RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

Airport:	*T.F Green Airport*	Scanner Location:	*Baggage Handeling Room*	Case#:	PVD-C356183
Personnel Performing Radiation Survey:	[redacted]			Date Survey Performed:	*3/28/2011*

Scanner Serial Number:	*6759*	Entrance Tunnel Serial Number:	*1108*	Exit Tunnel Serial Number:	*1088-1B*
High Reading:	66	High Reading:	116	High Reading:	56
Average Reading:	14.08	Average Reading:	23.78	Average Reading:	19.88
Min. Reading:	6	Min. Reading:	6	Min. Reading:	4
Good		Good		Good	

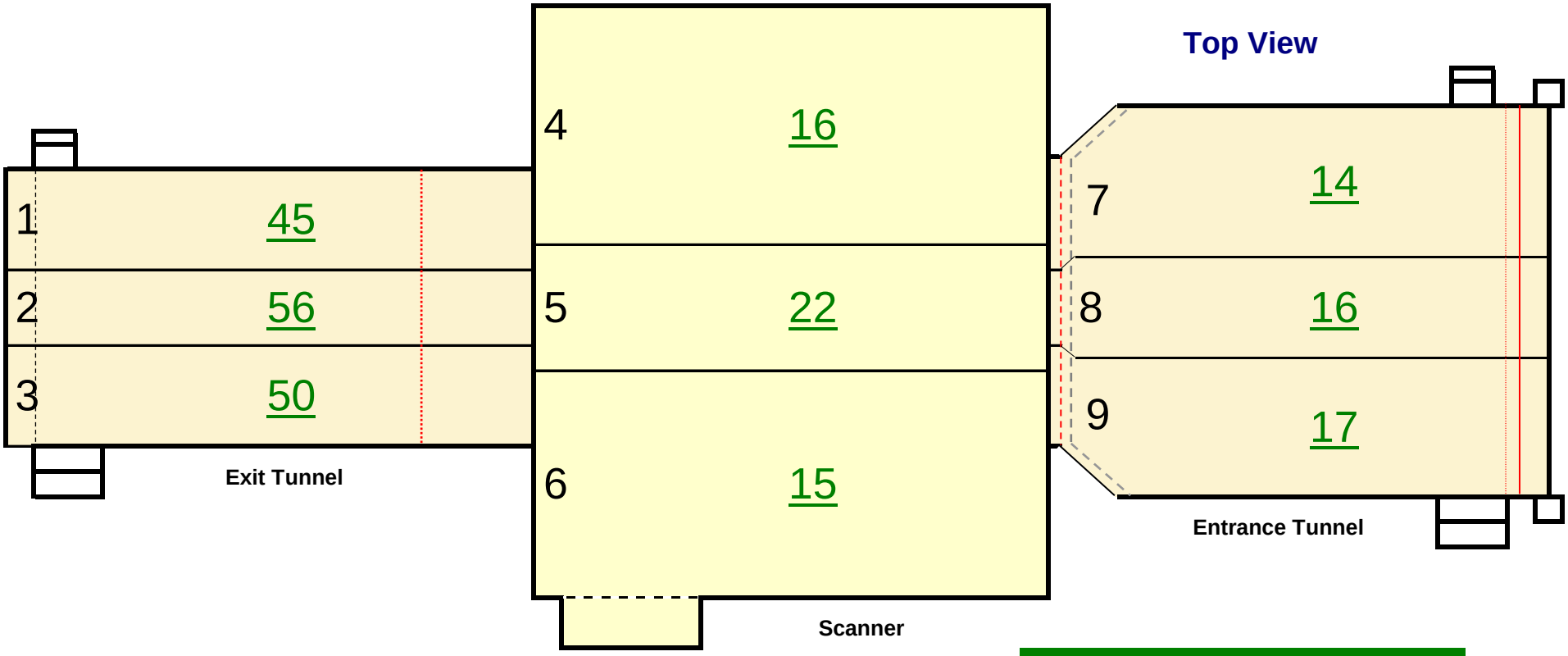
Radiation Meter:	Type Meter:	451P	Meter Serial Number:	6230	Calibration Due Date:	*February 1, 2012*

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-28MAR2011-6759	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



