



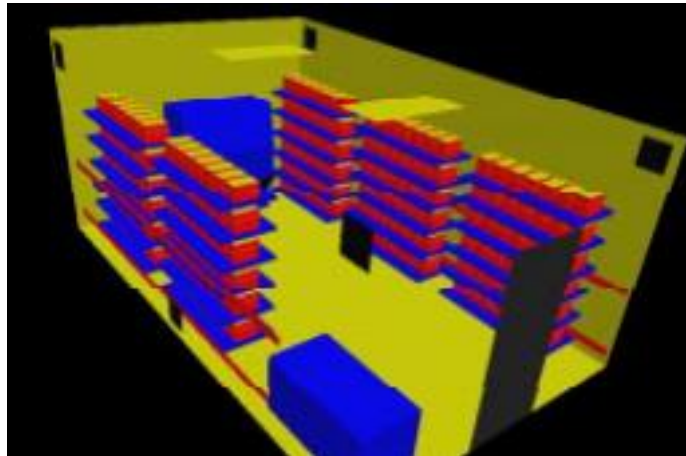
Casename Case 74

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low Ind	18.8	61%	High x4 / Low x2	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.62	72.71	1884	62.32%
<b>S.D.</b>	0.29	0.51	345	2.56%
<b>Max.</b>	23.56	74.41	2633	67.44%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.99	1.91	2.94	4.53	6.72	9.53	13.46	17.65	22.68	28.03
<b>Max.</b>	1.38	2.66	4.11	6.33	9.39	13.31	18.81	24.66	31.69	39.17

**Room Breathing Zone**

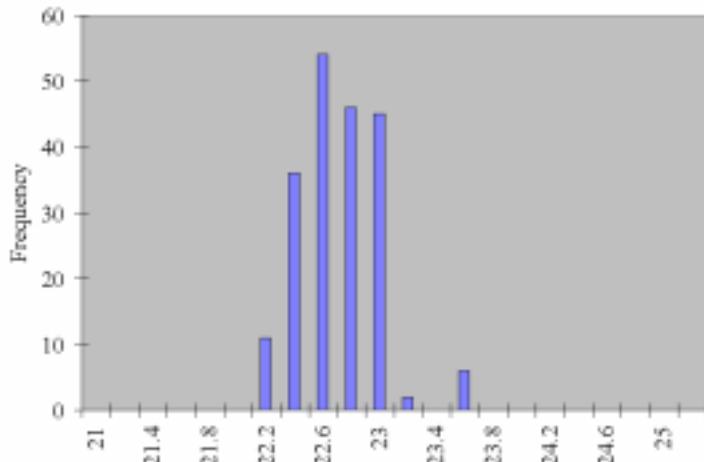
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.09	69.96	48	52.74%
<b>S.D.</b>	0.31	0.56	22	
<b>Max.</b>	22.37	72.26	247	

**Room Breathing Zone NH3 (ppm)**

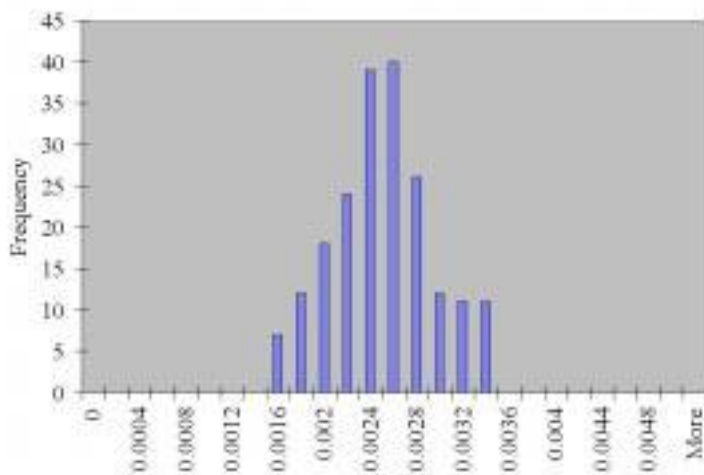
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.02	0.05	0.07	0.11	0.17	0.24	0.34	0.45	0.57	0.71
<b>Max.</b>	0.13	0.25	0.39	0.59	0.88	1.25	1.77	2.32	2.98	3.68

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



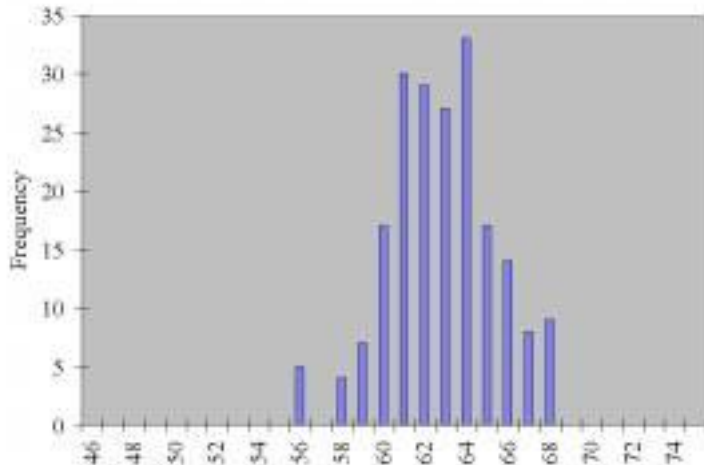
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	411
2	785000	795
3	785000	1225
4	785000	1888
5	785000	2800
6	785000	3969
7	785000	5609
8	785000	7353
9	785000	9447
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 75**

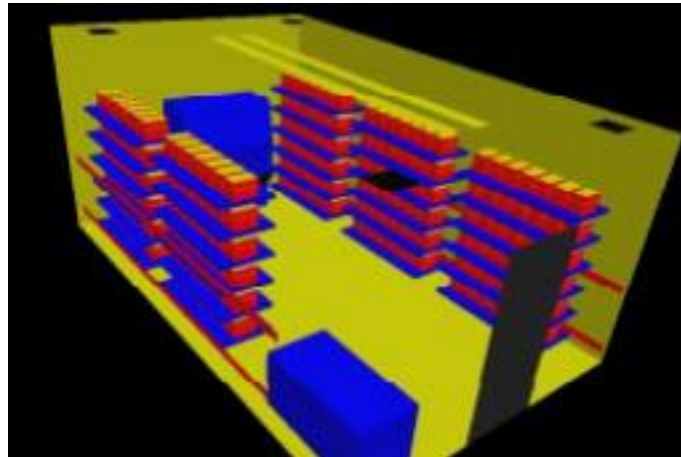
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	18.8	61%	Ceiling/Low 50/50	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON alt design	On wall	Single	1050	21000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.88	71.38	1839	64.89%
<b>S.D.</b>	0.19	0.34	362	2.56%
<b>Max.</b>	22.31	72.15	2622	69.92%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.97	1.86	2.87	4.98	8.01	11.70	17.24	21.79	26.73	30.30
<b>Max.</b>	1.39	2.65	4.09	7.10	11.42	16.69	24.58	31.06	38.11	43.20

**Room Breathing Zone**

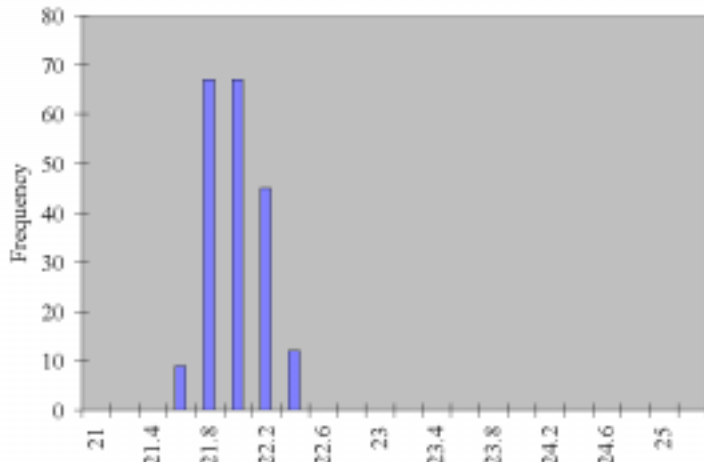
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.09	69.96	48	52.74%
<b>S.D.</b>	0.31	0.56	22	
<b>Max.</b>	22.37	72.26	247	

**Room Breathing Zone NH3 (ppm)**

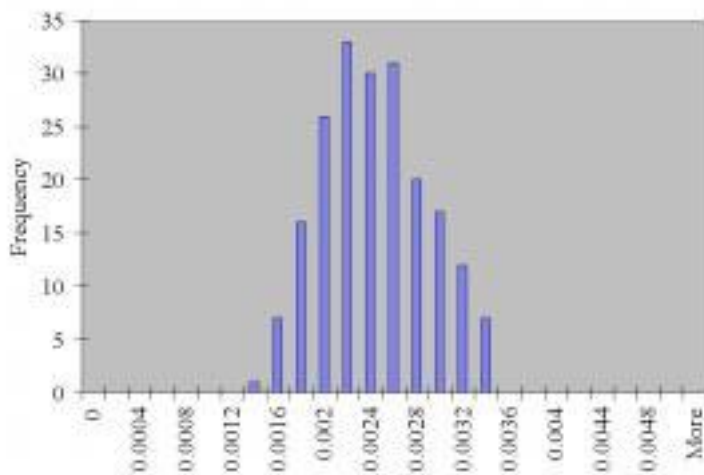
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.03	0.05	0.07	0.13	0.21	0.30	0.45	0.57	0.69	0.79
<b>Max.</b>	0.13	0.25	0.39	0.67	1.08	1.57	2.32	2.93	3.60	4.07

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



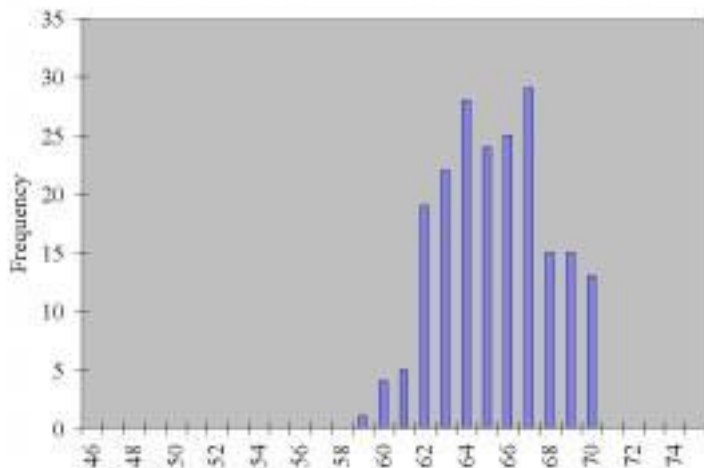
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	415
2	785000	795
3	785000	1225
4	785000	2127
5	785000	3420
6	785000	4996
7	785000	7360
8	785000	9300
9	785000	11410
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 76**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	18.8	61%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

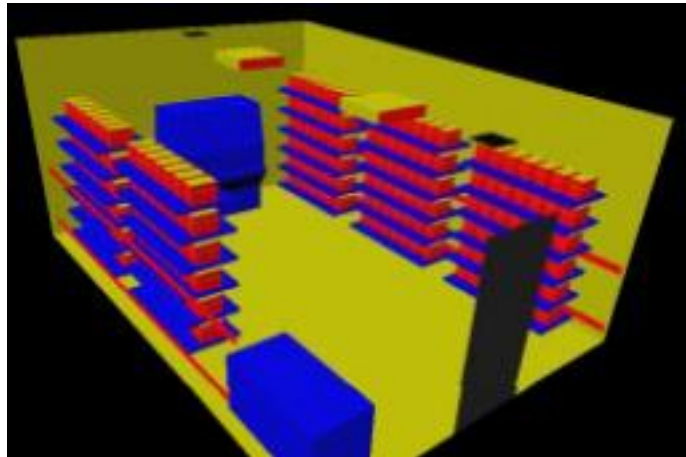
**Room**

**ACH**

15

**Cage Condition**

Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.13	71.83	1857	64.05%
<b>S.D.</b>	0.18	0.32	302	2.32%
<b>Max.</b>	22.89	73.21	2435	68.79%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.98	1.88	2.90	4.85	7.61	11.03	16.07	20.51	25.49	29.63
<b>Max.</b>	1.28	2.46	3.80	6.36	9.98	14.46	21.07	26.89	33.42	38.85

**Room Breathing Zone**

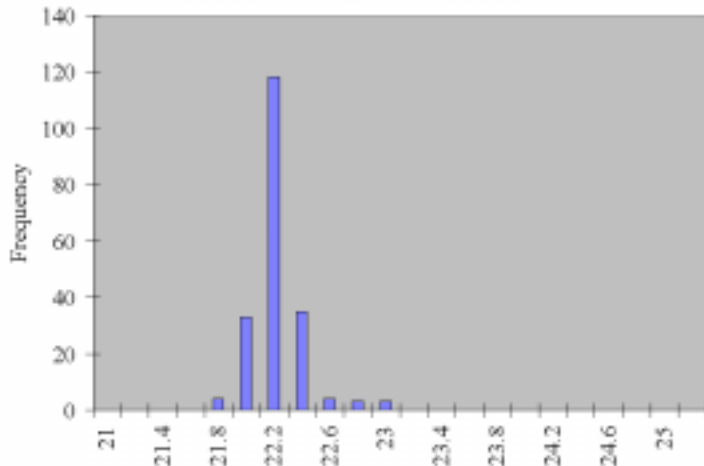
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.39	68.71	55	55.19%
<b>S.D.</b>	0.19	0.35	27	
<b>Max.</b>	21.23	70.21	236	

**Room Breathing Zone NH3 (ppm)**

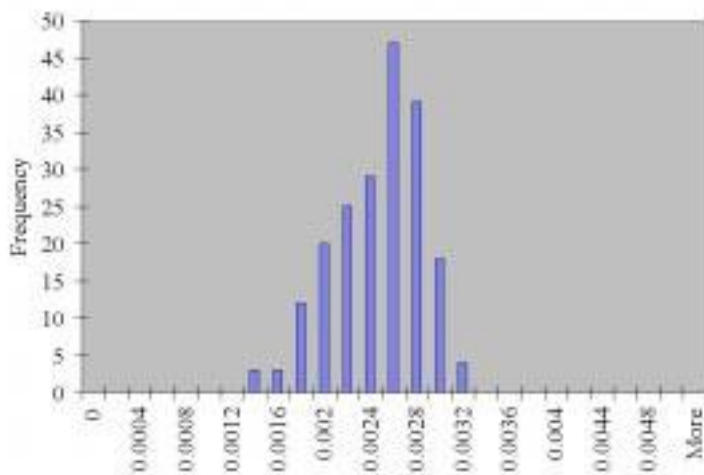
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.03	0.06	0.09	0.14	0.23	0.33	0.48	0.61	0.76	0.88
<b>Max.</b>	0.12	0.24	0.37	0.62	0.97	1.40	2.04	2.61	3.24	3.77

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



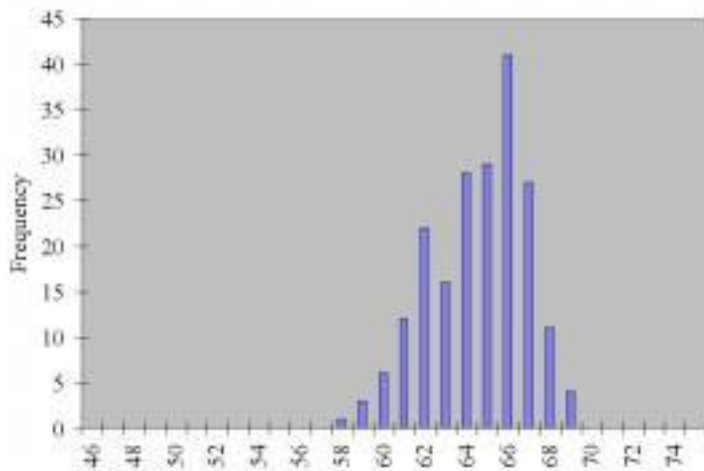
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	414
2	785000	795
3	785000	1225
4	785000	2049
5	785000	3218
6	785000	4662
7	785000	6791
8	785000	8667
9	785000	10772
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 77**

