

RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

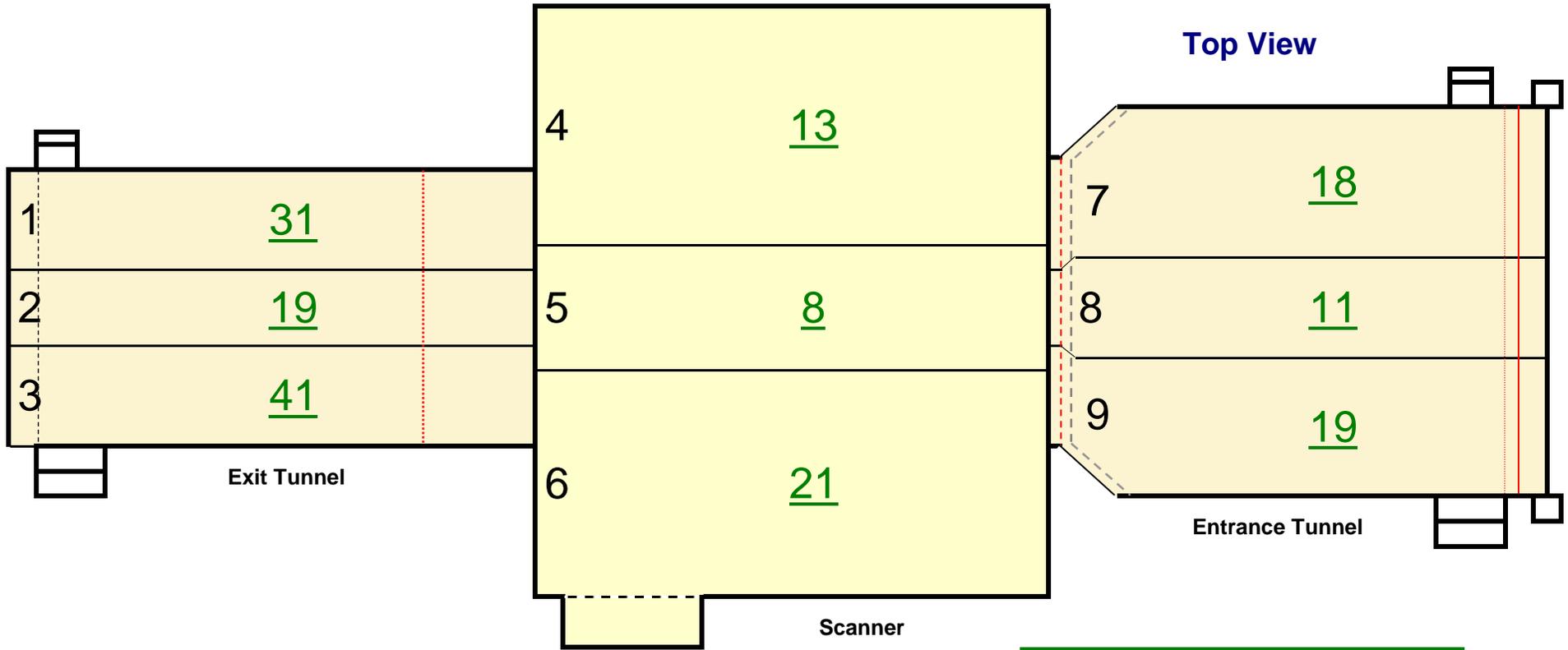
Airport: PHX	Scanner Location: Baggage Handling Room	Case#: 3358122
Personnel Performing Radiation Survey: XXXXXXXXXX		Date Survey Performed: 3/14/2011
Scanner Serial Number: 6673	Entrance Tunnel Serial Number: 	Exit Tunnel Serial Number:
High Reading: 21	Average Reading: 13.23	Min. Reading: 7
High Reading: 77	Average Reading: 21.90	Min. Reading: 7
High Reading: 61	Average Reading: 22.17	Min. Reading: 5
Good	Good	Good
Radiation Meter: Type Meter: 451P	Meter Serial Number: 263	Calibration Due Date: October 18, 2011

