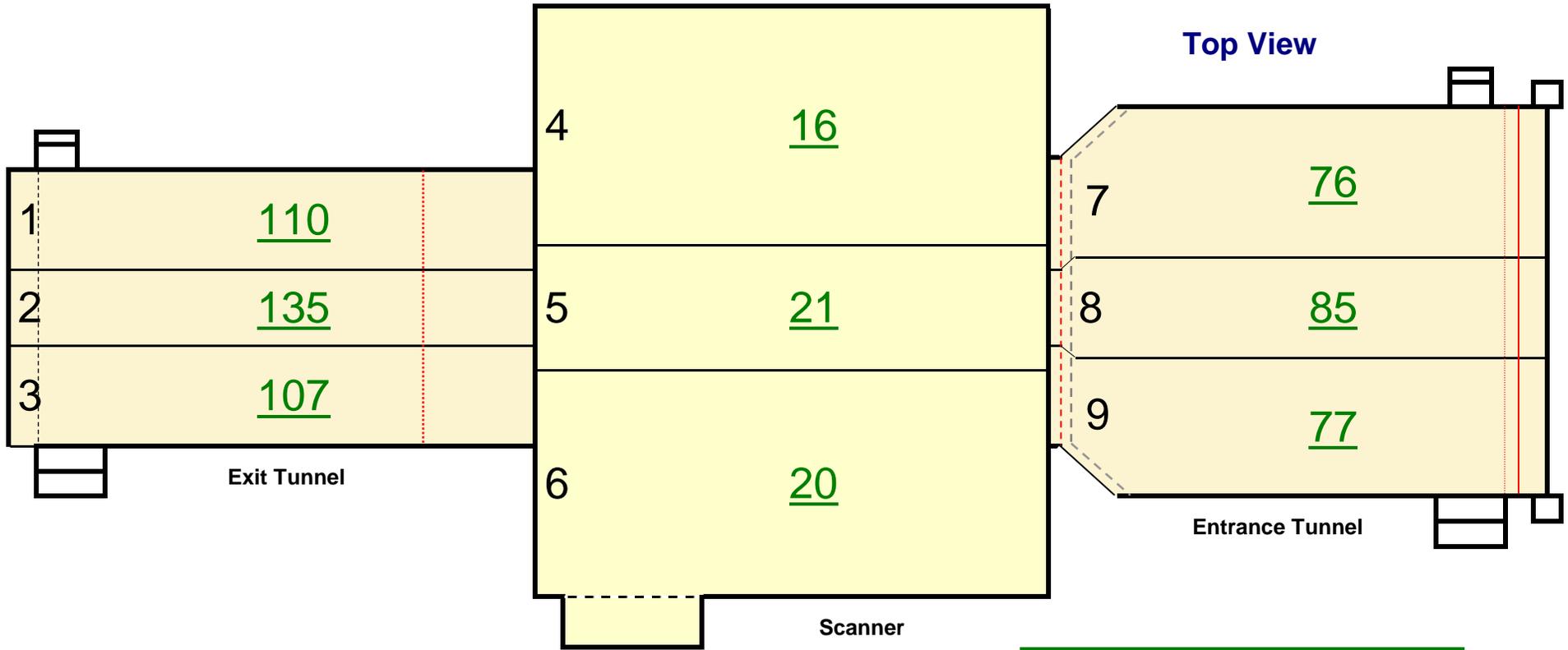


# RADIATION SURVEY WORKSHEET

## eXaminer Radiation Survey Information

Airport: <b>San Diego Int'l Airport</b>	Scanner Location: <b>Baggage Handling Room</b>	Case#: <b>SAN-C359204</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>6135</b>	Entrance Tunnel Serial Number: <b>2050A</b>	Exit Tunnel Serial Number: <b>2050B</b>
High Reading: <b>159</b>	Average Reading: <b>56.17</b>	Min. Reading: <b>16</b>
High Reading: <b>178</b>	Average Reading: <b>82.88</b>	Min. Reading: <b>29</b>
High Reading: <b>166</b>	Average Reading: <b>96.40</b>	Min. Reading: <b>22</b>
<b>Good</b>	<b>Good</b>	<b>Good</b>
Radiation Meter: Type Meter: <b>451P</b>	Meter Serial Number: <b>6265</b>	Calibration Due Date: <b>July 2, 2011</b>
<div style="display: flex; justify-content: space-between;"> <span>N</span> <span>O</span> <span>T</span> <span>E</span> <span>S</span> </div>		
<b>Complete Radiation Survey (CRS)</b>	<b>Record Voltage and Beam Current here:</b>	
<b>Rename this Document before starting the Survey to:</b>	<b>Voltage:</b> <b>167</b> KV	<b>Beam Current:</b> <b>10.0</b> mA
<b>SAN-CRS-18MAR2011-6135</b>	<b>Maximum Safe Readings</b>	<b>Scanner</b> 350 <b>Tunnels</b> 350 <b>Curtains</b> 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 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.