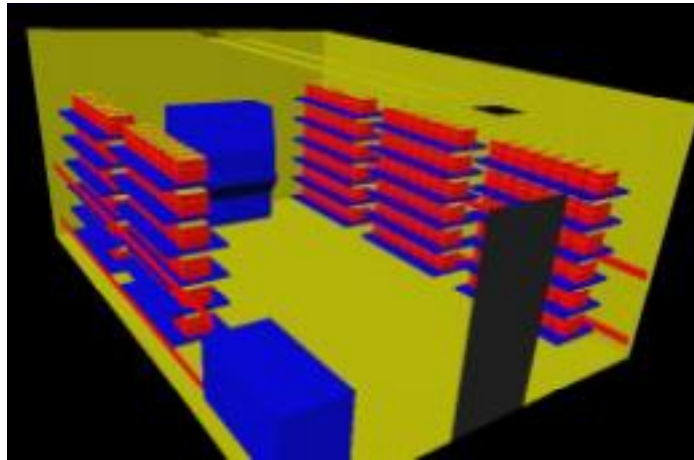
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Slot	18.8	61%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.14	71.86	1881	64.17%
<b>S.D.</b>	0.26	0.46	351	2.58%
<b>Max.</b>	22.90	73.22	2652	70.61%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.99	1.90	2.93	4.94	7.78	11.29	16.47	20.98	26.03	30.15
<b>Max.</b>	1.40	2.68	4.14	6.96	10.97	15.91	23.22	29.59	36.70	42.51

**Room Breathing Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.39	68.70	50	55.16%
<b>S.D.</b>	0.23	0.42	21	
<b>Max.</b>	21.44	70.59	191	

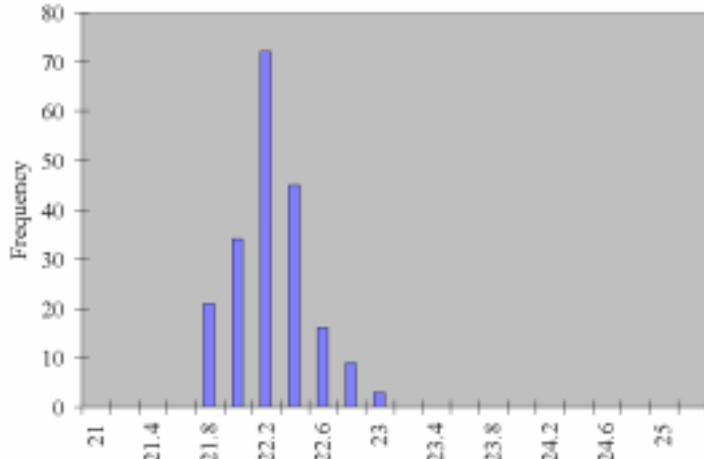
**Room Breathing Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.03	0.05	0.08	0.13	0.21	0.30	0.44	0.56	0.70	0.81
<b>Max.</b>	0.10	0.19	0.30	0.50	0.79	1.14	1.67	2.13	2.64	3.06

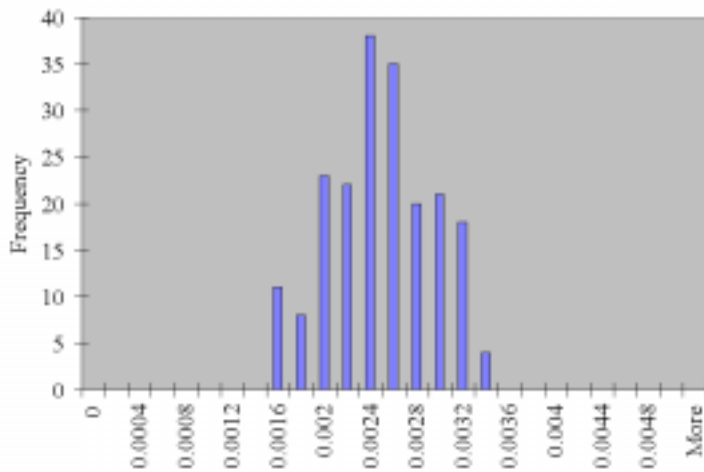


**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



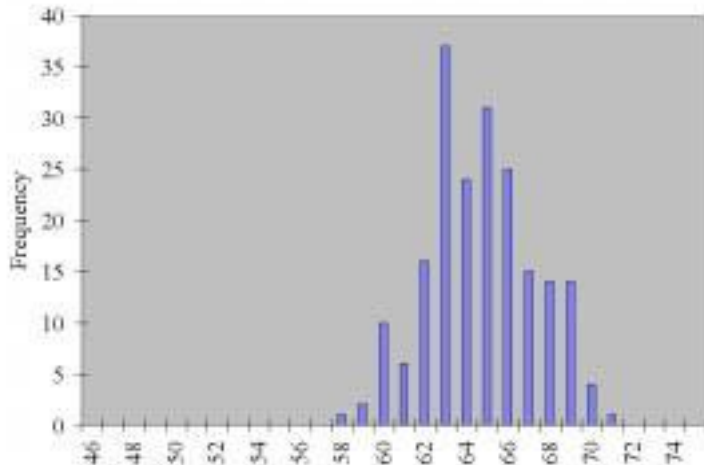
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	414
2	785000	795
3	785000	1225
4	785000	2060
5	785000	3247
6	785000	4710
7	785000	6872
8	785000	8758
9	785000	10864
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 78**

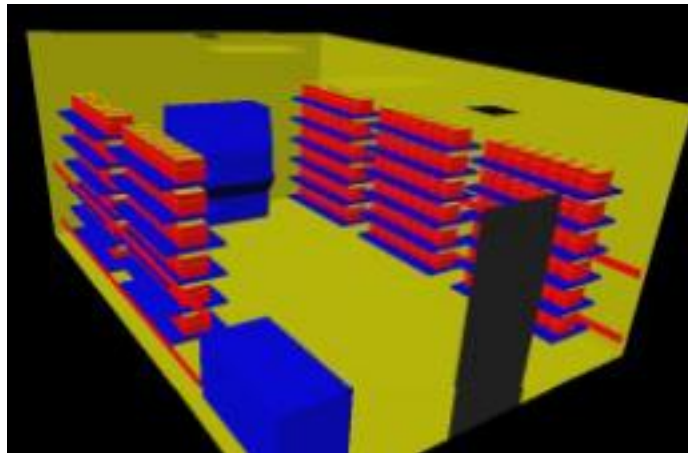
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low Ind	18.8	61%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.09	71.76	1919	64.69%
<b>S.D.</b>	0.22	0.40	362	2.65%
<b>Max.</b>	22.67	72.81	2625	70.05%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	1.01	1.94	2.99	5.16	8.25	12.03	17.67	22.38	27.54	31.38
<b>Max.</b>	1.39	2.66	4.10	7.05	11.28	16.45	24.17	30.61	37.66	42.92

**Room Breathing Zone**

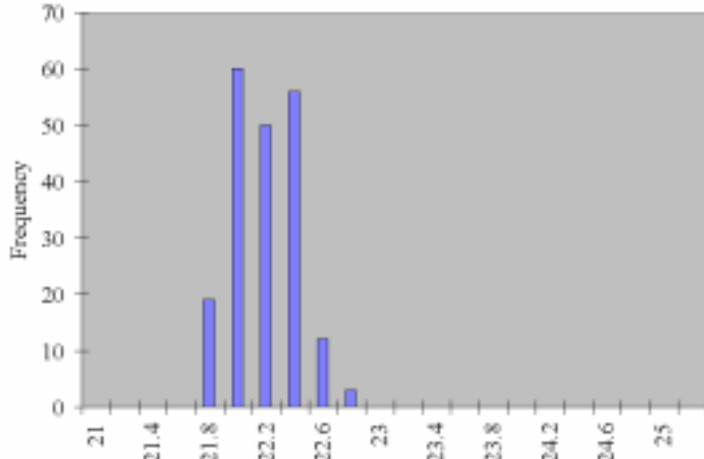
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.41	68.74	55	55.13%
<b>S.D.</b>	0.24	0.44	20	
<b>Max.</b>	22.13	71.84	212	

**Room Breathing Zone NH3 (ppm)**

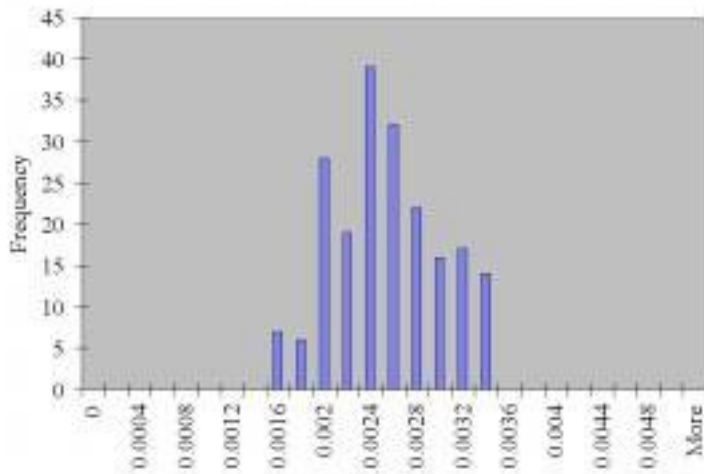
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.03	0.06	0.09	0.15	0.24	0.35	0.51	0.64	0.79	0.90
<b>Max.</b>	0.11	0.21	0.33	0.57	0.91	1.33	1.95	2.47	3.04	3.46

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



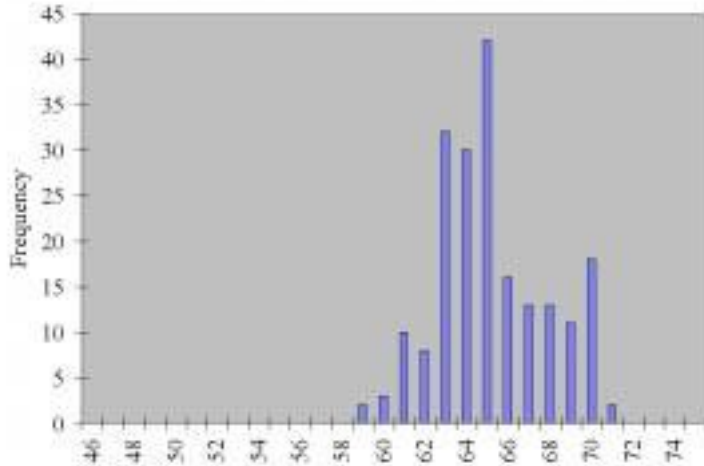
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	415
2	785000	795
3	785000	1225
4	785000	2109
5	785000	3373
6	785000	4919
7	785000	7229
8	785000	9154
9	785000	11263
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 79**

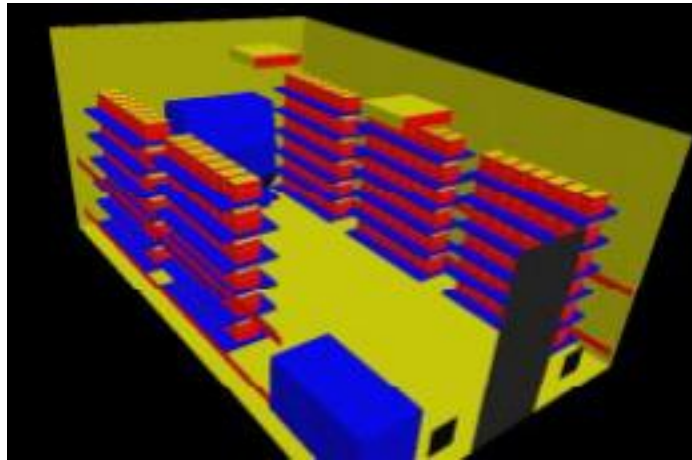
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	18.8	61%	2 Door exhausts	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	23.12	73.62	1647	58.59%
<b>S.D.</b>	0.37	0.66	301	2.52%
<b>Max.</b>	24.34	75.81	2355	63.76%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.86	1.67	2.57	3.70	5.21	7.22	9.88	13.33	17.71	23.15
<b>Max.</b>	1.22	2.38	3.67	5.30	7.45	10.33	14.13	19.07	25.32	33.10

**Room Breathing Zone**

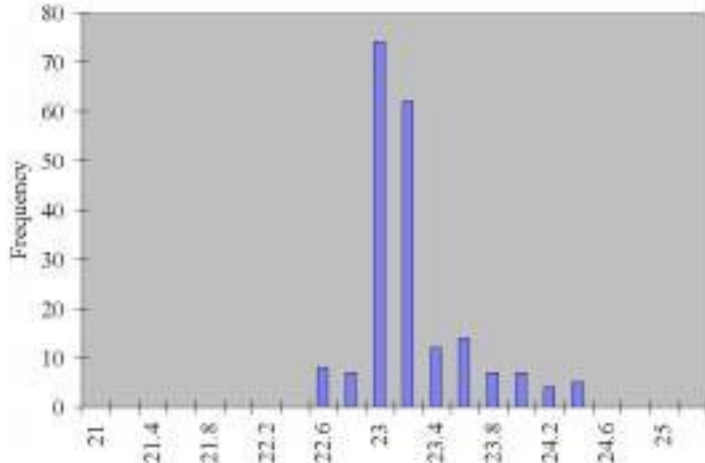
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.94	71.49	81	50.26%
<b>S.D.</b>	0.36	0.64	26	
<b>Max.</b>	22.89	73.20	195	

**Room Breathing Zone NH3 (ppm)**

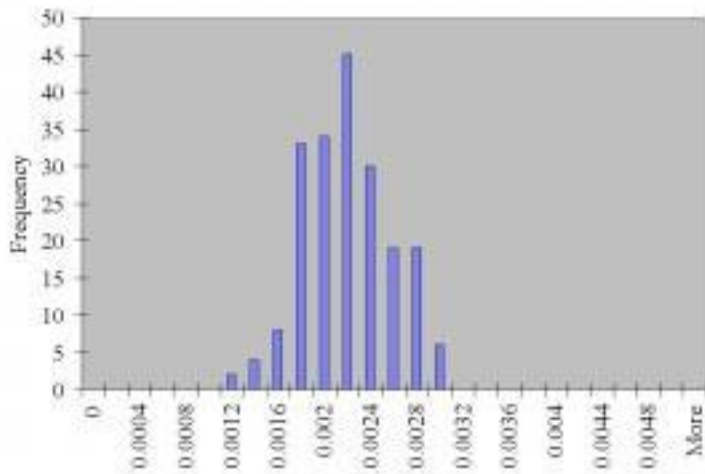
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.04	0.08	0.13	0.18	0.26	0.36	0.49	0.66	0.87	1.14
<b>Max.</b>	0.10	0.20	0.30	0.44	0.62	0.86	1.17	1.58	2.10	2.74

