

RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

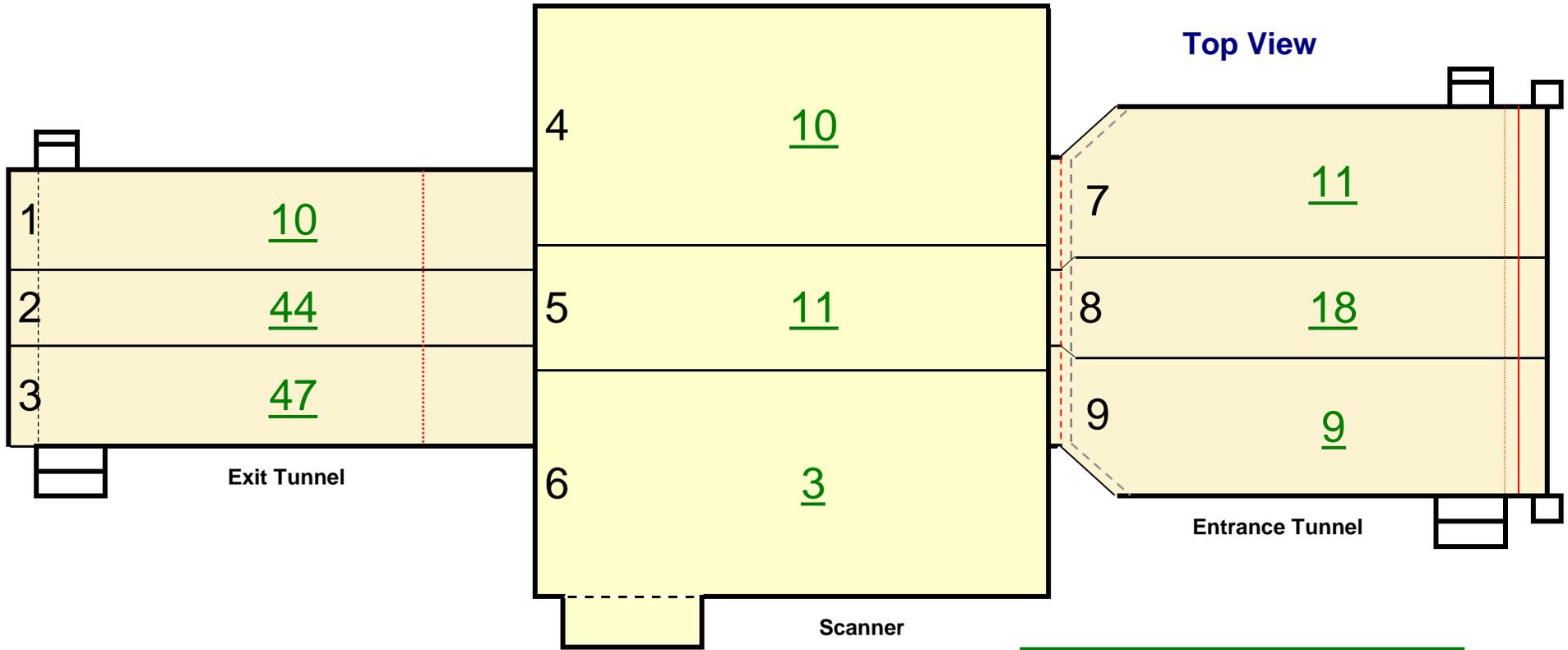
Airport: HNL	Scanner Location: Lobby Four	Case#: HNL 360777
Personnel Performing Radiation Survey:		Date Survey Performed: 3/30/2011
Scanner Serial Number: 6949	Entrance Tunnel Serial Number: 5602A	Exit Tunnel Serial Number: 5602B
High Reading: 17	Average Reading: 8.79	Min. Reading: 3
High Reading: 54	Average Reading: 15.83	Min. Reading: 8
High Reading: 47	Average Reading: 17.21	Min. Reading: 3
Good	Good	Good
Radiation Meter: Type Meter: 451P	Meter Serial Number: 6430	Calibration Due Date: December 20, 2011

