RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

Airport:	*Palm Beach International Airport*	Scanner Location:	*Baggage Handeling Room*	Case#:	PBI-C299422
Personnel Performing Radiation Survey:	[redacted]			Date Survey Performed:	*4/30/2010*

Scanner Serial Number:	*6318*	Entrance Tunnel Serial Number:	*2267A*	Exit Tunnel Serial Number:	*2267B*
High Reading:	29	High Reading:	89	High Reading:	96
Average Reading:	14.05	Average Reading:	24.39	Average Reading:	25.73
Min. Reading:	3	Min. Reading:	11	Min. Reading:	7
Good		Good		Good	

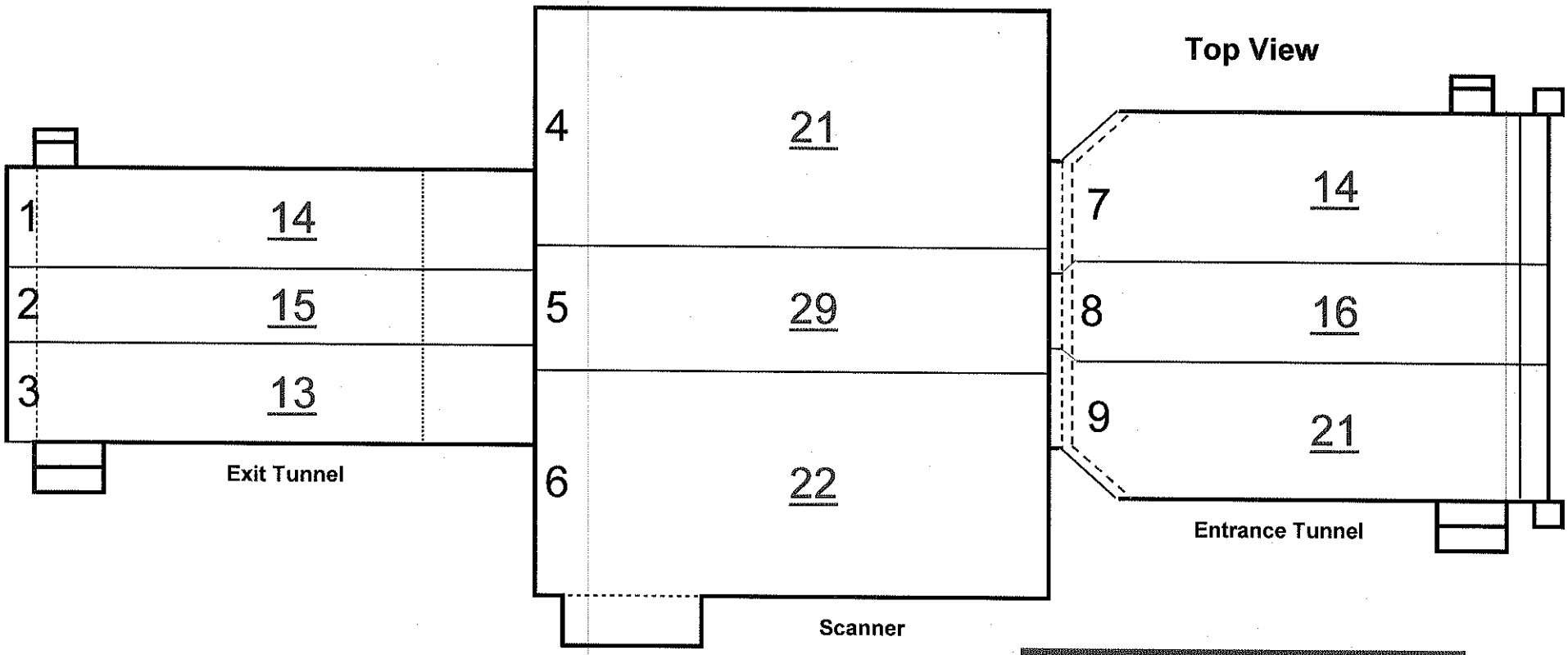
Radiation Meter:	Type Meter:	451P	Meter Serial Number:	263	Calibration Due Date:	*October 22, 2010*

NOTES

Complete Radiation Survey (CRS)	Record Voltage and Bean Current here:					
Rename this Document before starting the Survey to:	Voltage:	164	KV	Beam Current:	9.8	mA
PBI-CRS-30DEC2010-6318	**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.

