RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

Airport:	IAH	Scanner Location:	Baggage Handeling Room	Case#:	IAH-C348371
Personnel Performing Radiation Survey:	[redacted]			Date Survey Performed:	3/23/2011

Scanner Serial Number:	6548	Entrance Tunnel Serial Number:	5273a	Exit Tunnel Serial Number:	5273b
High Reading:	50	High Reading:	61	High Reading:	72
Average Reading:	27.69	Average Reading:	29.35	Average Reading:	20.58
Min. Reading:	3	Min. Reading:	9	Min. Reading:	3
	Good		Good		Good

Radiation Meter:	Type Meter:	451P	Meter Serial Number:	6334	Calibration Due Date:	September 15, 2011

NOTES

Complete Radiation Survey (CRS)

Rename this Document before starting the Survey to:

IAH-CRS-23MAR2011-6548

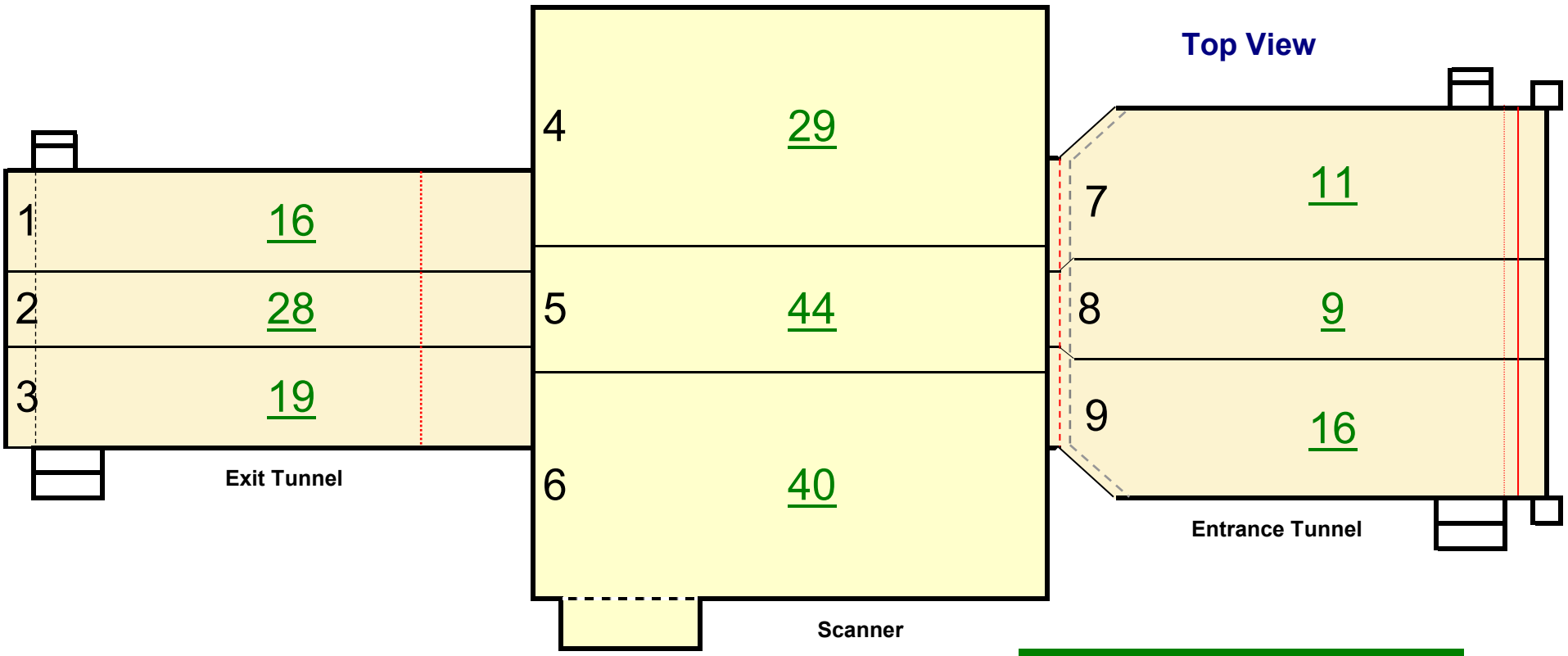
Record Voltage and Bean Current here:

Voltage:	168	KV	Beam Current:	9.7	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.