NOTES

Complete Radiation Survey (CRS)	Record Voltage and Beam Current here:						
Rename this Document before starting the Survey to:	Voltage: 165 KV Beam Current: 10.0 mA						
335-CRS-14MAR2011-6673	Maximum Safe Readings						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Scanner</td> <td style="width: 10%; text-align: center;">350</td> <td style="width: 25%;">Tunnels</td> <td style="width: 10%; text-align: center;">350</td> <td style="width: 30%;">Curtains</td> <td style="width: 10%; text-align: center;">350</td> </tr> </table>	Scanner	350	Tunnels	350	Curtains	350
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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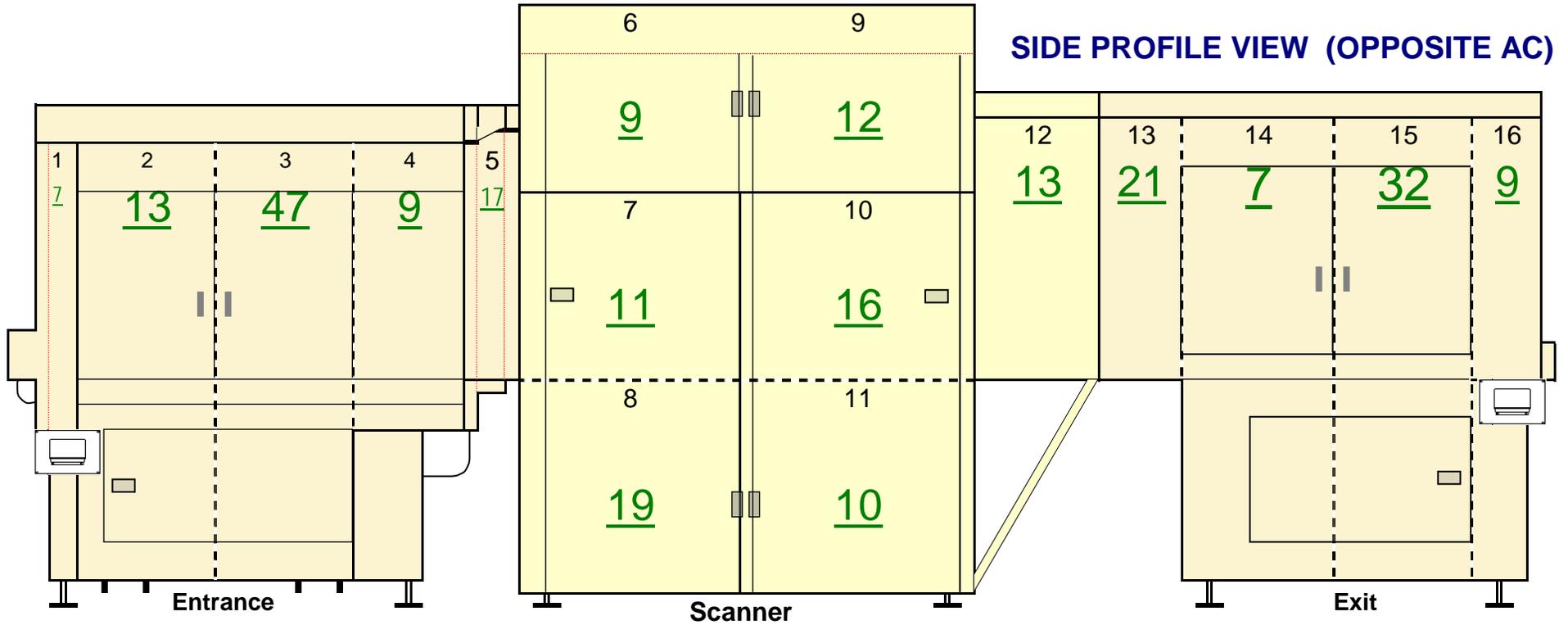


Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	31	
2	Exit Conveyor Top Panel	19	
3	Exit Conveyor Top Panel	41	
4	Scanner Conveyor Top Panel	13	
5	Scanner Conveyor Top Panel	8	
6	Scanner Conveyor Top Panel	21	
7	Entrance Conveyor Top Panel	18	
8	Entrance Conveyor Top Panel	11	
9	Entrance Conveyor Top Panel	19	