NOTES

Complete Radiation Survey (CRS)	Record Voltage and Beam Current here:
Rename this Document before starting the Survey to:	Voltage: <u>165</u> KV Beam Current: <u>9.9</u> mA
HNL-CRS-30MAR2011-6949	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 μ R/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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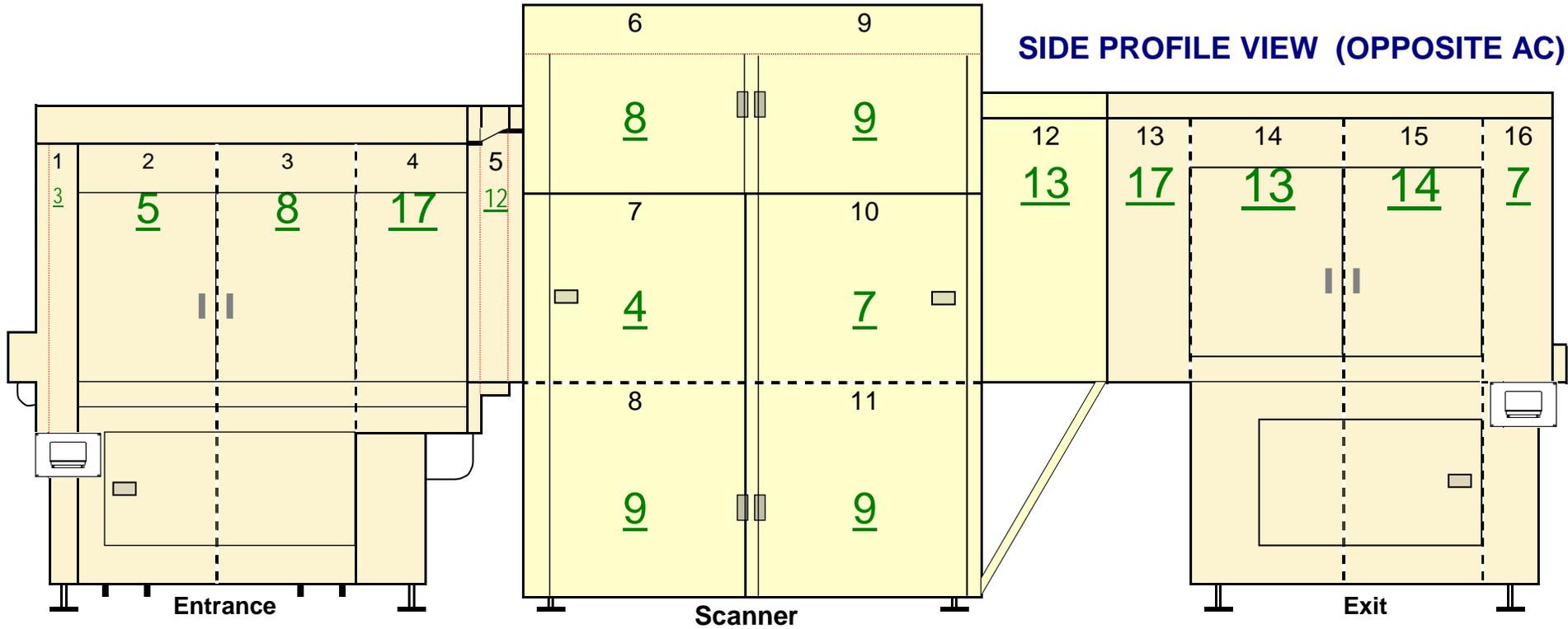
Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Top Panel	10	
2	Exit Conveyor Top Panel	44	
3	Exit Conveyor Top Panel	47	
4	Scanner Conveyor Top Panel	10	
5	Scanner Conveyor Top Panel	11	
6	Scanner Conveyor Top Panel	3	
7	Entrance Conveyor Top Panel	11	
8	Entrance Conveyor Top Panel	18	
9	Entrance Conveyor Top Panel	9	

GOOD

Highest Reading	47
Average Reading	18
Lowest Reading	3

RADIATION SURVEY WORKSHEET

SIDE PROFILE VIEW (OPPOSITE AC)

