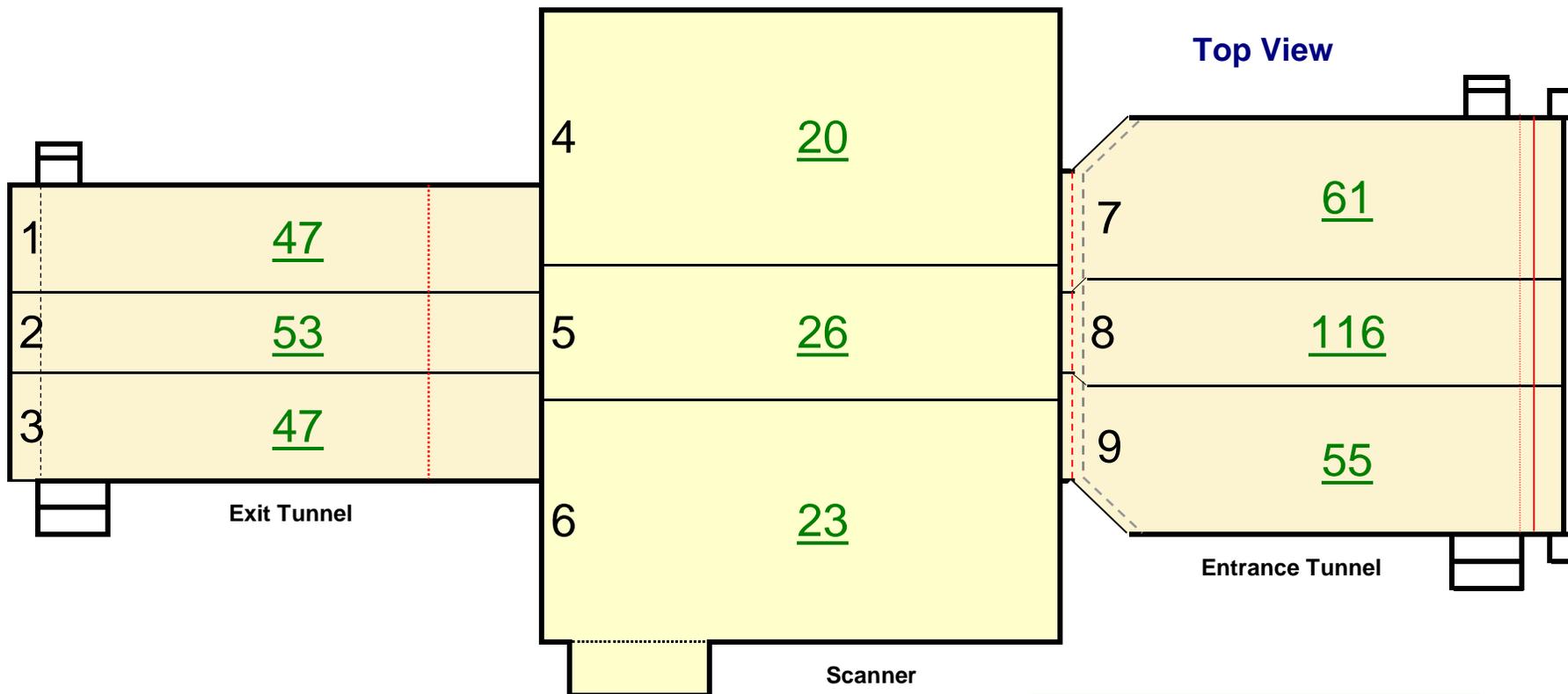


# RADIATION SURVEY WORKSHEET

## eXaminer Radiation Survey Information

Airport: <b>FLL</b>	Scanner Location: <b>Terminal 3</b>	Case#: <b>FLL349618</b>
Personnel Performing Radiation Survey: <span style="background-color: black; color: black;">XXXXXXXXXX</span>		Date Survey Performed: <b>3/2/2011</b>
Scanner Serial Number: <b>6389</b>	Entrance Tunnel Serial Number: <b>2244A</b>	Exit Tunnel Serial Number: <b>5199B</b>
High Reading: <b>76</b> Average Reading: <b>34.48</b> Min. Reading: <b>12</b>	High Reading: <b>116</b> Average Reading: <b>53.88</b> Min. Reading: <b>27</b>	High Reading: <b>78</b> Average Reading: <b>40.83</b> Min. Reading: <b>10</b>
<b>Good</b>	<b>Good</b>	<b>Good</b>
Radiation Meter: Type Meter: <b>451P</b>	Meter Serial Number: <b>68</b>	Calibration Due Date: <b>March 8, 2011</b>
N O T E S		
Complete Radiation Survey (CRS)	Record Voltage and Bean Current here:	
Rename this Document before starting the Survey to:	Voltage: <b>165</b> KV	Beam Current: <b>9.9</b> mA
<b>FLL-CRS-2MAR2011-6389</b>	Maximum Safe Readings	Scanner 350    Tunnels 350    Curtains 350
Step:	Procedure	Expected results
1.	Set Up: Obtain Invision 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