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



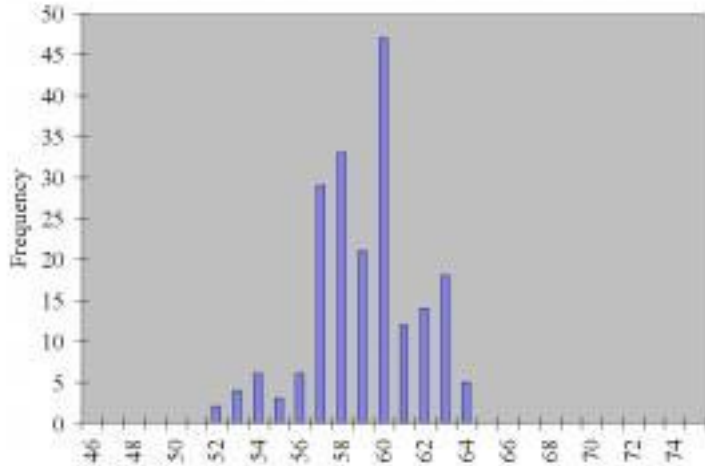
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 80**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Slot	18.8	61%	2 Door exhausts	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room**

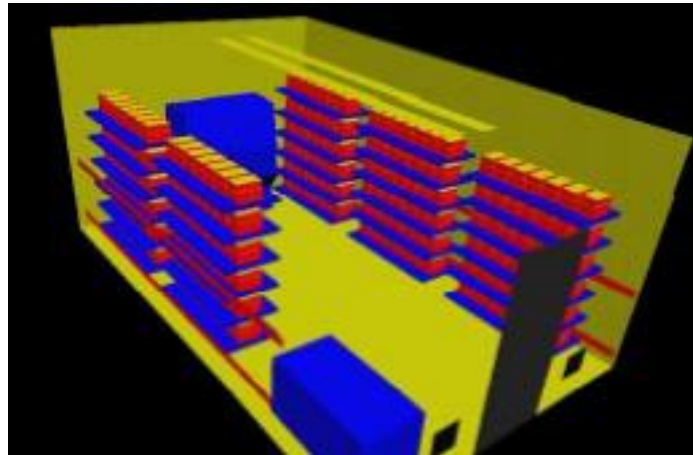
**ACH**

15

**Cage**

**Condition**

Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	23.22	73.80	1707	58.68%
<b>S.D.</b>	0.44	0.79	311	2.60%
<b>Max.</b>	24.40	75.91	2688	64.90%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.89	1.73	2.66	3.84	5.40	7.49	10.24	13.82	18.35	23.99
<b>Max.</b>	1.40	2.72	4.19	6.05	8.50	11.79	16.14	21.77	28.91	37.79

**Room Breathing Zone**

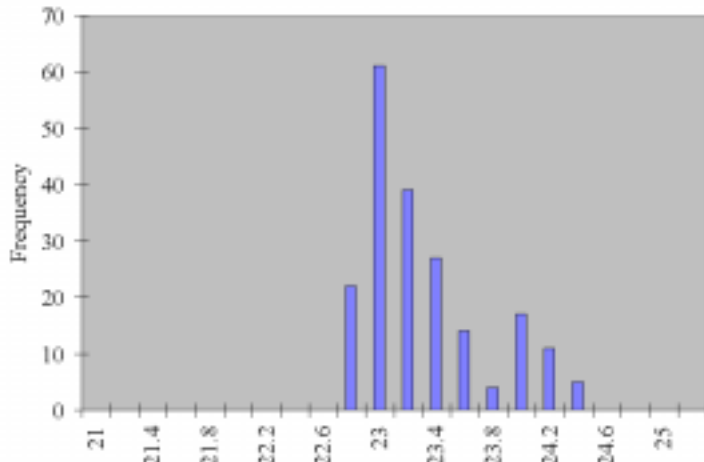
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.10	71.77	90	49.83%
<b>S.D.</b>	0.43	0.78	22	
<b>Max.</b>	23.07	73.52	207	

**Room Breathing Zone NH3 (ppm)**

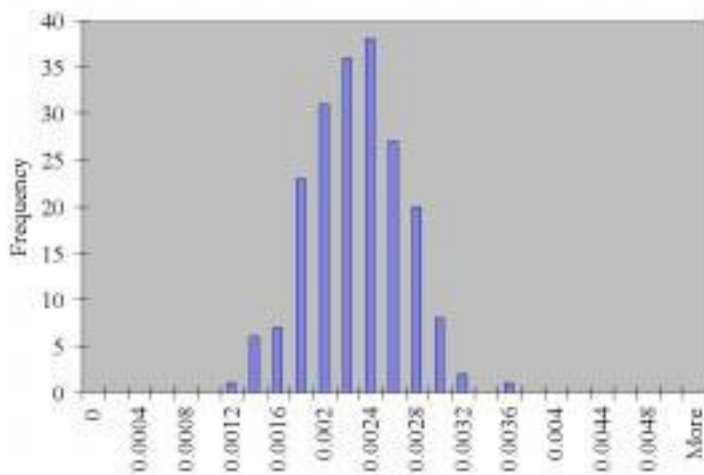
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.05	0.09	0.14	0.20	0.29	0.40	0.54	0.73	0.97	1.27
<b>Max.</b>	0.11	0.21	0.32	0.47	0.65	0.91	1.24	1.68	2.23	2.91

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



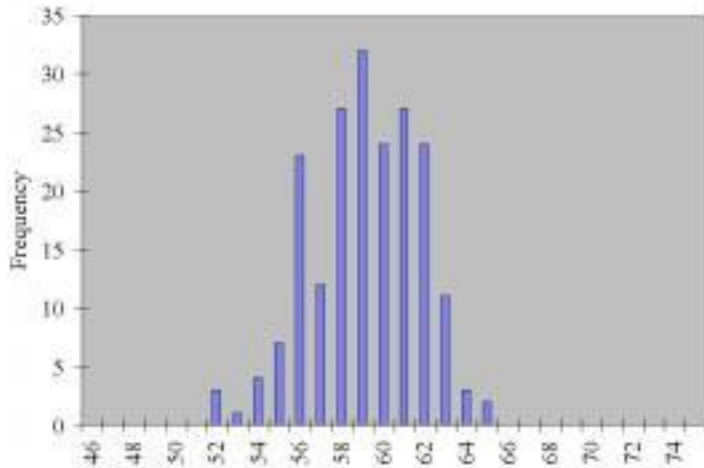
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



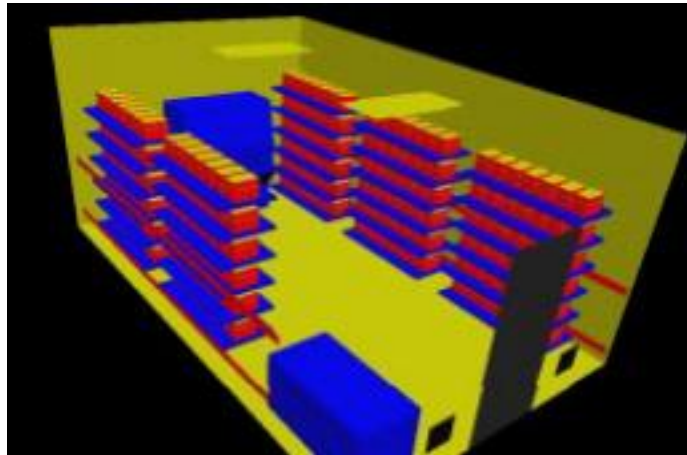
Casename      **Case 81**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low Ind	18.8	61%	2 Door exhausts	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	23.40	74.13	1741	58.28%
<b>S.D.</b>	0.48	0.86	293	2.45%
<b>Max.</b>	24.45	76.00	2720	63.62%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.91	1.76	2.72	3.92	5.51	7.64	10.45	14.10	18.72	24.47
<b>Max.</b>	1.41	2.75	4.24	6.12	8.60	11.93	16.33	22.03	29.25	38.24

**Room Breathing Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.45	72.41	89	48.73%
<b>S.D.</b>	0.55	0.99	30	
<b>Max.</b>	23.36	74.05	278	

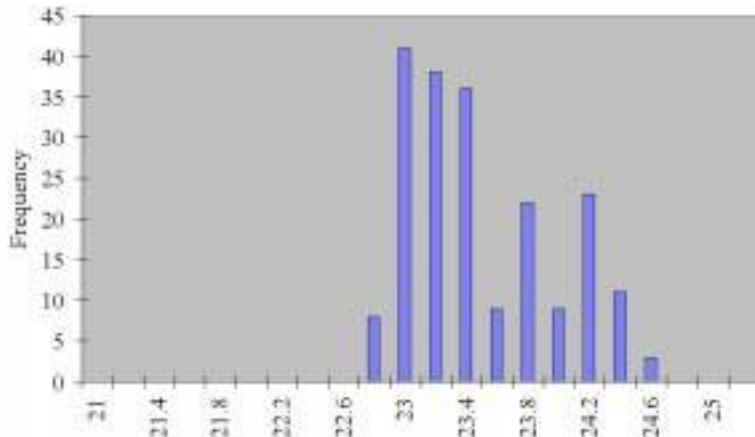
**Room Breathing Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.05	0.09	0.14	0.20	0.28	0.39	0.54	0.72	0.96	1.25
<b>Max.</b>	0.14	0.28	0.43	0.63	0.88	1.22	1.67	2.25	2.99	3.91

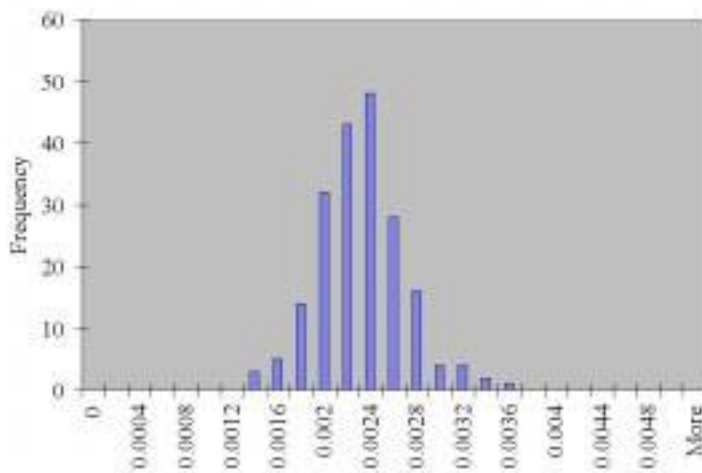


**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



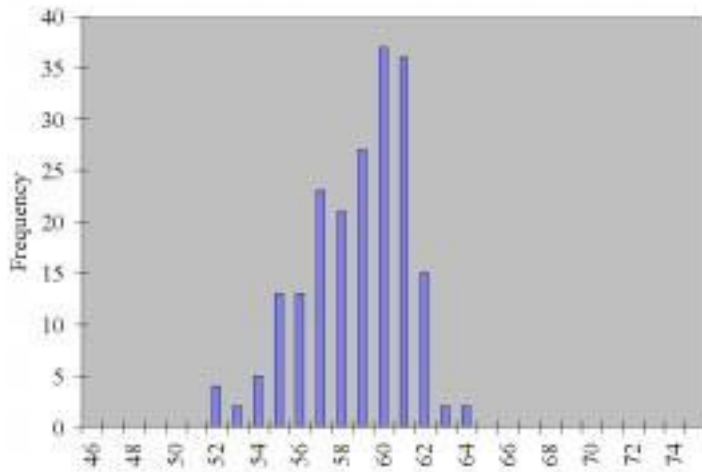
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 82**

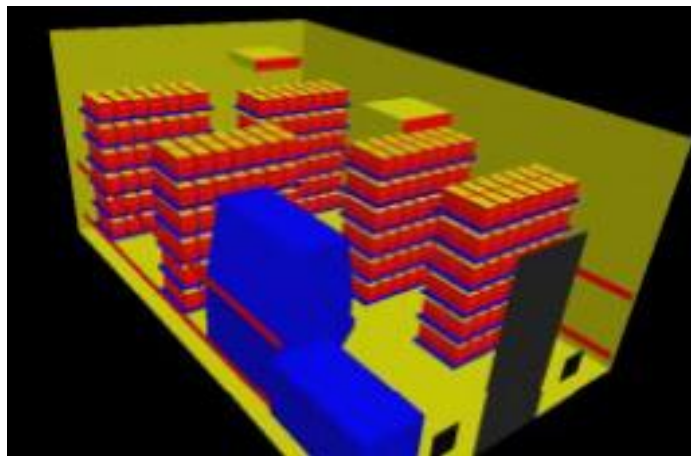
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	18.8	61%	2 Door exhausts	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.29	72.13	1667	61.88%
<b>S.D.</b>	0.53	0.96	419	3.59%
<b>Max.</b>	23.63	74.53	2794	68.39%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.87	1.69	2.60	3.92	5.72	8.06	11.28	14.91	19.35	24.34
<b>Max.</b>	1.46	2.83	4.36	6.58	9.59	13.51	18.91	25.00	32.45	40.81

**Room Breathing Zone**

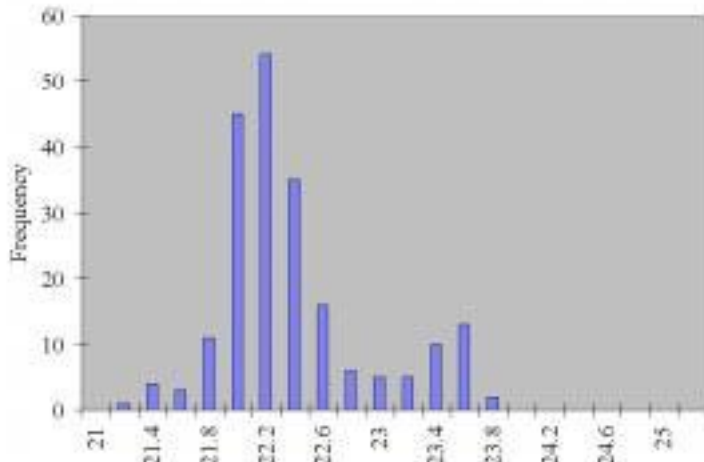
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.26	70.27	116	52.75%
<b>S.D.</b>	0.91	1.64	53	
<b>Max.</b>	27.19	80.94	332	

**Room Breathing Zone NH3 (ppm)**

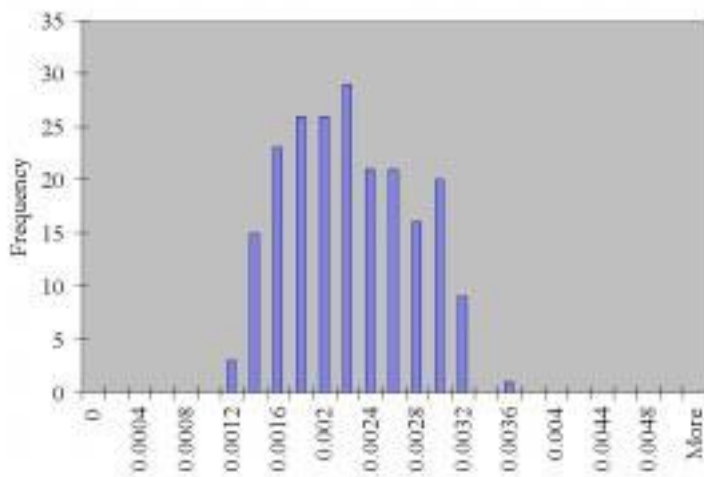
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.06	0.12	0.18	0.27	0.40	0.56	0.79	1.04	1.35	1.70
<b>Max.</b>	0.17	0.34	0.52	0.78	1.14	1.61	2.25	2.97	3.86	4.86

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



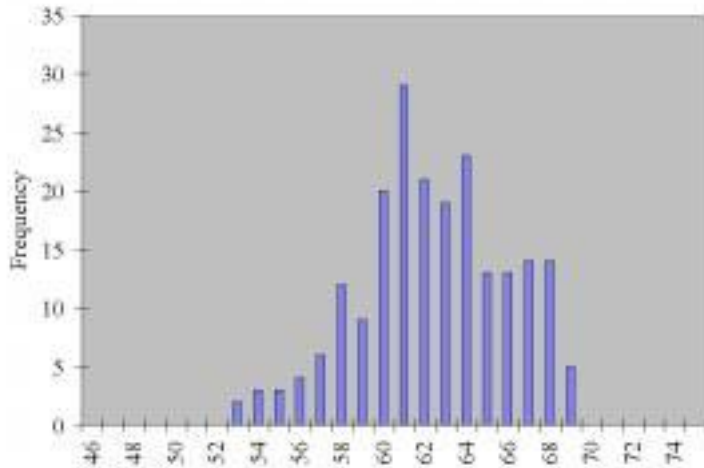
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	410
2	785000	795
3	785000	1225
4	785000	1848
5	785000	2695
6	785000	3795
7	785000	5313
8	785000	7024
9	785000	9115
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



