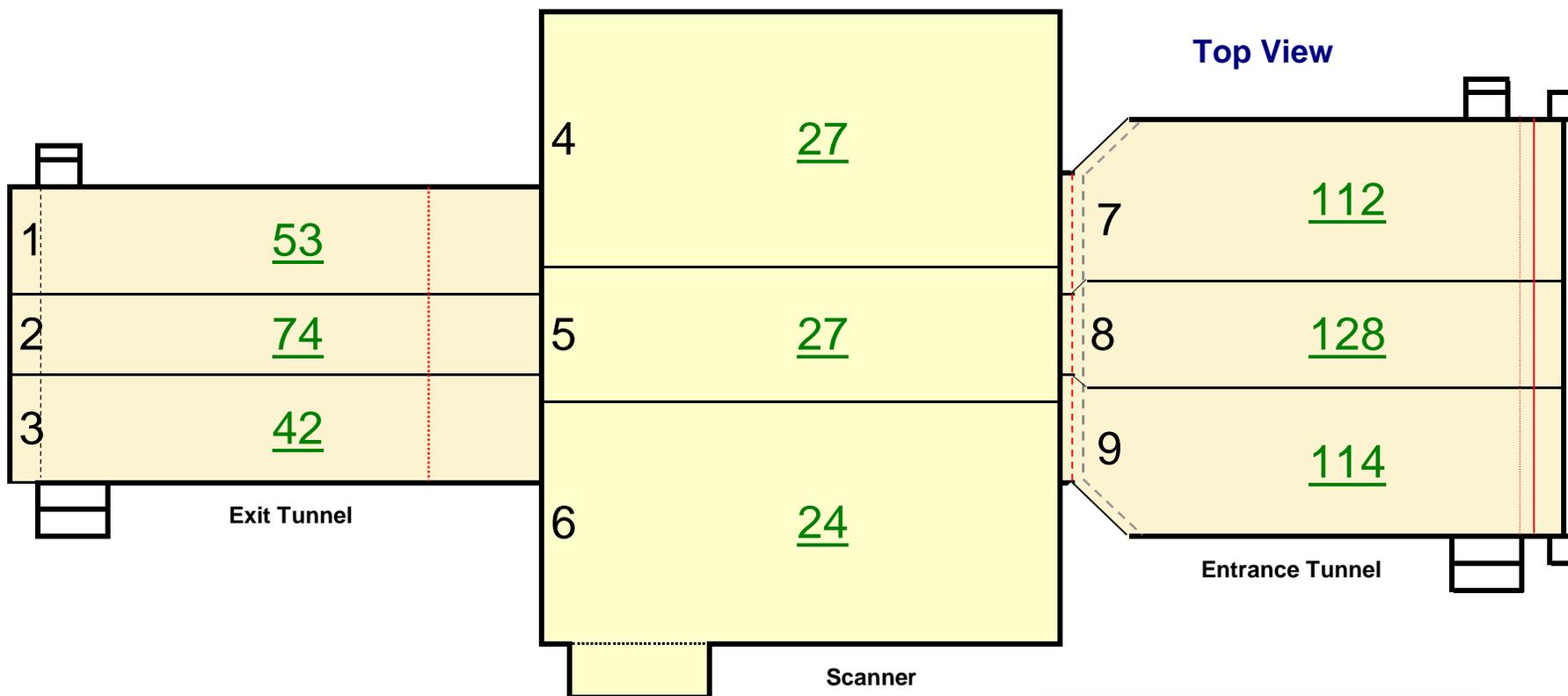


# RADIATION SURVEY WORKSHEET

## eXaminer Radiation Survey Information

Airport: <b>FLL</b>	Scanner Location: <b>Terminal 3</b>	Case#: <b>FLL349518</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>6401</b>	Entrance Tunnel Serial Number: <b>2245A</b>	Exit Tunnel Serial Number: <b>5258B</b>
High Reading: <b>76</b> Average Reading: <b>31.32</b> Min. Reading: <b>9</b>	High Reading: <b>128</b> Average Reading: <b>53.69</b> Min. Reading: <b>17</b>	High Reading: <b>75</b> Average Reading: <b>44.96</b> Min. Reading: <b>12</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 Beam 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-2MAR2011-6401</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