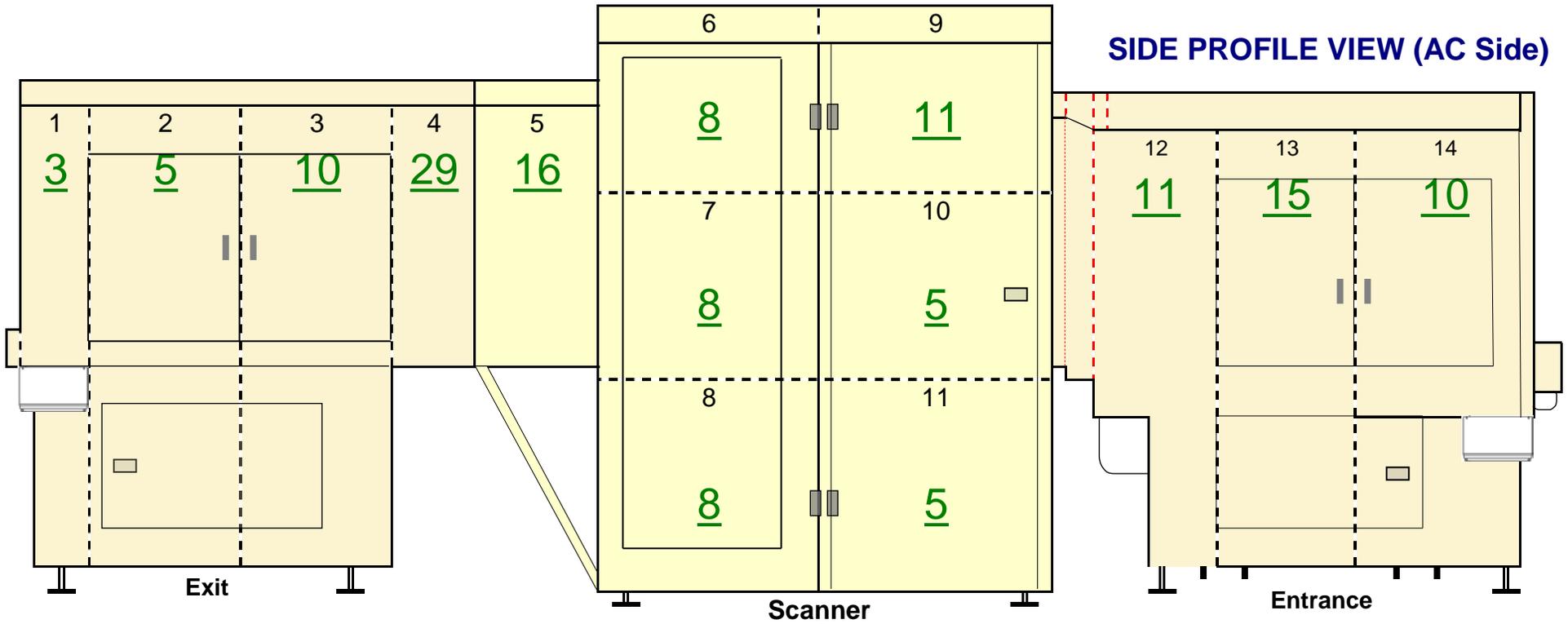


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		$\mu\text{R}/\text{Hr}$
1	Entrance Conveyor Panel	3
2	Entrance Conveyor Panel	5
3	Entrance Conveyor Panel	8
4	Entrance Conveyor Panel	17
5	Entrance Conveyor / Scanner Panel	12
6	Upper Scanner Panel	8
7	Middle Scanner Panel	4
8	Lower Scanner Panel	9
9	Upper Scanner Panel	9
10	Middle Scanner Panel	7
11	Lower Scanner Panel	9
12	Exit Conveyor / Scanner Panel	13
13	Exit Conveyor Panel	17
14	Exit Conveyor Panel	13
15	Exit Conveyor Panel	14
16	Exit Conveyor Panel	7

