RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

Airport:	*T.F Green Airport*	Scanner Location:	*Baggage Handeling Room*	Case#:	PVD-C357647
Personnel Performing Radiation Survey:	[redacted]			Date Survey Performed:	*3/25/2011*

Scanner Serial Number:	*6754*	Entrance Tunnel Serial Number:	*1103*	Exit Tunnel Serial Number:	*1081-1B*
High Reading:	33	High Reading:	136	High Reading:	55
Average Reading:	12.98	Average Reading:	23.63	Average Reading:	19.27
Min. Reading:	4	Min. Reading:	6	Min. Reading:	3
Good		Good		Good	

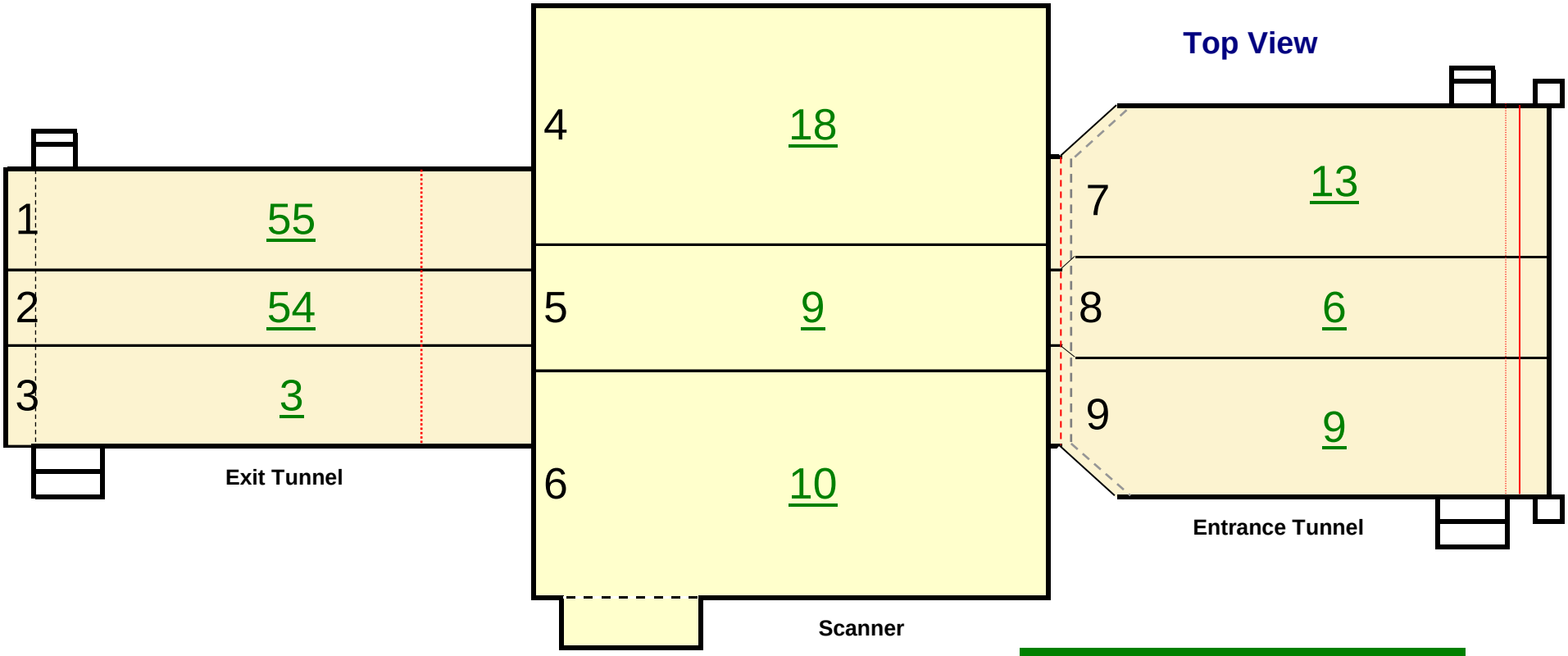
Radiation Meter:	Type Meter:	451P	Meter Serial Number:	6230	Calibration Due Date:	*February 1, 2012*

NOTES

Complete Radiation Survey (CRS)	Record Voltage and Bean Current here:						
Rename this Document before starting the Survey to:	Voltage:	165	KV	Beam Current:	10.0	mA	
PVD-CRS-25MAR2011-6754	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 stickers and place on the eXaminer in accordance with Examiner Technical Bulletin ex253.	Readings shall not exceed 350 uR/hr in any box.

