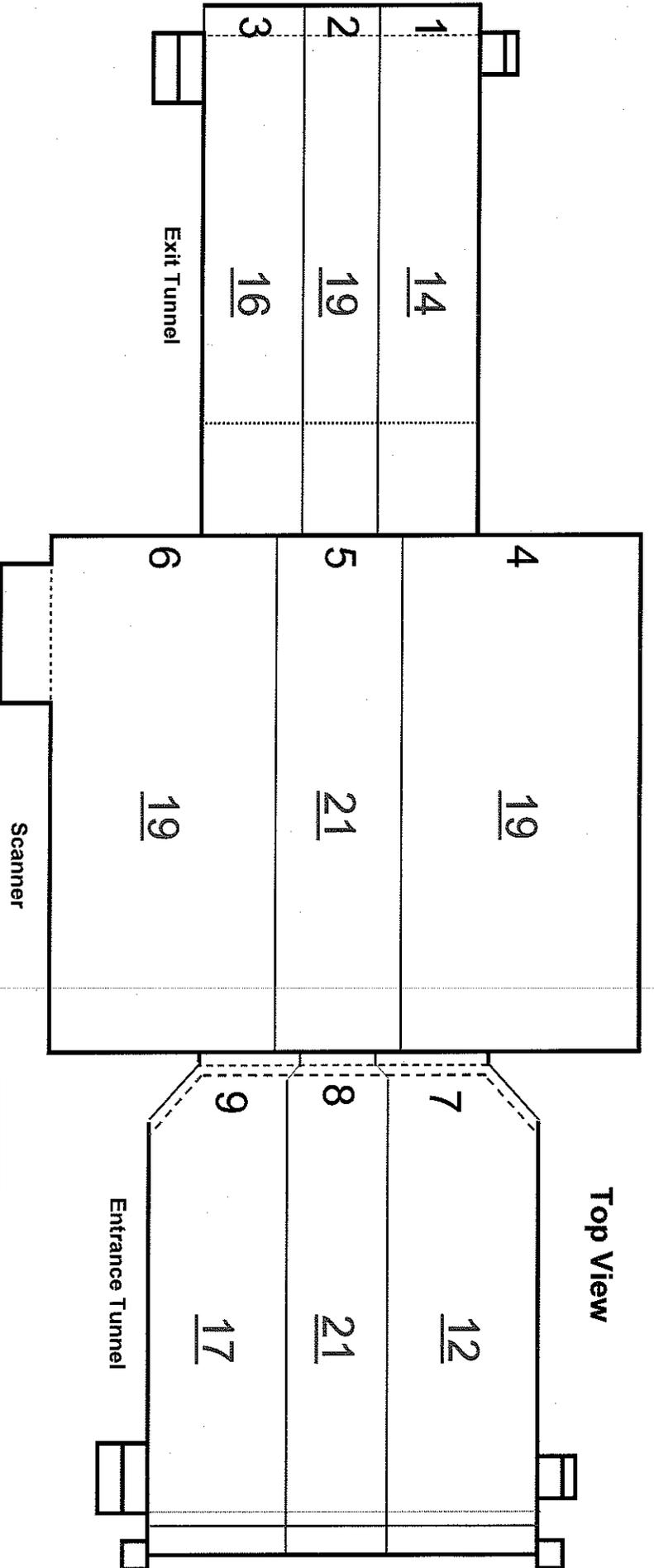


# RADIATION SURVEY WORKSHEET

## eXaminer Radiation Survey Information

Airport: <b>Palm Beach International Airport</b>		Scanner Location: <b>Baggage Handling Room</b>		Case#: <b>PBI-C299015</b>	
Personnel Performing Radiation Survey:				Date Survey Performed: <b>4/28/2010</b>	
Scanner Serial Number: <b>6324</b>		Entrance Tunnel Serial Number: <b>2266A</b>		Exit Tunnel Serial Number: <b>2266B</b>	
High Reading: <b>21</b>	Average Reading: <b>14.94</b>	Min. Reading: <b>9</b>	High Reading: <b>95</b>	Average Reading: <b>27.33</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>263</b>	Calibration Due Date: <b>October 22, 2010</b>		
<b>Complete Radiation Survey (CRS)</b>			<b>Record Voltage and Bean Current here:</b>		
<b>Rename this Document before starting the Survey to:</b> <b>PBI-CRS-28DEC2010-6324</b>			<b>Voltage:</b> <b>164</b>	<b>KV</b>	<b>Beam Current:</b> <b>9.8</b>
			<b>Maximum Safe Readings</b>	<b>Scanner</b>	<b>350</b>
			<b>Tunnels</b>	<b>350</b>	<b>Curtains</b>
			<b>350</b>	<b>350</b>	<b>350</b>
<b>Procedure</b>			<b>Expected results</b>		
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 uR/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.		

