

RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

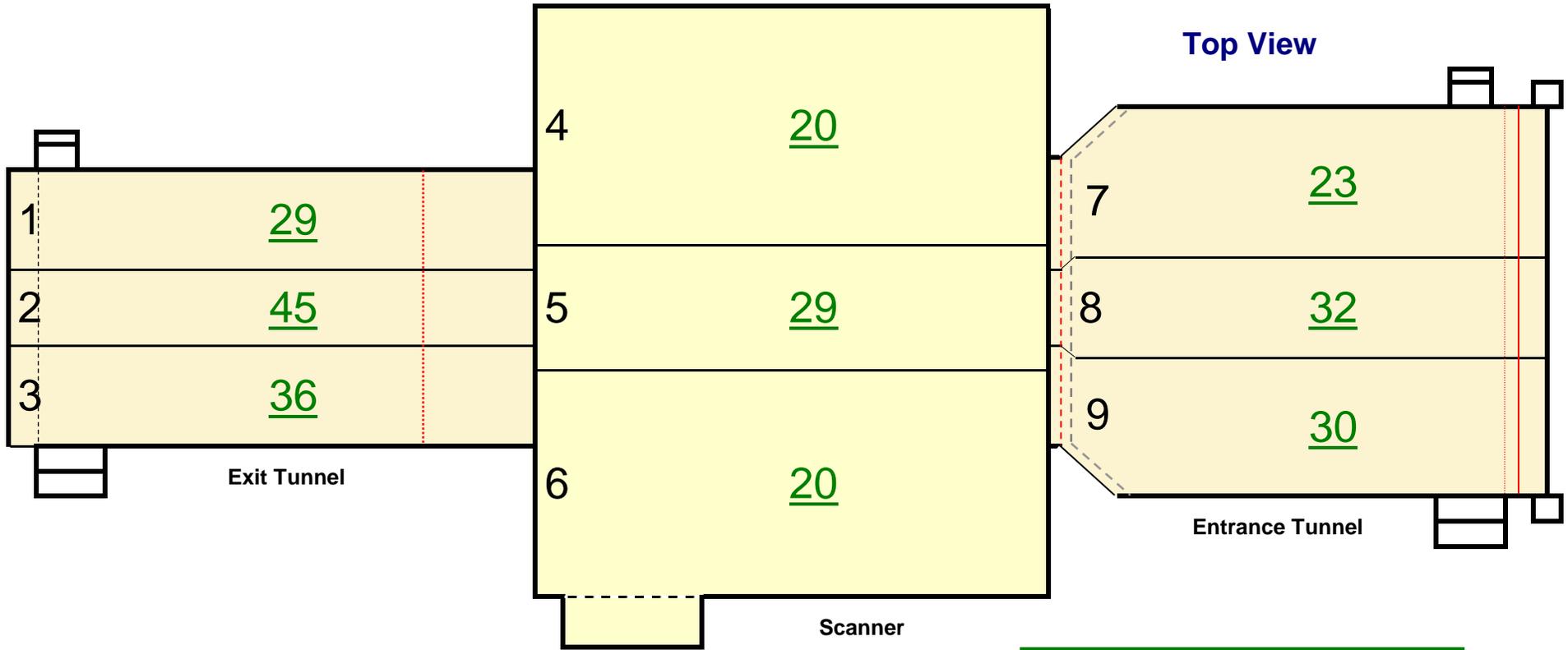
Airport: Houston International Airport	Scanner Location: Terminal A	Case#: IAH-C355760
Personnel Performing Radiation Survey: XXXXXXXXXX		Date Survey Performed: 3/3/2011
Scanner Serial Number: 6790	Entrance Tunnel Serial Number: 1162	Exit Tunnel Serial Number: 1120b
High Reading: 43	Average Reading: 19.63	Min. Reading: 8
High Reading: 104	Average Reading: 28.89	Min. Reading: 3
High Reading: 46	Average Reading: 25.75	Min. Reading: 10
Good	Good	Good
Radiation Meter: Type Meter: 451P	Meter Serial Number: 6334	Calibration Due Date: September 15, 2011