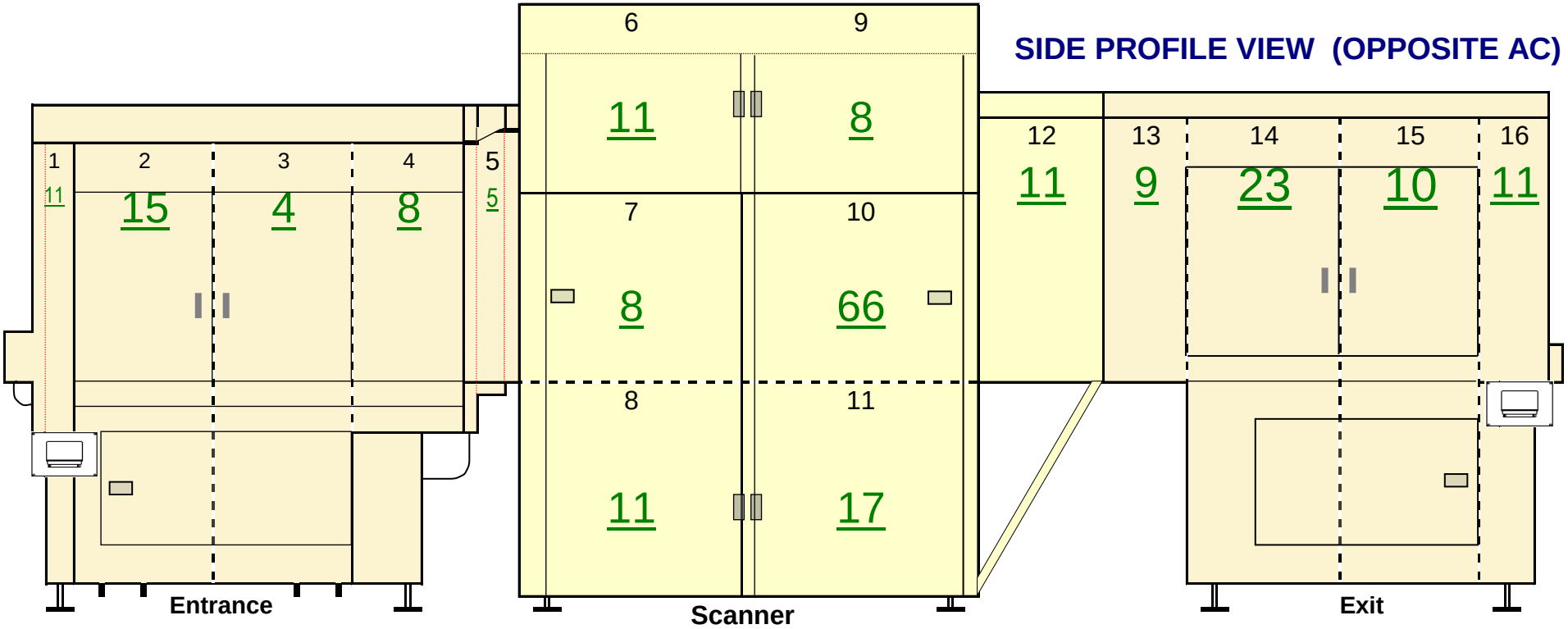
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	45	
2	Exit Conveyor Top Panel	56	
3	Exit Conveyor Top Panel	50	
4	Scanner Conveyor Top Panel	16	
5	Scanner Conveyor Top Panel	22	
6	Scanner Conveyor Top Panel	15	
7	Entrance Conveyor Top Panel	14	
8	Entrance Conveyor Top Panel	16	
9	Entrance Conveyor Top Panel	17	

Highest Reading	56
Average Reading	28
Lowest Reading	14

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (OPPOSITE AC)



