

RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

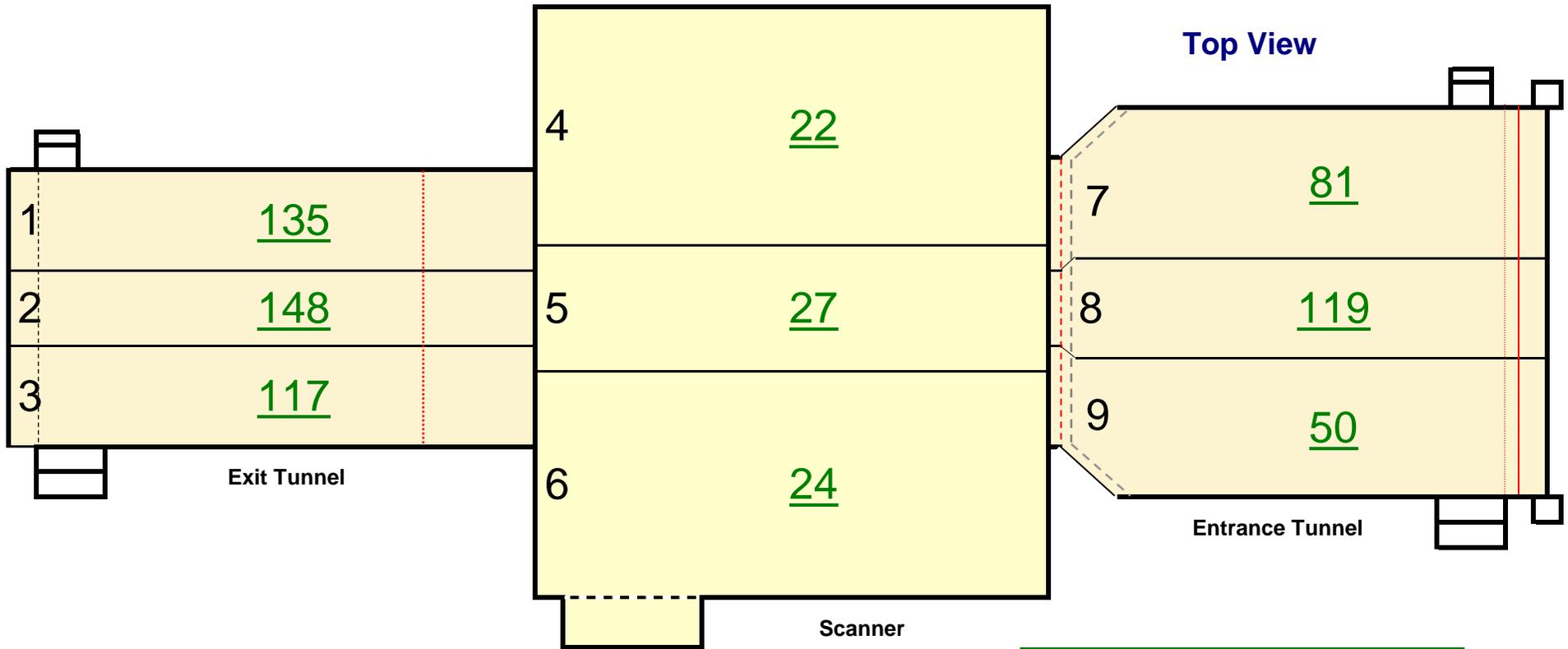
Airport: ABQ	Scanner Location: Delta Bag Room	Case#: 359656
Personnel Performing Radiation Survey: XXXXXXXXXX		Date Survey Performed: 3/24/2011
Scanner Serial Number: 6163	Entrance Tunnel Serial Number: 2088A	Exit Tunnel Serial Number: 2088B
High Reading: 121	Average Reading: 40.65	Min. Reading: 10
High Reading: 220	Average Reading: 90.03	Min. Reading: 32
High Reading: 200	Average Reading: 106.38	Min. Reading: 14
Good	Good	Good
Radiation Meter: Type Meter: 451P	Meter Serial Number: 6492	Calibration Due Date: December 27, 2011