NOTES

Complete Radiation Survey (CRS)	Record Voltage and Beam Current here:										
<p>Rename this Document before starting the Survey to:</p> <p style="text-align: center; font-size: 1.2em;">IAH-CRS-3MAR2011-6790</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Voltage: <u>165</u> KV</td> <td style="width: 30%;">Beam Current: <u>9.8</u> mA</td> </tr> <tr> <td>Maximum Safe Readings</td> <td></td> </tr> <tr> <td style="text-align: center;">Scanner</td> <td style="text-align: center;">350</td> </tr> <tr> <td style="text-align: center;">Tunnels</td> <td style="text-align: center;">350</td> </tr> <tr> <td style="text-align: center;">Curtains</td> <td style="text-align: center;">350</td> </tr> </table>	Voltage: <u>165</u> KV	Beam Current: <u>9.8</u> mA	Maximum Safe Readings		Scanner	350	Tunnels	350	Curtains	350
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Maximum Safe Readings											
Scanner	350										
Tunnels	350										
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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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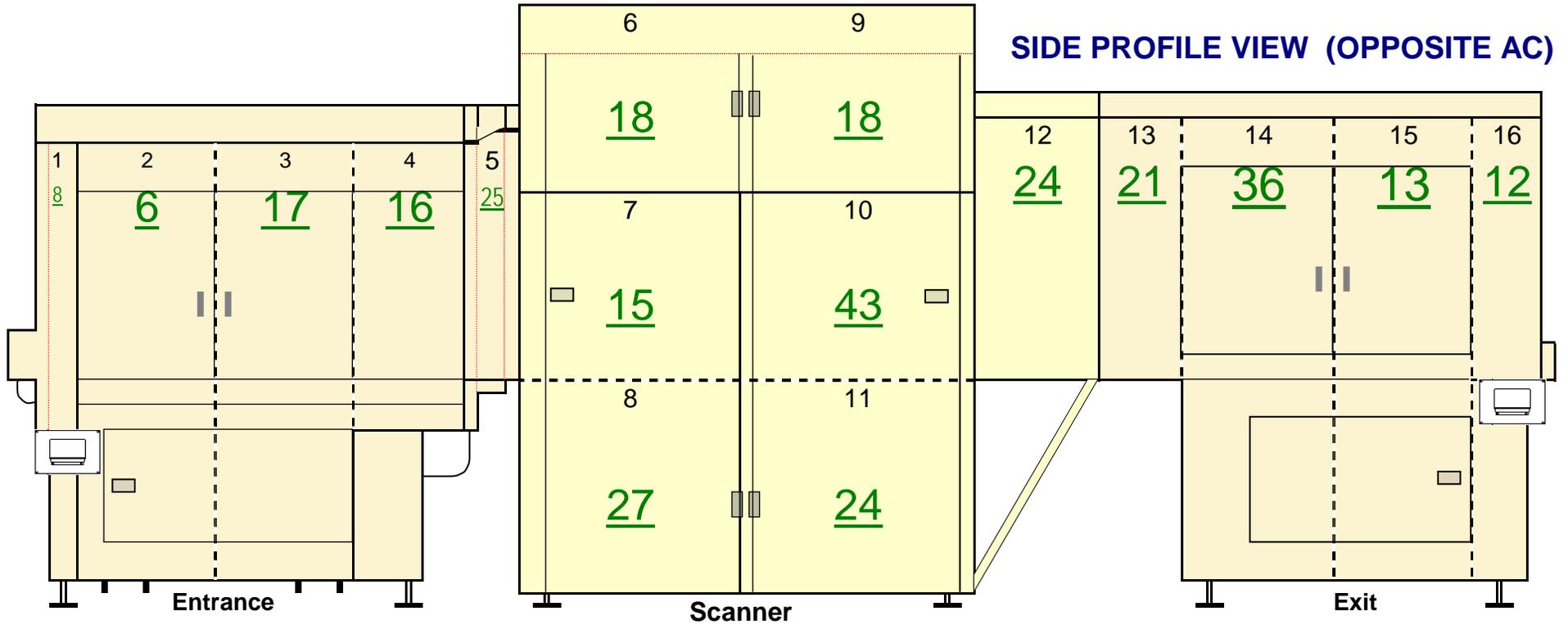


GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		μR/Hr	
1	Exit Conveyor Top Panel	29	
2	Exit Conveyor Top Panel	45	
3	Exit Conveyor Top Panel	36	
4	Scanner Conveyor Top Panel	20	
5	Scanner Conveyor Top Panel	29	
6	Scanner Conveyor Top Panel	20	
7	Entrance Conveyor Top Panel	23	
8	Entrance Conveyor Top Panel	32	
9	Entrance Conveyor Top Panel	30	

