RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

Airport:	CLT	Scanner Location:	White Zone Baggage Room	Case#:	CLT-355773
Personnel Performing Radiation Survey:	[redacted]			Date Survey Performed:	3/22/2011

Scanner Serial Number:	6273	Entrance Tunnel Serial Number:	2187A	Exit Tunnel Serial Number:	5422B
High Reading:	49	High Reading:	172	High Reading:	61
Average Reading:	16.92	Average Reading:	68.11	Average Reading:	30.90
Min. Reading:	6	Min. Reading:	3	Min. Reading:	5
	Good		Good		Good

Radiation Meter:	Type Meter:	451P	Meter Serial Number:	3681	Calibration Due Date:	January 18, 2012

NOTES

Complete Radiation Survey (CRS)	Record Voltage and Bean Current here:							
Rename this Document before starting the Survey to: CLT-CRS-22MAR2011-6273	Voltage:	165	KV	Beam Current:	10.0	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 stickers and place on the eXaminer in accordance with Examiner Technical Bulletin ex253.	Readings shall not exceed 350 uR/hr in any box.

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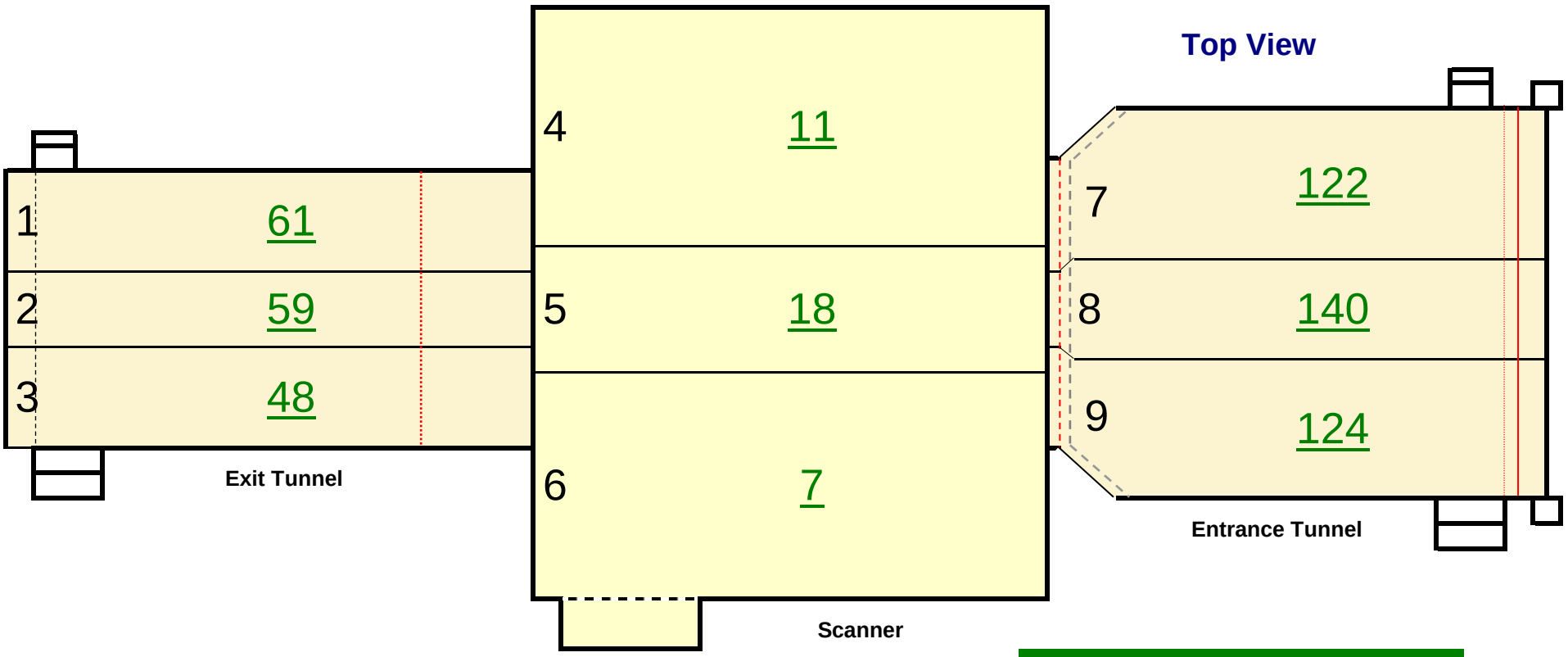