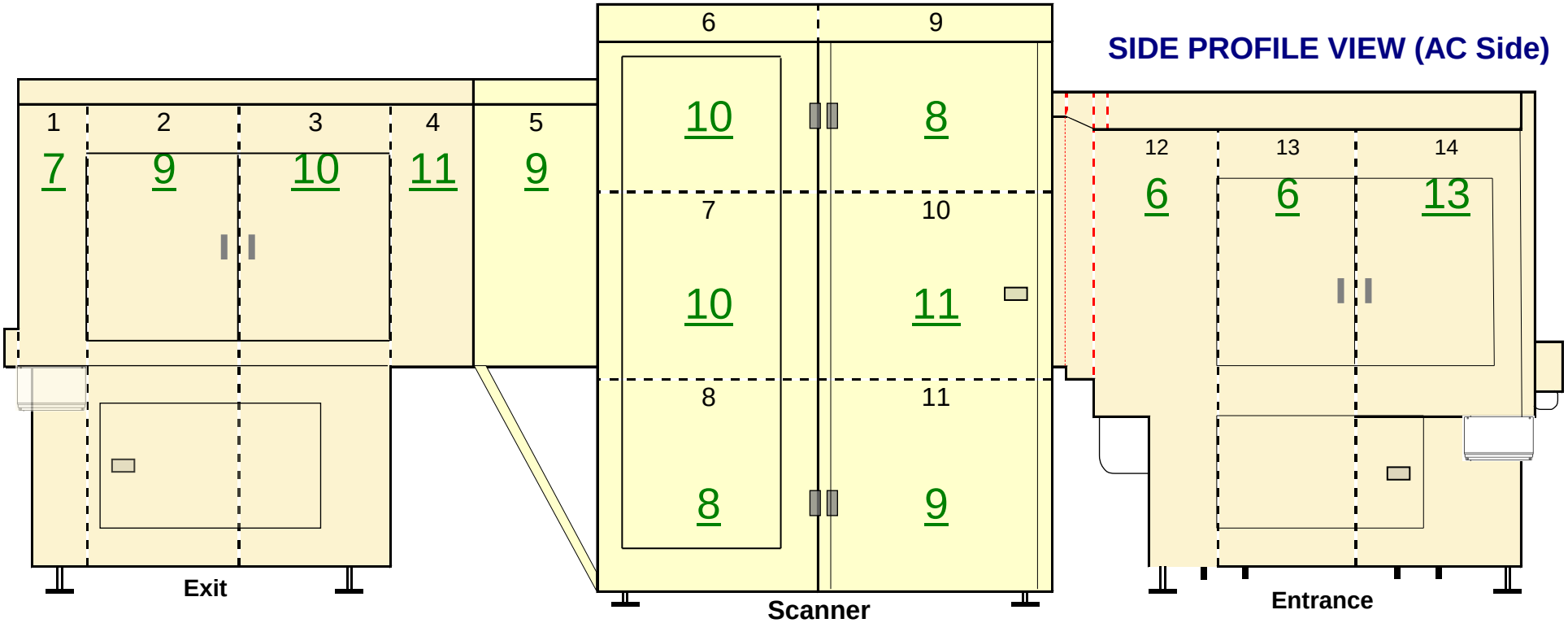
SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Entrance Conveyor Panel	11	
2	Entrance Conveyor Panel	15	
3	Entrance Conveyor Panel	4	
4	Entrance Conveyor Panel	8	
5	Entrance Conveyor / Scanner Panel	5	
6	Upper Scanner Panel	11	
7	Middle Scanner Panel	8	
8	Lower Scanner Panel	11	
9	Upper Scanner Panel	8	
10	Middle Scanner Panel	66	
11	Lower Scanner Panel	17	
12	Exit Conveyor / Scanner Panel	11	
13	Exit Conveyor Panel	9	
14	Exit Conveyor Panel	23	
15	Exit Conveyor Panel	10	
16	Exit Conveyor Panel	11	

GOOD

Highest Reading	66
Average Reading	14
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	7	
2	Exit Conveyor Panel	9	
3	Exit Conveyor Panel	10	
4	Exit Conveyor Panel	11	
5	Exit Conveyor / Scanner Panel	9	
6	Upper Scanner Pane	10	
7	Middle Scanner Panel	10	
8	Lower Scanner Panel	8	
9	Upper Scanner Panel	8	
10	Middle Scanner Panel	11	
11	Lower Scanner Panel	9	
12	Entrance Conveyor / Scanner Panel	6	
13	Entrance Conveyor Panel	6	
14	Entrance Conveyor Panel	13	

