RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

Airport:	*Fort Lauderdale Airport*	Scanner Location:	*Baggage Handling Room*	Case#:	FLL-298877
Personnel Performing Radiation Survey:	[redacted]			Date Survey Performed:	*4/27/2010*

Scanner Serial Number:	*6389*	Entrance Tunnel Serial Number:	*2244a*	Exit Tunnel Serial Number:	*2244b*
High Reading:	Average Reading:	Min. Reading:	High Reading:	Average Reading:	Min. Reading:
			122	40.44	25
BLANK CELLS →	# Blank Cells 1		Good	BLANK CELLS →	# Blank Cells 4

Radiation Meter:	Type Meter:	451P	Meter Serial Number:	68	Calibration Due Date:	*March 8, 2011*

NOTES

(Click Here and SELECT ONE)

Rename this Document before starting the Survey to:

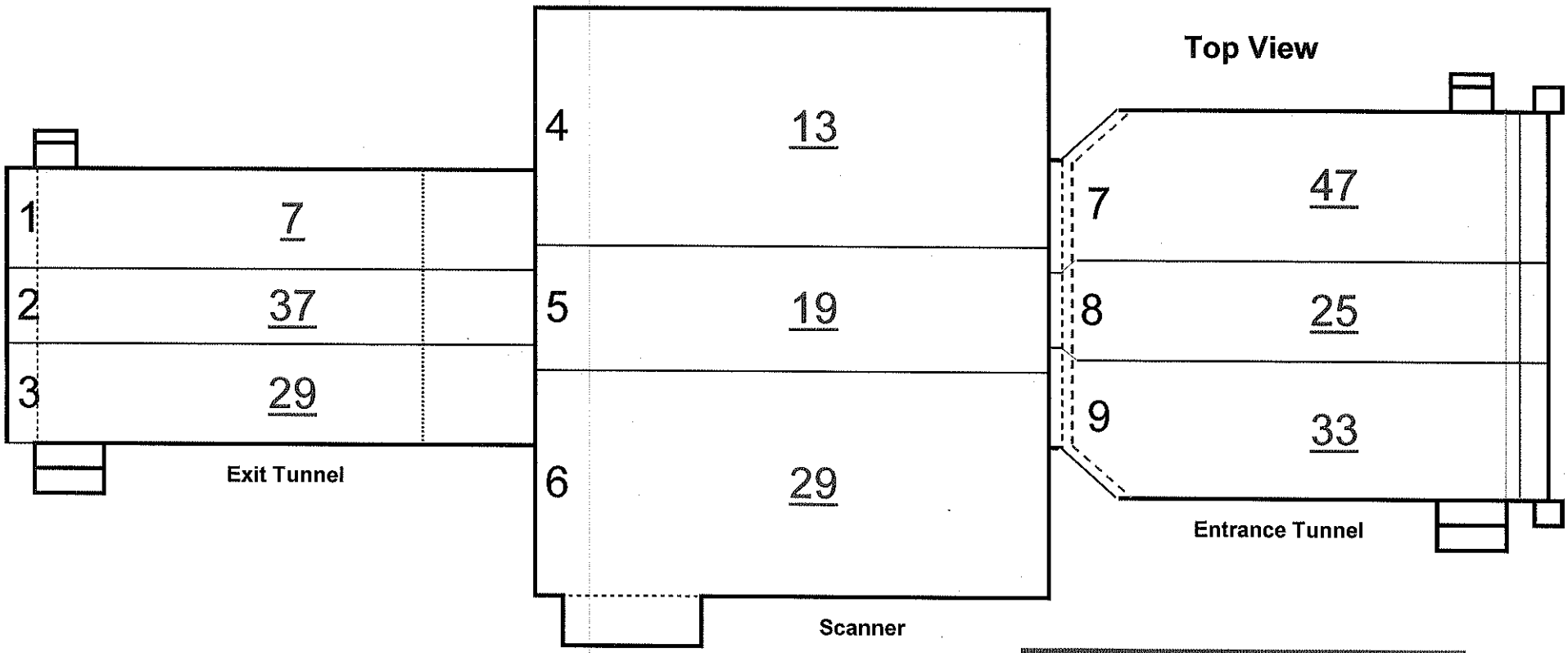
Record Voltage and Bean Current here:

Voltage: 166 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 uR/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