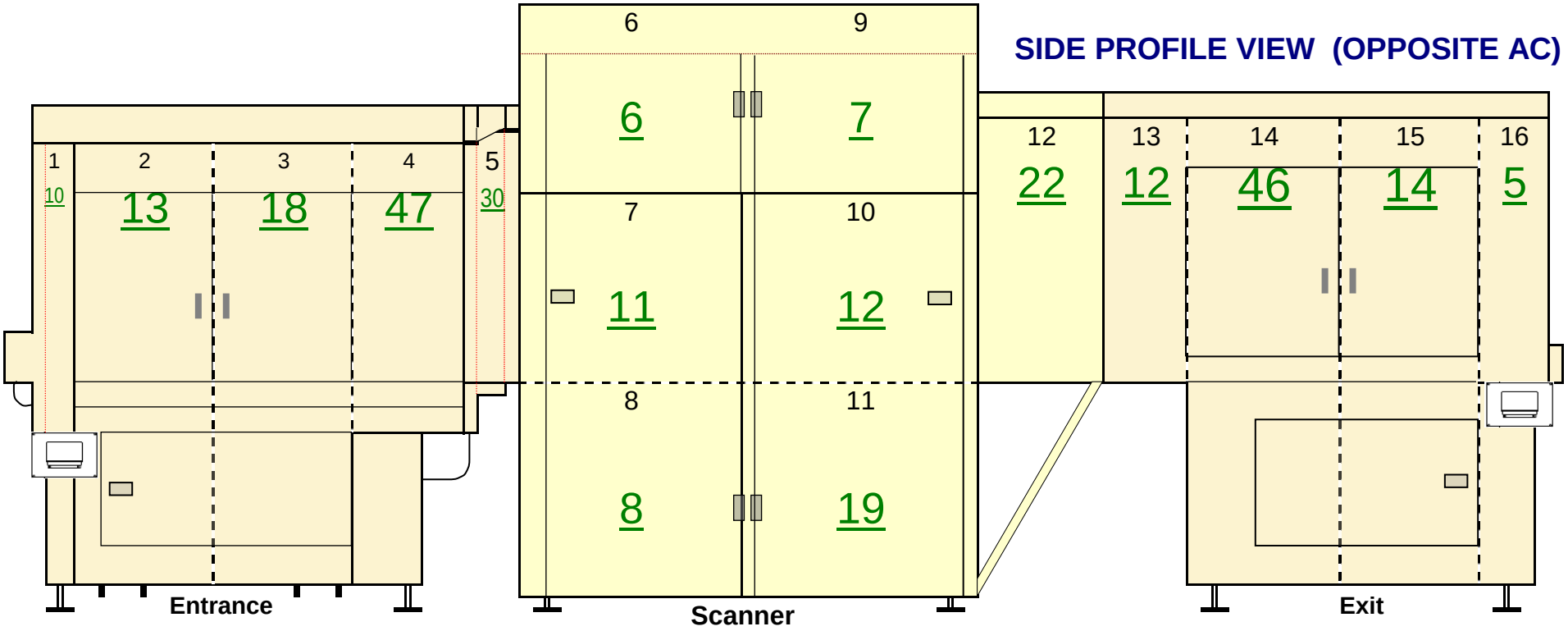
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	61	
2	Exit Conveyor Top Panel	59	
3	Exit Conveyor Top Panel	48	
4	Scanner Conveyor Top Panel	11	
5	Scanner Conveyor Top Panel	18	
6	Scanner Conveyor Top Panel	7	
7	Entrance Conveyor Top Panel	122	
8	Entrance Conveyor Top Panel	140	
9	Entrance Conveyor Top Panel	124	

Highest Reading	140
Average Reading	66
Lowest Reading	7

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (OPPOSITE AC)



