RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

Airport:	PHX	Scanner Location:	T4 South Line 4	Case#:	355767
Personnel Performing Radiation Survey:	[redacted]			Date Survey Performed:	3/3/2011

Scanner Serial Number:	6684	Entrance Tunnel Serial Number:	6374A	Exit Tunnel Serial Number:	6374B
High Reading:	46	High Reading:	54	High Reading:	163
Average Reading:	27.26	Average Reading:	30.89	Average Reading:	48.00
Min. Reading:	15	Min. Reading:	15	Min. Reading:	20
	Good		Good		Good

Radiation Meter:	Type Meter:	451P	Meter Serial Number:	263	Calibration Due Date:	October 18, 2011

NOTES

Complete Radiation Survey (CRS)	Record Voltage and Bean Current here:							
Rename this Document before starting the Survey to: 355-CRS-3MAR2011-6684	Voltage:	164	KV	Beam Current:	9.8	mA		
	Maximum Safe Readings	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 µR/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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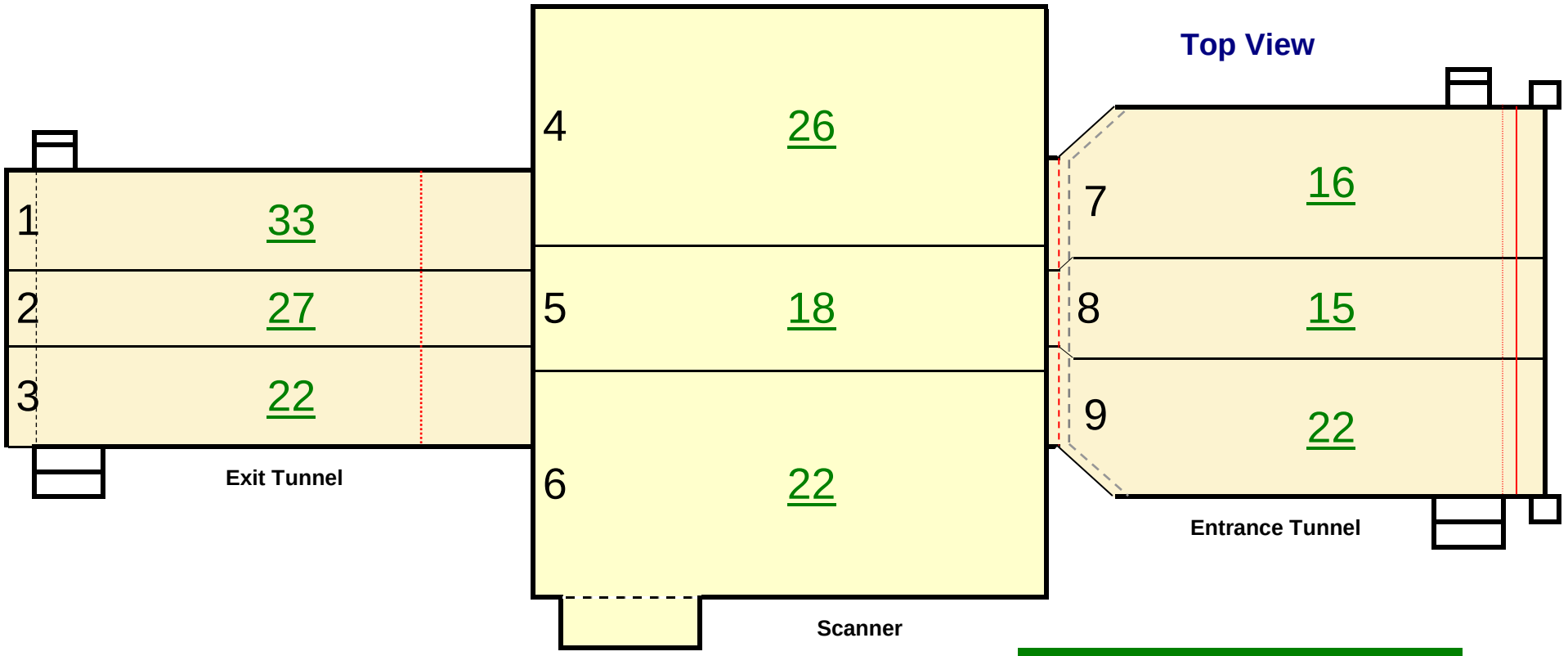