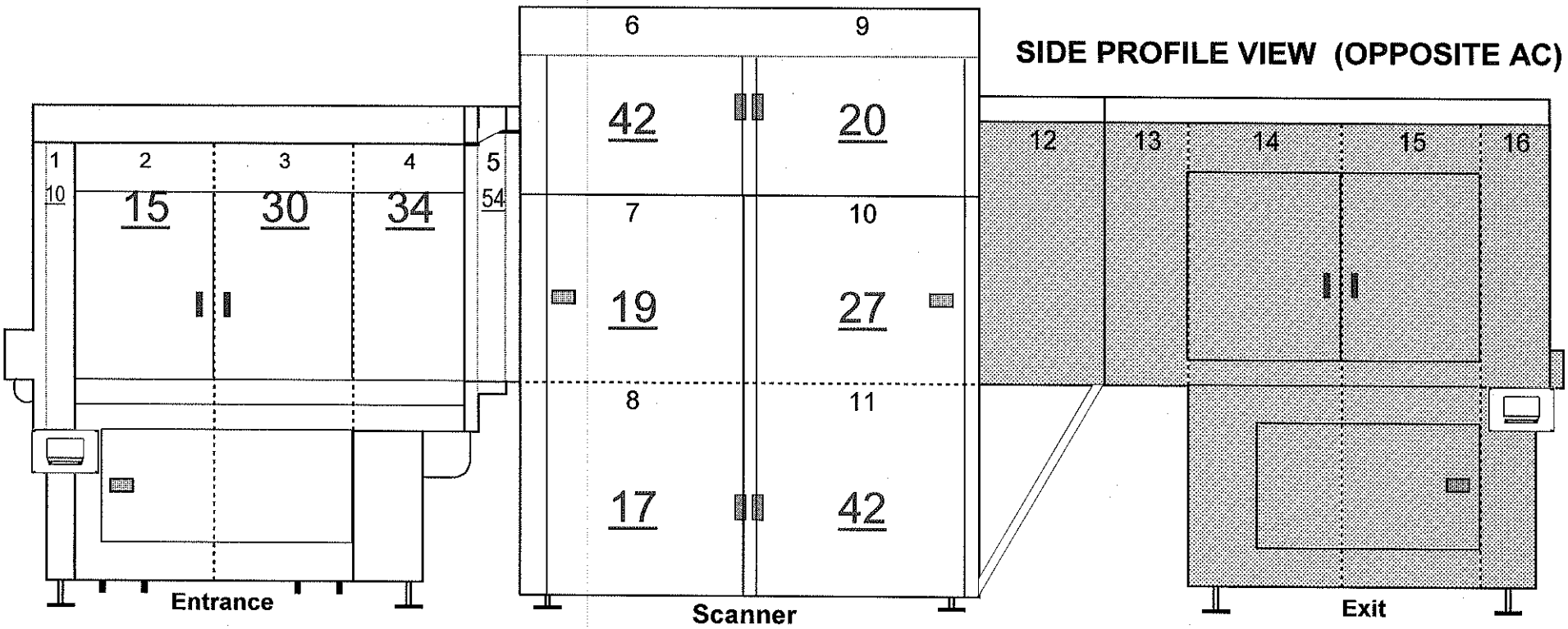
GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	7	
2	Exit Conveyor Top Panel	37	
3	Exit Conveyor Top Panel	29	
4	Scanner Conveyor Top Panel	13	
5	Scanner Conveyor Top Panel	19	
6	Scanner Conveyor Top Panel	29	
7	Entrance Conveyor Top Panel	47	
8	Entrance Conveyor Top Panel	25	
9	Entrance Conveyor Top Panel	33	

Highest Reading	47
Average Reading	27
Lowest Reading	7

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (OPPOSITE AC)