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Complete Radiation Survey (CRS)	Record Voltage and Beam Current here:					
Rename this Document before starting the Survey to: 359-CRS-24MAR2011-6163	Voltage: <u>166</u> KV Beam Current: <u>9.9</u> mA					
	Maximum Safe Readings <table style="display: inline-table; border: none;"> <tr> <td style="border: none;">Scanner</td> <td style="border: none;">350</td> <td style="border: none;">Tunnels</td> <td style="border: none;">350</td> <td style="border: none;">Curtains</td> <td style="border: none;">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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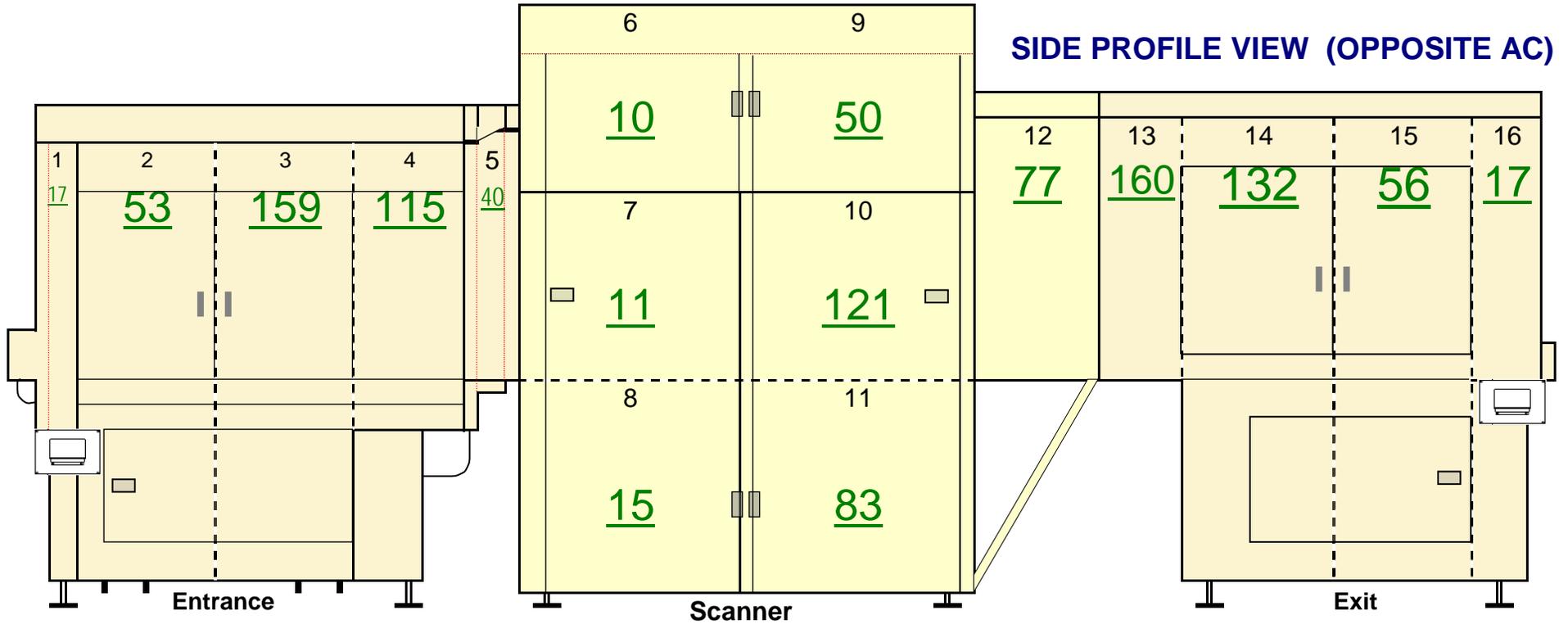


Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	135	
2	Exit Conveyor Top Panel	148	
3	Exit Conveyor Top Panel	117	
4	Scanner Conveyor Top Panel	22	
5	Scanner Conveyor Top Panel	27	
6	Scanner Conveyor Top Panel	24	
7	Entrance Conveyor Top Panel	81	
8	Entrance Conveyor Top Panel	119	
9	Entrance Conveyor Top Panel	50	