GOOD

Highest Reading	17
Average Reading	10
Low Reading	3

RADIATION SURVEY WORKSHEET



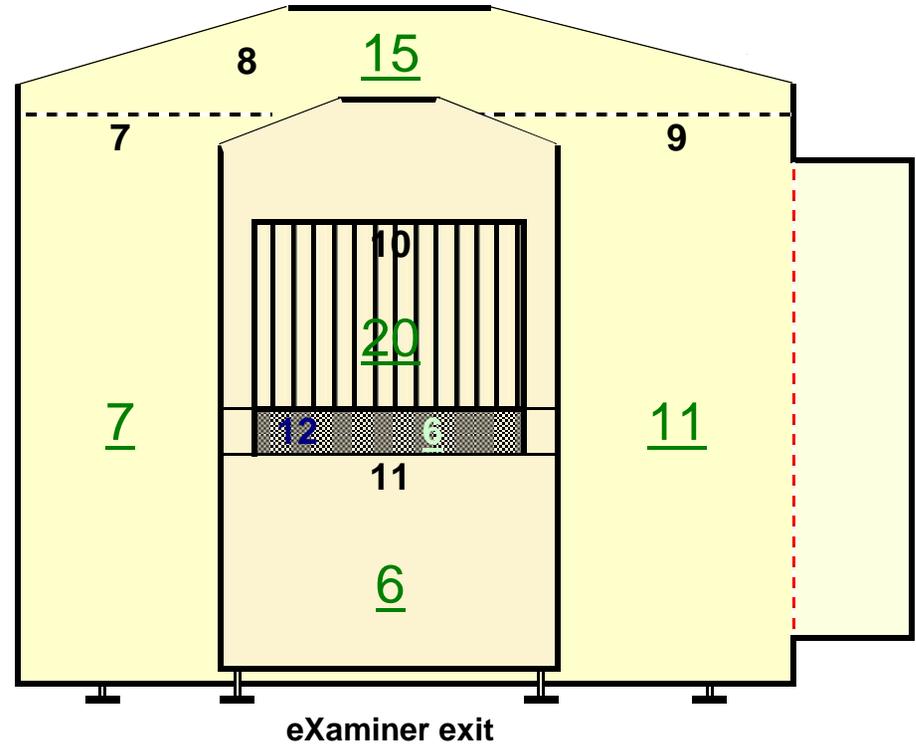
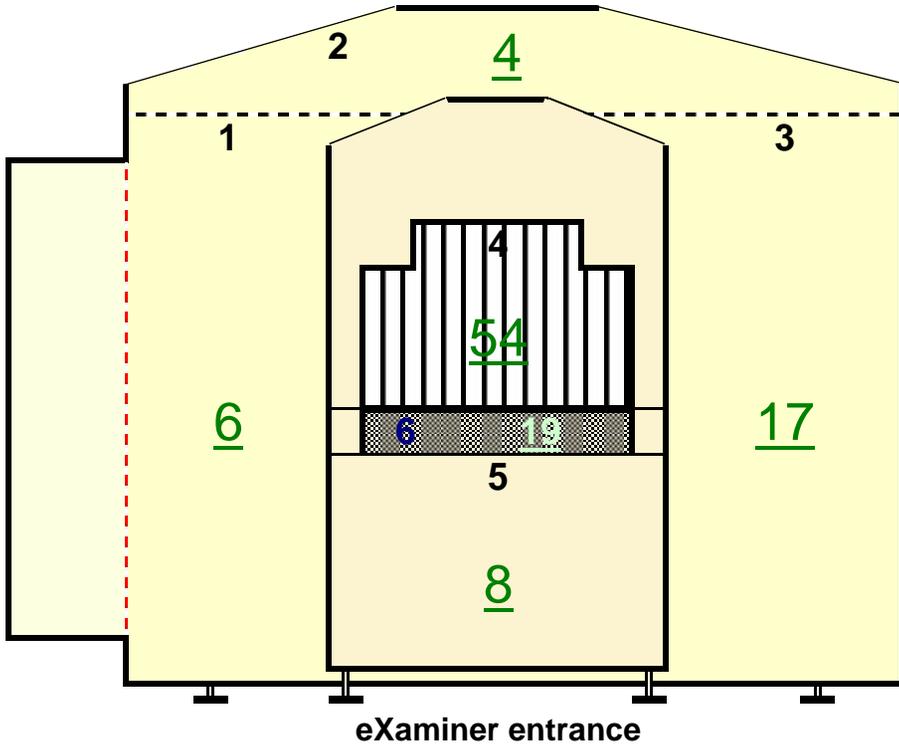
SYSTEM - SIDE PROFILE VIEW (AC Side)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		μR/Hr
1	Exit Conveyor Panel	3
2	Exit Conveyor Panel	5
3	Exit Conveyor Panel	10
4	Exit Conveyor Panel	29
5	Exit Conveyor / Scanner Panel	16
6	Upper Scanner Pane	8
7	Middle Scanner Panel	8
8	Lower Scanner Panel	8
9	Upper Scanner Panel	11
10	Middle Scanner Panel	5
11	Lower Scanner Panel	5
12	Entrance Conveyor / Scanner Panel	11
13	Entrance Conveyor Panel	15
14	Entrance Conveyor Panel	10

GOOD

Highest Reading	29
Average Reading	10
Low Reading	3

RADIATION SURVEY WORKSHEET

SYSTEM - FACES (End Views)



SYSTEM - FACES (End Views)		
Scattered Radiation Measurement Points Worksheet		
Record highest reading per panel		$\mu\text{R}/\text{Hr}$
1	Scanner Panel	6
2	Scanner Top Panel	4
3	Scanner Panel	17
4	Belt Entrance	54
5	Entrance Lower Panel	8
6	Belt Lower Facia Cover Entrance	19
7	Scanner Panel	7
8	Scanner Top Panel	15
9	Scanner Panel	11
10	Belt Exit	20
11	Exit Lower Panel	6
12	Belt Lower Facia Cover Exit	6

GOOD

Highest Reading	54
Average Reading	14
Low Reading	4