# RADIATION SURVEY WORKSHEET

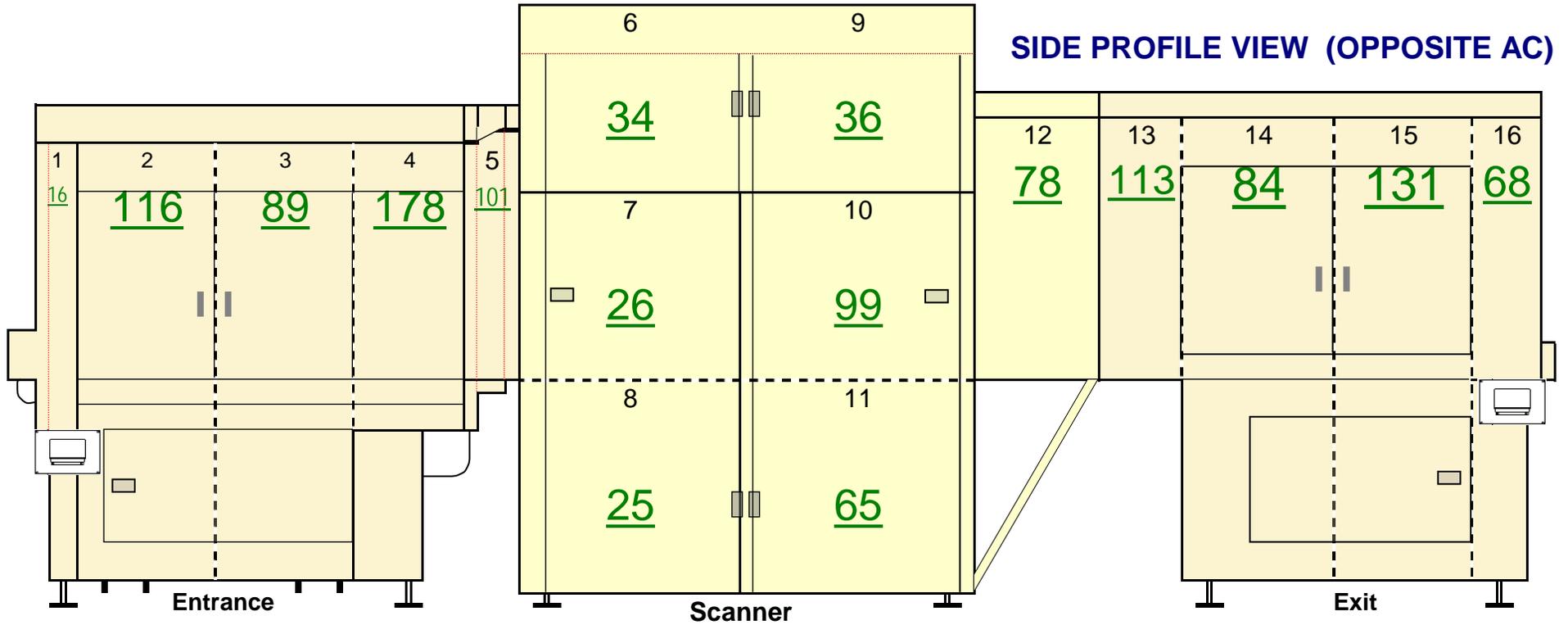


GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		μR/Hr	
1	Exit Conveyor Top Panel	110	
2	Exit Conveyor Top Panel	135	
3	Exit Conveyor Top Panel	107	
4	Scanner Conveyor Top Panel	16	
5	Scanner Conveyor Top Panel	21	
6	Scanner Conveyor Top Panel	20	
7	Entrance Conveyor Top Panel	76	
8	Entrance Conveyor Top Panel	85	
9	Entrance Conveyor Top Panel	77	

