

RADIATION SURVEY WORKSHEET

eXaminer Radiation Survey Information

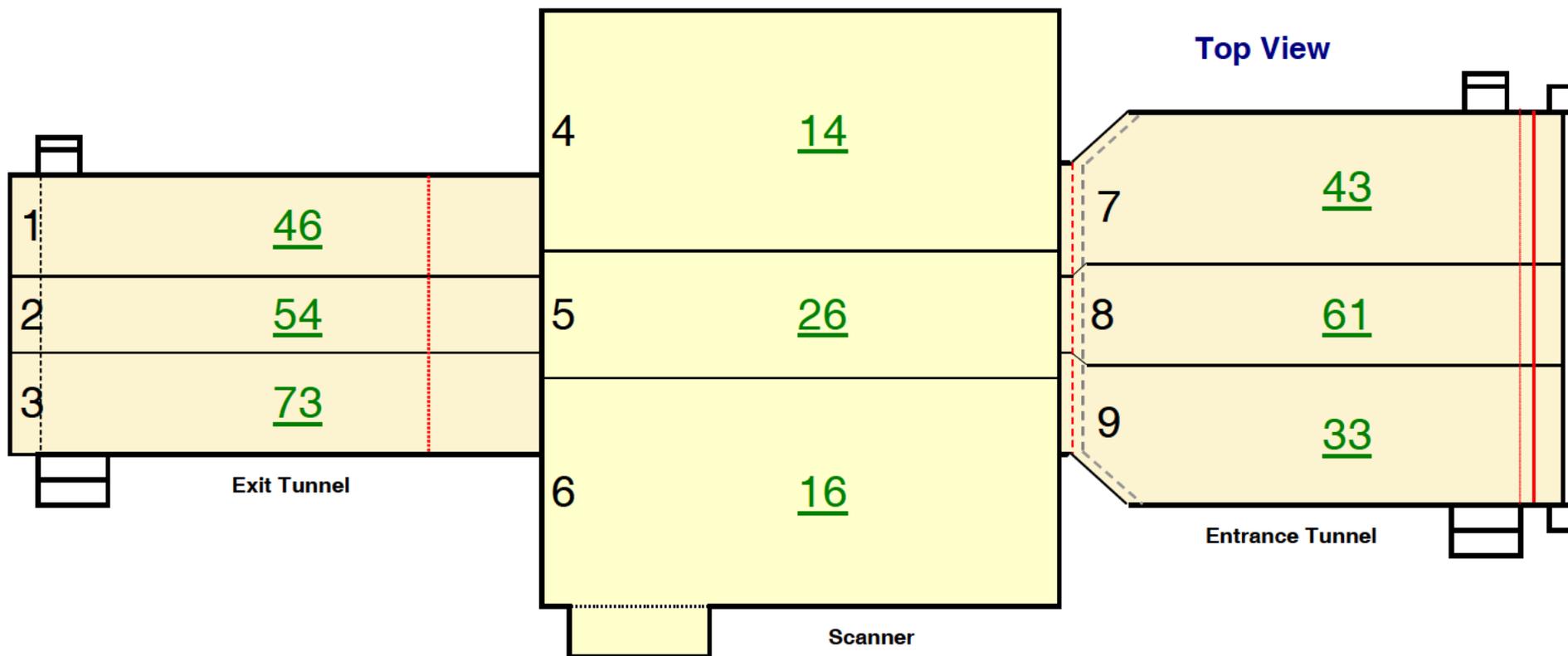
Airport: SJU	Scanner Location: TERM.B	Case#: 357460
Personnel Performing Radiation Survey: [REDACTED]		Date Survey Performed: 3/9/2011
Scanner Serial Number: 6194	Entrance Tunnel Serial Number: 2136A	Exit Tunnel Serial Number: 2136B
High Reading: 34	Average Reading: 17.39	Min. Reading: 6
High Reading: 197	Average Reading: 48.76	Min. Reading: 14
High Reading: 286	Average Reading: 64.52	Min. Reading: 23
Good	Good	Good
Radiation Meter: Type Meter: 451P	Meter Serial Number: 96	Calibration Due Date: October 27, 2011

NOTES

Complete Radiation Survey (CRS)	Record Voltage and Bean Current here:							
Rename this Document before starting the Survey to:	Voltage: <u>163378</u> KV Beam Current: <u>9.8</u> mA							
357-CRS-9MAR2011-6194	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Maximum Safe Readings</td> <td style="text-align: center;">Scanner</td> <td style="text-align: center;">350</td> <td style="text-align: center;">Tunnels</td> <td style="text-align: center;">350</td> <td style="text-align: center;">Curtains</td> <td style="text-align: center;">350</td> </tr> </table>	Maximum Safe Readings	Scanner	350	Tunnels	350	Curtains	350
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Step:	Procedure	Expected results
	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.