GOOD

Highest Reading	41
Average Reading	20
Lowest Reading	8

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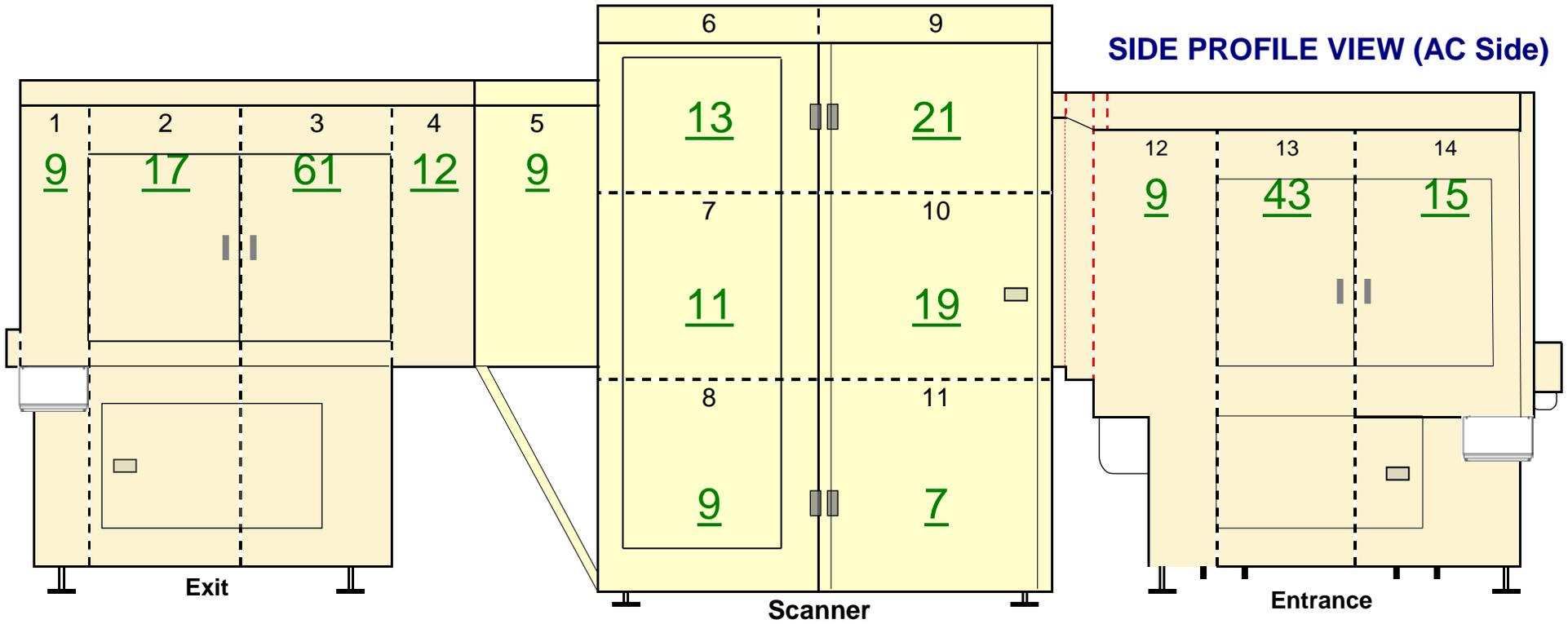


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
	Record highest reading per panel	μR/Hr
1	Entrance Conveyor Panel	7
2	Entrance Conveyor Panel	13
3	Entrance Conveyor Panel	47
4	Entrance Conveyor Panel	9
5	Entrance Conveyor / Scanner Panel	17
6	Upper Scanner Panel	9
7	Middle Scanner Panel	11
8	Lower Scanner Panel	19
9	Upper Scanner Panel	12
10	Middle Scanner Panel	16
11	Lower Scanner Panel	10
12	Exit Conveyor / Scanner Panel	13
13	Exit Conveyor Panel	21
14	Exit Conveyor Panel	7
15	Exit Conveyor Panel	32
16	Exit Conveyor Panel	9