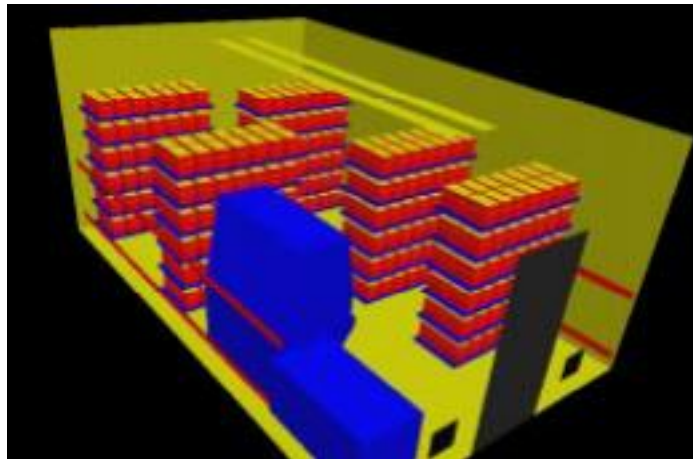
Casename      **Case 83**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Slot	17.5	66%	2 Door exhausts	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	Perp	Double	2100	42000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.20	71.97	1756	66.78%
<b>S.D.</b>	0.66	1.19	477	2.60%
<b>Max.</b>	23.55	74.39	3023	75.06%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.94	1.78	2.74	5.15	8.67	12.87	19.34	24.01	28.75	30.99
<b>Max.</b>	1.61	3.06	4.72	8.87	14.92	22.15	33.31	41.33	49.50	53.35

**Room Breathing Zone**

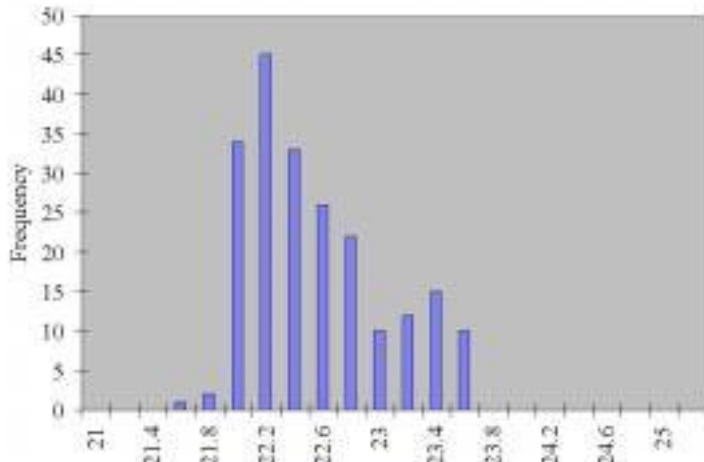
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.44	70.58	167	52.60%
<b>S.D.</b>	0.81	1.46	42	
<b>Max.</b>	26.98	80.56	403	

**Room Breathing Zone NH3 (ppm)**

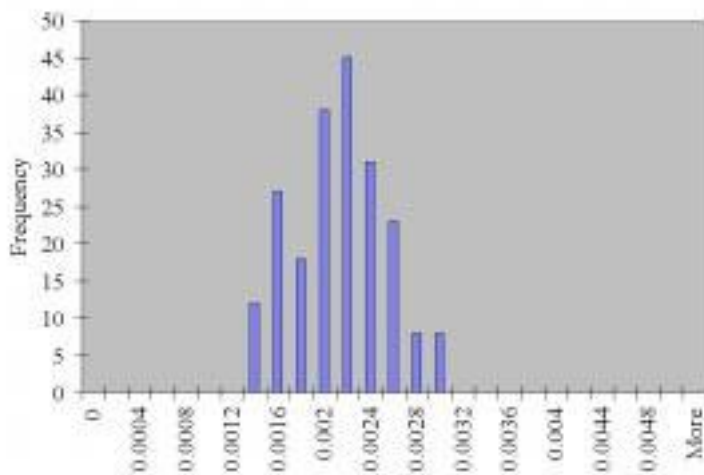
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.09	0.17	0.26	0.49	0.82	1.22	1.84	2.28	2.73	2.94
<b>Max.</b>	0.21	0.41	0.63	1.18	1.99	2.95	4.44	5.51	6.60	7.11

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



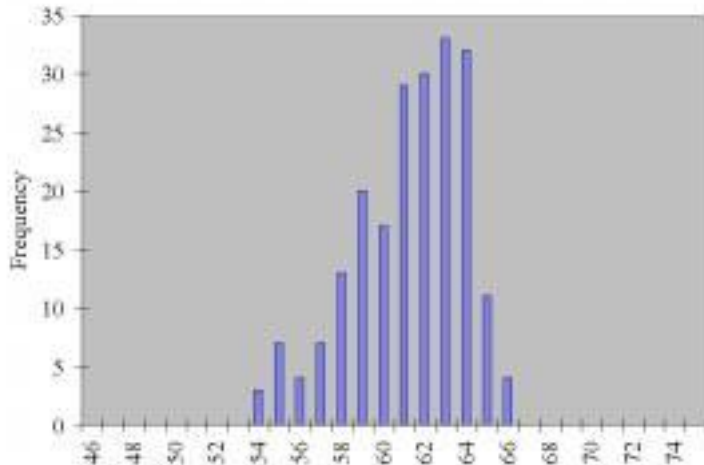
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	418
2	785000	795
3	785000	1225
4	785000	2303
5	785000	3876
6	785000	5752
7	785000	8650
8	785000	10734
9	785000	12856
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 84**

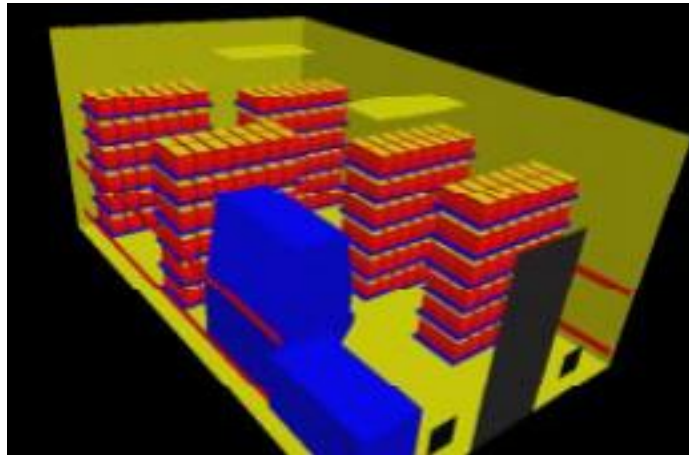
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low Ind	17.5	66%	2 Door exhausts	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	Perp	Double	2100	42000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.48	72.46	1853	60.88%
<b>S.D.</b>	0.48	0.87	443	3.20%
<b>Max.</b>	23.73	74.71	2964	66.31%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.96	1.88	2.89	4.17	5.86	8.13	11.12	15.00	19.93	26.05
<b>Max.</b>	1.54	3.00	4.62	6.67	9.37	13.00	17.79	24.00	31.87	41.66

**Room Breathing Zone**

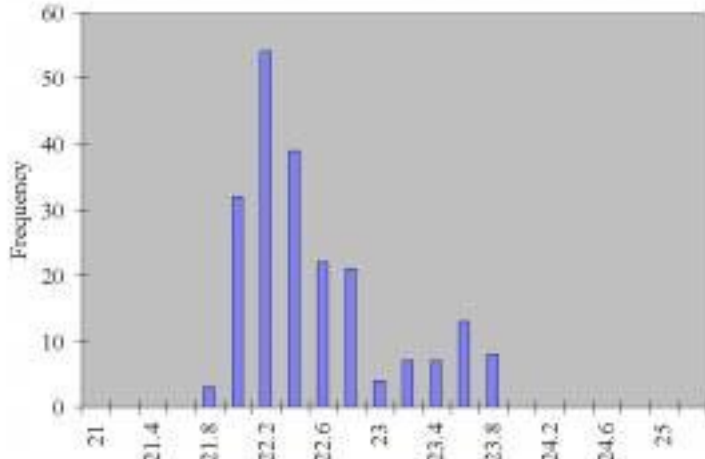
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.48	70.67	152	52.33%
<b>S.D.</b>	0.89	1.60	47	
<b>Max.</b>	26.19	79.14	380	

**Room Breathing Zone NH3 (ppm)**

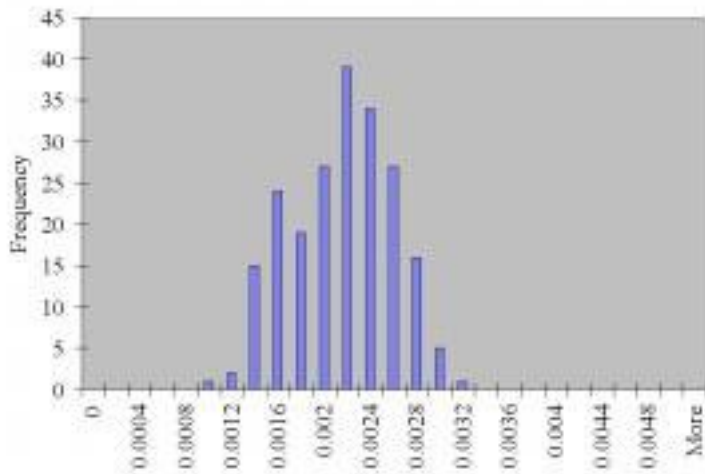
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.08	0.15	0.24	0.34	0.48	0.67	0.91	1.23	1.64	2.14
<b>Max.</b>	0.20	0.38	0.59	0.85	1.20	1.67	2.28	3.07	4.08	5.34

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



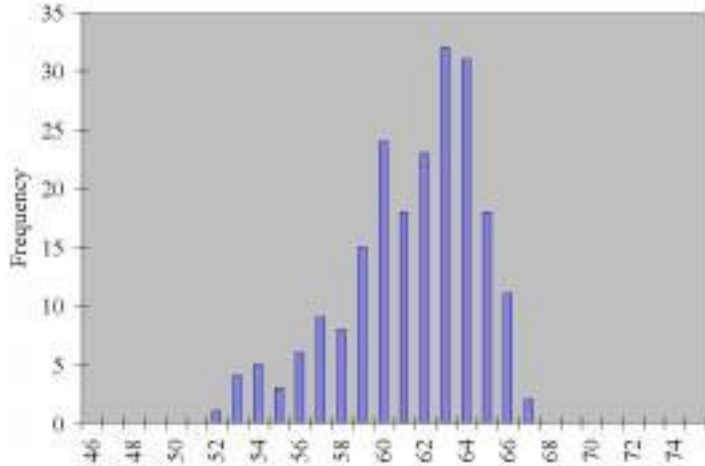
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 85**

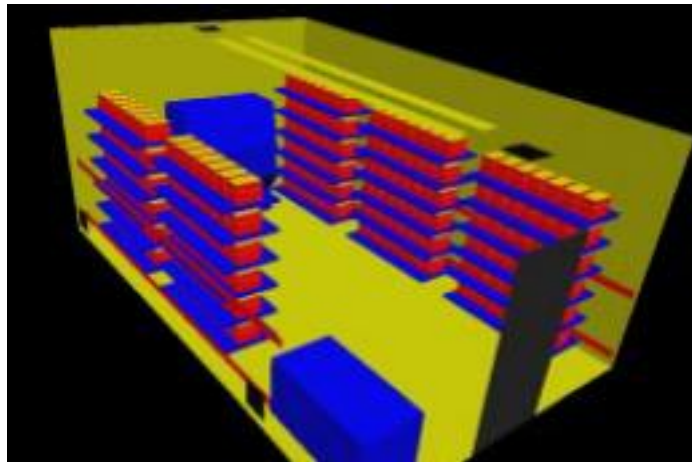
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	17.5	66%	Low	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON alt design	Perp	Double	2100	42000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.37	72.27	1930	62.82%
<b>S.D.</b>	0.31	0.57	425	2.86%
<b>Max.</b>	23.02	73.44	2840	68.68%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	1.01	1.95	3.01	4.76	7.19	10.26	14.64	19.02	24.18	29.32
<b>Max.</b>	1.49	2.87	4.43	7.00	10.57	15.09	21.54	27.99	35.58	43.14

**Room Breathing Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.74	69.33	132	54.66%
<b>S.D.</b>	0.36	0.65	53	
<b>Max.</b>	21.49	70.68	445	

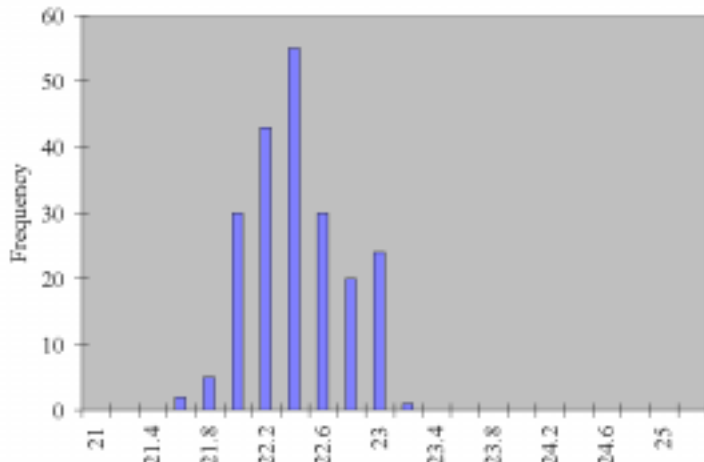
**Room Breathing Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.07	0.13	0.21	0.33	0.49	0.70	1.00	1.30	1.65	2.00
<b>Max.</b>	0.23	0.45	0.69	1.10	1.66	2.36	3.37	4.38	5.57	6.75

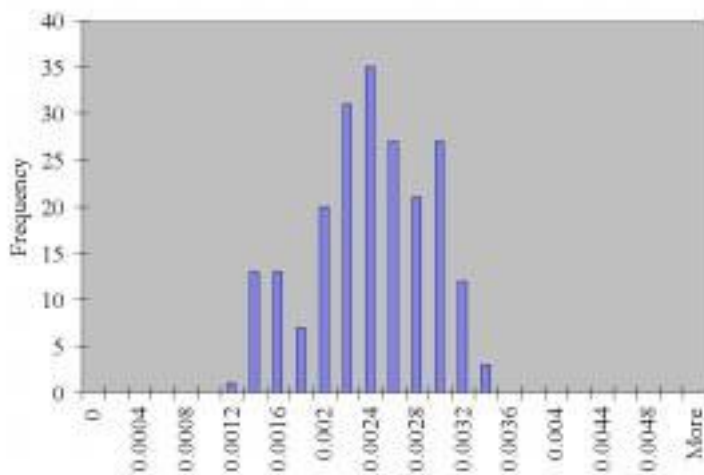


**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



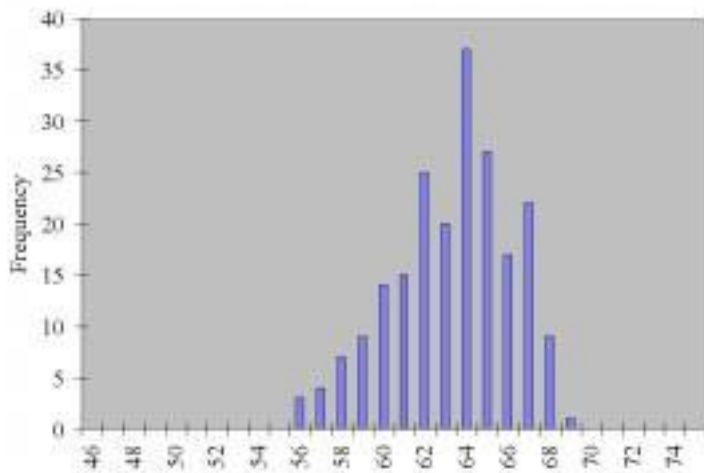
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	411
2	785000	795
3	785000	1225
4	785000	1935
5	785000	2922
6	785000	4171
7	785000	5953
8	785000	7736
9	785000	9833
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 86**