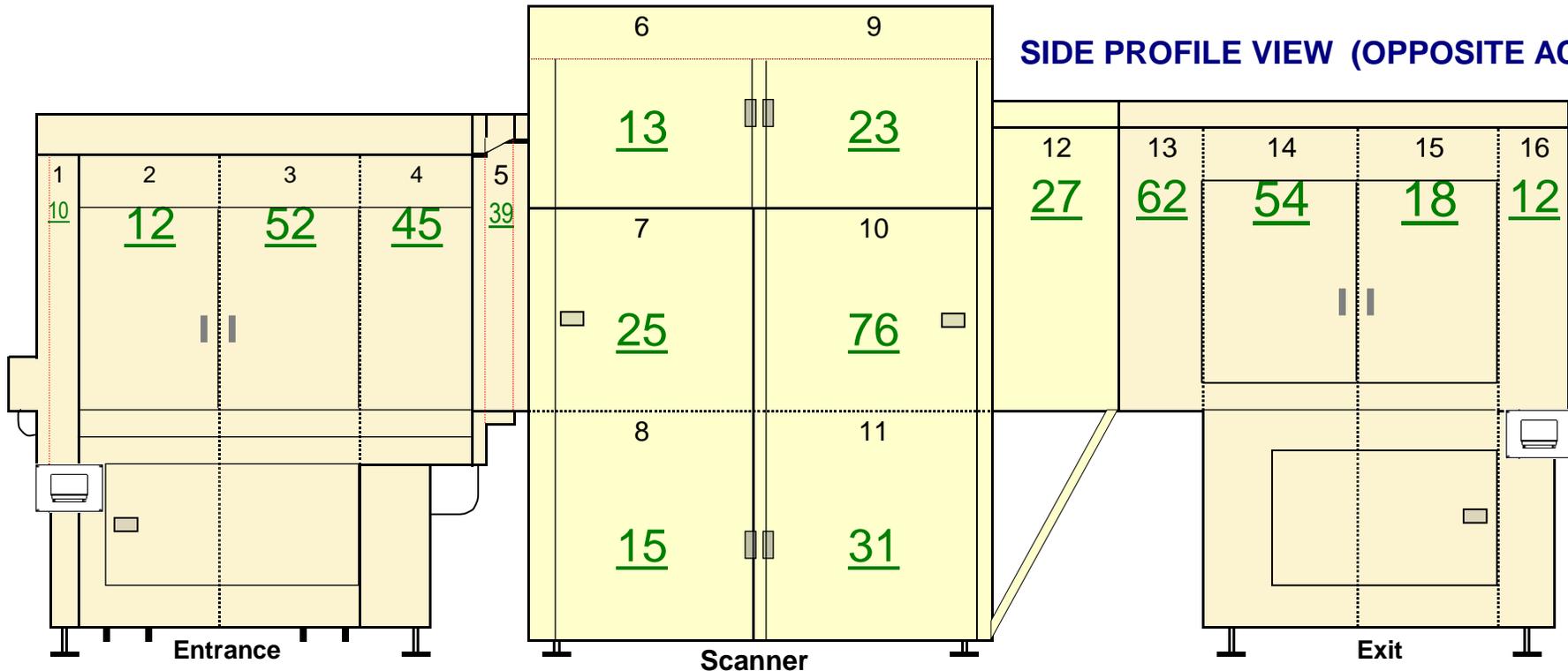
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		μR/Hr	
1	Exit Conveyor Top Panel	53	
2	Exit Conveyor Top Panel	74	
3	Exit Conveyor Top Panel	42	
4	Scanner Conveyor Top Panel	27	
5	Scanner Conveyor Top Panel	27	
6	Scanner Conveyor Top Panel	24	
7	Entrance Conveyor Top Panel	112	
8	Entrance Conveyor Top Panel	128	
9	Entrance Conveyor Top Panel	114	