# RADIATION SURVEY WORKSHEET

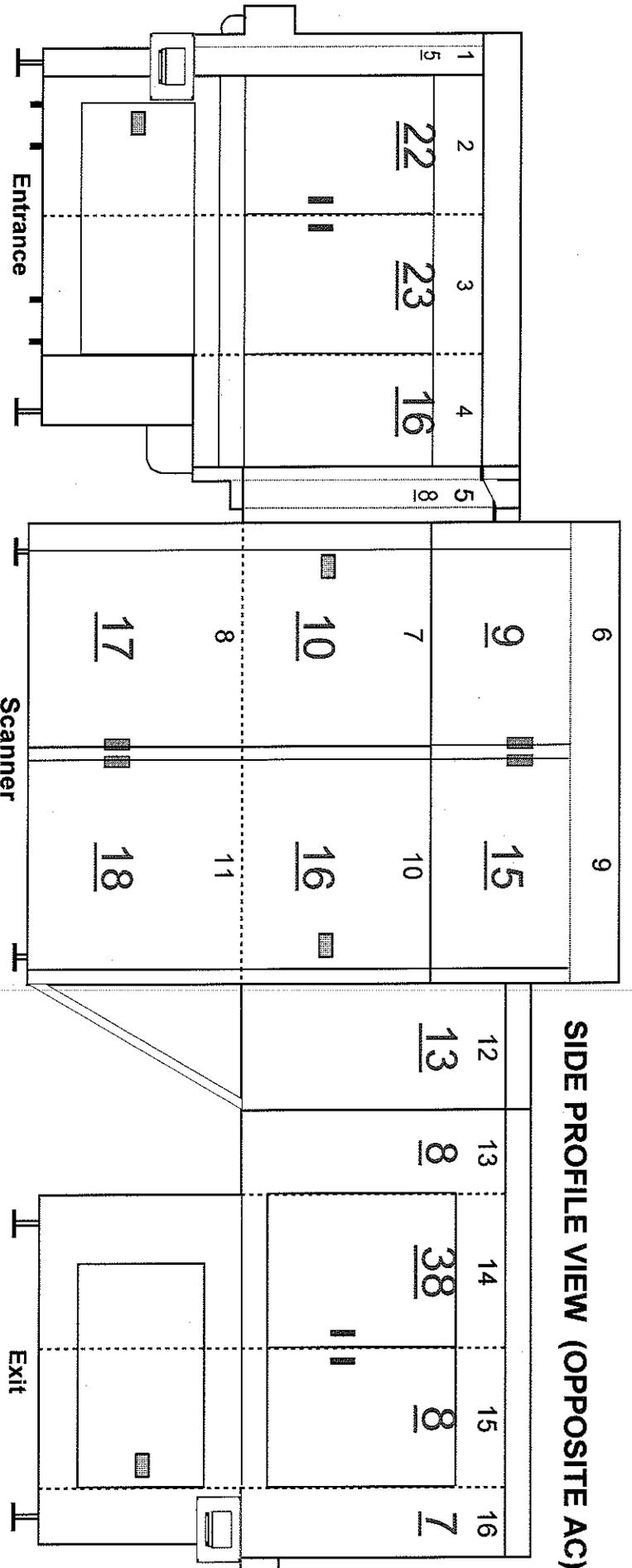


Top View		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel	µR/hr	No PROBLEM
1 Exit Conveyor Top Panel	14	
2 Exit Conveyor Top Panel	19	
3 Exit Conveyor Top Panel	16	
4 Scanner Conveyor Top Panel	19	
5 Scanner Conveyor Top Panel	21	
6 Scanner Conveyor Top Panel	19	
7 Entrance Conveyor Top Panel	12	
8 Entrance Conveyor Top Panel	21	
9 Entrance Conveyor Top Panel	17	