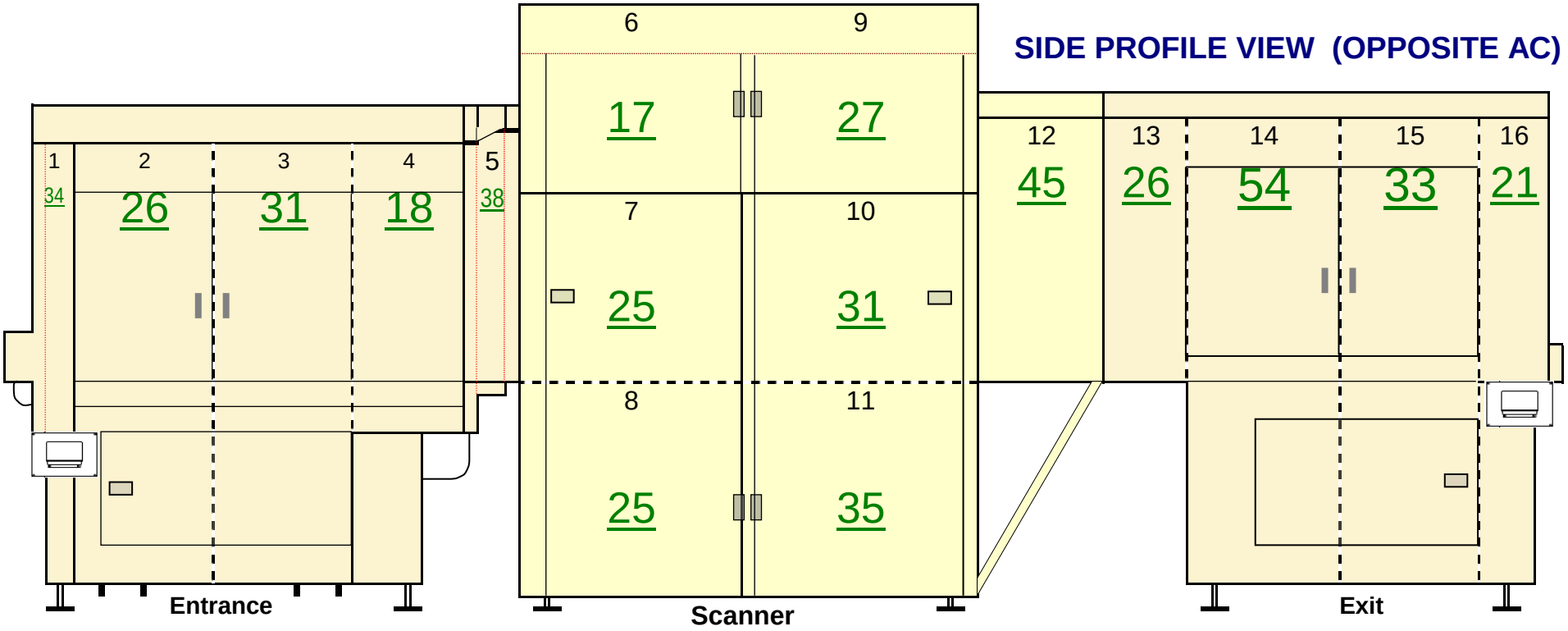
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	33	
2	Exit Conveyor Top Panel	27	
3	Exit Conveyor Top Panel	22	
4	Scanner Conveyor Top Panel	26	
5	Scanner Conveyor Top Panel	18	
6	Scanner Conveyor Top Panel	22	
7	Entrance Conveyor Top Panel	16	
8	Entrance Conveyor Top Panel	15	
9	Entrance Conveyor Top Panel	22	

Highest Reading	33
Average Reading	22
Lowest Reading	15

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (OPPOSITE AC)



