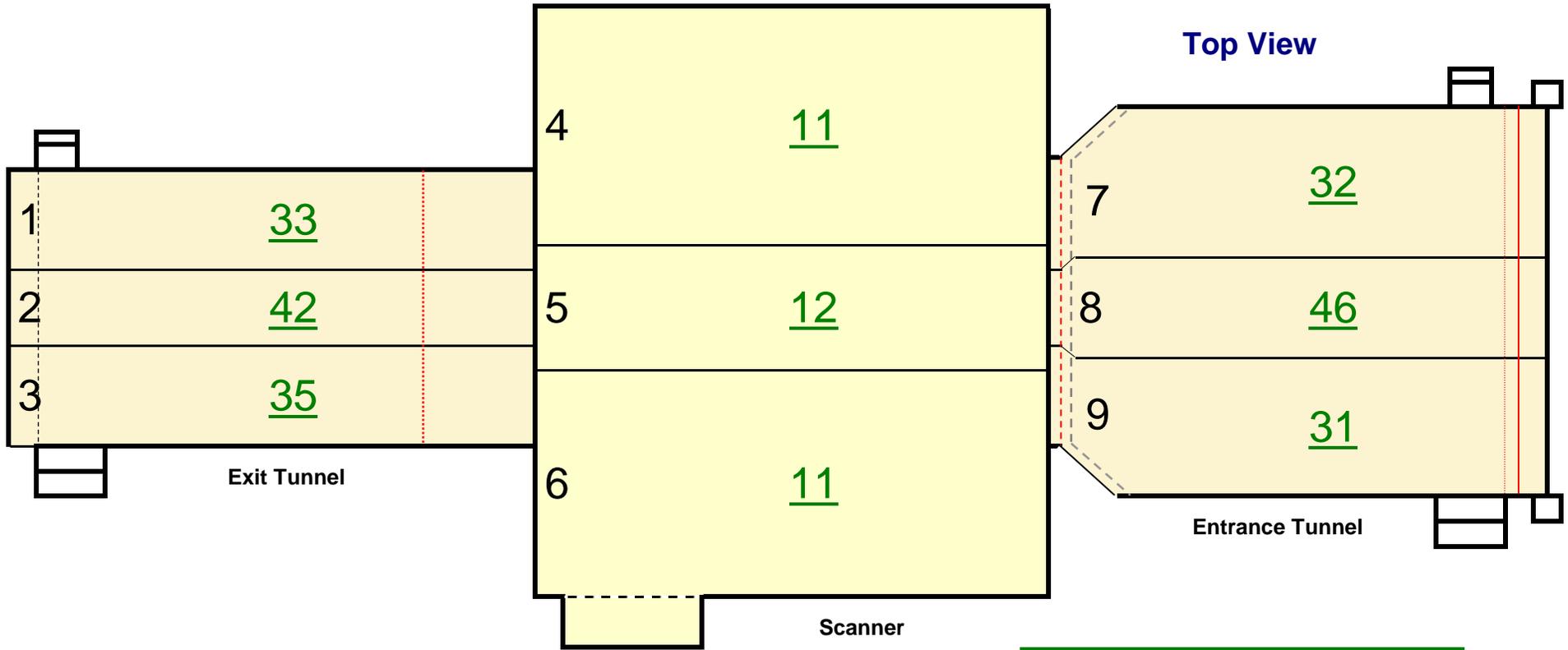
Airport: <b>Los Angeles International Airport</b>	Scanner Location: <b>Baggage Handling Room</b>	Case#: <b>LAX-C359043</b>
Personnel Performing Radiation Survey: <span style="background-color: black; color: black;">XXXXXXXXXX</span>		Date Survey Performed: <b>3/18/2011</b>
Scanner Serial Number: <b>6132</b>	Entrance Tunnel Serial Number: <b>2064A</b>	Exit Tunnel Serial Number: <b>2064B</b>
High Reading: <b>49</b>	Average Reading: <b>16.94</b>	Min. Reading: <b>5</b>
High Reading: <b>231</b>	Average Reading: <b>49.80</b>	Min. Reading: <b>11</b>
High Reading: <b>125</b>	Average Reading: <b>31.42</b>	Min. Reading: <b>10</b>
<b>Good</b>	<b>Good</b>	<b>Good</b>
Radiation Meter: Type Meter: <b>451P-YGG</b>	Meter Serial Number: <b>241</b>	Calibration Due Date: <b>February 28, 2012</b>