GOOD

Highest Reading	21
Average Reading	18
Lowest Reading	12

# RADIATION SURVEY WORKSHEET

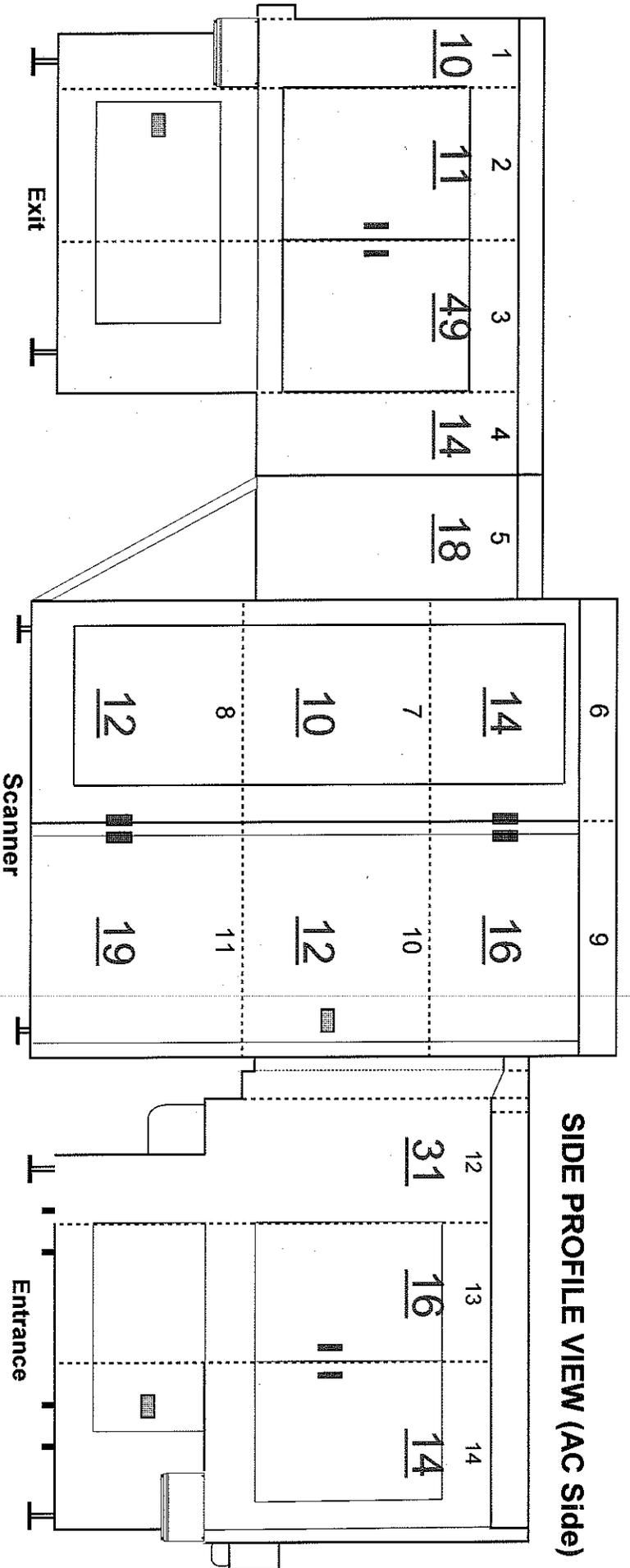


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel	$\mu\text{R}/\text{Hr}$	No PROBLEM
1 Entrance Conveyor Panel	5	
2 Entrance Conveyor Panel	22	
3 Entrance Conveyor Panel	23	
4 Entrance Conveyor Panel	16	
5 Entrance Conveyor / Scanner Panel	8	
6 Upper Scanner Panel	9	
7 Middle Scanner Panel	10	
8 Lower Scanner Panel	17	
9 Upper Scanner Panel	15	
10 Middle Scanner Panel	16	
11 Lower Scanner Panel	18	
12 Exit Conveyor / Scanner Panel	13	
13 Exit Conveyor Panel	8	
14 Exit Conveyor Panel	38	
15 Exit Conveyor Panel	8	
16 Exit Conveyor Panel	7	