RADIATION SURVEY WORKSHEET



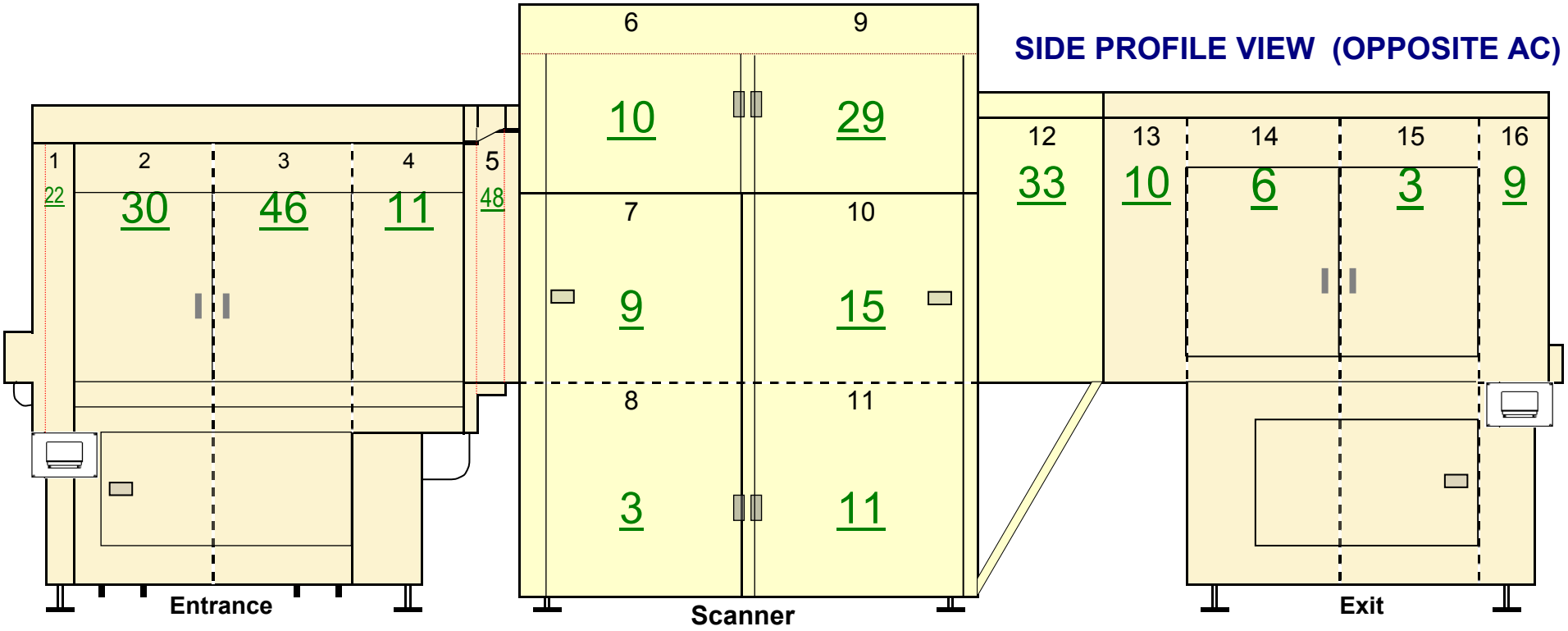
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	16	
2	Exit Conveyor Top Panel	28	
3	Exit Conveyor Top Panel	19	
4	Scanner Conveyor Top Panel	29	
5	Scanner Conveyor Top Panel	44	
6	Scanner Conveyor Top Panel	40	
7	Entrance Conveyor Top Panel	11	
8	Entrance Conveyor Top Panel	9	
9	Entrance Conveyor Top Panel	16	

Highest Reading	44
Average Reading	24
Lowest Reading	9

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (OPPOSITE AC)