NOTES

<b>Complete Radiation Survey (CRS)</b>	<b>Record Voltage and Beam Current here:</b>				
<p><b>Rename this Document before starting the Survey to:</b></p> <p style="text-align: center; font-size: 1.2em;"><b>LAX-CRS-18MAR2011-6132</b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Voltage: <b>165</b> KV</td> <td style="width: 30%;">Beam Current: <b>10.0</b> mA</td> </tr> <tr> <td>Maximum Safe Readings</td> <td>Scanner 350 Tunnels 350 Curtains 350</td> </tr> </table>	Voltage: <b>165</b> KV	Beam Current: <b>10.0</b> mA	Maximum Safe Readings	Scanner 350 Tunnels 350 Curtains 350
	Voltage: <b>165</b> KV	Beam Current: <b>10.0</b> mA			
Maximum Safe Readings	Scanner 350 Tunnels 350 Curtains 350				

Step:	Procedure	Expected results
1.	Set Up: Obtain Inovision Ion Chamber Survey Meter and in an area away from the scanners, turn on the meter by pressing the On-Off key. Wait approx. 4 minutes for the meter to run through the initialization procedure.	The GUI will be visible and will indicate Standby. After the radiation meter initialization procedure is complete the meter will be reading less than 20 $\mu$ R/hr and the meter will be ready for use.
2.	The scanner will be in Standby. Change the conveyor switch on the scanner to Stop. Change the exit tunnel conveyor switch to Off to stop the conveyor.	Both conveyors should be stopped.
3.	On the GUI dropdown screen, select diagnostic, followed by Radiation Survey. A radiation survey window will appear. Click "Turn On" button to turn x-rays on. Turn on x-rays prompt will say "Place survey bag on belt". Place IQTK bag on Entry Conveyor Belt.	A window indicating "Radiation Survey" will appear.
4.	When "Bag in survey position" appears, go to the FCC monitor and select "2" then <Enter>, verify and record the voltage and current in the displayed on the FCC screen in the planks provided above.	The high voltage is between <b>144KV</b> and <b>176KV</b> . The current is between <b>8.8mA</b> and <b>10.6mA</b> and the scanner X-ray indicator lights are on.
5.	Survey one of the areas indicated by the boxes in Appendix A2. Record the highest reading within the area. Repeat the process until all areas are surveyed and readings are recorded.	As the survey is conducted, the radiation meter indicates the degree of radiation emission.
6.	Review all radiation data sheets for high readings.	Readings shall not exceed 350 uR/hr in any box.
7.	After radiation survey is complete, click on "Start Conveyor" button on the GUI. Click the "Turn Off" button to turn off x-rays. Next click "Done". The IQTK bag will eject from exit tunnel. EDAC will reboot.	IQTK bag is ejected and scanner reboots.
7.	Visually inspect the entrance and exit of the system for X-ray caution hazard signs.	X-ray hazard signs reading "Do not insert any part of the body when system is energized" are posted at entrance and exit of system.
9.	Fill out the eXaminer radiation sticker and adhere to the frame of the eXaminer under door #5 on the left side of the scanner.	Readings shall not exceed 350 uR/hr in any box.