GOOD

Highest Reading	38
Average Reading	15
Low Reading	5

# RADIATION SURVEY WORKSHEET



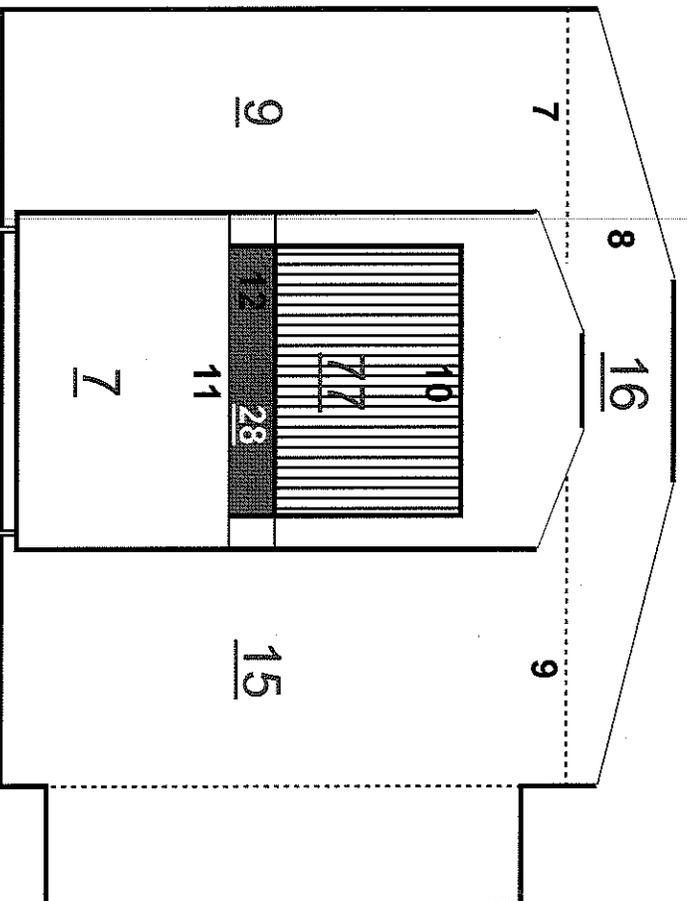
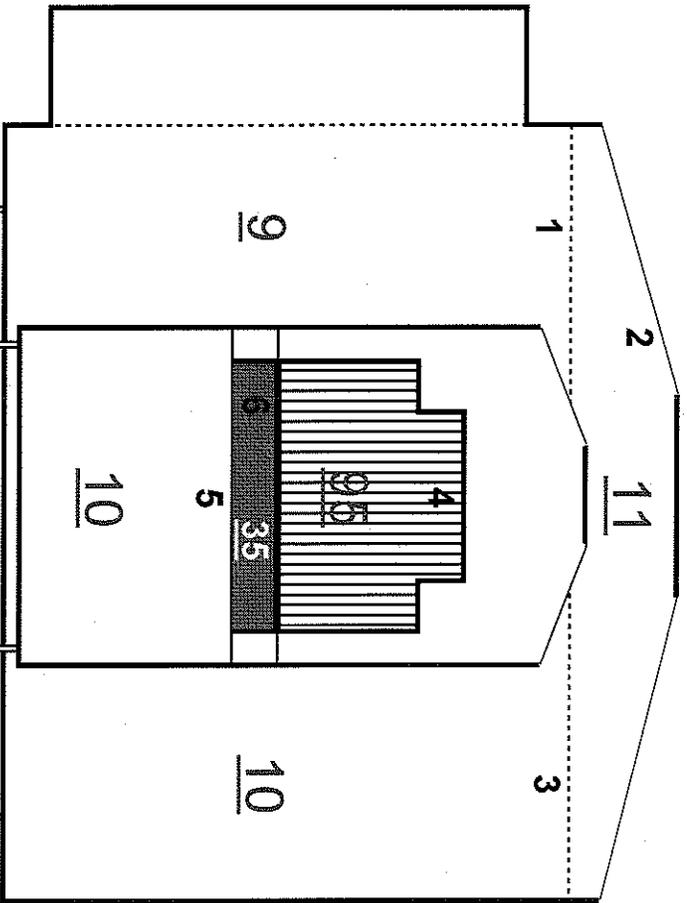
SYSTEM - SIDE PROFILE VIEW ( AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel	$\mu\text{R}/\text{hr}$	No PROBLEM
1 Exit Conveyor Panel	10	
2 Exit Conveyor Panel	11	
3 Exit Conveyor Panel	49	
4 Exit Conveyor Panel	14	
5 Exit Conveyor / Scanner Panel	18	
6 Upper Scanner Panel	14	
7 Middle Scanner Panel	10	
8 Lower Scanner Panel	12	
9 Upper Scanner Panel	16	
10 Middle Scanner Panel	12	
11 Lower Scanner Panel	19	
12 Entrance Conveyor / Scanner Panel	31	
13 Entrance Conveyor Panel	16	
14 Entrance Conveyor Panel	14	

GOOD

Highest Reading	49
Average Reading	18
Low Reading	10

# 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	9
2	Scanner Top Panel	11
3	Scanner Panel	10
4	Belt Entrance	95
5	Entrance Lower Panel	10
6	Belt Lower Facia Cover Entrance	35
7	Scanner Panel	9
8	Scanner Top Panel	16
9	Scanner Panel	15
10	Belt Exit	77
11	Exit Lower Panel	7
12	Belt Lower Facia Cover Exit	28

examiner exit

**GOOD**

Highest Reading	95
Average Reading	27
Low Reading	7