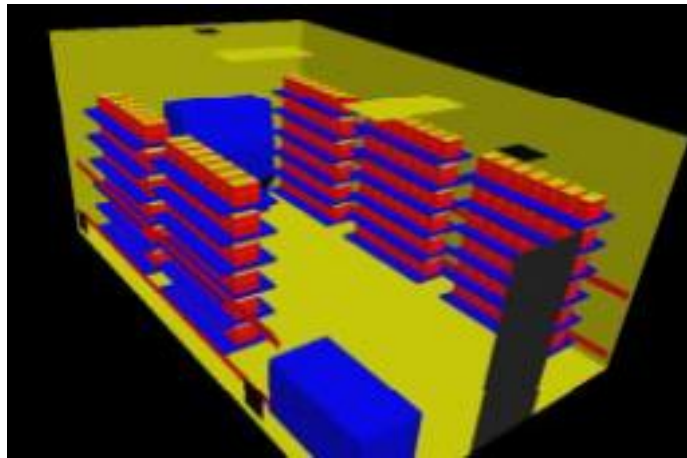
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Slot	17.5	66%	Low	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON alt design	Perp	Double	2100	42000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.30	72.13	1917	62.01%
<b>S.D.</b>	0.45	0.81	554	3.29%
<b>Max.</b>	23.25	73.84	3249	72.05%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	1.00	1.94	2.99	4.54	6.66	9.39	13.19	17.39	22.50	28.15
<b>Max.</b>	1.70	3.29	5.07	7.70	11.28	15.92	22.35	29.47	38.13	47.71

**Room Breathing Zone**

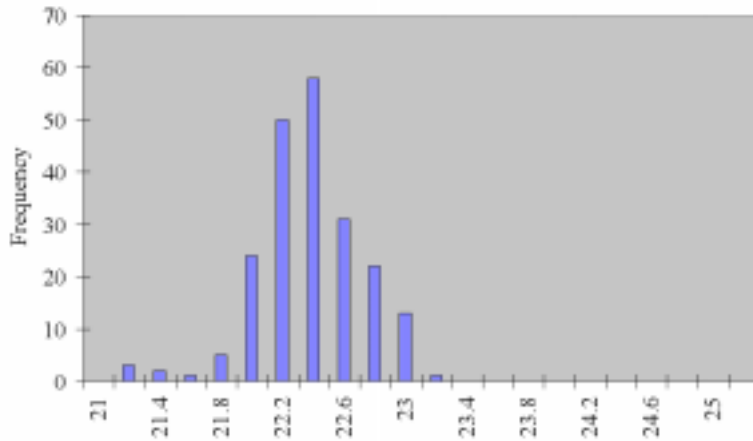
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.18	70.13	124	53.08%
<b>S.D.</b>	0.44	0.79	67	
<b>Max.</b>	22.27	72.08	374	

**Room Breathing Zone NH3 (ppm)**

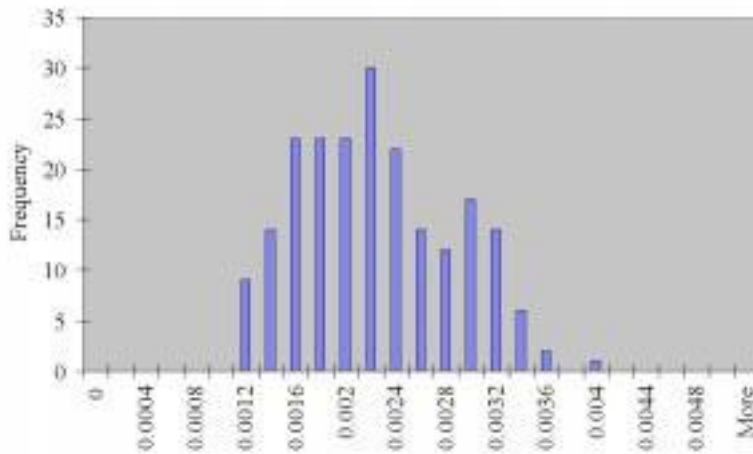
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.06	0.13	0.19	0.29	0.43	0.61	0.85	1.13	1.46	1.82
<b>Max.</b>	0.20	0.38	0.58	0.89	1.30	1.83	2.57	3.39	4.39	5.49

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



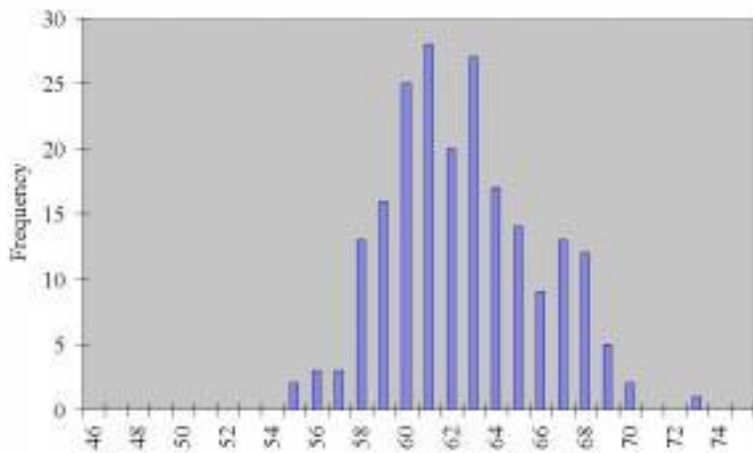
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	410
2	785000	795
3	785000	1225
4	785000	1859
5	785000	2726
6	785000	3846
7	785000	5400
8	785000	7121
9	785000	9213
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



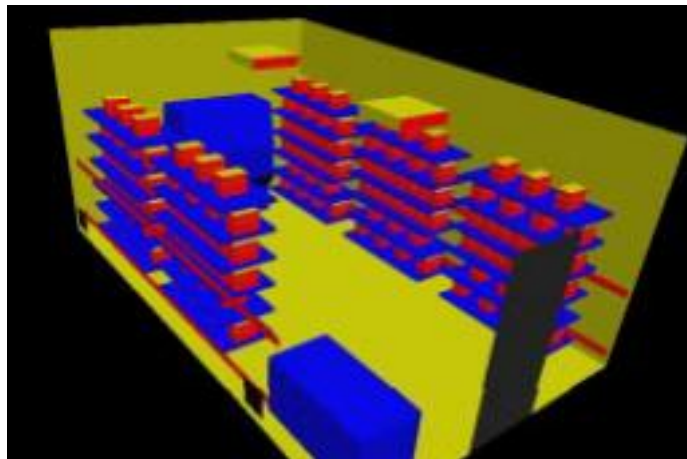
Casename **Case 87**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	19.2	59%	Low	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Reduced	700	14000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.65	72.77	1391	55.84%
<b>S.D.</b>	4.31	7.76	455	3.11%
<b>Max.</b>	24.56	76.21	2638	64.18%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.72	1.41	2.17	3.13	4.40	6.10	8.35	11.26	14.96	19.55
<b>Max.</b>	1.37	2.67	4.12	5.93	8.34	11.57	15.84	21.36	28.37	37.09

**Room Breathing Zone**

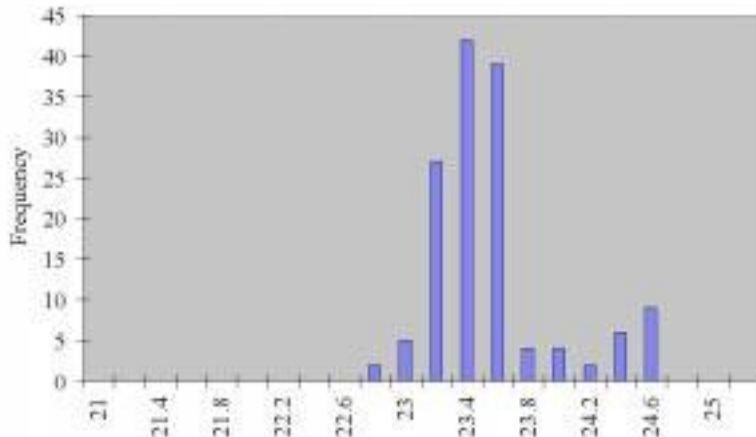
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.45	72.41	45	48.38%
<b>S.D.</b>	0.39	0.71	17	
<b>Max.</b>	23.63	74.53	134	

**Room Breathing Zone NH3 (ppm)**

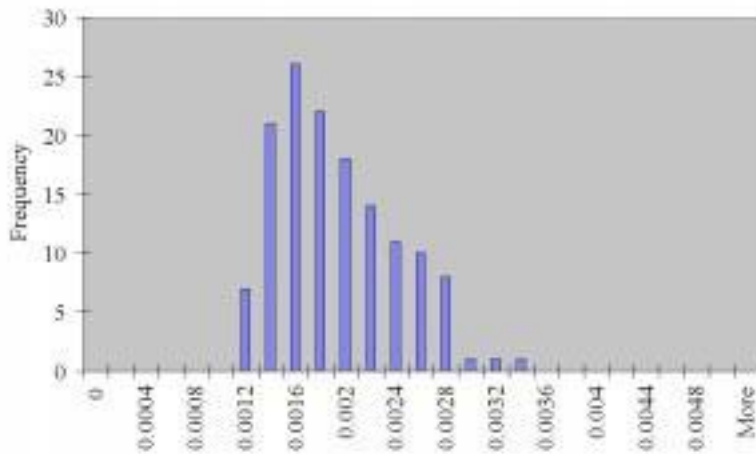
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.02	0.05	0.07	0.10	0.14	0.20	0.27	0.36	0.48	0.63
<b>Max.</b>	0.07	0.14	0.21	0.30	0.42	0.59	0.81	1.09	1.44	1.89

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



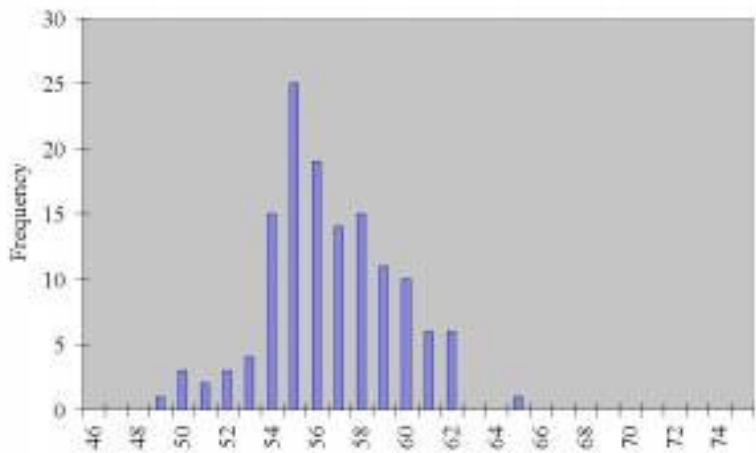
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



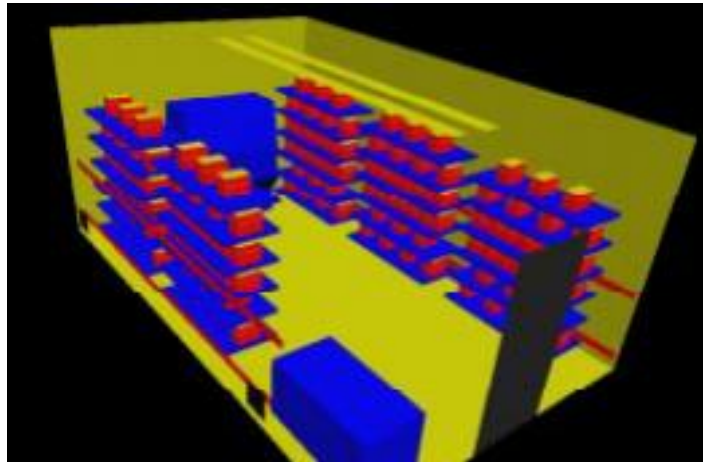
Casename      **Case 88**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Slot	19.2	59%	Low	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Reduced	700	14000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	23.55	74.39	1550	56.31%
<b>S.D.</b>	0.39	0.70	378	2.71%
<b>Max.</b>	24.53	76.16	2516	63.30%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.81	1.57	2.42	3.49	4.90	6.80	9.30	12.55	16.67	21.78
<b>Max.</b>	1.31	2.55	3.93	5.66	7.96	11.04	15.10	20.37	27.06	35.37

**Room Breathing Zone**

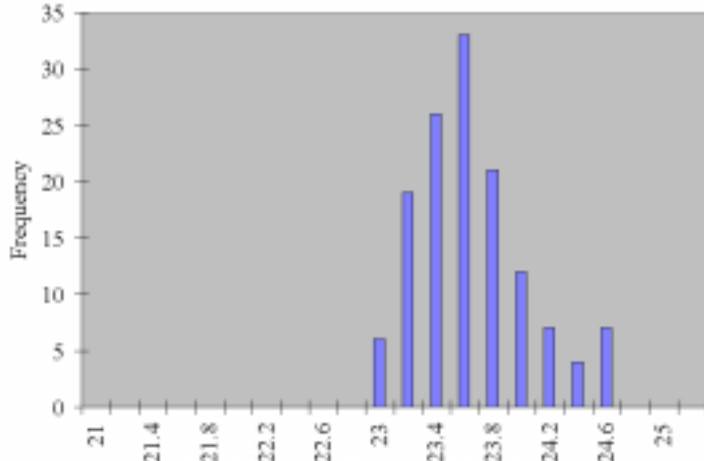
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.56	72.61	48	48.07%
<b>S.D.</b>	0.44	0.79	11	
<b>Max.</b>	23.62	74.52	86	

**Room Breathing Zone NH3 (ppm)**

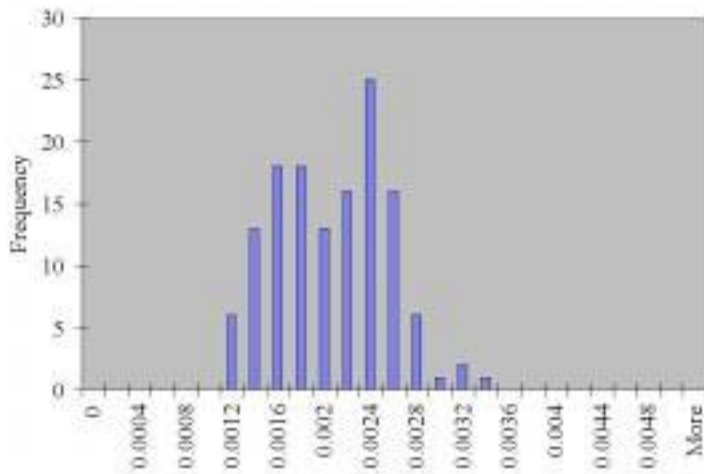
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.02	0.05	0.07	0.11	0.15	0.21	0.29	0.39	0.51	0.67
<b>Max.</b>	0.04	0.09	0.13	0.19	0.27	0.38	0.51	0.69	0.92	1.21