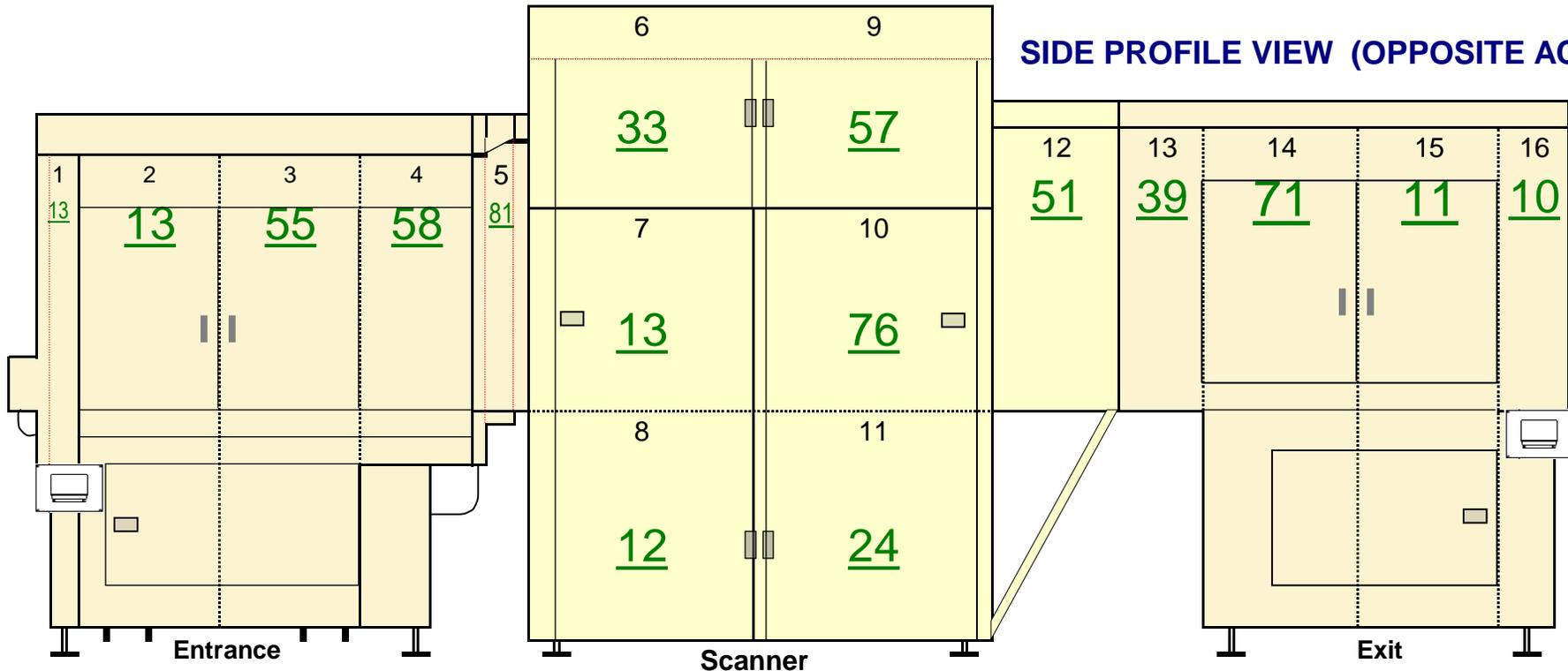
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel	μR/Hr		
1	Exit Conveyor Top Panel	47	
2	Exit Conveyor Top Panel	53	
3	Exit Conveyor Top Panel	47	
4	Scanner Conveyor Top Panel	20	
5	Scanner Conveyor Top Panel	26	
6	Scanner Conveyor Top Panel	23	
7	Entrance Conveyor Top Panel	61	
8	Entrance Conveyor Top Panel	116	
9	Entrance Conveyor Top Panel	55	

