

RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

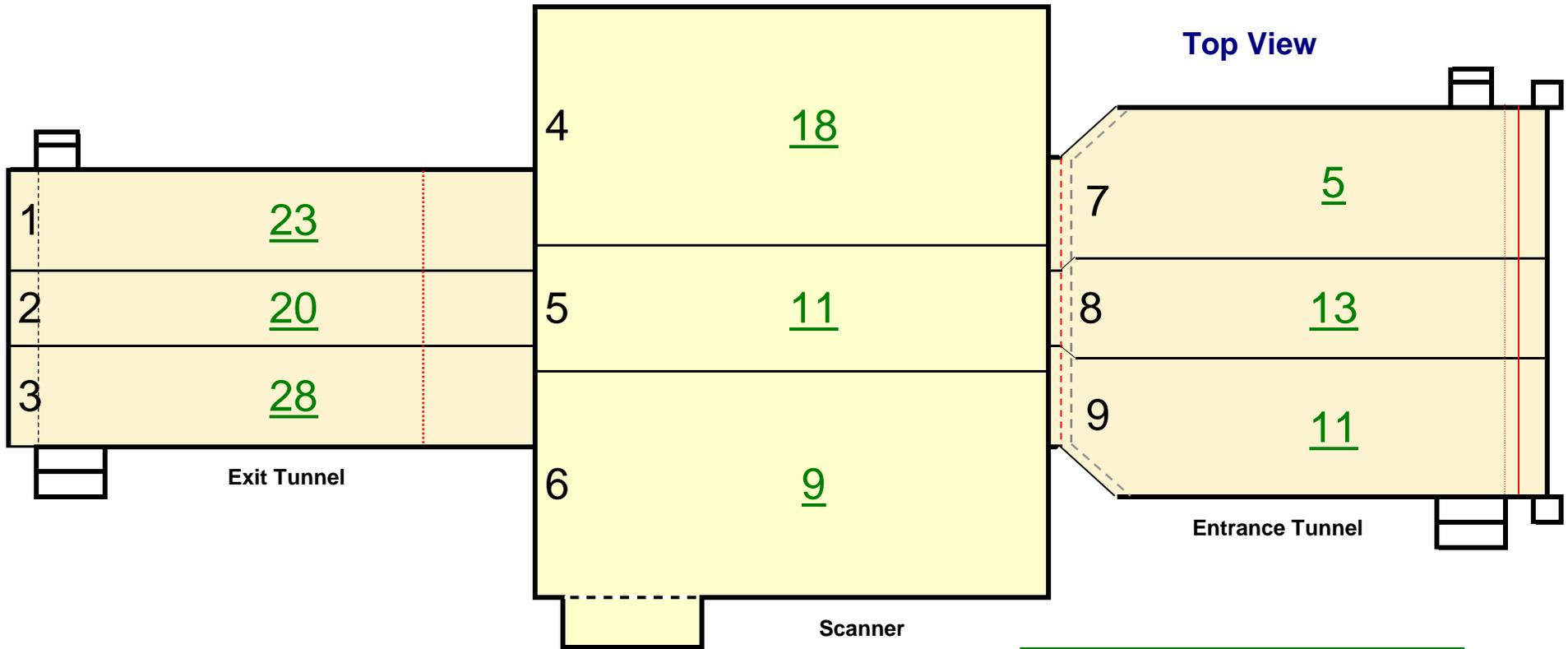
Airport: Tampa international Airport	Scanner Location: Baggage Handling Room	Case#:
Personnel Performing Radiation Survey:		Date Survey Performed: 3/11/2011
Scanner Serial Number: 6469	Entrance Tunnel Serial Number: 1221	Exit Tunnel Serial Number: 5184B
High Reading: 23	Average Reading: 7.15	Min. Reading: 1
High Reading: 41	Average Reading: 10.28	Min. Reading: 2
High Reading: 28	Average Reading: 17.23	Min. Reading: 3
Good		Good
Radiation Meter:	Type Meter: 451P	Meter Serial Number: 6577
		Calibration Due Date: April 20, 2011