GOOD

Highest Reading	148
Average Reading	80
Lowest Reading	22

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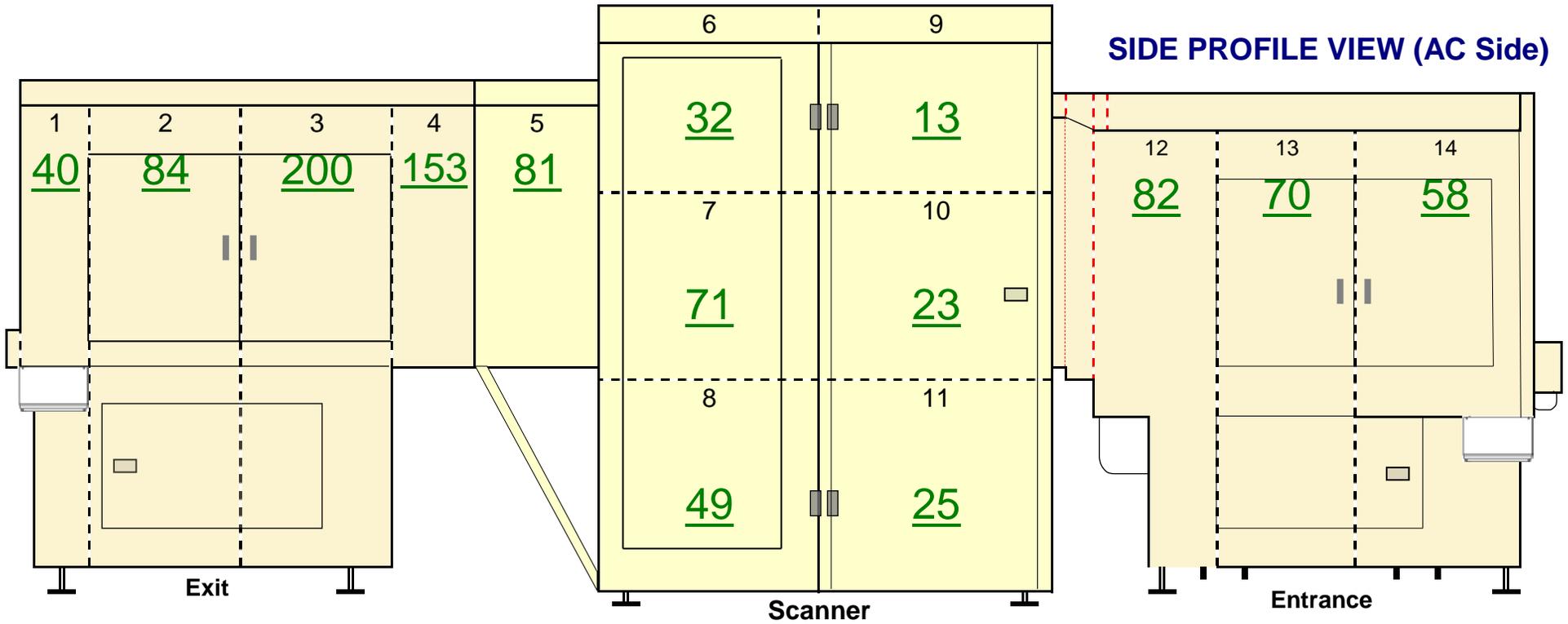


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
	Record highest reading per panel	μR/Hr
1	Entrance Conveyor Panel	17
2	Entrance Conveyor Panel	53
3	Entrance Conveyor Panel	159
4	Entrance Conveyor Panel	115
5	Entrance Conveyor / Scanner Panel	40
6	Upper Scanner Panel	10
7	Middle Scanner Panel	11
8	Lower Scanner Panel	15
9	Upper Scanner Panel	50
10	Middle Scanner Panel	121
11	Lower Scanner Panel	83
12	Exit Conveyor / Scanner Panel	77
13	Exit Conveyor Panel	160
14	Exit Conveyor Panel	132
15	Exit Conveyor Panel	56
16	Exit Conveyor Panel	17