GOOD

Highest Reading	13
Average Reading	9
Low Reading	6

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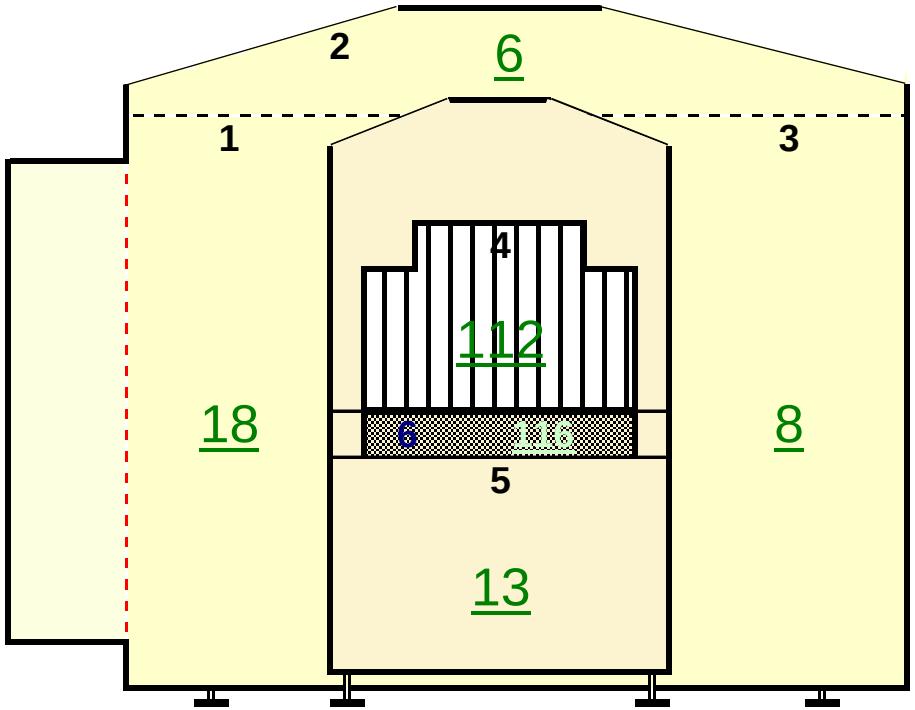
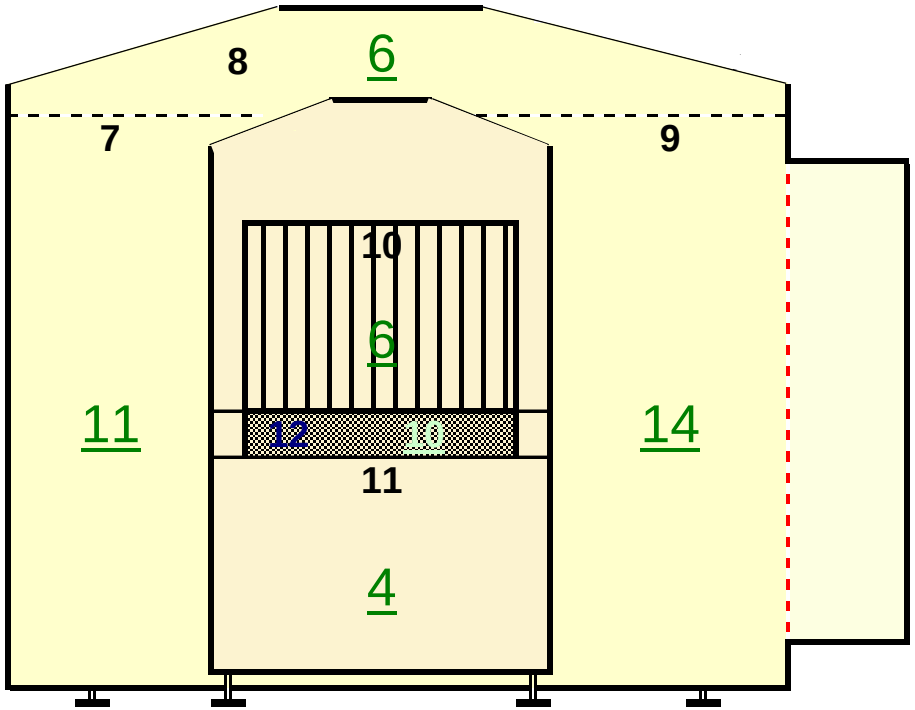
SYSTEM - FACES (End Views)



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	18	
2	Scanner Top Panel	6	
3	Scanner Panel	8	
4	Belt Entrance	112	
5	Entrance Lower Panel	13	
6	Belt Lower Facia Cover Entrance	116	
7	Scanner Panel	11	
8	Scanner Top Panel	6	
9	Scanner Panel	14	
10	Belt Exit	6	
11	Exit Lower Panel	4	
12	Belt Lower Facia Cover Exit	10	

GOOD

Highest Reading	116
Average Reading	27
Low Reading	4