RADIATION SURVEY WORKSHEET



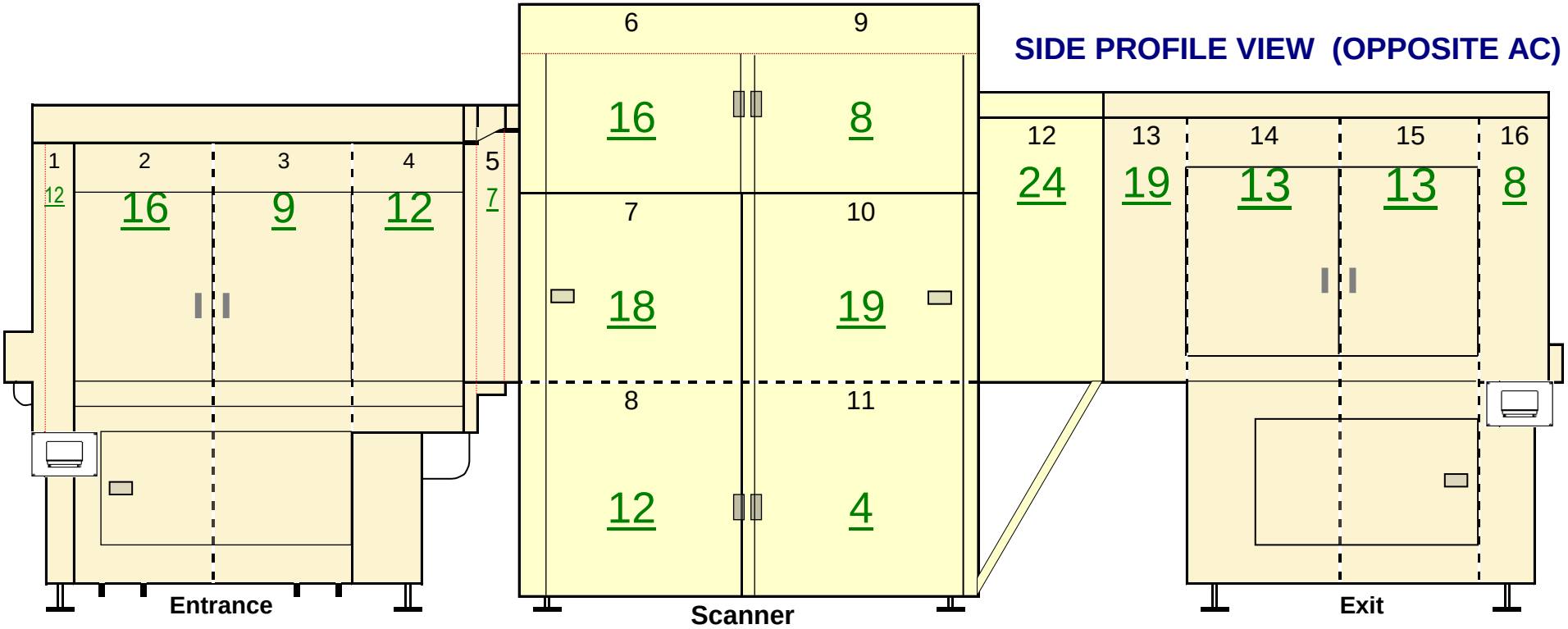
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	55	
2	Exit Conveyor Top Panel	54	
3	Exit Conveyor Top Panel	3	
4	Scanner Conveyor Top Panel	18	
5	Scanner Conveyor Top Panel	9	
6	Scanner Conveyor Top Panel	10	
7	Entrance Conveyor Top Panel	13	
8	Entrance Conveyor Top Panel	6	
9	Entrance Conveyor Top Panel	9	

Highest Reading	55
Average Reading	20
Lowest Reading	3

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (OPPOSITE AC)