Highest Reading	116
Average Reading	50
Lowest Reading	20

# RADIATION SURVEY WORKSHEET

## SIDE PROFILE VIEW (OPPOSITE AC)

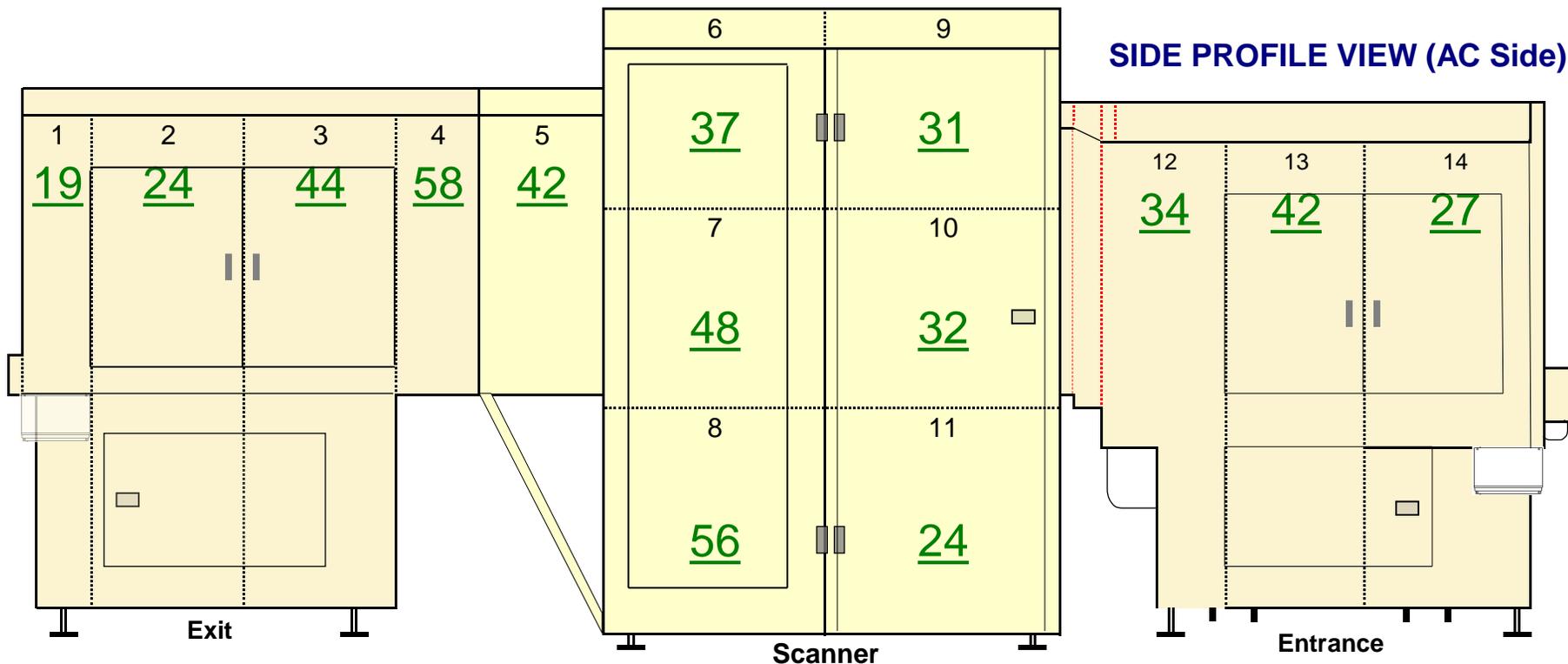


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Entrance Conveyor Panel	13	
2	Entrance Conveyor Panel	13	
3	Entrance Conveyor Panel	55	
4	Entrance Conveyor Panel	58	
5	Entrance Conveyor / Scanner Panel	81	
6	Upper Scanner Panel	33	
7	Middle Scanner Panel	13	
8	Lower Scanner Panel	12	
9	Upper Scanner Panel	57	
10	Middle Scanner Panel	76	
11	Lower Scanner Panel	24	
12	Exit Conveyor / Scanner Panel	51	
13	Exit Conveyor Panel	39	
14	Exit Conveyor Panel	71	
15	Exit Conveyor Panel	11	
16	Exit Conveyor Panel	10	