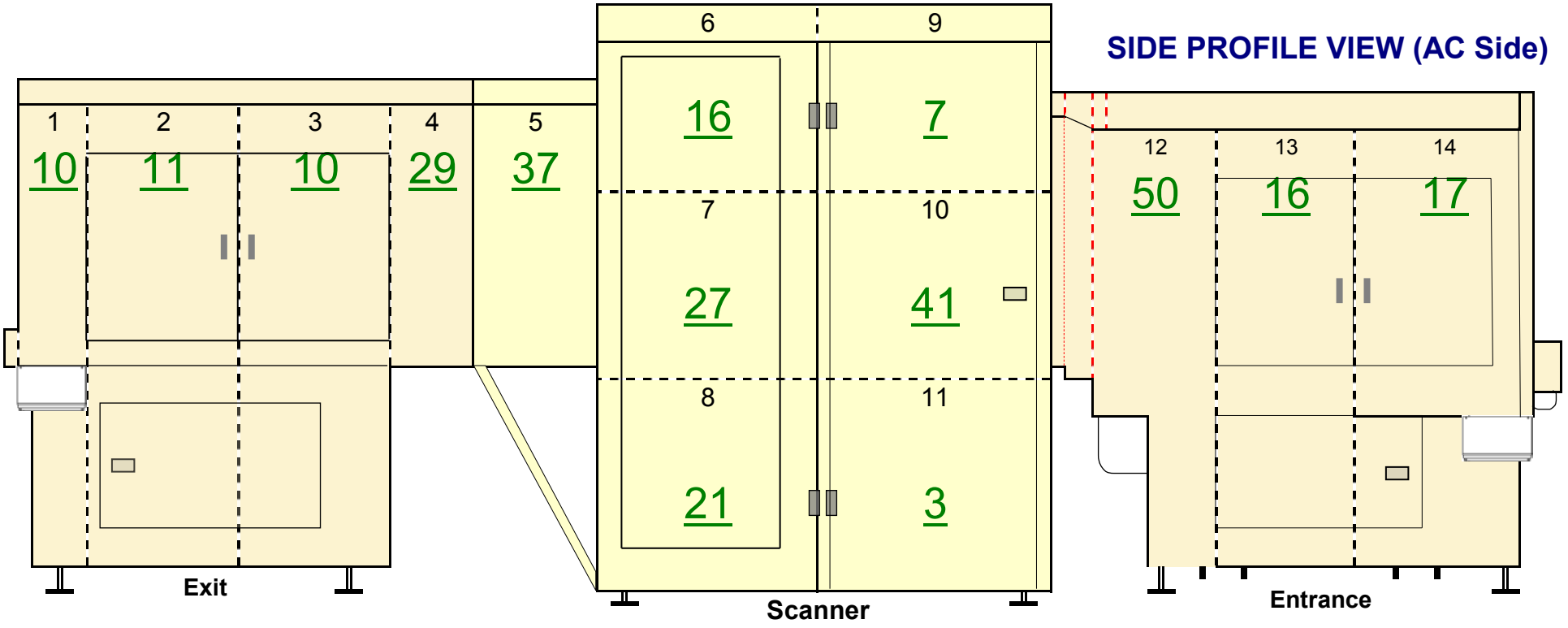
SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Entrance Conveyor Panel	22	
2	Entrance Conveyor Panel	30	
3	Entrance Conveyor Panel	46	
4	Entrance Conveyor Panel	11	
5	Entrance Conveyor / Scanner Panel	48	
6	Upper Scanner Panel	10	
7	Middle Scanner Panel	9	
8	Lower Scanner Panel	3	
9	Upper Scanner Panel	29	
10	Middle Scanner Panel	15	
11	Lower Scanner Panel	11	
12	Exit Conveyor / Scanner Panel	33	
13	Exit Conveyor Panel	10	
14	Exit Conveyor Panel	6	
15	Exit Conveyor Panel	3	
16	Exit Conveyor Panel	9	