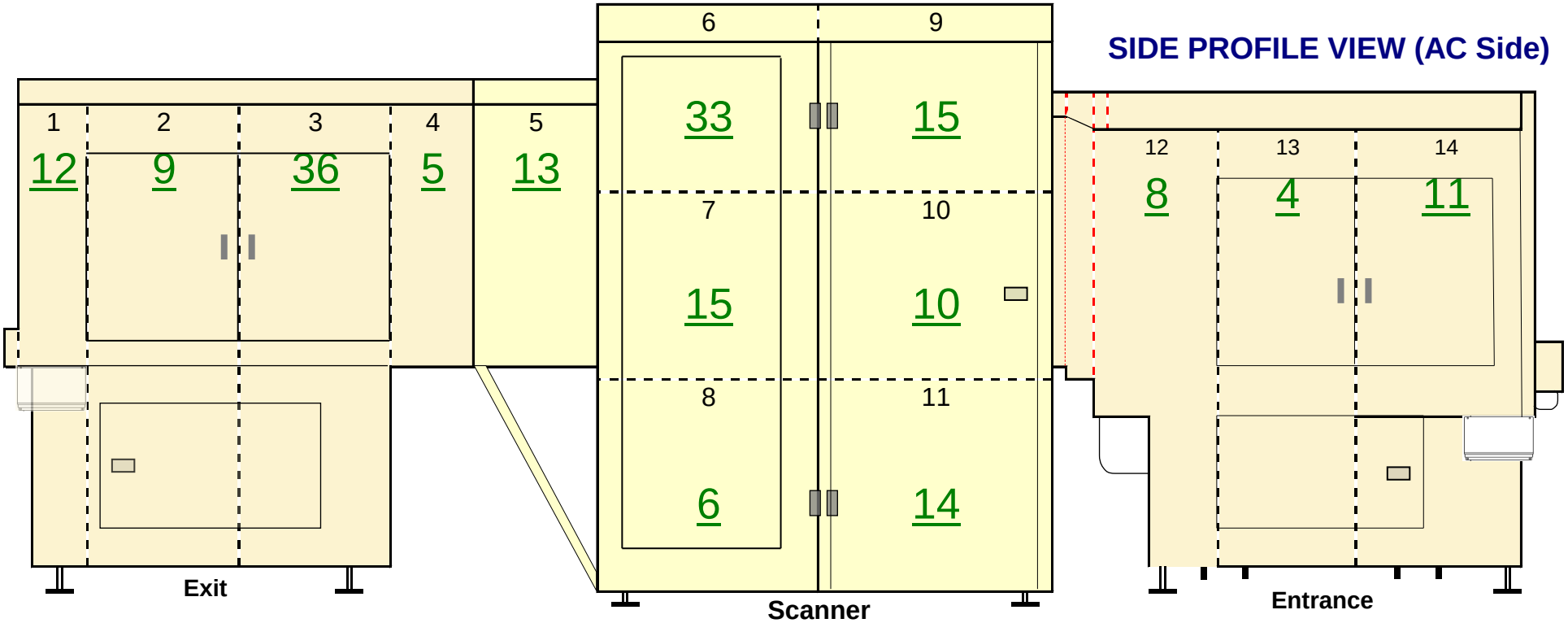
SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Entrance Conveyor Panel	12	
2	Entrance Conveyor Panel	16	
3	Entrance Conveyor Panel	9	
4	Entrance Conveyor Panel	12	
5	Entrance Conveyor / Scanner Panel	7	
6	Upper Scanner Panel	16	
7	Middle Scanner Panel	18	
8	Lower Scanner Panel	12	
9	Upper Scanner Panel	8	
10	Middle Scanner Panel	19	
11	Lower Scanner Panel	4	
12	Exit Conveyor / Scanner Panel	24	
13	Exit Conveyor Panel	19	
14	Exit Conveyor Panel	13	
15	Exit Conveyor Panel	13	
16	Exit Conveyor Panel	8	

GOOD

Highest Reading	24
Average Reading	13
Low Reading	4

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (AC Side)