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



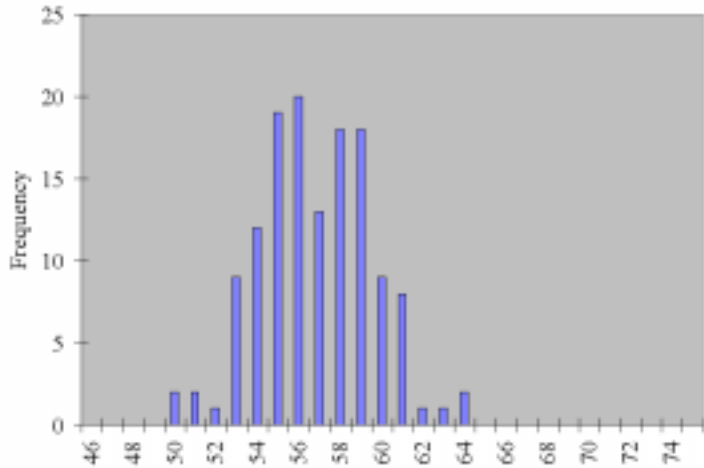
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 89**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low Ind	19.2	59%	Low	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Reduced	700	14000 gr	neg 100cfm

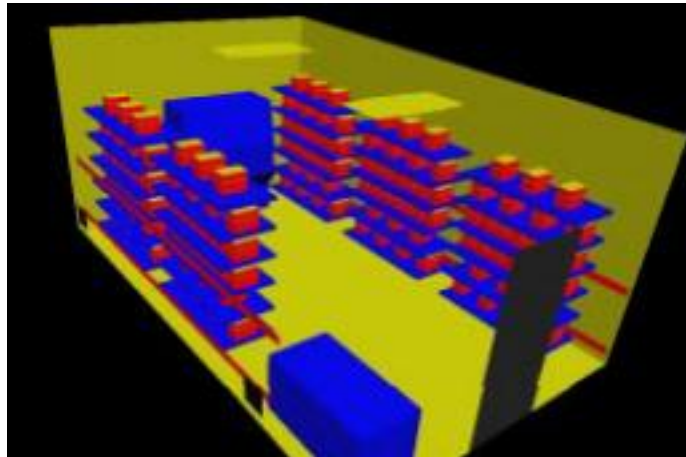
**Room**

**ACH**

15

**Cage Condition**

Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	23.68	74.62	1636	56.53%
<b>S.D.</b>	0.44	0.80	374	3.10%
<b>Max.</b>	24.92	76.86	2599	63.57%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.85	1.66	2.55	3.68	5.17	7.17	9.82	13.25	17.59	23.00
<b>Max.</b>	1.35	2.63	4.05	5.85	8.22	11.40	15.60	21.04	27.95	36.53

**Room Breathing Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	22.92	73.26	62	47.10%
<b>S.D.</b>	0.55	1.00	21	
<b>Max.</b>	24.09	75.36	217	

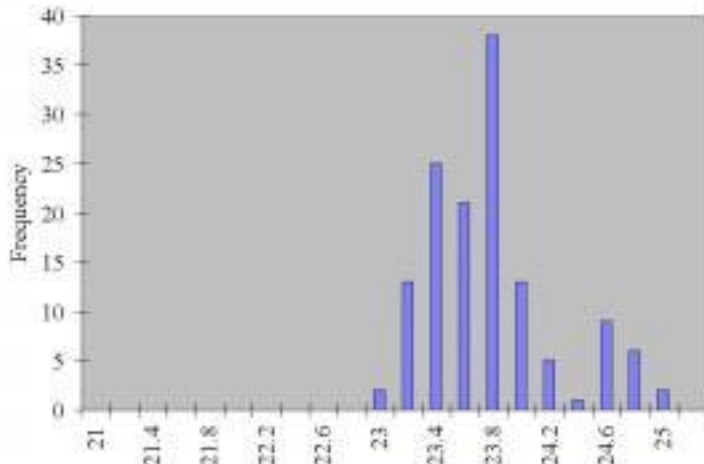
**Room Breathing Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.03	0.06	0.10	0.14	0.20	0.27	0.37	0.50	0.67	0.87
<b>Max.</b>	0.11	0.22	0.34	0.49	0.69	0.95	1.30	1.75	2.33	3.04

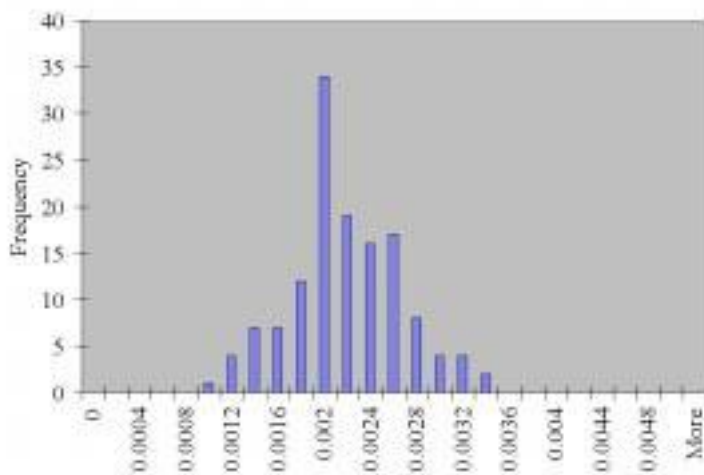


**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



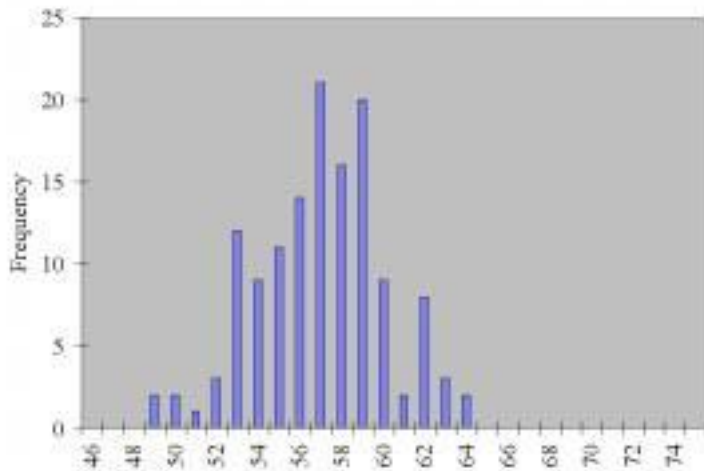
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 90**

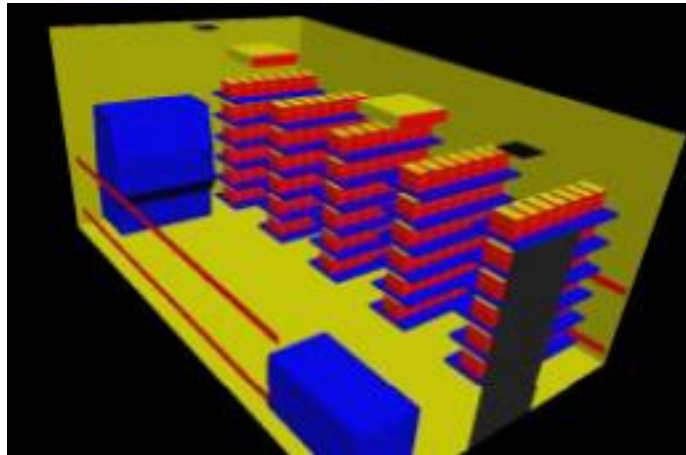
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	18.8	61%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	Perp all 5 on 1 wall	Single	1050	21000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.93	71.47	1673	63.32%
<b>S.D.</b>	0.29	0.52	385	2.63%
<b>Max.</b>	22.36	72.24	2511	69.19%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.88	1.69	2.61	4.22	6.48	9.32	13.41	17.29	21.77	25.93
<b>Max.</b>	1.32	2.54	3.92	6.34	9.73	13.98	20.13	25.96	32.68	38.92

**Room Breathing Zone**

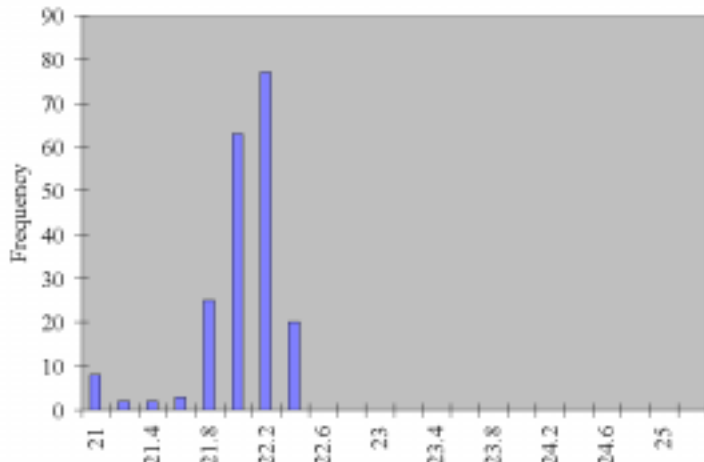
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.38	68.69	72	55.37%
<b>S.D.</b>	0.23	0.41	29	
<b>Max.</b>	21.75	71.15	279	

**Room Breathing Zone NH3 (ppm)**

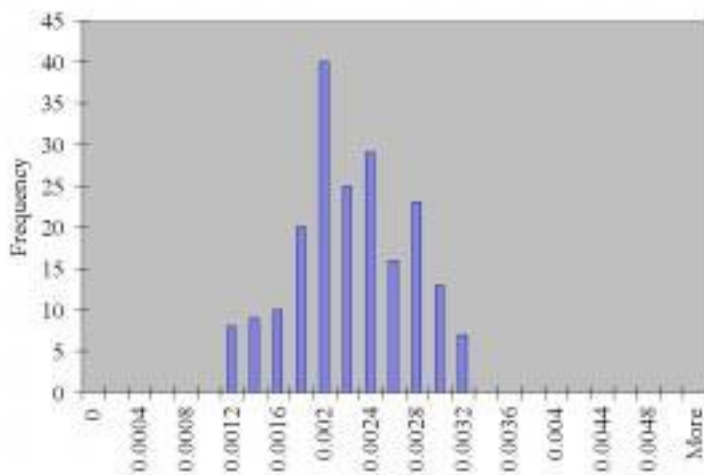
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.04	0.07	0.11	0.18	0.28	0.40	0.57	0.74	0.93	1.11
<b>Max.</b>	0.15	0.28	0.44	0.70	1.08	1.55	2.24	2.89	3.63	4.33

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



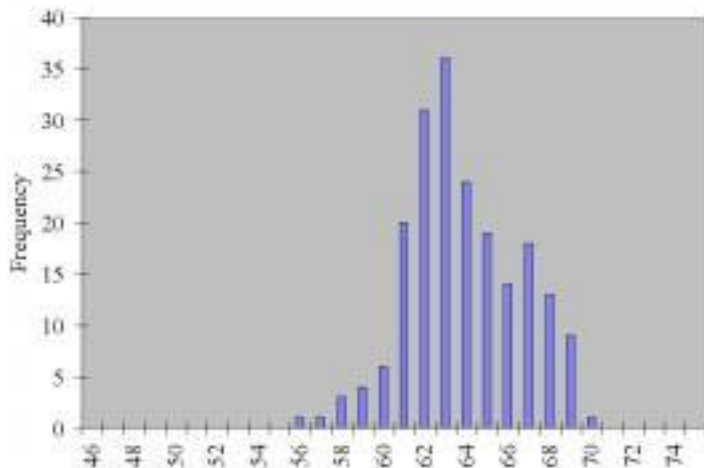
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	412
2	785000	795
3	785000	1225
4	785000	1982
5	785000	3043
6	785000	4371
7	785000	6295
8	785000	8116
9	785000	10216
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 91**

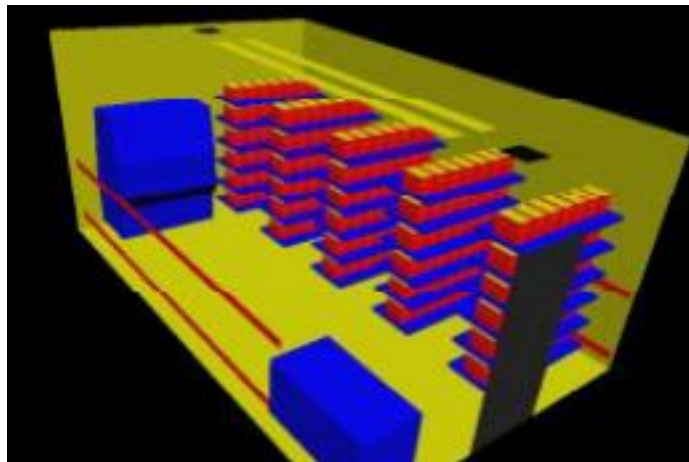
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Slot	18.8	61%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	Perp all 5 on 1 wall	Single	1050	21000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.99	71.58	1709	63.38%
<b>S.D.</b>	0.30	0.54	381	2.49%
<b>Max.</b>	22.59	72.67	2643	69.86%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.90	1.73	2.67	4.33	6.65	9.57	13.79	17.76	22.33	26.55
<b>Max.</b>	1.39	2.68	4.12	6.69	10.29	14.79	21.32	27.47	34.54	41.07

**Room Breathing Zone**

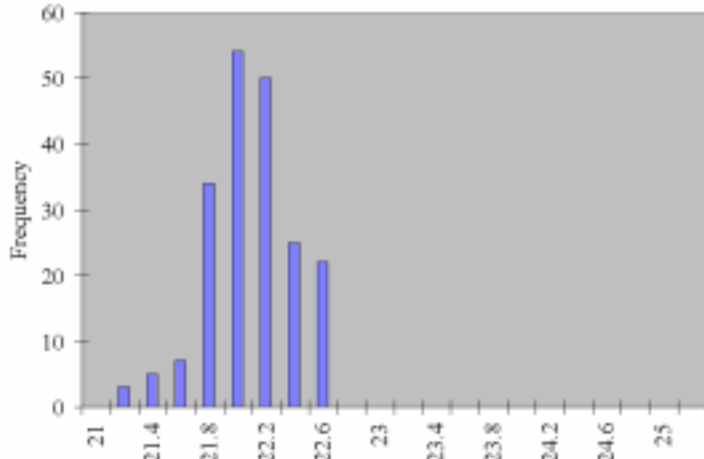
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.46	68.83	57	54.97%
<b>S.D.</b>	0.25	0.44	19	
<b>Max.</b>	21.66	70.99	183	

**Room Breathing Zone NH3 (ppm)**

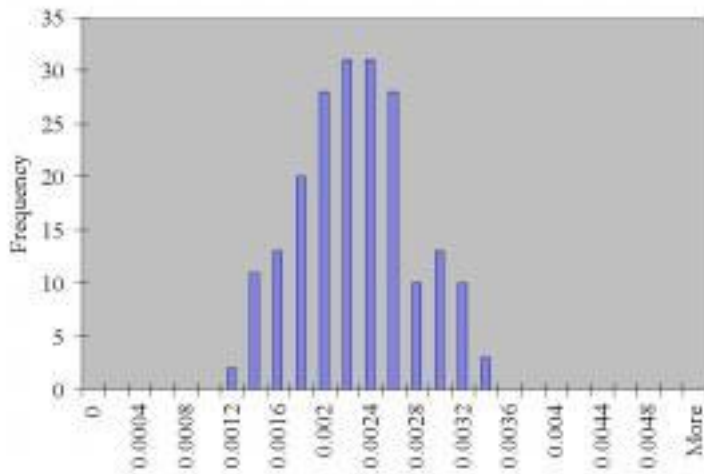
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.03	0.06	0.09	0.14	0.22	0.32	0.46	0.59	0.75	0.89
<b>Max.</b>	0.10	0.19	0.29	0.46	0.71	1.03	1.48	1.90	2.39	2.85