RADIATION SURVEY WORKSHEET



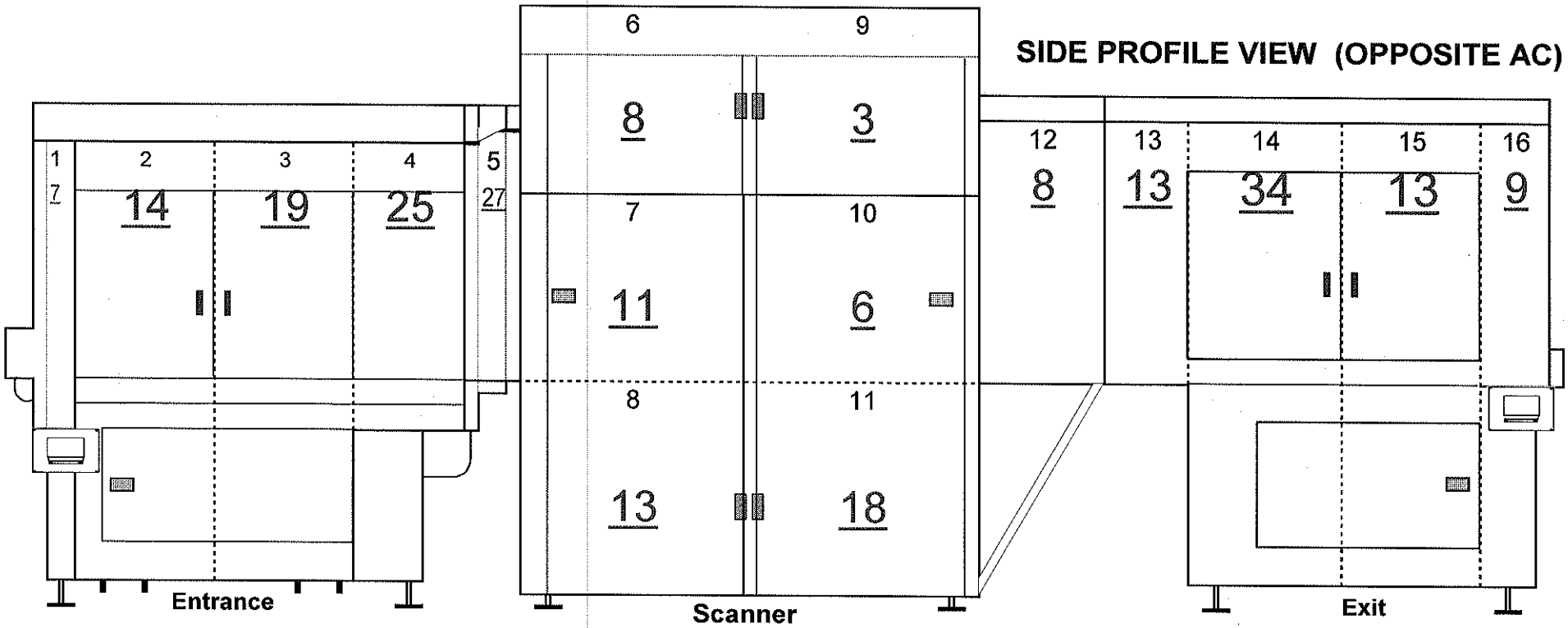
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	14	
2	Exit Conveyor Top Panel	15	
3	Exit Conveyor Top Panel	13	
4	Scanner Conveyor Top Panel	21	
5	Scanner Conveyor Top Panel	29	
6	Scanner Conveyor Top Panel	22	
7	Entrance Conveyor Top Panel	14	
8	Entrance Conveyor Top Panel	16	
9	Entrance Conveyor Top Panel	21	

Highest Reading	29
Average Reading	18
Lowest Reading	13

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	7	
2	Entrance Conveyor Panel	14	
3	Entrance Conveyor Panel	19	
4	Entrance Conveyor Panel	25	
5	Entrance Conveyor / Scanner Panel	27	
6	Upper Scanner Panel	8	
7	Middle Scanner Panel	11	
8	Lower Scanner Panel	13	
9	Upper Scanner Panel	3	
10	Middle Scanner Panel	6	
11	Lower Scanner Panel	18	
12	Exit Conveyor / Scanner Panel	8	
13	Exit Conveyor Panel	13	
14	Exit Conveyor Panel	34	
15	Exit Conveyor Panel	13	
16	Exit Conveyor Panel	9	