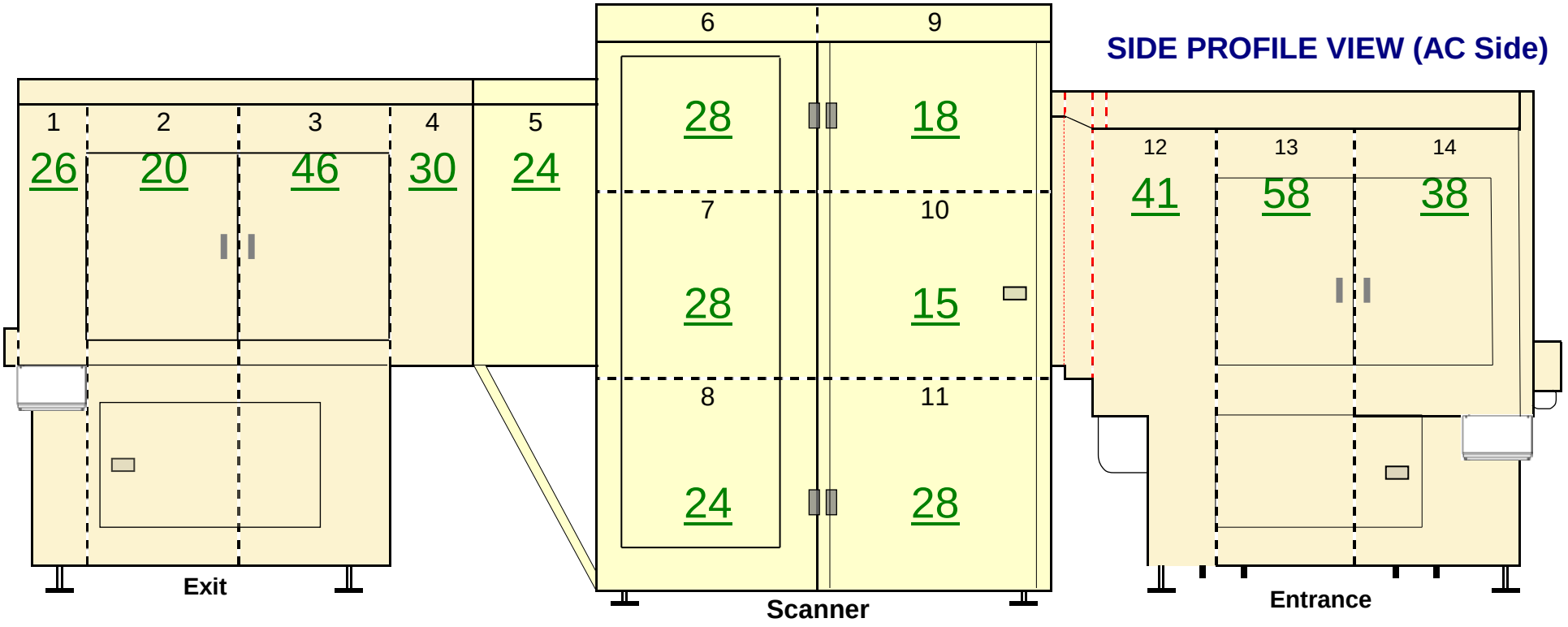
SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Entrance Conveyor Panel	34	
2	Entrance Conveyor Panel	26	
3	Entrance Conveyor Panel	31	
4	Entrance Conveyor Panel	18	
5	Entrance Conveyor / Scanner Panel	38	
6	Upper Scanner Panel	17	
7	Middle Scanner Panel	25	
8	Lower Scanner Panel	25	
9	Upper Scanner Panel	27	
10	Middle Scanner Panel	31	
11	Lower Scanner Panel	35	
12	Exit Conveyor / Scanner Panel	45	
13	Exit Conveyor Panel	26	
14	Exit Conveyor Panel	54	
15	Exit Conveyor Panel	33	
16	Exit Conveyor Panel	21	

GOOD

Highest Reading	54
Average Reading	30
Low Reading	17

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (AC Side)