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Complete Radiation Survey (CRS)	Record Voltage and Beam Current here:					
Rename this Document before starting the Survey to: -CRS-11MAR2011-6469	Voltage: <u>164</u> KV Beam Current: <u>9.9</u> mA					
	Maximum Safe Readings <table style="display: inline-table; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">Scanner</td> <td style="border: 1px solid black; padding: 2px;">350</td> <td style="border: 1px solid black; padding: 2px;">Tunnels</td> <td style="border: 1px solid black; padding: 2px;">350</td> <td style="border: 1px solid black; padding: 2px;">Curtains</td> <td style="border: 1px solid black; padding: 2px;">350</td> </tr> </table>	Scanner	350	Tunnels	350	Curtains
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 μ 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 144KV and 176KV . The current is between 8.8mA and 10.6mA 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 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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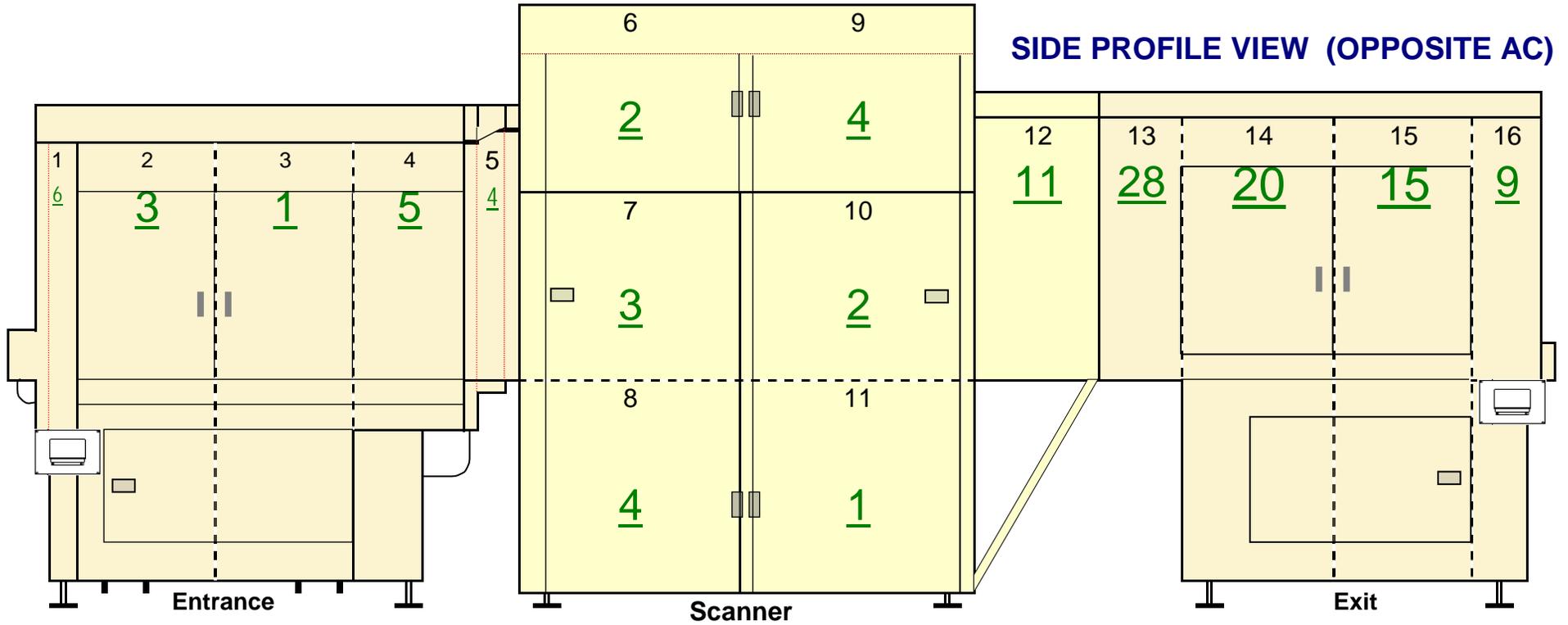


GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		μR/Hr	
1	Exit Conveyor Top Panel	23	
2	Exit Conveyor Top Panel	20	
3	Exit Conveyor Top Panel	28	
4	Scanner Conveyor Top Panel	18	
5	Scanner Conveyor Top Panel	11	
6	Scanner Conveyor Top Panel	9	
7	Entrance Conveyor Top Panel	5	
8	Entrance Conveyor Top Panel	13	
9	Entrance Conveyor Top Panel	11	