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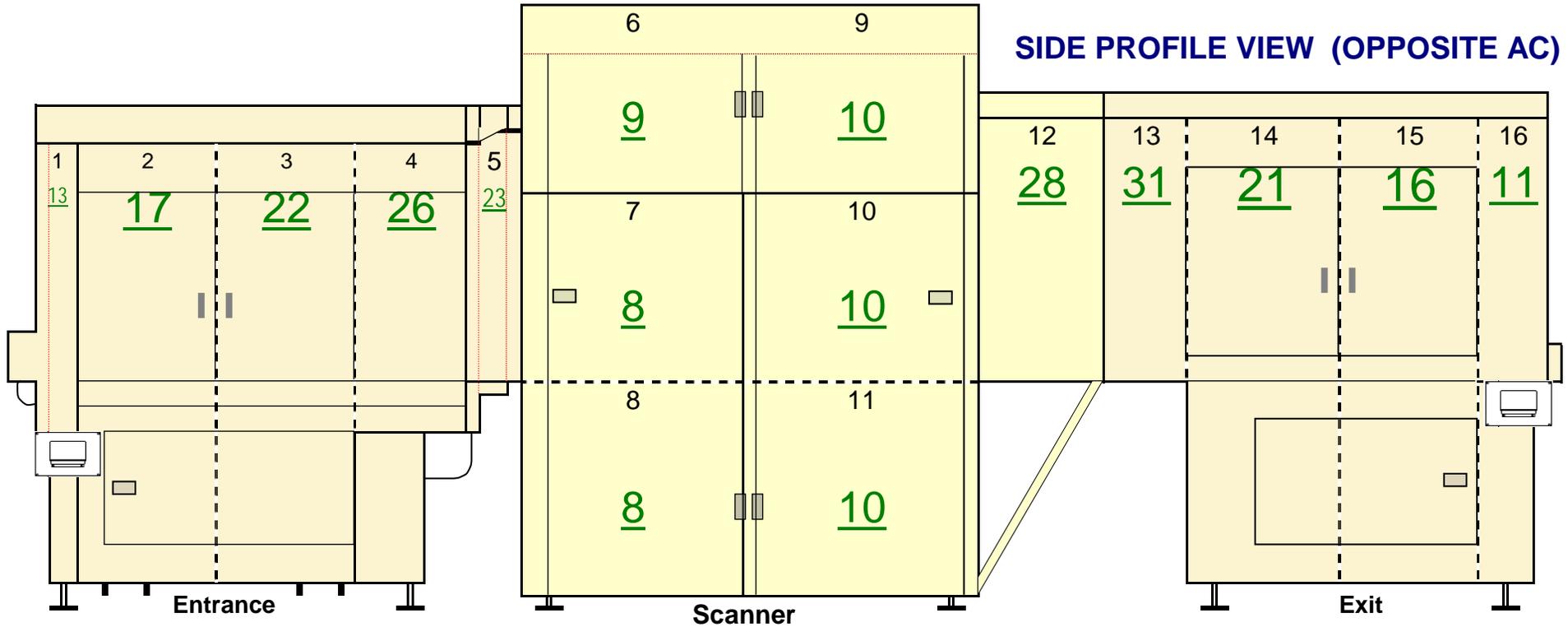
Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	33	
2	Exit Conveyor Top Panel	42	
3	Exit Conveyor Top Panel	35	
4	Scanner Conveyor Top Panel	11	
5	Scanner Conveyor Top Panel	12	
6	Scanner Conveyor Top Panel	11	
7	Entrance Conveyor Top Panel	32	
8	Entrance Conveyor Top Panel	46	
9	Entrance Conveyor Top Panel	31	