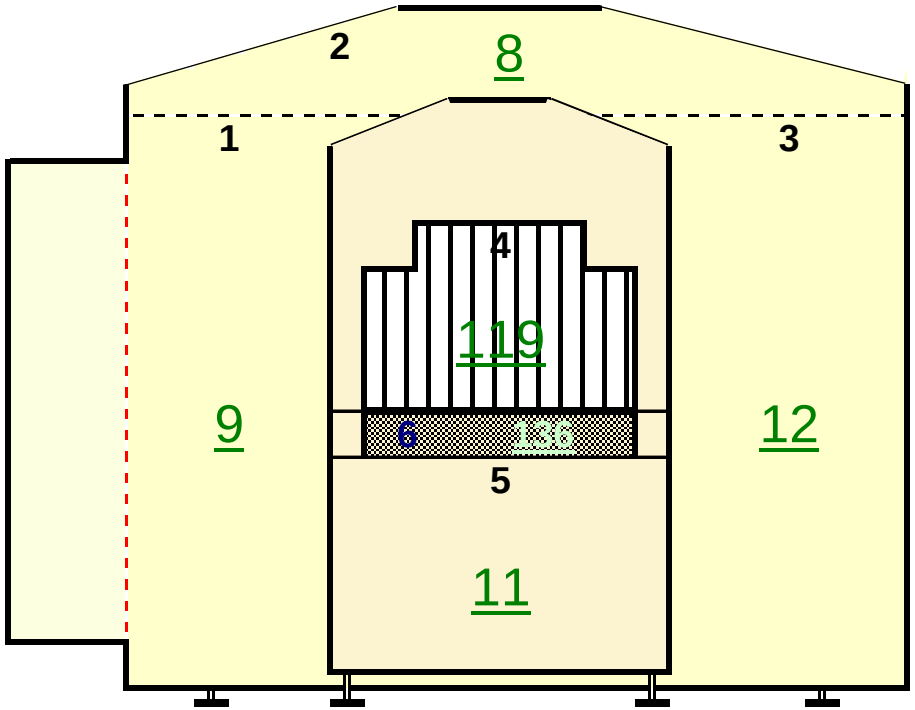
SYSTEM - SIDE PROFILE VIEW (AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Panel	12	
2	Exit Conveyor Panel	9	
3	Exit Conveyor Panel	36	
4	Exit Conveyor Panel	5	
5	Exit Conveyor / Scanner Panel	13	
6	Upper Scanner Pane	33	
7	Middle Scanner Panel	15	
8	Lower Scanner Panel	6	
9	Upper Scanner Panel	15	
10	Middle Scanner Panel	10	
11	Lower Scanner Panel	14	
12	Entrance Conveyor / Scanner Panel	8	
13	Entrance Conveyor Panel	4	
14	Entrance Conveyor Panel	11	

GOOD

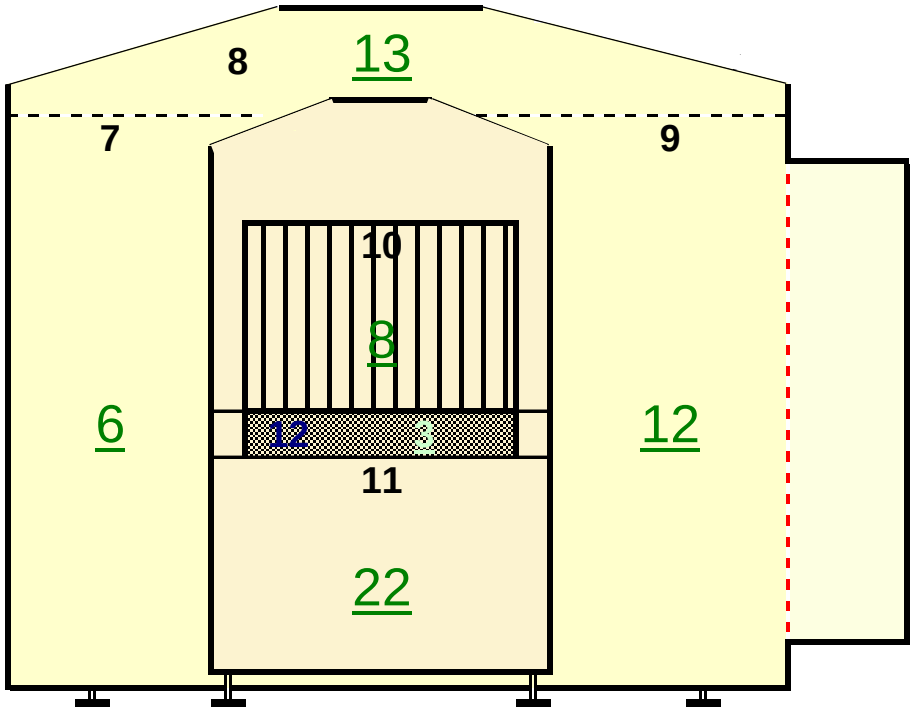
Highest Reading	36
Average Reading	14
Low Reading	4

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		µR/Hr	
1	Scanner Panel	9	
2	Scanner Top Panel	8	
3	Scanner Panel	12	
4	Belt Entrance	119	
5	Entrance Lower Panel	11	
6	Belt Lower Facia Cover Entrance	136	
7	Scanner Panel	6	
8	Scanner Top Panel	13	
9	Scanner Panel	12	
10	Belt Exit	8	
11	Exit Lower Panel	22	
12	Belt Lower Facia Cover Exit	3	

GOOD

Highest Reading	136
Average Reading	30
Low Reading	3