Highest Reading	28
Average Reading	15
Lowest Reading	5

RADIATION SURVEY WORKSHEET

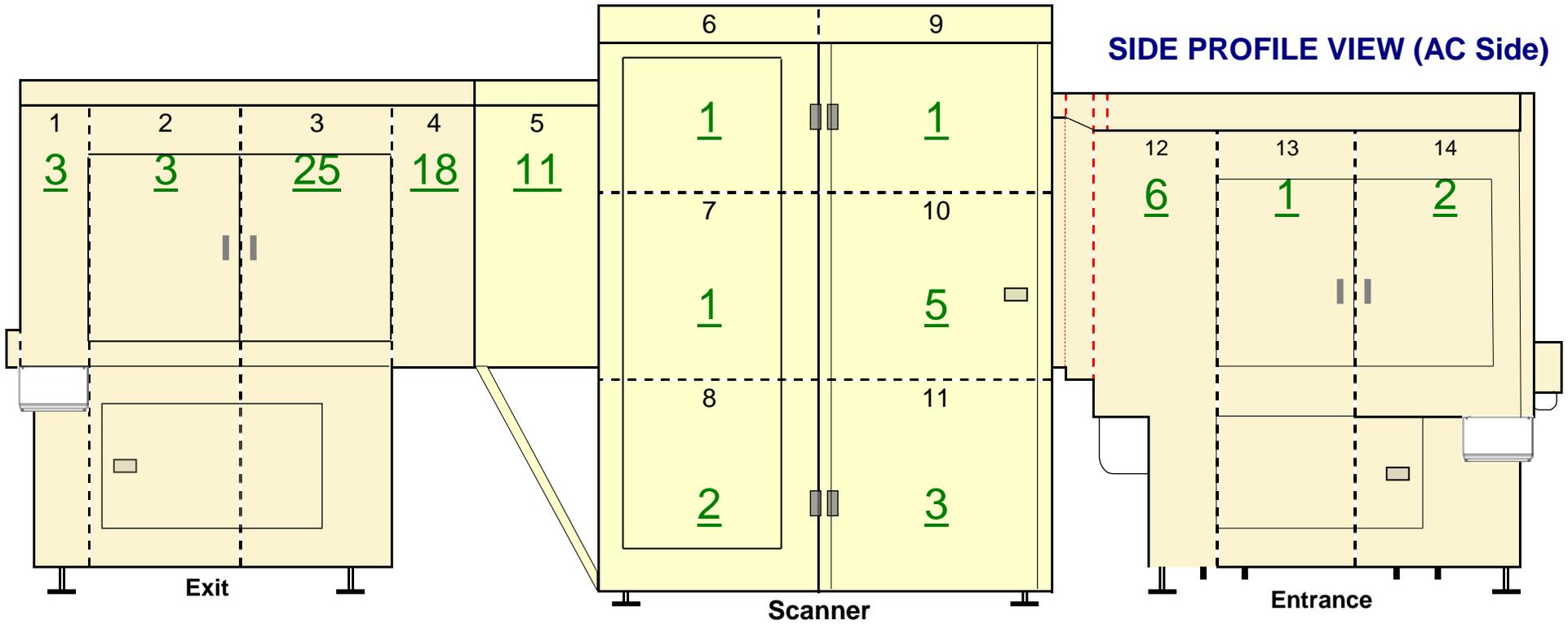


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
	Record highest reading per panel	μR/Hr
1	Entrance Conveyor Panel	6
2	Entrance Conveyor Panel	3
3	Entrance Conveyor Panel	1
4	Entrance Conveyor Panel	5
5	Entrance Conveyor / Scanner Panel	4
6	Upper Scanner Panel	2
7	Middle Scanner Panel	3
8	Lower Scanner Panel	4
9	Upper Scanner Panel	4
10	Middle Scanner Panel	2
11	Lower Scanner Panel	1
12	Exit Conveyor / Scanner Panel	11
13	Exit Conveyor Panel	28
14	Exit Conveyor Panel	20
15	Exit Conveyor Panel	15
16	Exit Conveyor Panel	9