GOOD

Highest Reading	46
Average Reading	28
Lowest Reading	11

# RADIATION SURVEY WORKSHEET

## SIDE PROFILE VIEW (OPPOSITE AC)

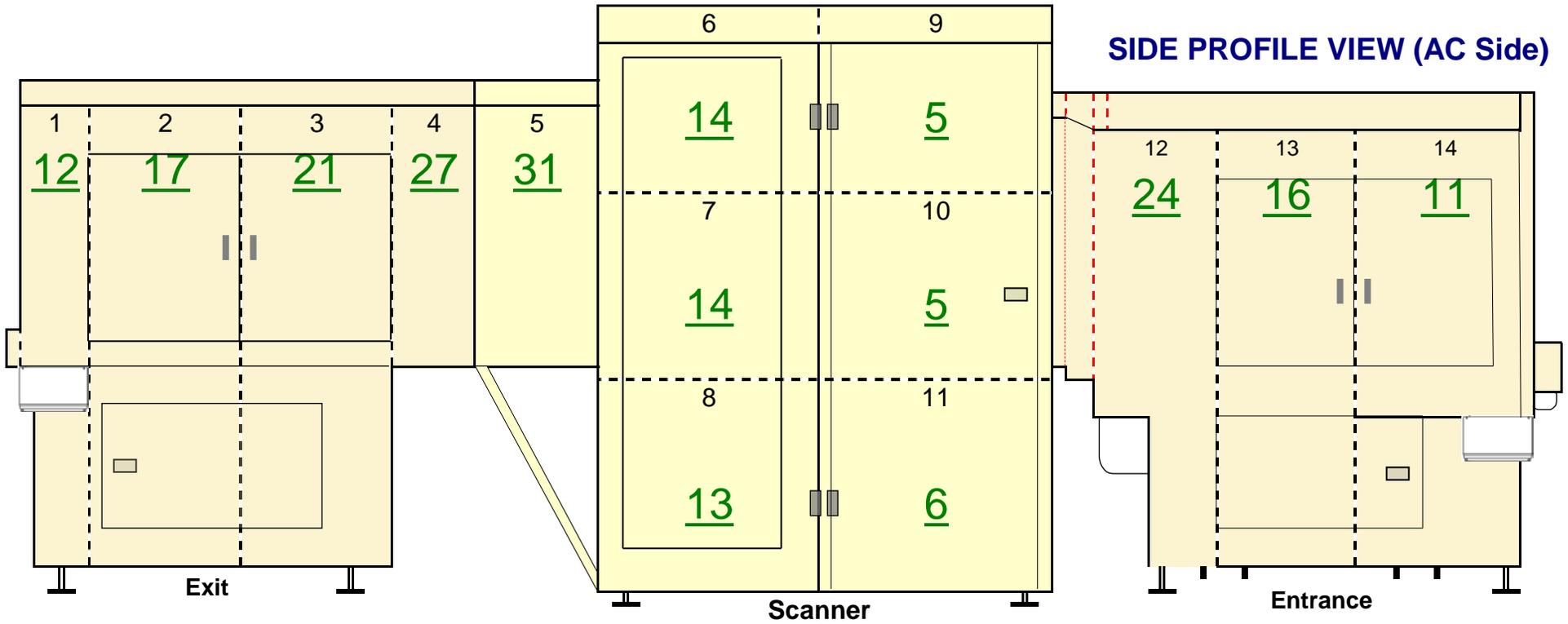


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		μR/Hr
1	Entrance Conveyor Panel	13
2	Entrance Conveyor Panel	17
3	Entrance Conveyor Panel	22
4	Entrance Conveyor Panel	26
5	Entrance Conveyor / Scanner Panel	23
6	Upper Scanner Panel	9
7	Middle Scanner Panel	8
8	Lower Scanner Panel	8
9	Upper Scanner Panel	10
10	Middle Scanner Panel	10
11	Lower Scanner Panel	10
12	Exit Conveyor / Scanner Panel	28
13	Exit Conveyor Panel	31
14	Exit Conveyor Panel	21
15	Exit Conveyor Panel	16
16	Exit Conveyor Panel	11