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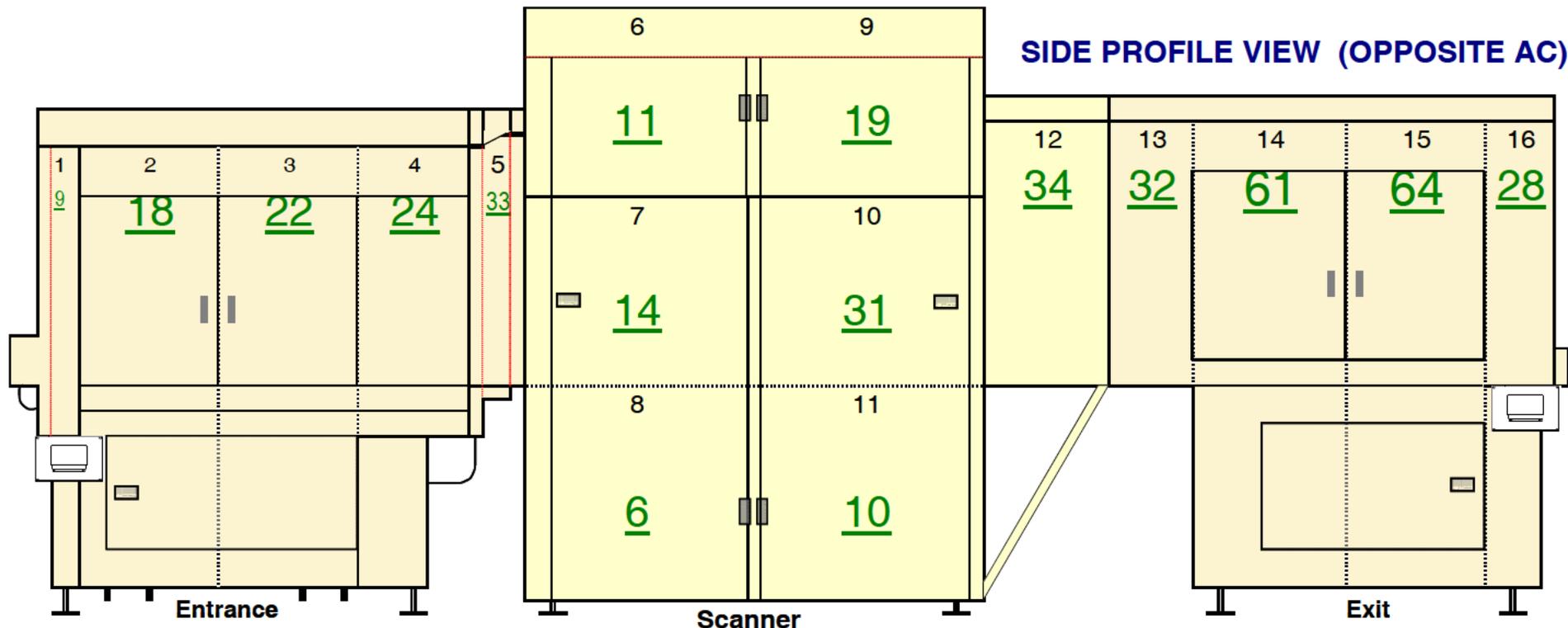


GOOD

Top View			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		μR/Hr	
1	Exit Conveyor Top Panel	46	
2	Exit Conveyor Top Panel	54	
3	Exit Conveyor Top Panel	73	
4	Scanner Conveyor Top Panel	14	
5	Scanner Conveyor Top Panel	26	
6	Scanner Conveyor Top Panel	16	
7	Entrance Conveyor Top Panel	43	
8	Entrance Conveyor Top Panel	61	
9	Entrance Conveyor Top Panel	33	