Highest Reading	45
Average Reading	29
Lowest Reading	20

RADIATION SURVEY WORKSHEET

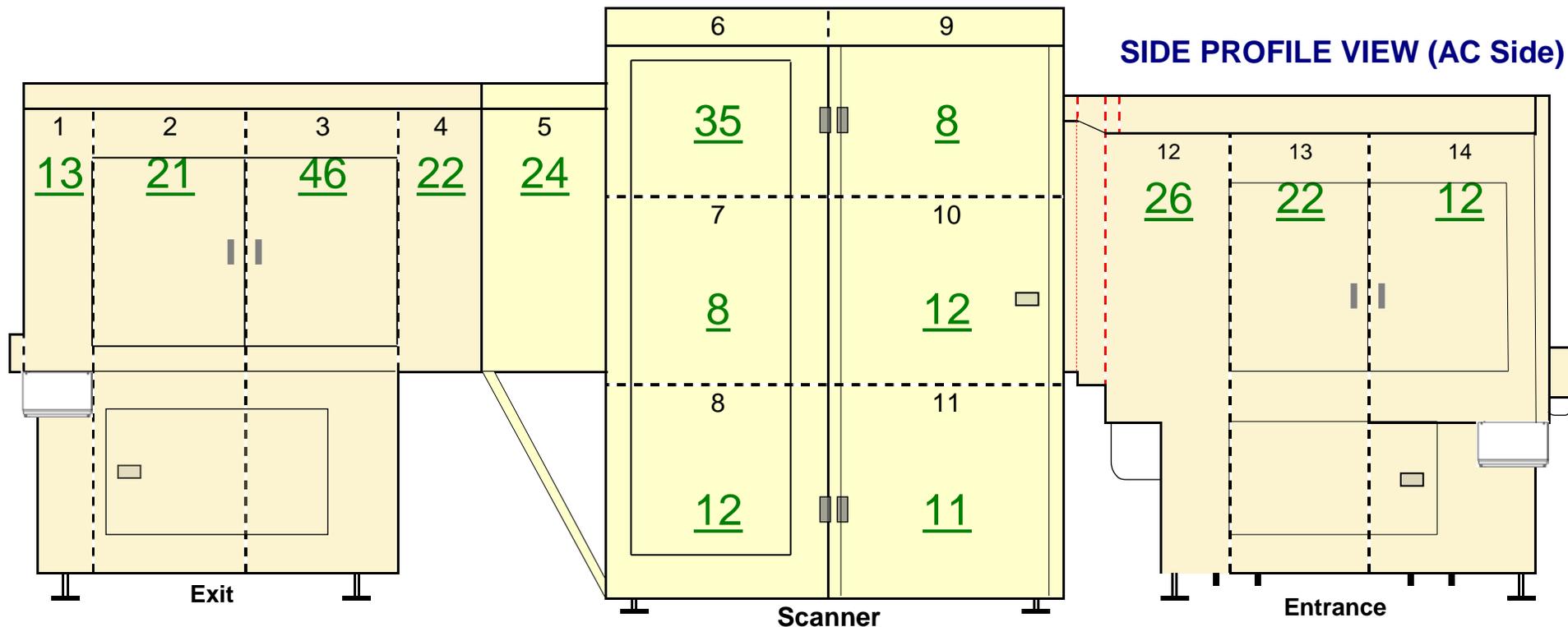


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
	Record highest reading per panel	μR/Hr
1	Entrance Conveyor Panel	8
2	Entrance Conveyor Panel	6
3	Entrance Conveyor Panel	17
4	Entrance Conveyor Panel	16
5	Entrance Conveyor / Scanner Panel	25
6	Upper Scanner Panel	18
7	Middle Scanner Panel	15
8	Lower Scanner Panel	27
9	Upper Scanner Panel	18
10	Middle Scanner Panel	43
11	Lower Scanner Panel	24
12	Exit Conveyor / Scanner Panel	24
13	Exit Conveyor Panel	21
14	Exit Conveyor Panel	36
15	Exit Conveyor Panel	13
16	Exit Conveyor Panel	12