GOOD

Highest Reading	31
Average Reading	16
Low Reading	8

# RADIATION SURVEY WORKSHEET



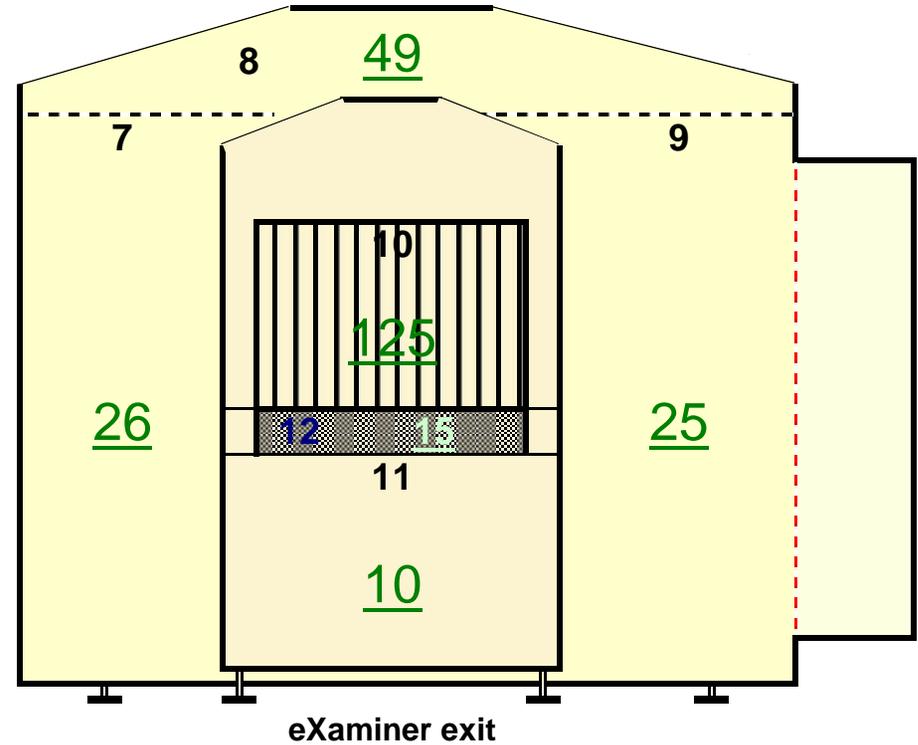
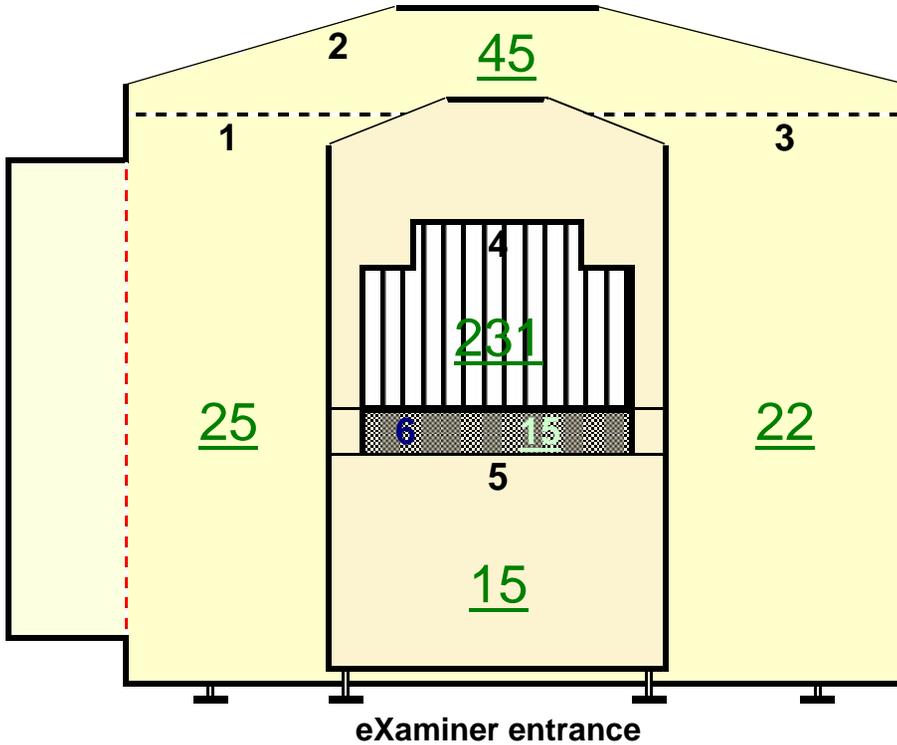
SYSTEM - SIDE PROFILE VIEW ( AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		μR/Hr
1	Exit Conveyor Panel	12
2	Exit Conveyor Panel	17
3	Exit Conveyor Panel	21
4	Exit Conveyor Panel	27
5	Exit Conveyor / Scanner Panel	31
6	Upper Scanner Pane	14
7	Middle Scanner Panel	14
8	Lower Scanner Panel	13
9	Upper Scanner Panel	5
10	Middle Scanner Panel	5
11	Lower Scanner Panel	6
12	Entrance Conveyor / Scanner Panel	24
13	Entrance Conveyor Panel	16
14	Entrance Conveyor Panel	11

GOOD

Highest Reading	31
Average Reading	15
Low Reading	5

# RADIATION SURVEY WORKSHEET

## SYSTEM - FACES (End Views)



SYSTEM - FACES (End Views)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		$\mu\text{R}/\text{Hr}$
1	Scanner Panel	25
2	Scanner Top Panel	45
3	Scanner Panel	22
4	Belt Entrance	231
5	Entrance Lower Panel	15
6	Belt Lower Facia Cover Entrance	15
7	Scanner Panel	26
8	Scanner Top Panel	49
9	Scanner Panel	25
10	Belt Exit	125
11	Exit Lower Panel	10
12	Belt Lower Facia Cover Exit	15

GOOD

Highest Reading	231
Average Reading	50
Low Reading	10