Highest Reading	128
Average Reading	67
Lowest Reading	24

# RADIATION SURVEY WORKSHEET

## SIDE PROFILE VIEW (OPPOSITE AC)

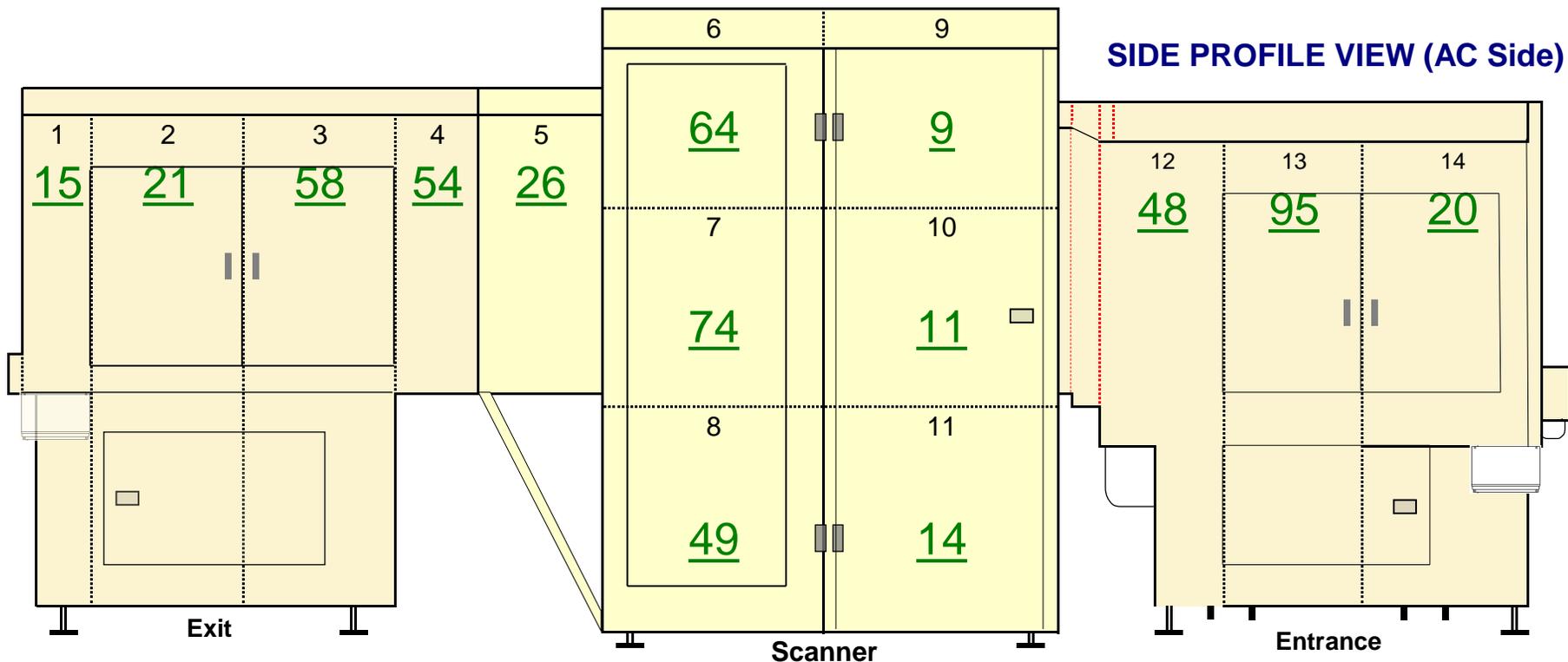


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Entrance Conveyor Panel	10	
2	Entrance Conveyor Panel	12	
3	Entrance Conveyor Panel	52	
4	Entrance Conveyor Panel	45	
5	Entrance Conveyor / Scanner Panel	39	
6	Upper Scanner Panel	13	
7	Middle Scanner Panel	25	
8	Lower Scanner Panel	15	
9	Upper Scanner Panel	23	
10	Middle Scanner Panel	76	
11	Lower Scanner Panel	31	
12	Exit Conveyor / Scanner Panel	27	
13	Exit Conveyor Panel	62	
14	Exit Conveyor Panel	54	
15	Exit Conveyor Panel	18	
16	Exit Conveyor Panel	12	