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



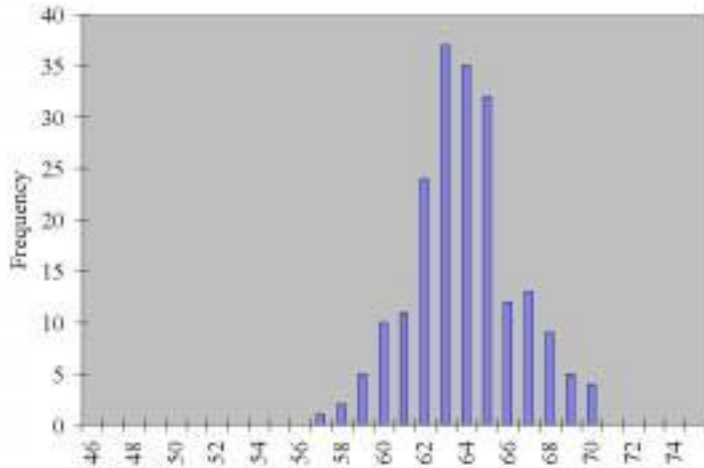
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	412
2	785000	795
3	785000	1225
4	785000	1987
5	785000	3056
6	785000	4394
7	785000	6333
8	785000	8158
9	785000	10259
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 92**

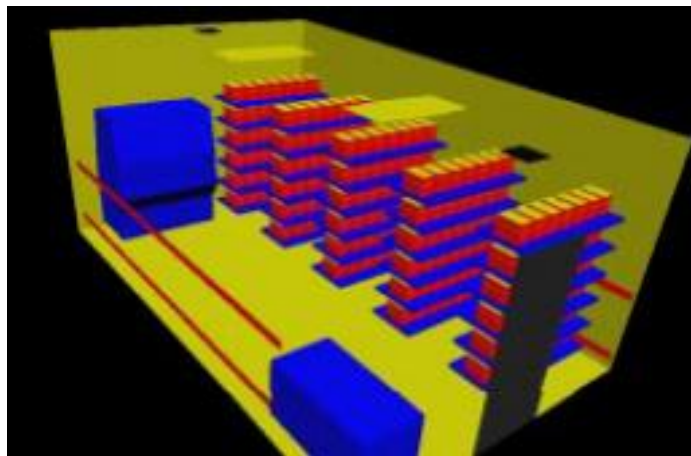
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low Ind	18.8	61%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	Perp all 5 on 1 wall	Single	1050	21000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.98	71.56	1631	62.80%
<b>S.D.</b>	0.31	0.56	314	2.29%
<b>Max.</b>	22.58	72.65	2404	69.73%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.86	1.65	2.55	4.02	6.06	8.65	12.33	16.04	20.39	24.75
<b>Max.</b>	1.26	2.43	3.75	5.92	8.93	12.74	18.18	23.63	30.06	36.48

**Room Breathing Zone**

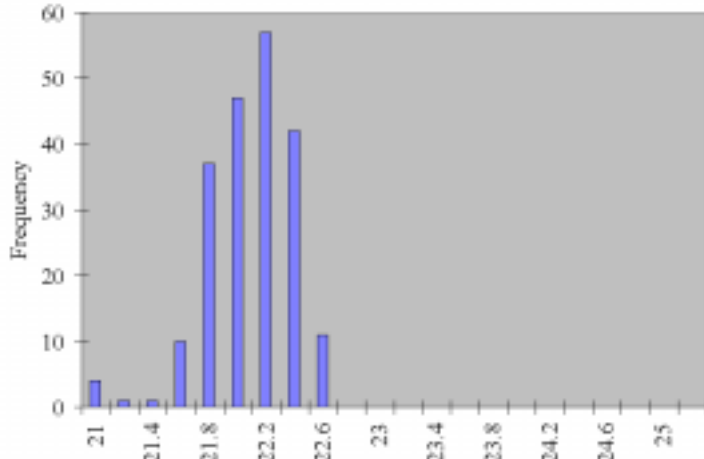
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.40	68.71	41	55.05%
<b>S.D.</b>	0.17	0.30	15	
<b>Max.</b>	20.95	69.70	151	

**Room Breathing Zone NH3 (ppm)**

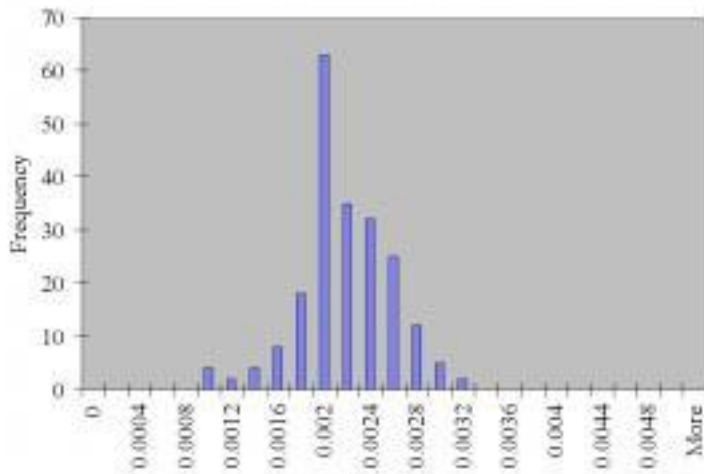
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.02	0.04	0.06	0.10	0.15	0.22	0.31	0.41	0.52	0.63
<b>Max.</b>	0.08	0.15	0.24	0.37	0.56	0.80	1.14	1.48	1.88	2.29

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



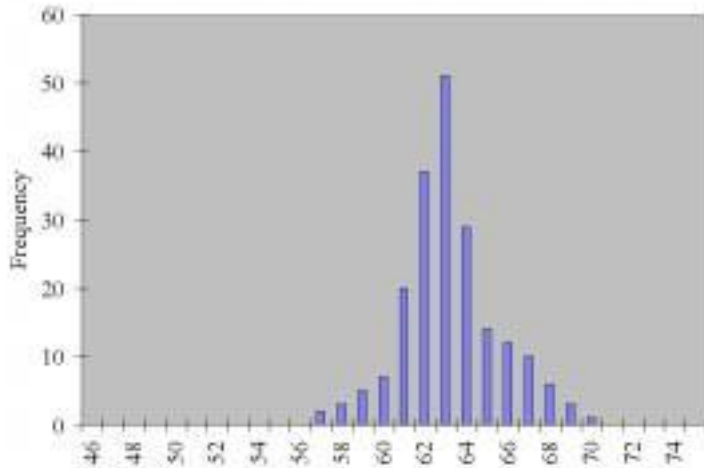
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	411
2	785000	795
3	785000	1225
4	785000	1933
5	785000	2916
6	785000	4161
7	785000	5936
8	785000	7716
9	785000	9814
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 93**

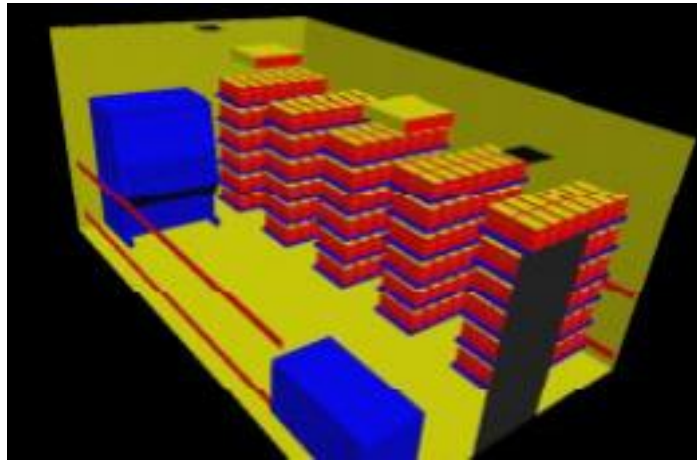
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	17.5	66%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	Perp all 5 on 1 wall	Double	2100	42000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.94	71.49	1822	65.04%
<b>S.D.</b>	0.37	0.66	402	2.43%
<b>Max.</b>	22.66	72.79	2780	69.72%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.96	1.84	2.84	4.97	8.02	11.74	17.32	21.85	26.75	30.18
<b>Max.</b>	1.47	2.81	4.34	7.58	12.24	17.91	26.44	33.35	40.83	46.07

**Room Breathing Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.26	68.47	86	55.93%
<b>S.D.</b>	0.52	0.94	399	
<b>Max.</b>	30.00	86.00	361	

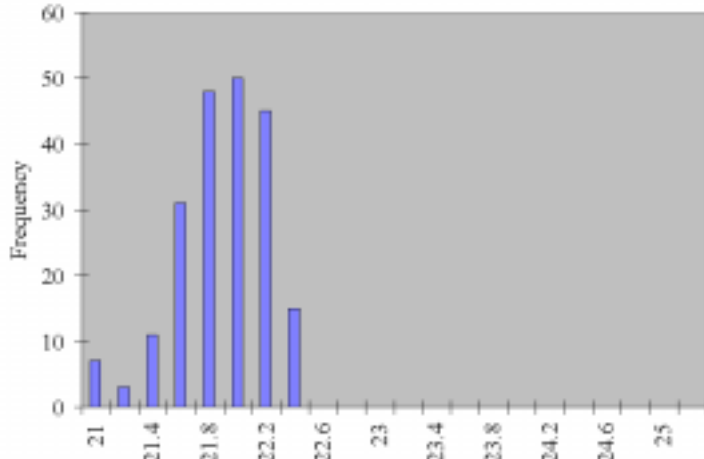
**Room Breathing Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.05	0.09	0.13	0.24	0.38	0.56	0.82	1.04	1.27	1.43
<b>Max.</b>	0.19	0.37	0.56	0.98	1.59	2.33	3.43	4.33	5.30	5.98

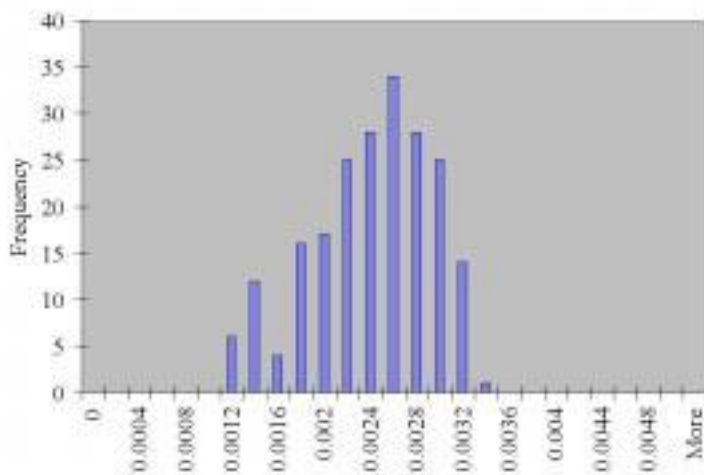


**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



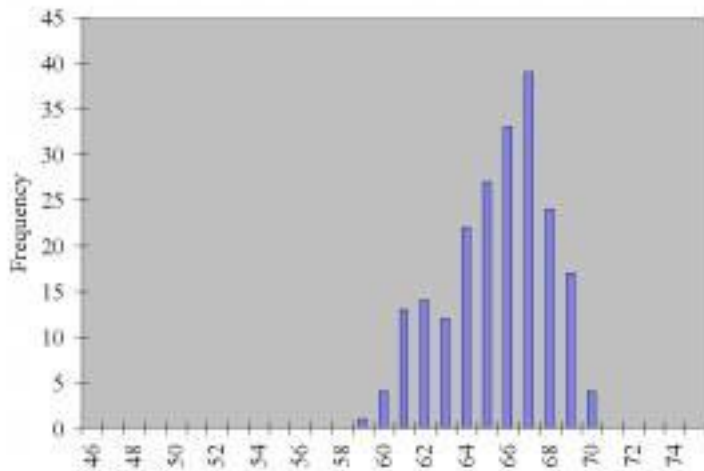
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	415
2	785000	795
3	785000	1225
4	785000	2141
5	785000	3457
6	785000	5058
7	785000	7466
8	785000	9418
9	785000	11529
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 94**

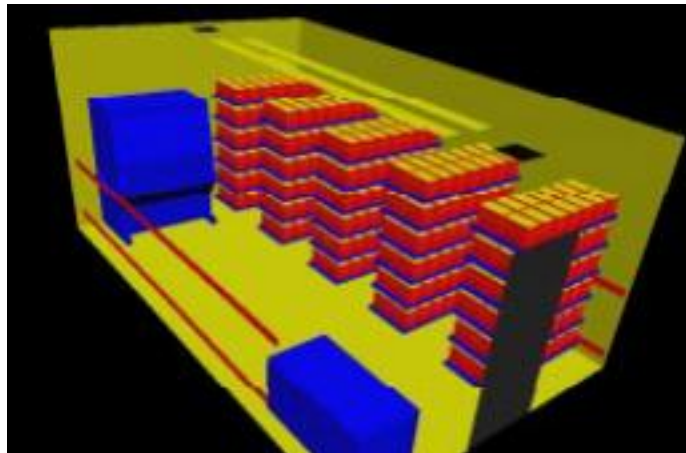
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Slot	17.5	66%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	Perp all 5 on 1 wall	Double	2100	42000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.85	71.34	1757	64.38%
<b>S.D.</b>	0.39	0.71	395	2.10%
<b>Max.</b>	22.72	72.89	2734	69.23%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.93	1.78	2.74	4.66	7.38	10.73	15.71	19.97	24.68	28.40
<b>Max.</b>	1.44	2.77	4.27	7.24	11.49	16.70	24.44	31.06	38.40	44.18

**Room Breathing Zone**

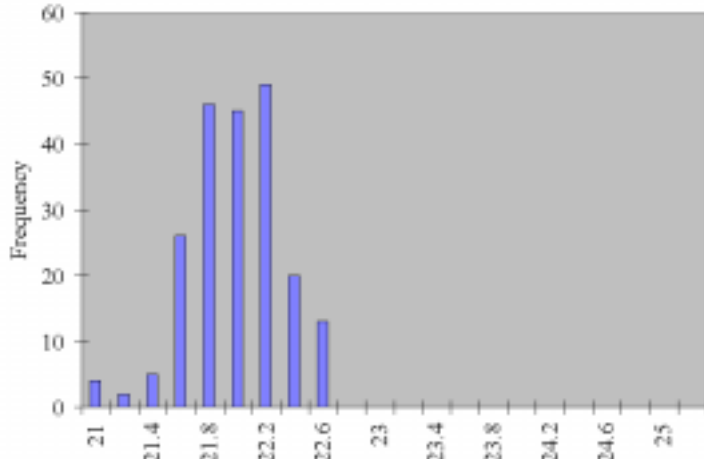
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.23	68.41	117	56.34%
<b>S.D.</b>	0.26	0.46	36	
<b>Max.</b>	20.69	69.24	328	

**Room Breathing Zone NH3 (ppm)**

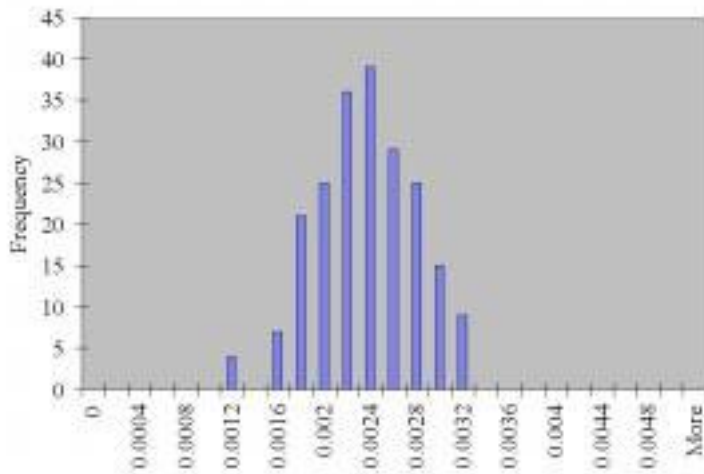
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.06	0.12	0.18	0.31	0.49	0.71	1.04	1.33	1.64	1.89
<b>Max.</b>	0.17	0.33	0.51	0.87	1.38	2.01	2.94	3.73	4.61	5.31