GOOD

Highest Reading	48
Average Reading	18
Low Reading	3

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	10	
2	Exit Conveyor Panel	11	
3	Exit Conveyor Panel	10	
4	Exit Conveyor Panel	29	
5	Exit Conveyor / Scanner Panel	37	
6	Upper Scanner Pane	16	
7	Middle Scanner Panel	27	
8	Lower Scanner Panel	21	
9	Upper Scanner Panel	7	
10	Middle Scanner Panel	41	
11	Lower Scanner Panel	3	
12	Entrance Conveyor / Scanner Panel	50	
13	Entrance Conveyor Panel	16	
14	Entrance Conveyor Panel	17	

GOOD

Highest Reading	50
Average Reading	21
Low Reading	3

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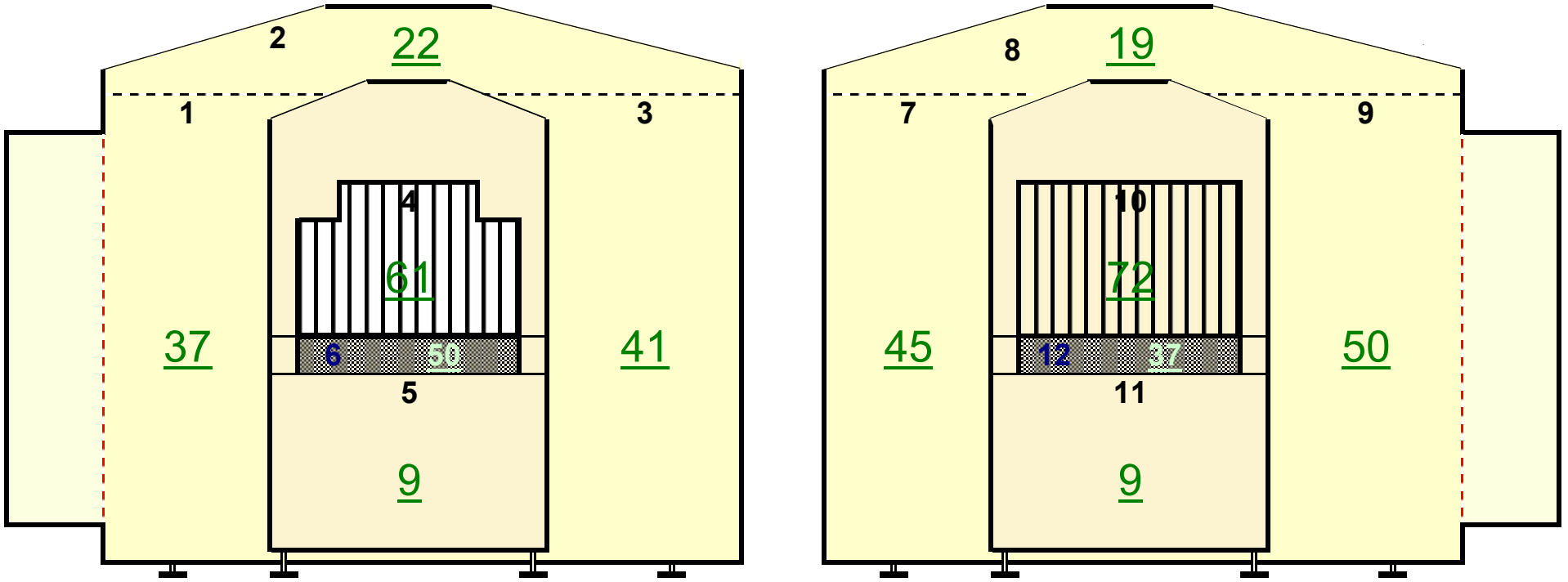
SYSTEM - FACES (End Views)



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	37	
2	Scanner Top Panel	22	
3	Scanner Panel	41	
4	Belt Entrance	61	
5	Entrance Lower Panel	9	
6	Belt Lower Facia Cover Entrance	50	
7	Scanner Panel	45	
8	Scanner Top Panel	19	
9	Scanner Panel	50	
10	Belt Exit	72	
11	Exit Lower Panel	9	
12	Belt Lower Facia Cover Exit	37	

GOOD

Highest Reading	72
Average Reading	38
Low Reading	9