GOOD

Highest Reading	43
Average Reading	20
Low Reading	6

RADIATION SURVEY WORKSHEET



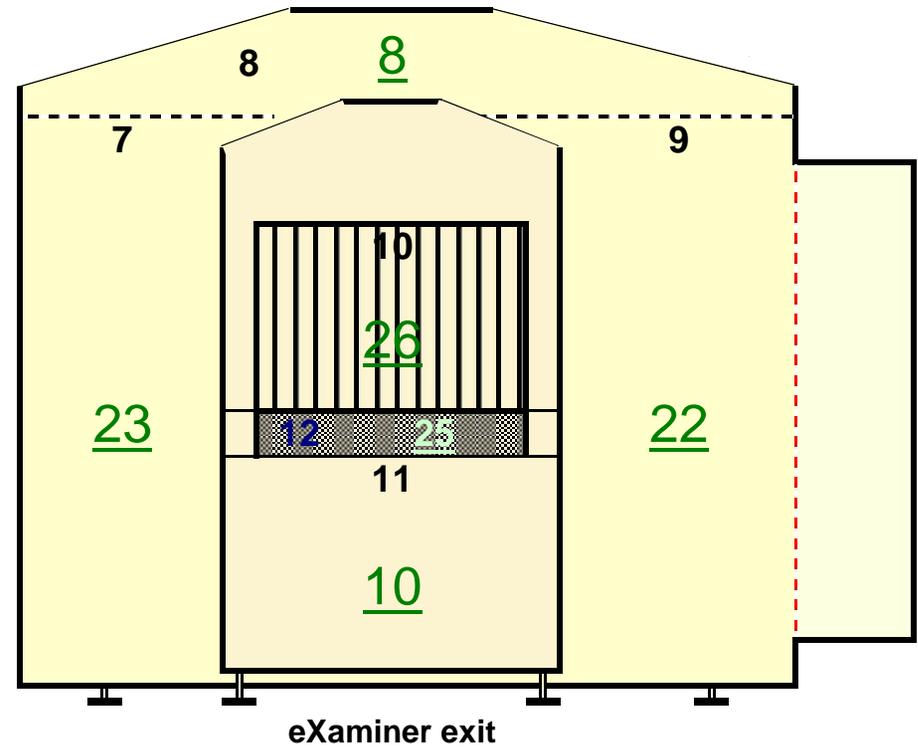
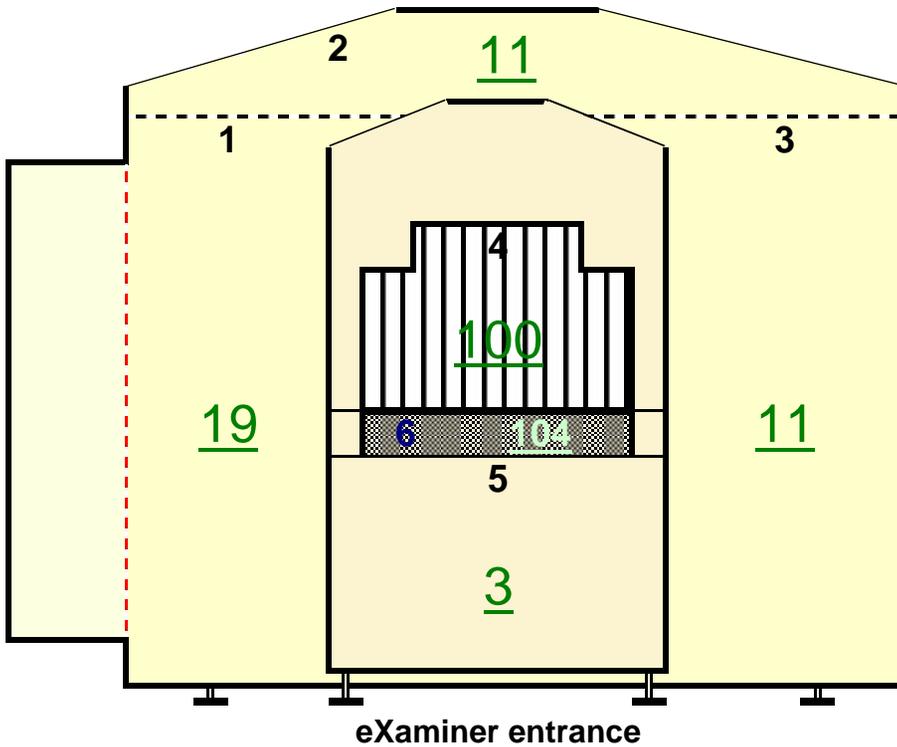
SYSTEM - SIDE PROFILE VIEW (AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		μR/Hr
1	Exit Conveyor Panel	13
2	Exit Conveyor Panel	21
3	Exit Conveyor Panel	46
4	Exit Conveyor Panel	22
5	Exit Conveyor / Scanner Panel	24
6	Upper Scanner Pane	35
7	Middle Scanner Panel	8
8	Lower Scanner Panel	12
9	Upper Scanner Panel	8
10	Middle Scanner Panel	12
11	Lower Scanner Panel	11
12	Entrance Conveyor / Scanner Panel	26
13	Entrance Conveyor Panel	22
14	Entrance Conveyor Panel	12

GOOD

Highest Reading	46
Average Reading	19
Low Reading	8

RADIATION SURVEY WORKSHEET

SYSTEM - FACES (End Views)



SYSTEM - FACES (End Views)			
Scattered Radiation Measurement Points Worksheet			
Record highest reading per panel		$\mu\text{R}/\text{Hr}$	No PROBLEM
1	Scanner Panel	19	
2	Scanner Top Panel	11	
3	Scanner Panel	11	
4	Belt Entrance	100	
5	Entrance Lower Panel	3	
6	Belt Lower Facia Cover Entrance	104	
7	Scanner Panel	23	
8	Scanner Top Panel	8	
9	Scanner Panel	22	
10	Belt Exit	26	
11	Exit Lower Panel	10	
12	Belt Lower Facia Cover Exit	25	

GOOD

Highest Reading	104
Average Reading	30
Low Reading	3