Highest Reading	73
Average Reading	41
Lowest Reading	14

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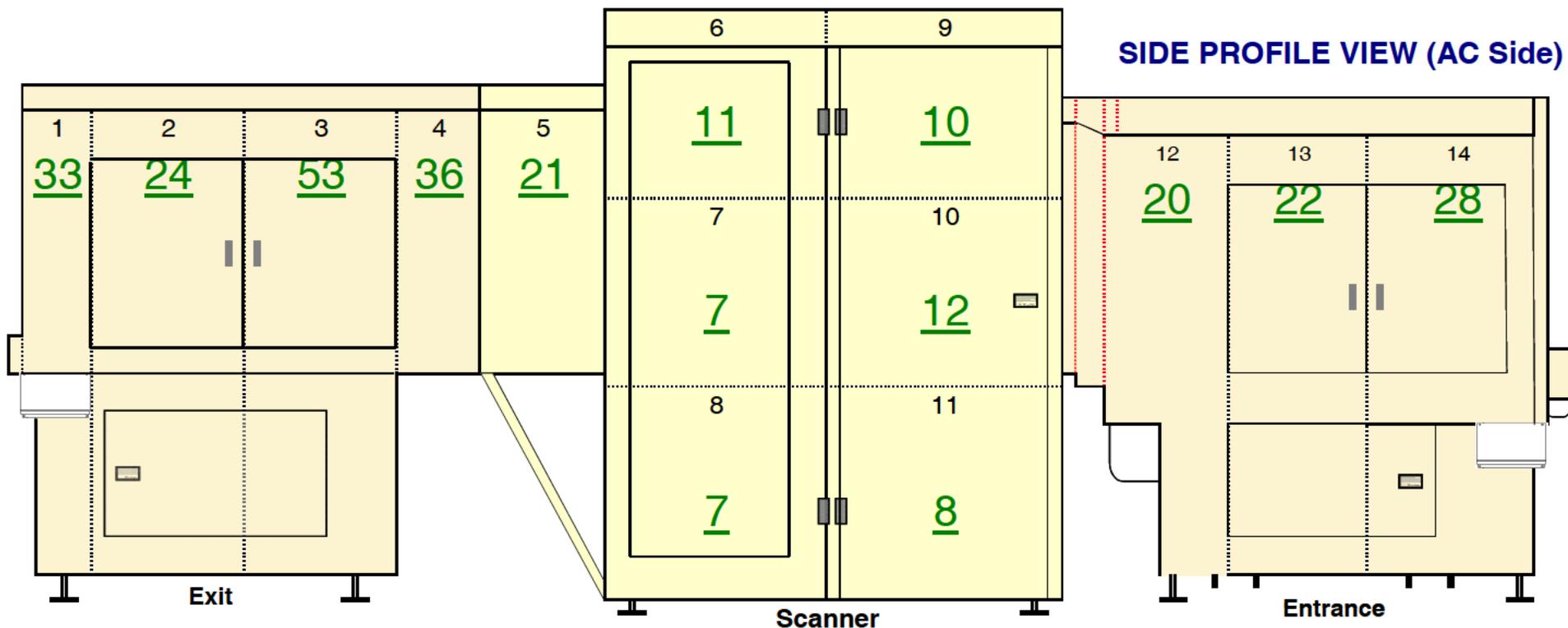


SYSTEM - SIDE PROFILE VIEW (Opposite AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		μR/Hr	
1	Entrance Conveyor Panel	9	
2	Entrance Conveyor Panel	18	
3	Entrance Conveyor Panel	22	
4	Entrance Conveyor Panel	24	
5	Entrance Conveyor / Scanner Panel	33	
6	Upper Scanner Panel	11	
7	Middle Scanner Panel	14	
8	Lower Scanner Panel	6	
9	Upper Scanner Panel	19	
10	Middle Scanner Panel	31	
11	Lower Scanner Panel	10	
12	Exit Conveyor / Scanner Panel	34	
13	Exit Conveyor Panel	32	
14	Exit Conveyor Panel	61	
15	Exit Conveyor Panel	64	
16	Exit Conveyor Panel	28	