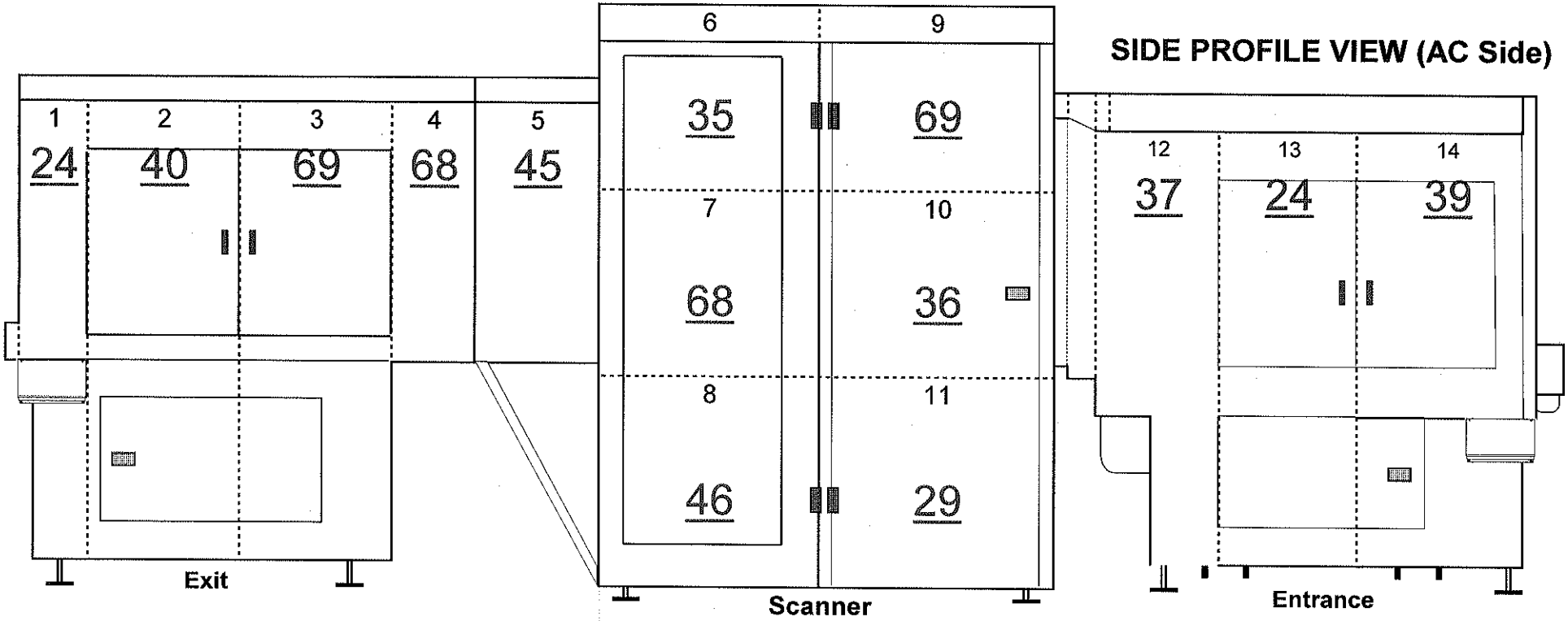
SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			
	Record highest reading per panel	µR/Hr	
1	Entrance Conveyor Panel	10	
2	Entrance Conveyor Panel	15	
3	Entrance Conveyor Panel	30	
4	Entrance Conveyor Panel	34	
5	Entrance Conveyor / Scanner Panel	54	
6	Upper Scanner Panel	42	
7	Middle Scanner Panel	19	
8	Lower Scanner Panel	17	
9	Upper Scanner Panel	20	
10	Middle Scanner Panel	27	
11	Lower Scanner Panel	42	
12	Exit Conveyor / Scanner Panel		← BLANK
13	Exit Conveyor Panel		← BLANK
14	Exit Conveyor Panel		← BLANK
15	Exit Conveyor Panel		← BLANK
16	Exit Conveyor Panel		← BLANK