GOOD

Highest Reading	76
Average Reading	32
Low Reading	10

# RADIATION SURVEY WORKSHEET



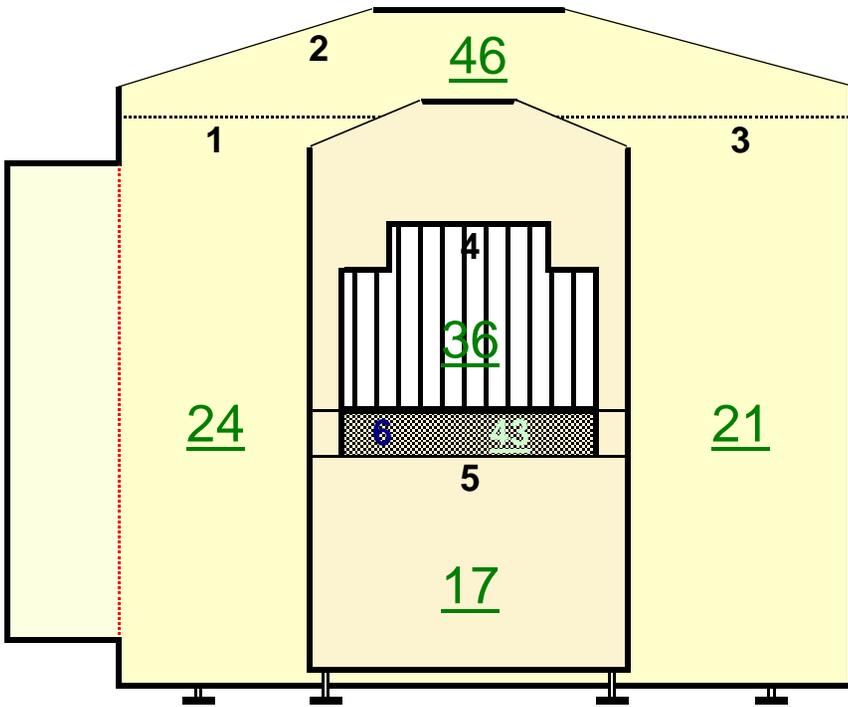
SYSTEM - SIDE PROFILE VIEW ( AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		$\mu\text{R}/\text{Hr}$	
1	Exit Conveyor Panel	15	
2	Exit Conveyor Panel	21	
3	Exit Conveyor Panel	58	
4	Exit Conveyor Panel	54	
5	Exit Conveyor / Scanner Panel	26	
6	Upper Scanner Pane	64	
7	Middle Scanner Panel	74	
8	Lower Scanner Panel	49	
9	Upper Scanner Panel	9	
10	Middle Scanner Panel	11	
11	Lower Scanner Panel	14	
12	Entrance Conveyor / Scanner Panel	48	
13	Entrance Conveyor Panel	95	
14	Entrance Conveyor Panel	20	

**GOOD**

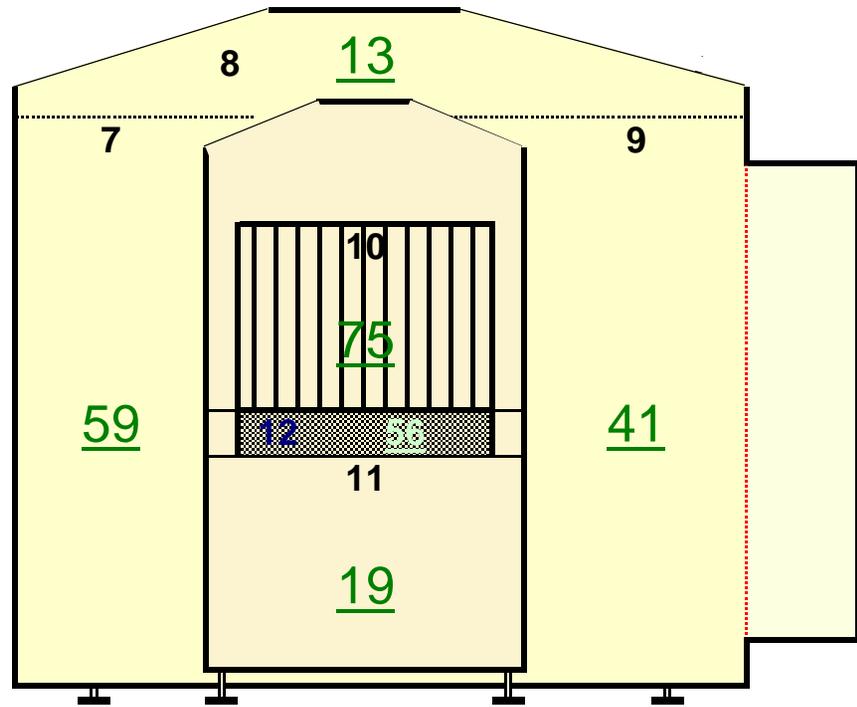
Highest Reading	95
Average Reading	40
Low Reading	9

# 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	24	
2	Scanner Top Panel	46	
3	Scanner Panel	21	
4	Belt Entrance	36	
5	Entrance Lower Panel	17	
6	Belt Lower Fascia Cover Entrance	43	
7	Scanner Panel	59	
8	Scanner Top Panel	13	
9	Scanner Panel	41	
10	Belt Exit	75	
11	Exit Lower Panel	19	
12	Belt Lower Fascia Cover Exit	56	

GOOD

Highest Reading	75
Average Reading	38
Low Reading	13