GOOD

Highest Reading	47
Average Reading	16
Low Reading	7

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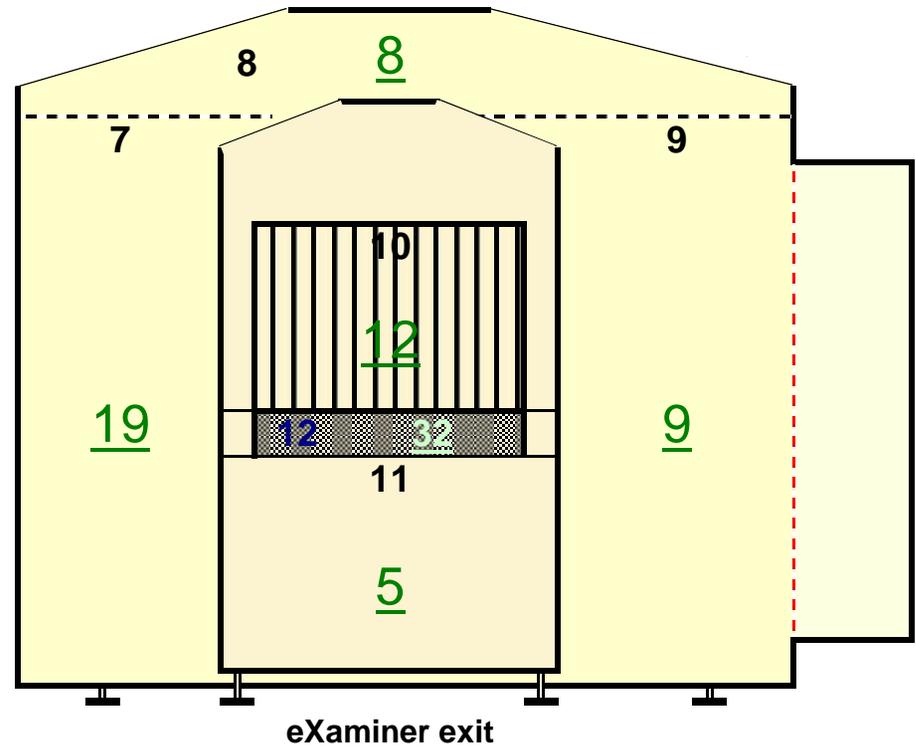
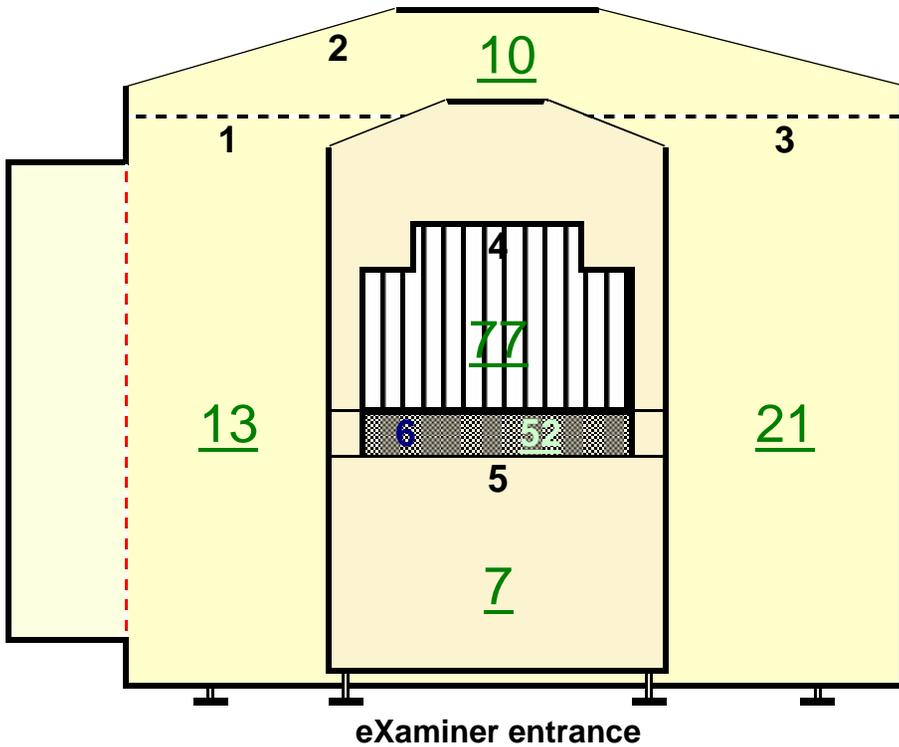
SYSTEM - SIDE PROFILE VIEW (AC Side)		
Scattered Radiation Measurement Points Worksheet		No PROBLEM
Record highest reading per panel	µR/Hr	
1	Exit Conveyor Panel	9
2	Exit Conveyor Panel	17
3	Exit Conveyor Panel	61
4	Exit Conveyor Panel	12
5	Exit Conveyor / Scanner Panel	9
6	Upper Scanner Pane	13
7	Middle Scanner Panel	11
8	Lower Scanner Panel	9
9	Upper Scanner Panel	21
10	Middle Scanner Panel	19
11	Lower Scanner Panel	7
12	Entrance Conveyor / Scanner Panel	9
13	Entrance Conveyor Panel	43
14	Entrance Conveyor Panel	15

GOOD

Highest Reading	61
Average Reading	18
Low Reading	7

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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	13
2	Scanner Top Panel	10
3	Scanner Panel	21
4	Belt Entrance	77
5	Entrance Lower Panel	7
6	Belt Lower Fascia Cover Entrance	52
7	Scanner Panel	19
8	Scanner Top Panel	8
9	Scanner Panel	9
10	Belt Exit	12
11	Exit Lower Panel	5
12	Belt Lower Fascia Cover Exit	32

GOOD

Highest Reading	77
Average Reading	22
Low Reading	5