PROBLEM
BLANK CELL

Highest Reading
Average Reading
Low Reading

12/28/2010

RADIATION SURVEY WORKSHEET



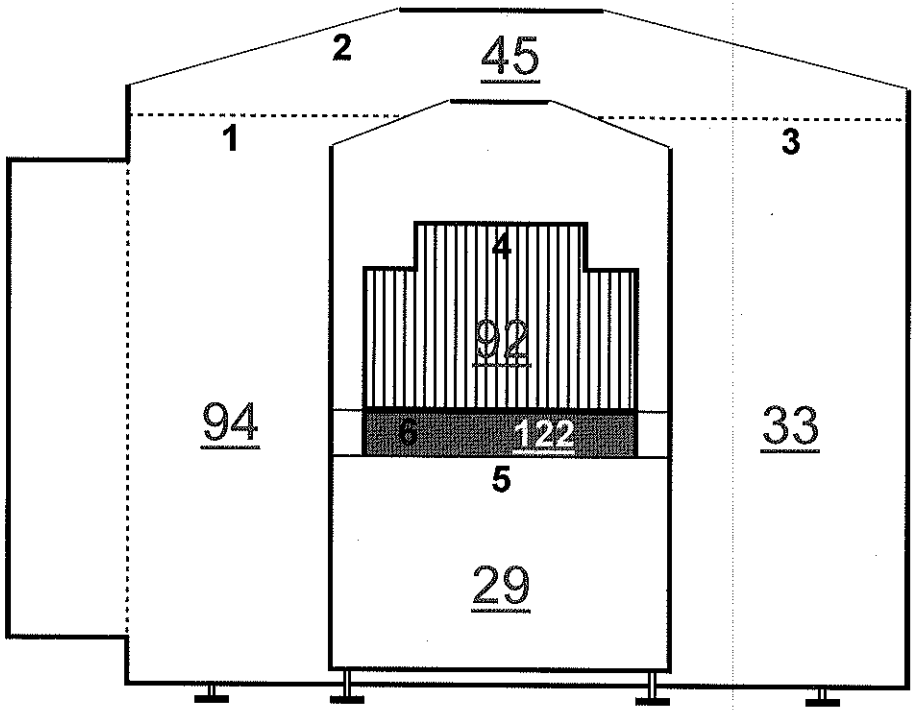
SYSTEM - SIDE PROFILE VIEW (AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
	Record highest reading per panel	µR/Hr	
1	Exit Conveyor Panel	24	
2	Exit Conveyor Panel	40	
3	Exit Conveyor Panel	69	
4	Exit Conveyor Panel	68	
5	Exit Conveyor / Scanner Panel	45	
6	Upper Scanner Pane	35	
7	Middle Scanner Panel	68	
8	Lower Scanner Panel	46	
9	Upper Scanner Panel	69	
10	Middle Scanner Panel	36	
11	Lower Scanner Panel	29	
12	Entrance Conveyor / Scanner Panel	37	
13	Entrance Conveyor Panel	24	
14	Entrance Conveyor Panel	39	

GOOD

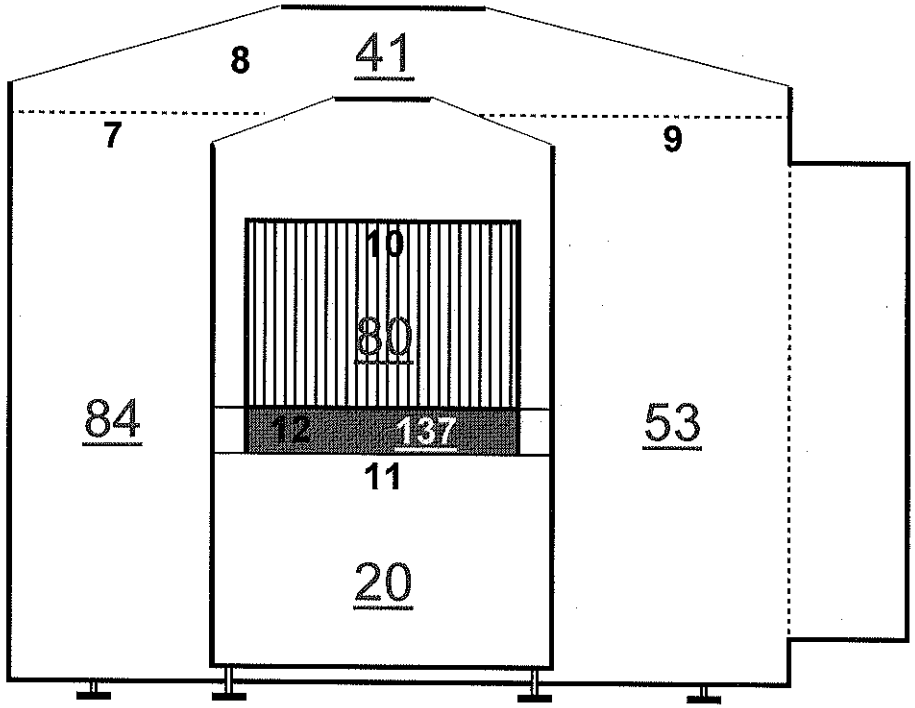
Highest Reading	69
Average Reading	45
Low Reading	24

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	94	
2	Scanner Top Panel	45	
3	Scanner Panel	33	
4	Belt Entrance	92	
5	Entrance Lower Panel	29	
6	Belt Lower Facia Cover Entrance	122	
7	Scanner Panel	84	
8	Scanner Top Panel	41	
9	Scanner Panel	53	
10	Belt Exit	80	
11	Exit Lower Panel	20	
12	Belt Lower Facia Cover Exit	137	

GOOD

Highest Reading	137
Average Reading	69
Low Reading	20

12/28/2010