GOOD

Highest Reading	34
Average Reading	14
Low Reading	3

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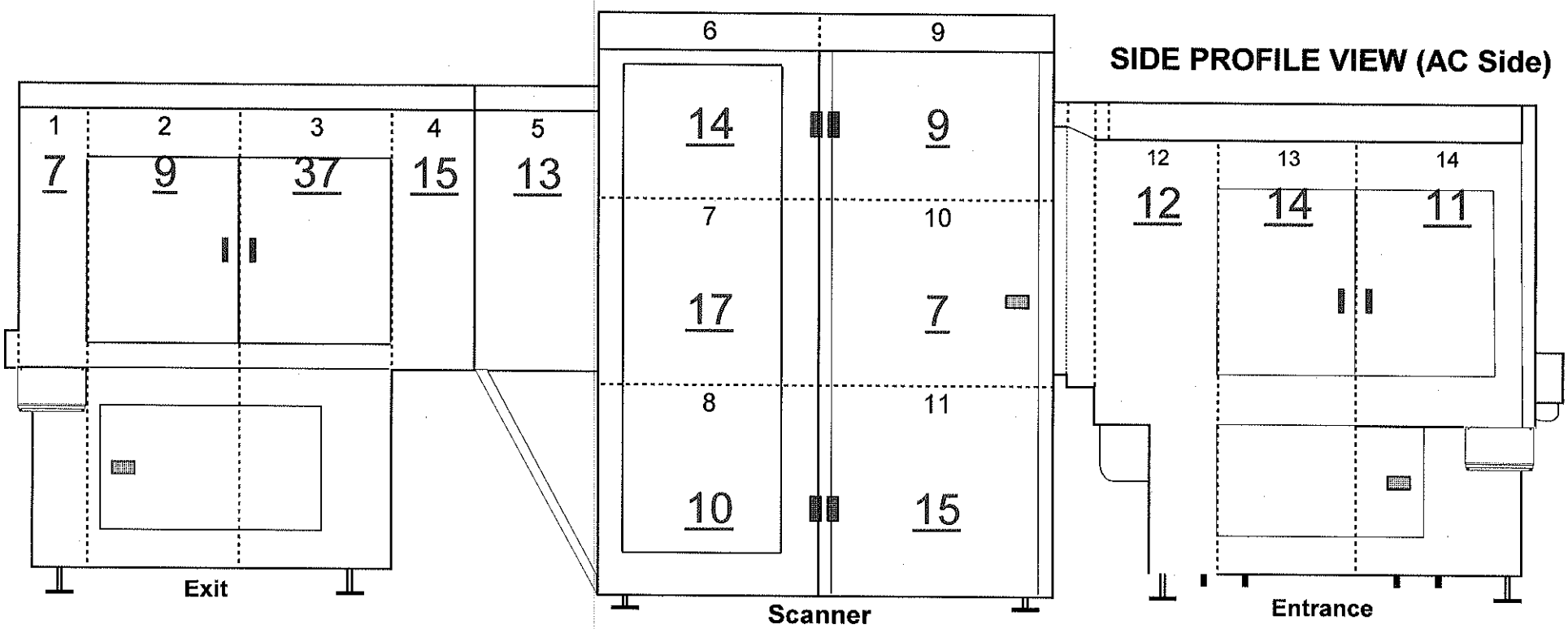
RADIATION SURVEY WORKSHEET



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	37	
4	Exit Conveyor Panel	15	
5	Exit Conveyor / Scanner Panel	13	
6	Upper Scanner Pane	14	
7	Middle Scanner Panel	17	
8	Lower Scanner Panel	10	
9	Upper Scanner Panel	9	
10	Middle Scanner Panel	7	
11	Lower Scanner Panel	15	
12	Entrance Conveyor / Scanner Panel	12	
13	Entrance Conveyor Panel	14	
14	Entrance Conveyor Panel	11	