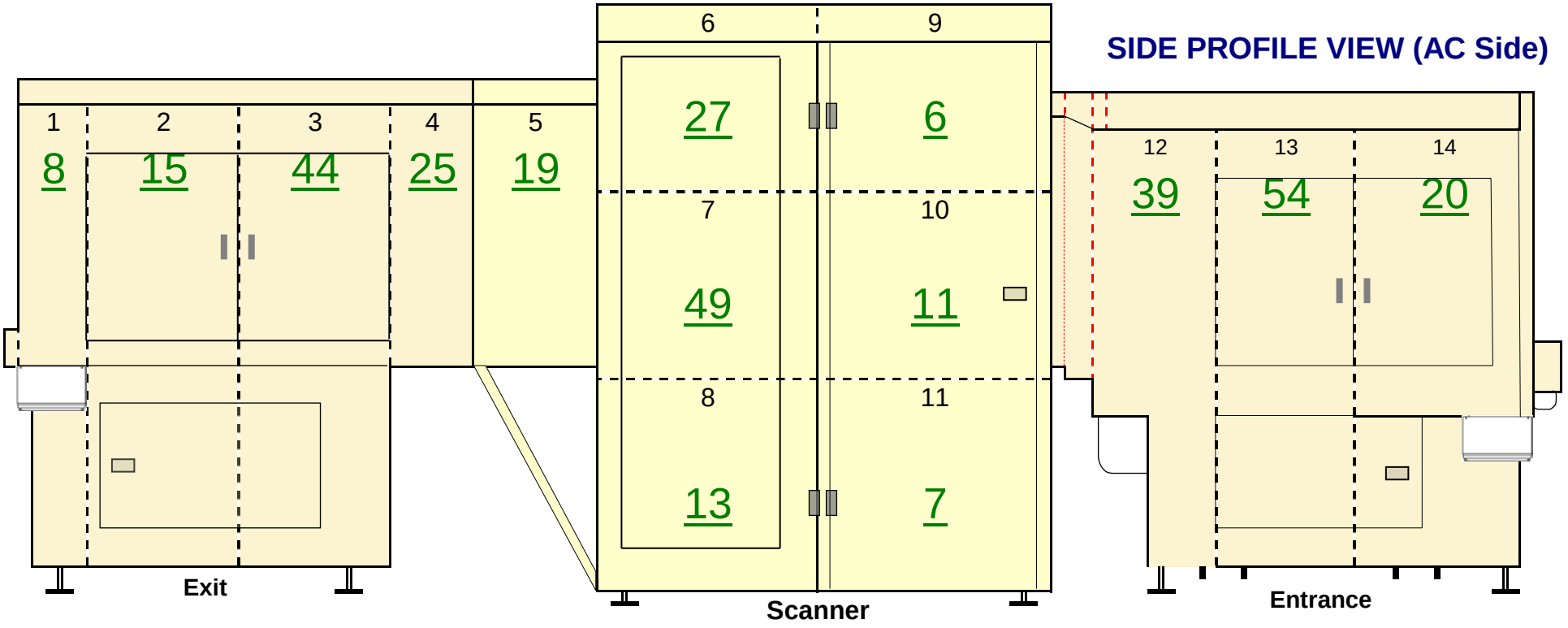
SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Entrance Conveyor Panel	10	
2	Entrance Conveyor Panel	13	
3	Entrance Conveyor Panel	18	
4	Entrance Conveyor Panel	47	
5	Entrance Conveyor / Scanner Panel	30	
6	Upper Scanner Panel	6	
7	Middle Scanner Panel	11	
8	Lower Scanner Panel	8	
9	Upper Scanner Panel	7	
10	Middle Scanner Panel	12	
11	Lower Scanner Panel	19	
12	Exit Conveyor / Scanner Panel	22	
13	Exit Conveyor Panel	12	
14	Exit Conveyor Panel	46	
15	Exit Conveyor Panel	14	
16	Exit Conveyor Panel	5	