GOOD

Highest Reading	160
Average Reading	70
Low Reading	10

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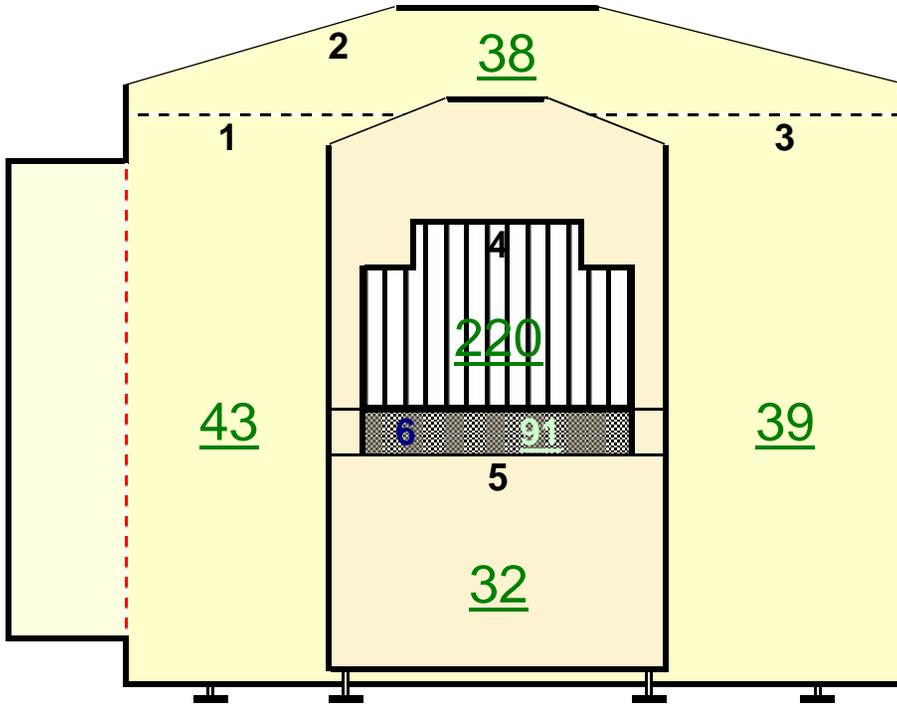
SYSTEM - SIDE PROFILE VIEW (AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Panel	40	
2	Exit Conveyor Panel	84	
3	Exit Conveyor Panel	200	
4	Exit Conveyor Panel	153	
5	Exit Conveyor / Scanner Panel	81	
6	Upper Scanner Pane	32	
7	Middle Scanner Panel	71	
8	Lower Scanner Panel	49	
9	Upper Scanner Panel	13	
10	Middle Scanner Panel	23	
11	Lower Scanner Panel	25	
12	Entrance Conveyor / Scanner Panel	82	
13	Entrance Conveyor Panel	70	
14	Entrance Conveyor Panel	58	

GOOD

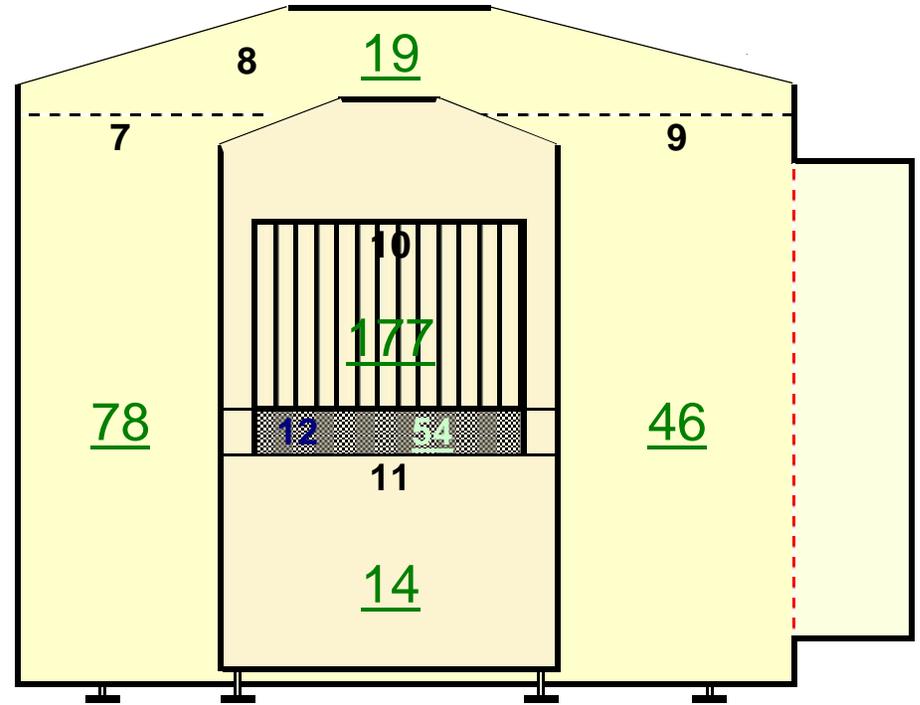
Highest Reading	200
Average Reading	70
Low Reading	13

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SYSTEM - FACES (End Views)



eXaminer entrance



eXaminer exit

SYSTEM - FACES (End Views)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		μR/Hr
1	Scanner Panel	43
2	Scanner Top Panel	38
3	Scanner Panel	39
4	Belt Entrance	220
5	Entrance Lower Panel	32
6	Belt Lower Fascia Cover Entrance	91
7	Scanner Panel	78
8	Scanner Top Panel	19
9	Scanner Panel	46
10	Belt Exit	177
11	Exit Lower Panel	14
12	Belt Lower Fascia Cover Exit	54

GOOD

Highest Reading	220
Average Reading	71
Low Reading	14