Highest Reading	135
Average Reading	72
Lowest Reading	16

# RADIATION SURVEY WORKSHEET

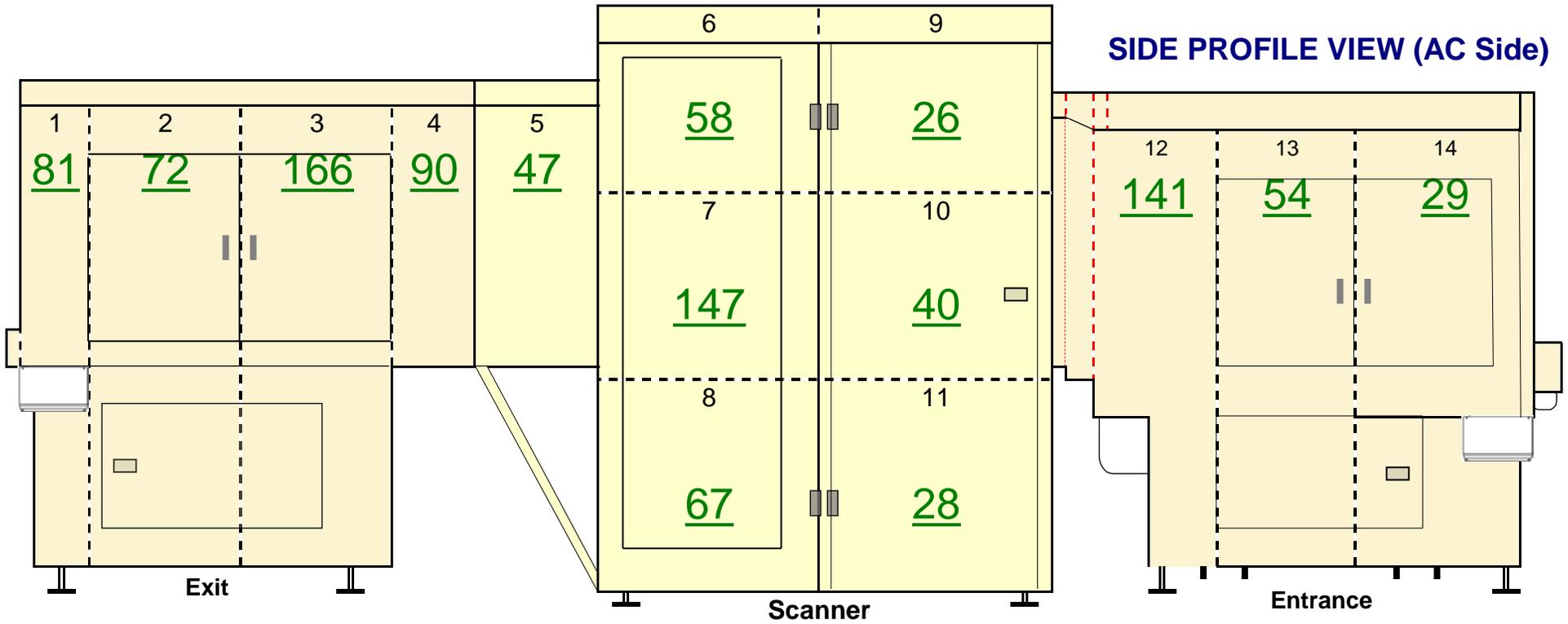


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
	Record highest reading per panel	μR/Hr
1	Entrance Conveyor Panel	16
2	Entrance Conveyor Panel	116
3	Entrance Conveyor Panel	89
4	Entrance Conveyor Panel	178
5	Entrance Conveyor / Scanner Panel	101
6	Upper Scanner Panel	34
7	Middle Scanner Panel	26
8	Lower Scanner Panel	25
9	Upper Scanner Panel	36
10	Middle Scanner Panel	99
11	Lower Scanner Panel	65
12	Exit Conveyor / Scanner Panel	78
13	Exit Conveyor Panel	113
14	Exit Conveyor Panel	84
15	Exit Conveyor Panel	131
16	Exit Conveyor Panel	68