GOOD

Highest Reading	81
Average Reading	39
Low Reading	10

# RADIATION SURVEY WORKSHEET



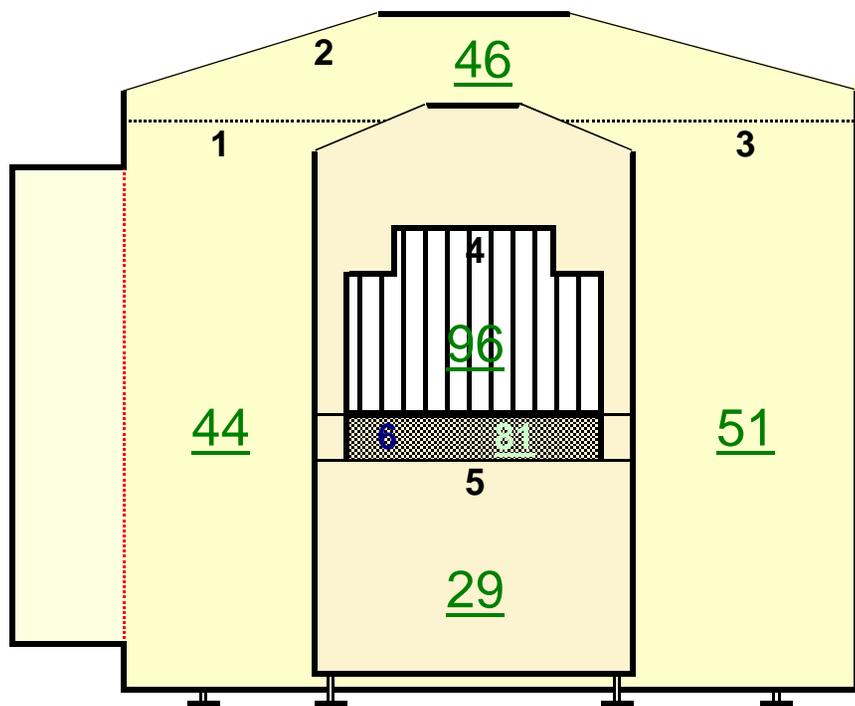
SYSTEM - SIDE PROFILE VIEW ( AC Side)			No <b>PROBLEM</b>
Scattered Radiation Measurement Points Worksheet		$\mu\text{R}/\text{Hr}$	
Record highest reading per panel			
1	Exit Conveyor Panel	19	
2	Exit Conveyor Panel	24	
3	Exit Conveyor Panel	44	
4	Exit Conveyor Panel	58	
5	Exit Conveyor / Scanner Panel	42	
6	Upper Scanner Pane	37	
7	Middle Scanner Panel	48	
8	Lower Scanner Panel	56	
9	Upper Scanner Panel	31	
10	Middle Scanner Panel	32	
11	Lower Scanner Panel	24	
12	Entrance Conveyor / Scanner Panel	34	
13	Entrance Conveyor Panel	42	
14	Entrance Conveyor Panel	27	

**GOOD**

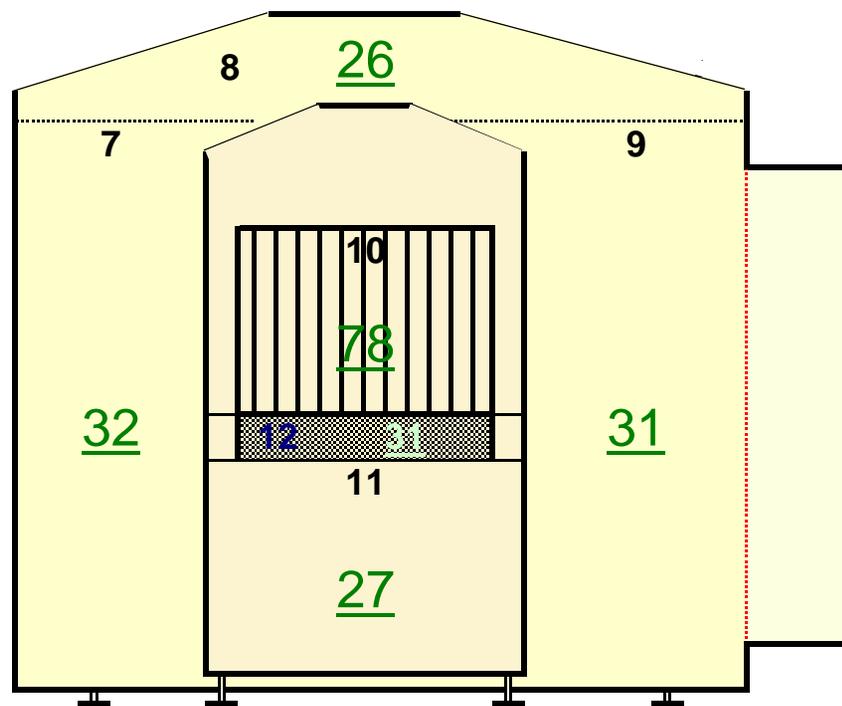
Highest Reading	58
Average Reading	37
Low Reading	19

# RADIATION SURVEY WORKSHEET

## SYSTEM - FACES (End Views)



eXaminer entrance



eXaminer exit

SYSTEM - FACES (End Views)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		$\mu\text{R}/\text{Hr}$	
1	Scanner Panel	44	
2	Scanner Top Panel	46	
3	Scanner Panel	51	
4	Belt Entrance	96	
5	Entrance Lower Panel	29	
6	Belt Lower Fascia Cover Entrance	81	
7	Scanner Panel	32	
8	Scanner Top Panel	26	
9	Scanner Panel	31	
10	Belt Exit	78	
11	Exit Lower Panel	27	
12	Belt Lower Fascia Cover Exit	31	

GOOD

Highest Reading	96
Average Reading	48
Low Reading	26