SYSTEM - SIDE PROFILE VIEW (AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Panel	26	
2	Exit Conveyor Panel	20	
3	Exit Conveyor Panel	46	
4	Exit Conveyor Panel	30	
5	Exit Conveyor / Scanner Panel	24	
6	Upper Scanner Pane	28	
7	Middle Scanner Panel	28	
8	Lower Scanner Panel	24	
9	Upper Scanner Panel	18	
10	Middle Scanner Panel	15	
11	Lower Scanner Panel	28	
12	Entrance Conveyor / Scanner Panel	41	
13	Entrance Conveyor Panel	58	
14	Entrance Conveyor Panel	38	

GOOD

Highest Reading	58
Average Reading	30
Low Reading	15

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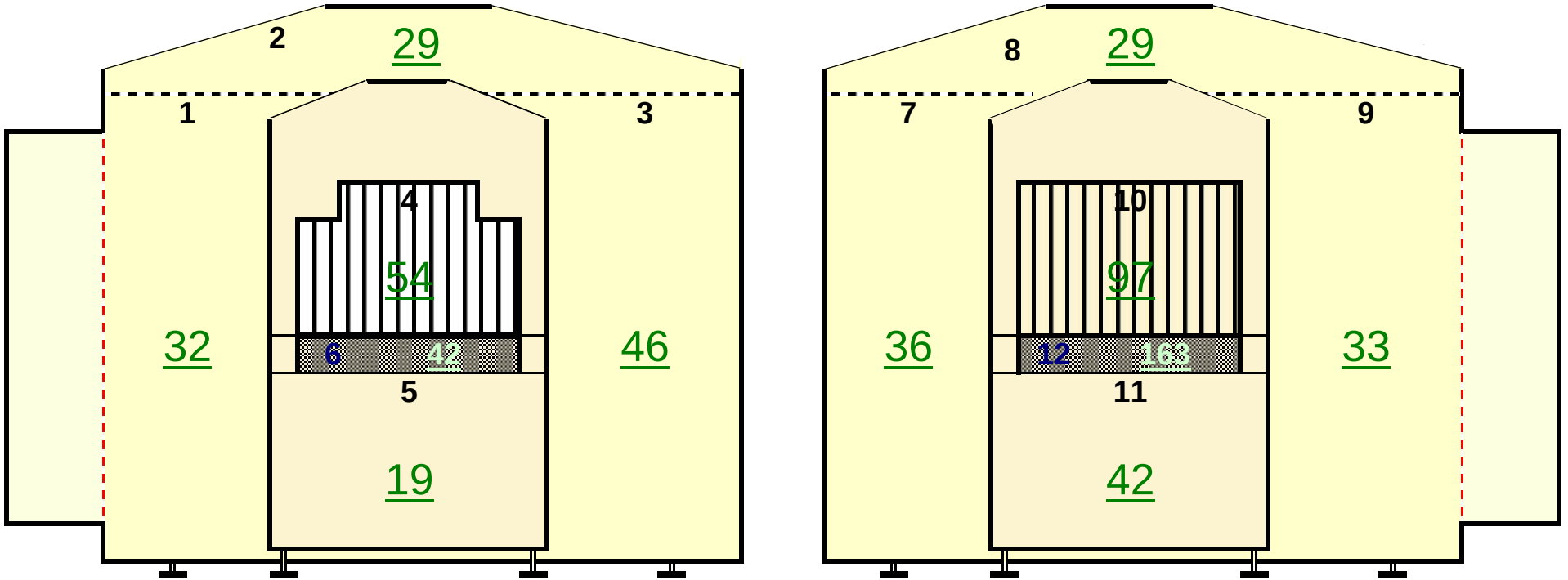
SYSTEM - FACES (End Views)



eXaminer entrance **eXaminer exit**

SYSTEM - FACES (End Views)			
Scattered Radiation Measurement Points Worksheet Record highest reading per panel		µR/Hr	No PROBLEM
1	Scanner Panel	32	
2	Scanner Top Panel	29	
3	Scanner Panel	46	
4	Belt Entrance	54	
5	Entrance Lower Panel	19	
6	Belt Lower Facia Cover Entrance	42	
7	Scanner Panel	36	
8	Scanner Top Panel	29	
9	Scanner Panel	33	
10	Belt Exit	97	
11	Exit Lower Panel	42	
12	Belt Lower Facia Cover Exit	163	

GOOD

Highest Reading	163
Average Reading	52
Low Reading	19