GOOD

Highest Reading	178
Average Reading	79
Low Reading	16

# RADIATION SURVEY WORKSHEET



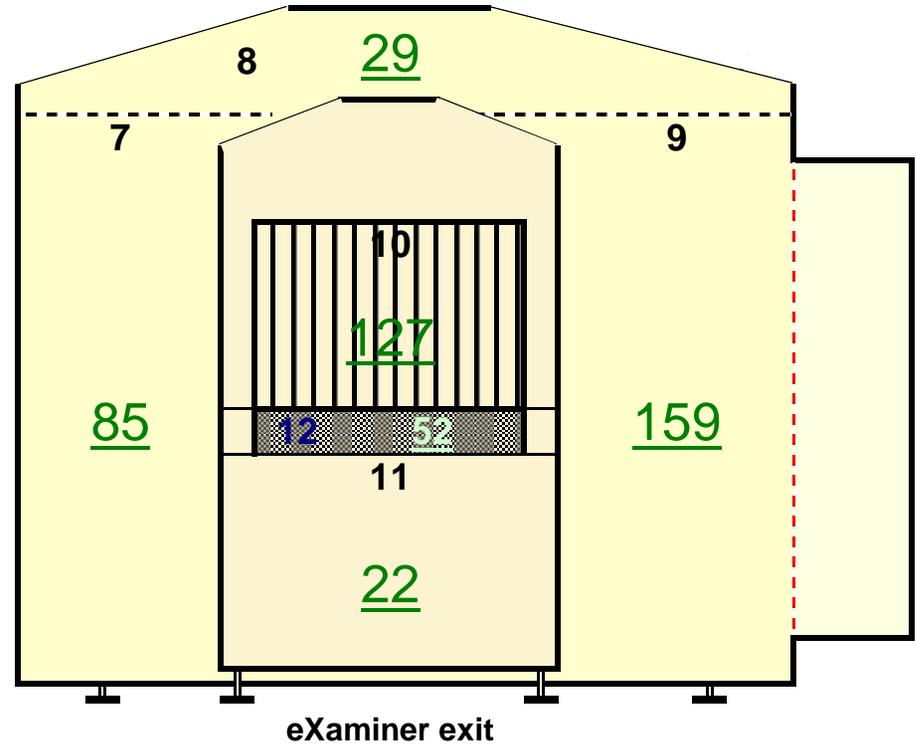
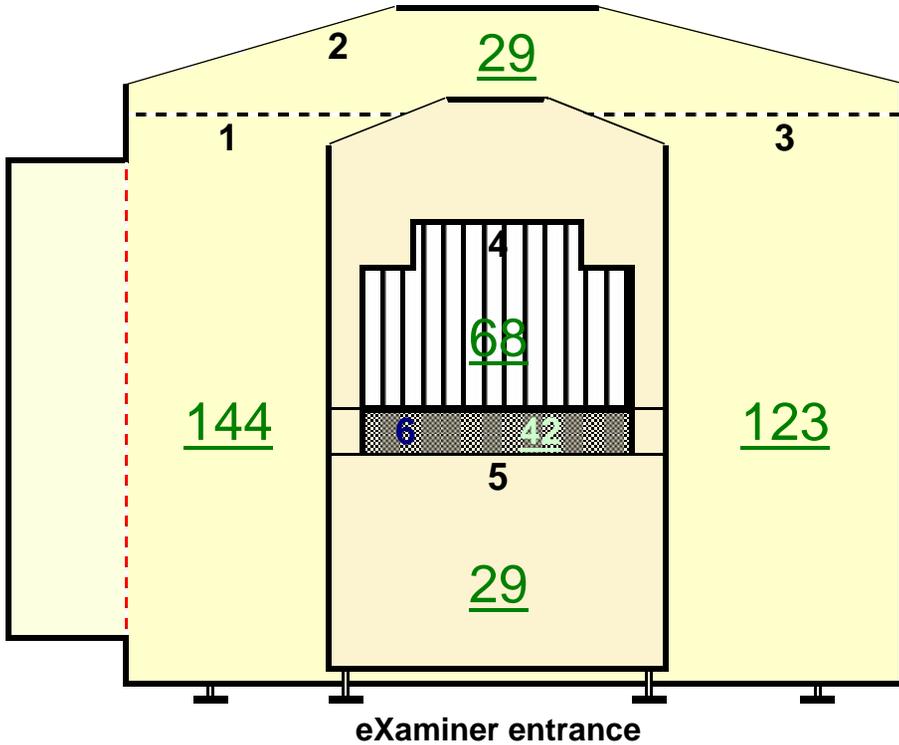
SYSTEM - SIDE PROFILE VIEW ( AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		μR/Hr
1	Exit Conveyor Panel	81
2	Exit Conveyor Panel	72
3	Exit Conveyor Panel	166
4	Exit Conveyor Panel	90
5	Exit Conveyor / Scanner Panel	47
6	Upper Scanner Pane	58
7	Middle Scanner Panel	147
8	Lower Scanner Panel	67
9	Upper Scanner Panel	26
10	Middle Scanner Panel	40
11	Lower Scanner Panel	28
12	Entrance Conveyor / Scanner Panel	141
13	Entrance Conveyor Panel	54
14	Entrance Conveyor Panel	29

GOOD

Highest Reading	166
Average Reading	75
Low Reading	26

# 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	144
2	Scanner Top Panel	29
3	Scanner Panel	123
4	Belt Entrance	68
5	Entrance Lower Panel	29
6	Belt Lower Facia Cover Entrance	42
7	Scanner Panel	85
8	Scanner Top Panel	29
9	Scanner Panel	159
10	Belt Exit	127
11	Exit Lower Panel	22
12	Belt Lower Facia Cover Exit	52

GOOD

Highest Reading	159
Average Reading	76
Low Reading	22