GOOD

Highest Reading	37
Average Reading	14
Low Reading	7

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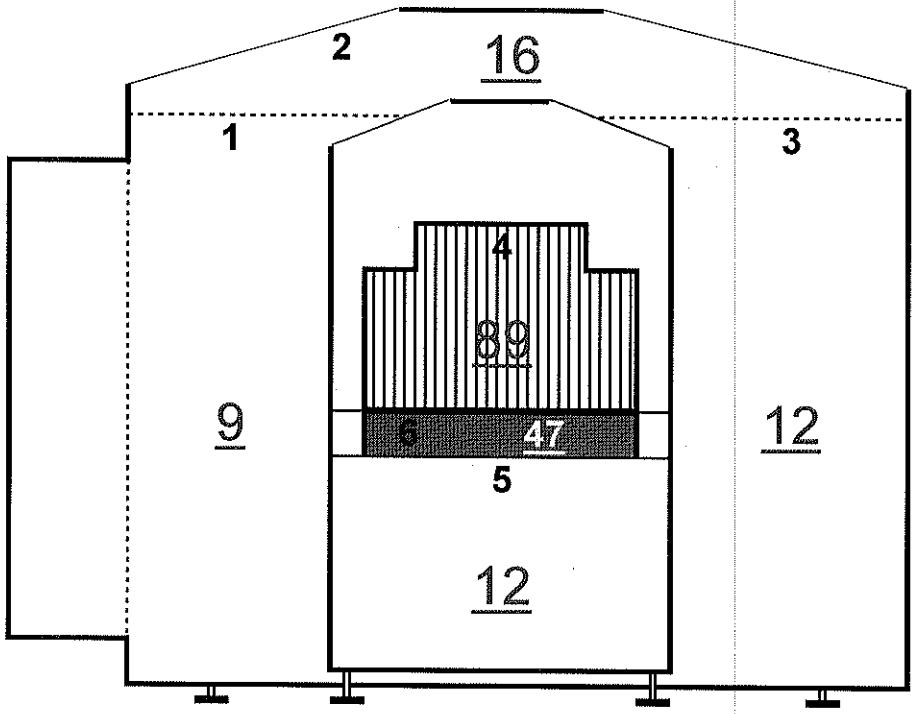
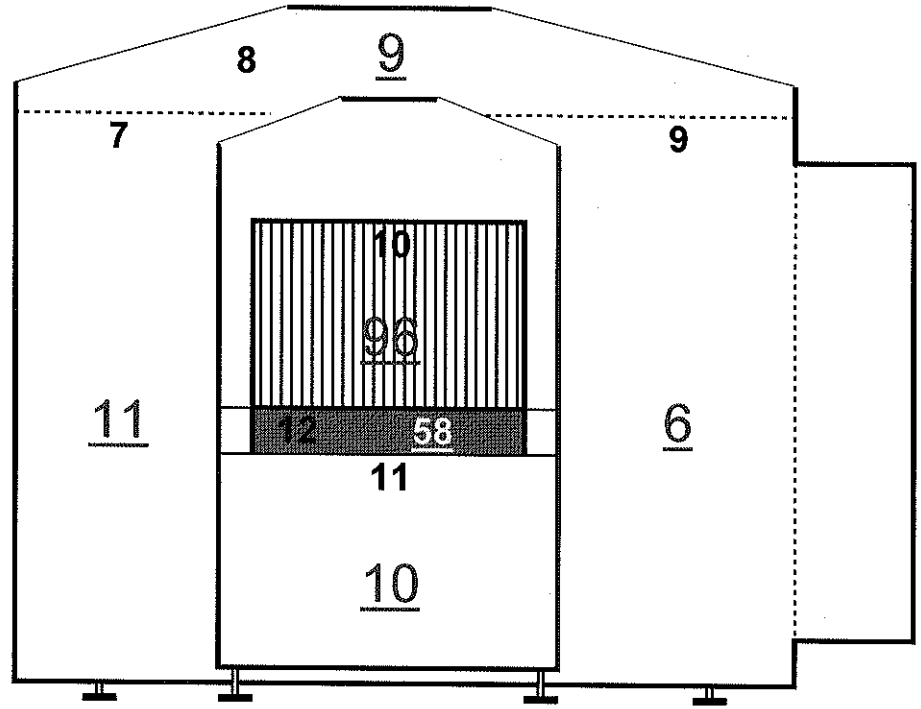
RADIATION SURVEY WORKSHEET

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	16	
3	Scanner Panel	12	
4	Belt Entrance	89	
5	Entrance Lower Panel	12	
6	Belt Lower Facia Cover Entrance	47	
7	Scanner Panel	11	
8	Scanner Top Panel	9	
9	Scanner Panel	6	
10	Belt Exit	96	
11	Exit Lower Panel	10	
12	Belt Lower Facia Cover Exit	58	

GOOD

Highest Reading	96
Average Reading	31
Low Reading	6

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