GOOD

Highest Reading	47
Average Reading	18
Low Reading	5

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	8	
2	Exit Conveyor Panel	15	
3	Exit Conveyor Panel	44	
4	Exit Conveyor Panel	25	
5	Exit Conveyor / Scanner Panel	19	
6	Upper Scanner Pane	27	
7	Middle Scanner Panel	49	
8	Lower Scanner Panel	13	
9	Upper Scanner Panel	6	
10	Middle Scanner Panel	11	
11	Lower Scanner Panel	7	
12	Entrance Conveyor / Scanner Panel	39	
13	Entrance Conveyor Panel	54	
14	Entrance Conveyor Panel	20	

GOOD

Highest Reading	54
Average Reading	24
Low Reading	6

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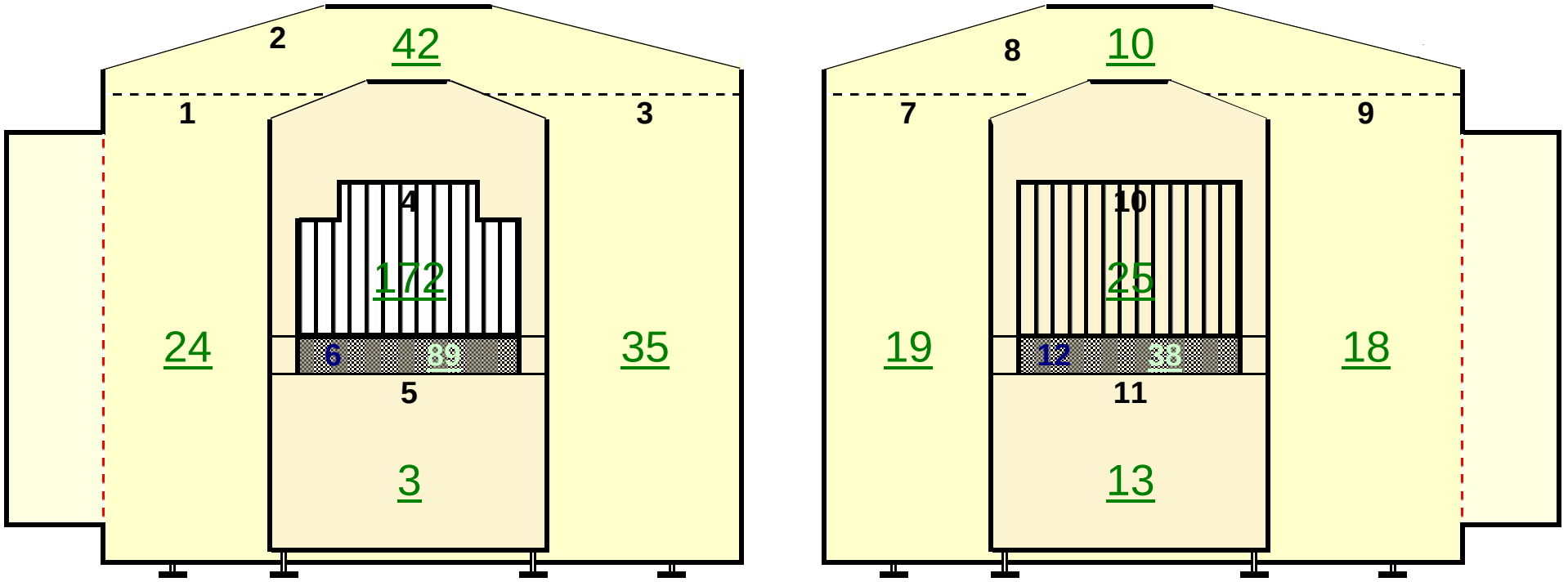
SYSTEM - FACES (End Views)



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	24	
2	Scanner Top Panel	42	
3	Scanner Panel	35	
4	Belt Entrance	172	
5	Entrance Lower Panel	3	
6	Belt Lower Facia Cover Entrance	89	
7	Scanner Panel	19	
8	Scanner Top Panel	10	
9	Scanner Panel	18	
10	Belt Exit	25	
11	Exit Lower Panel	13	
12	Belt Lower Facia Cover Exit	38	

GOOD

Highest Reading	172
Average Reading	41
Low Reading	3