GOOD

Highest Reading	28
Average Reading	7
Low Reading	1

RADIATION SURVEY WORKSHEET



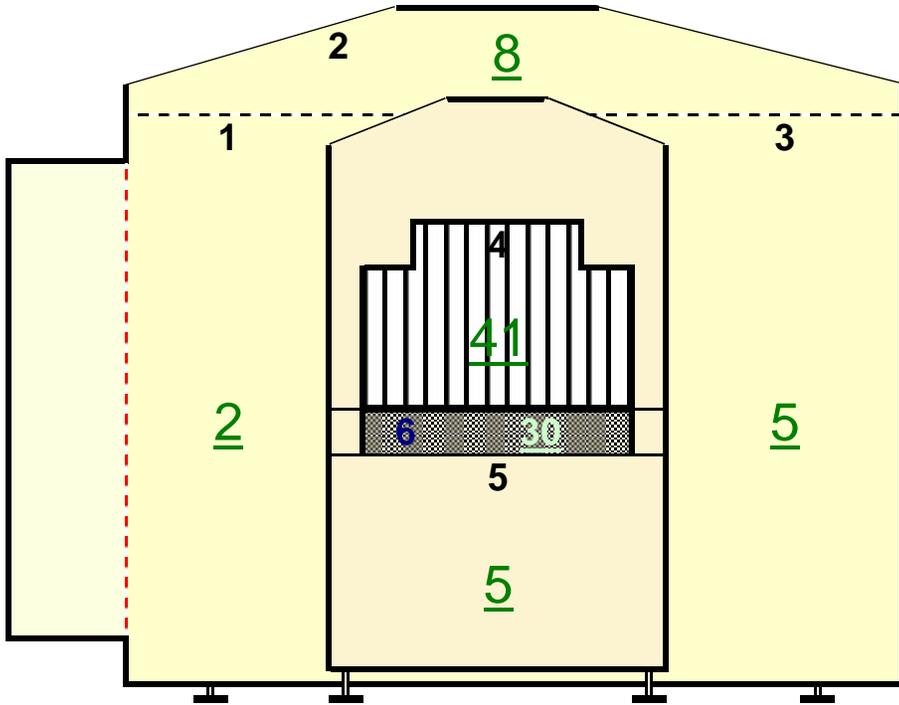
SYSTEM - SIDE PROFILE VIEW (AC Side)		
Scattered Radiation Measurement Points Worksheet		No PROBLEM
Record highest reading per panel	µR/Hr	
1	Exit Conveyor Panel	3
2	Exit Conveyor Panel	3
3	Exit Conveyor Panel	25
4	Exit Conveyor Panel	18
5	Exit Conveyor / Scanner Panel	11
6	Upper Scanner Pane	1
7	Middle Scanner Panel	1
8	Lower Scanner Panel	2
9	Upper Scanner Panel	1
10	Middle Scanner Panel	5
11	Lower Scanner Panel	3
12	Entrance Conveyor / Scanner Panel	6
13	Entrance Conveyor Panel	1
14	Entrance Conveyor Panel	2

GOOD

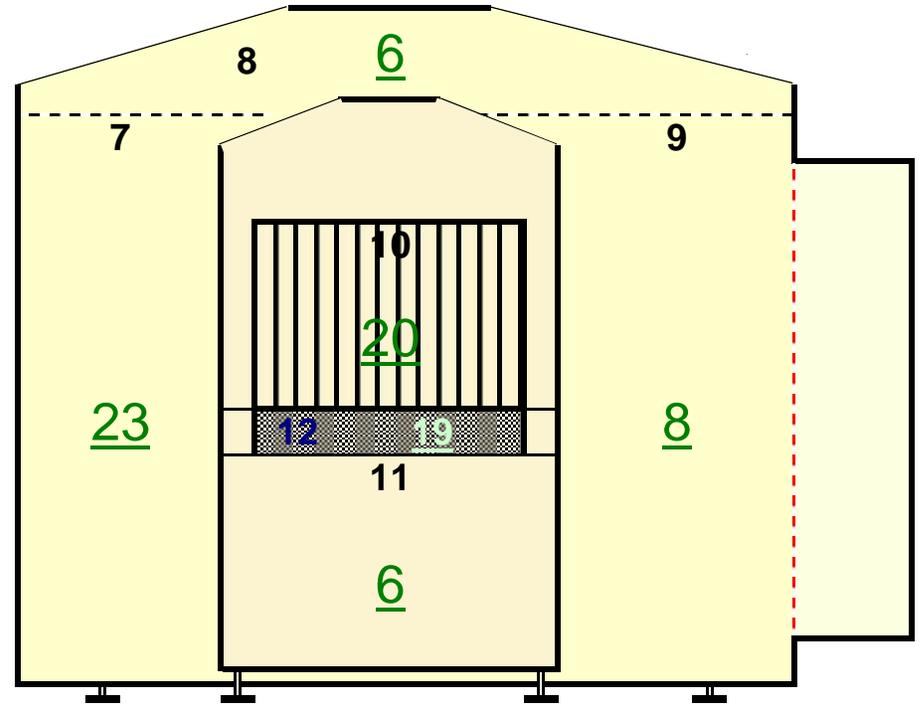
Highest Reading	25
Average Reading	6
Low Reading	1

RADIATION SURVEY WORKSHEET

SYSTEM - FACES (End Views)



eXaminer entrance



eXaminer exit

SYSTEM - FACES (End Views)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		$\mu\text{R}/\text{Hr}$
1	Scanner Panel	2
2	Scanner Top Panel	8
3	Scanner Panel	5
4	Belt Entrance	41
5	Entrance Lower Panel	5
6	Belt Lower Facia Cover Entrance	30
7	Scanner Panel	23
8	Scanner Top Panel	6
9	Scanner Panel	8
10	Belt Exit	20
11	Exit Lower Panel	6
12	Belt Lower Facia Cover Exit	19

GOOD

Highest Reading	41
Average Reading	14
Low Reading	2