GOOD

Highest Reading	64
Average Reading	26
Low Reading	6

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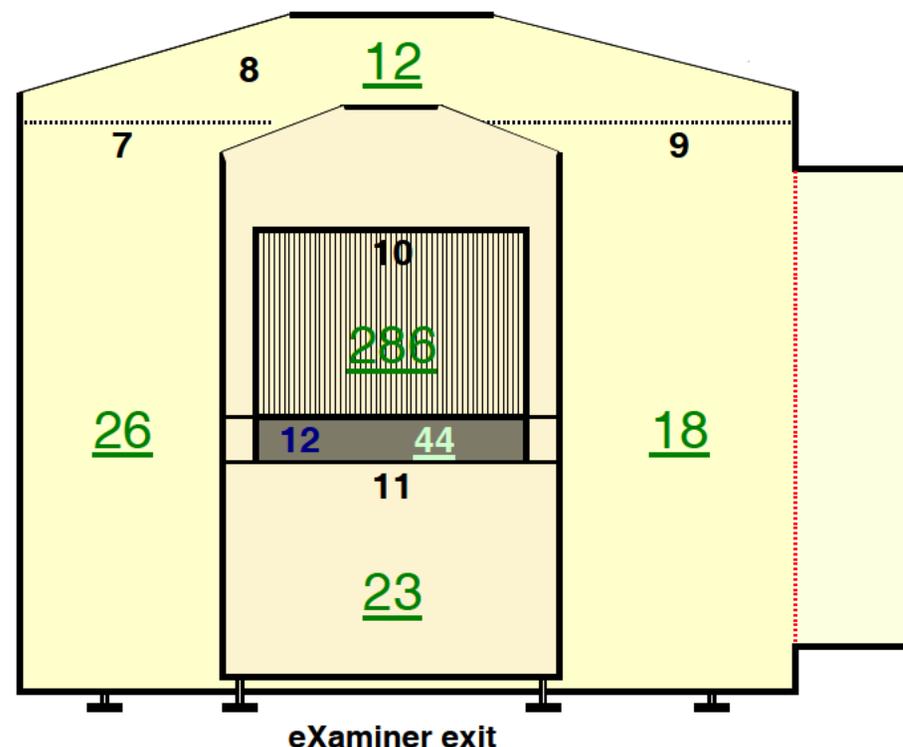
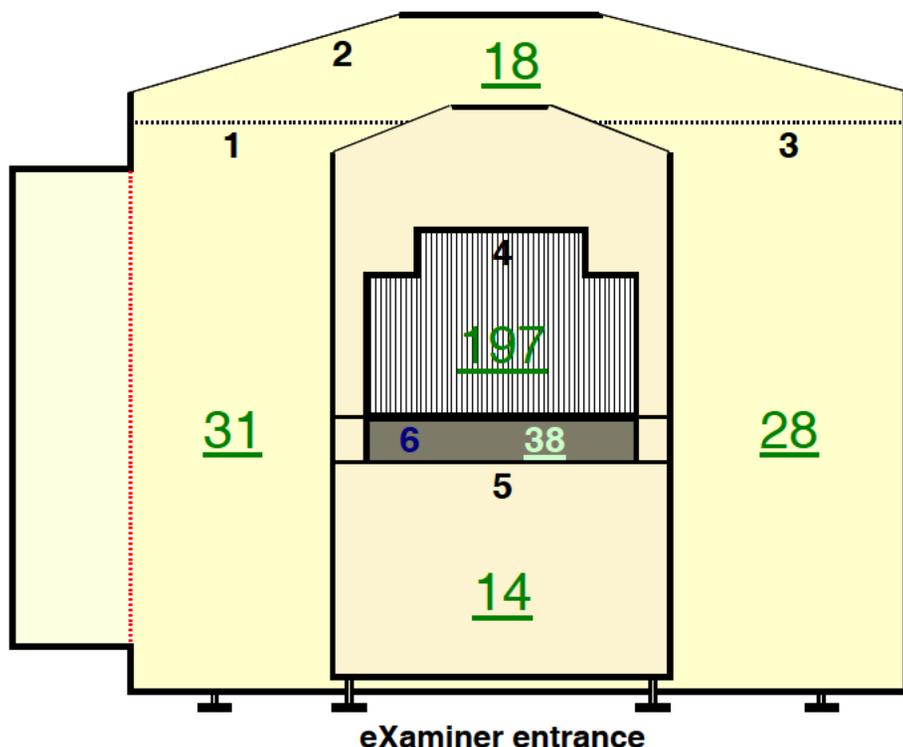
SYSTEM - SIDE PROFILE VIEW (AC Side)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		µR/Hr	
1	Exit Conveyor Panel	33	
2	Exit Conveyor Panel	24	
3	Exit Conveyor Panel	53	
4	Exit Conveyor Panel	36	
5	Exit Conveyor / Scanner Panel	21	
6	Upper Scanner Pane	11	
7	Middle Scanner Panel	7	
8	Lower Scanner Panel	7	
9	Upper Scanner Panel	10	
10	Middle Scanner Panel	12	
11	Lower Scanner Panel	8	
12	Entrance Conveyor / Scanner Panel	20	
13	Entrance Conveyor Panel	22	
14	Entrance Conveyor Panel	28	

GOOD

Highest Reading	53
Average Reading	21
Low Reading	7

RADIATION SURVEY WORKSHEET

SYSTEM - FACES (End Views)



SYSTEM - FACES (End Views)			
Scattered Radiation Measurement Points Worksheet			No PROBLEM
Record highest reading per panel		μR/Hr	
1	Scanner Panel	31	
2	Scanner Top Panel	18	
3	Scanner Panel	28	
4	Belt Entrance	197	
5	Entrance Lower Panel	14	
6	Belt Lower Facia Cover Entrance	38	
7	Scanner Panel	26	
8	Scanner Top Panel	12	
9	Scanner Panel	18	
10	Belt Exit	286	
11	Exit Lower Panel	23	
12	Belt Lower Facia Cover Exit	44	

GOOD

Highest Reading	286
Average Reading	61
Low Reading	12