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



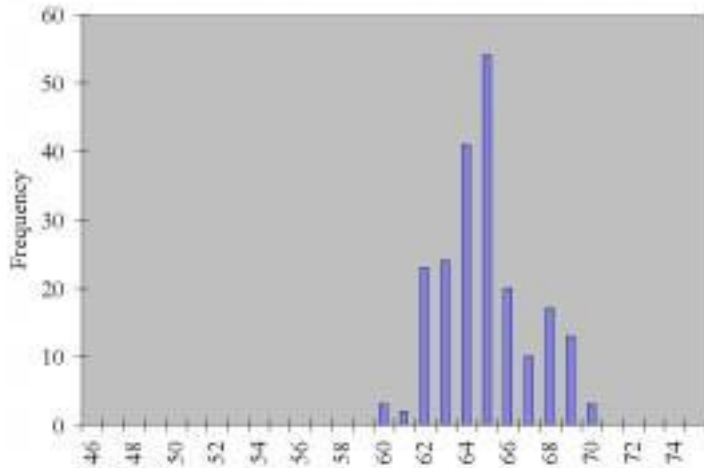
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	414
2	785000	795
3	785000	1225
4	785000	2080
5	785000	3299
6	785000	4795
7	785000	7017
8	785000	8919
9	785000	11026
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



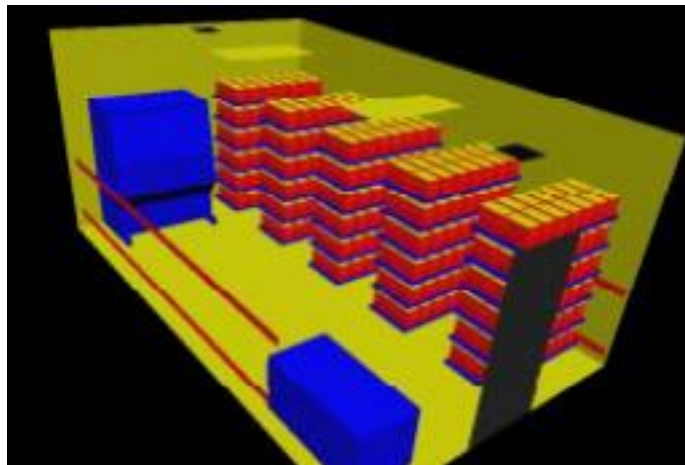
Casename      **Case 95**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low Ind	17.5	66%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	Perp all 5 on 1 wall	Double	2100	42000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.94	71.49	1822	64.10%
<b>S.D.</b>	0.37	0.66	402	2.75%
<b>Max.</b>	22.66	72.79	2780	70.20%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.96	1.84	2.84	4.77	7.50	10.87	15.84	20.21	25.09	29.12
<b>Max.</b>	1.47	2.81	4.34	7.28	11.44	16.59	24.18	30.84	38.30	44.45

**Room Breathing Zone**

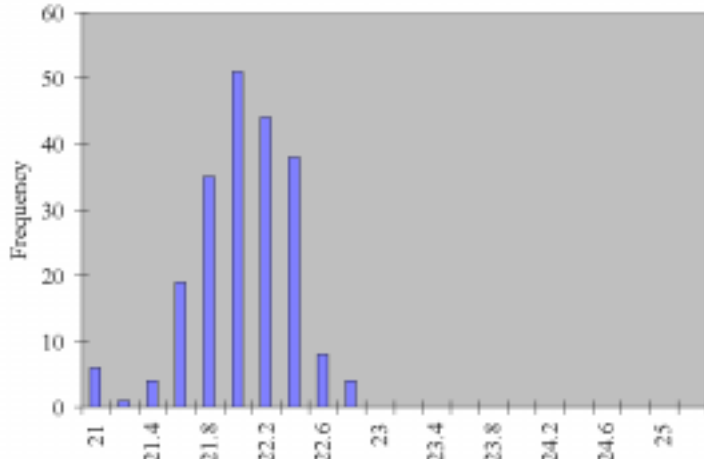
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.23	68.42	69	55.88%
<b>S.D.</b>	0.25	0.45	34	
<b>Max.</b>	20.79	69.42	281	

**Room Breathing Zone NH3 (ppm)**

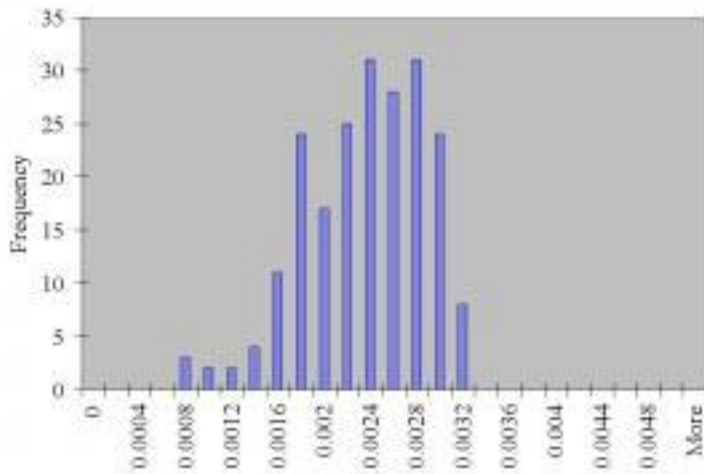
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.04	0.07	0.11	0.18	0.29	0.41	0.60	0.77	0.96	1.11
<b>Max.</b>	0.15	0.28	0.44	0.74	1.16	1.68	2.44	3.12	3.87	4.49

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



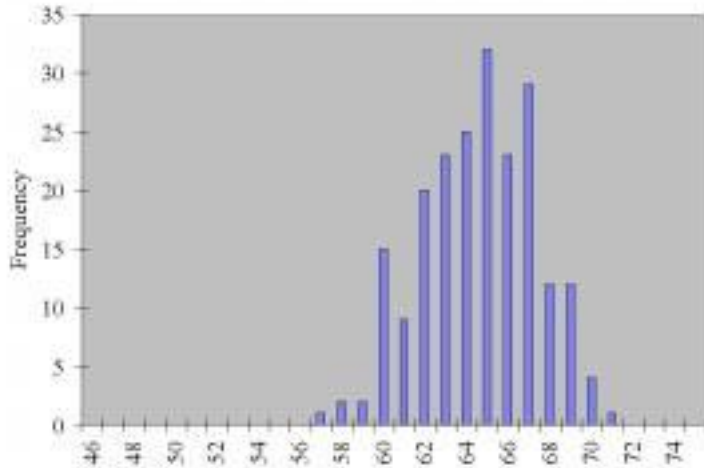
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	414
2	785000	795
3	785000	1225
4	785000	2054
5	785000	3231
6	785000	4684
7	785000	6827
8	785000	8708
9	785000	10814
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



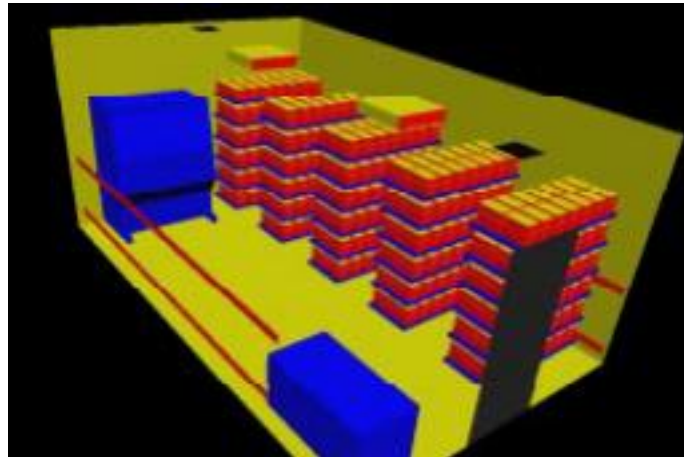
Casename      **Case 96**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	17.5	66%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON alt design	Perp all 5 on 1 wall	Double	2100	42000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.76	71.17	1957	65.79%
<b>S.D.</b>	0.34	0.61	459	2.90%
<b>Max.</b>	22.32	72.17	2763	71.27%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	1.04	1.98	3.05	5.51	9.06	13.35	19.87	24.88	30.15	33.32
<b>Max.</b>	1.47	2.80	4.31	7.78	12.80	18.85	28.06	35.12	42.57	47.05

**Room Breathing Zone**

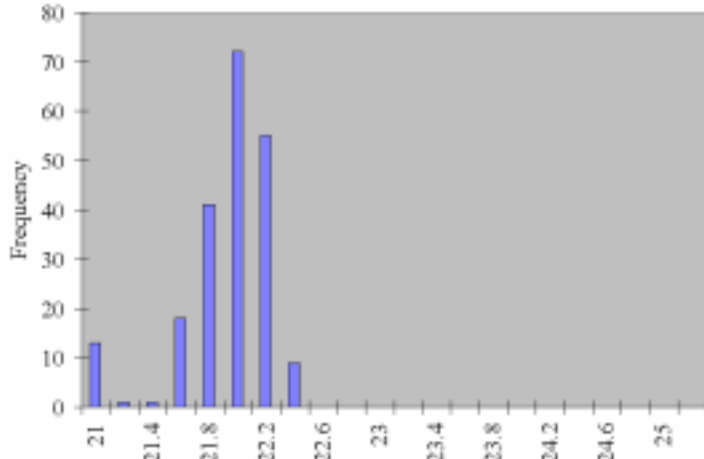
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.01	68.02	100	56.95%
<b>S.D.</b>	0.27	0.48	41	
<b>Max.</b>	20.70	69.26	280	

**Room Breathing Zone NH3 (ppm)**

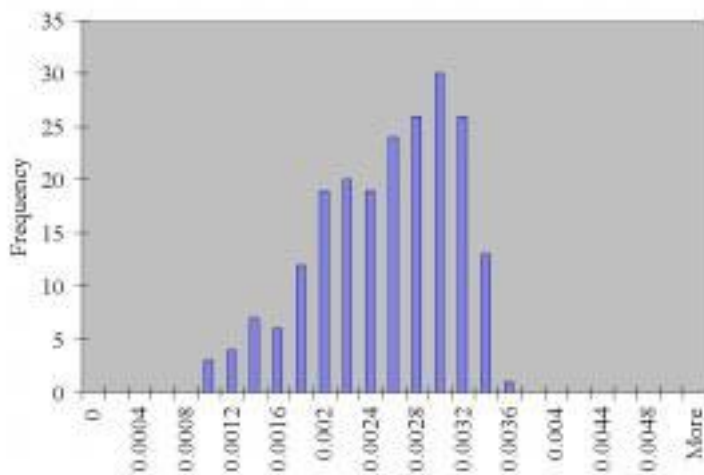
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.05	0.10	0.16	0.28	0.46	0.68	1.01	1.27	1.54	1.70
<b>Max.</b>	0.15	0.28	0.44	0.79	1.30	1.91	2.85	3.56	4.32	4.77

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



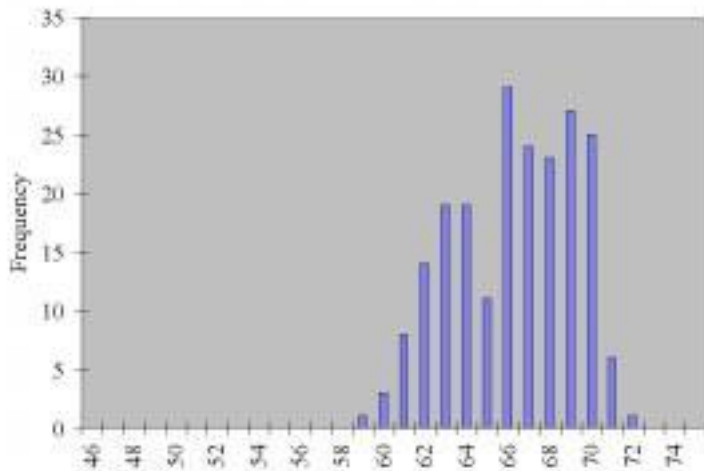
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	417
2	785000	795
3	785000	1225
4	785000	2210
5	785000	3636
6	785000	5355
7	785000	7972
8	785000	9981
9	785000	12097
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



Casename      **Case 97**

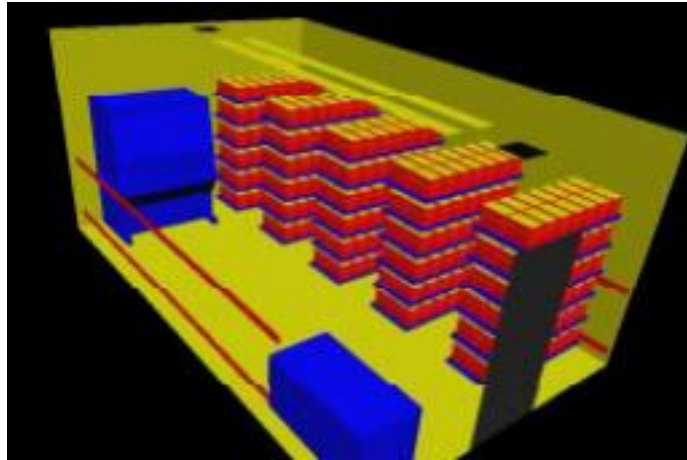
**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Slot	17.5	66%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON alt design	Perp all 5 on 1 wall	Double	2100	42000 gr	neg 100cfm

**Room**

**ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.65	70.97	1725	64.22%
<b>S.D.</b>	0.32	0.58	427	2.16%
<b>Max.</b>	22.29	72.12	2885	69.99%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.91	1.75	2.69	4.54	7.16	10.39	15.18	19.33	23.96	27.70
<b>Max.</b>	1.52	2.92	4.50	7.59	11.98	17.39	25.38	32.33	40.07	46.34

**Room Breathing Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	20.02	68.03	111	57.04%
<b>S.D.</b>	0.25	0.45	29	
<b>Max.</b>	20.78	69.40	294	

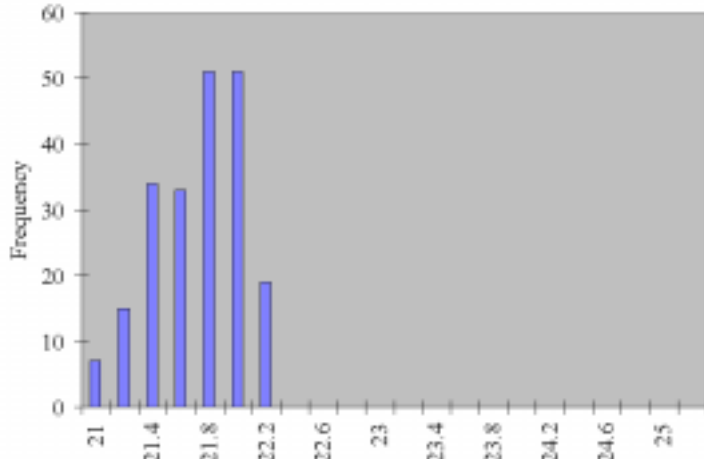
**Room Breathing Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.06	0.11	0.17	0.29	0.46	0.67	0.98	1.25	1.54	1.79
<b>Max.</b>	0.15	0.30	0.46	0.77	1.22	1.77	2.59	3.29	4.08	4.72

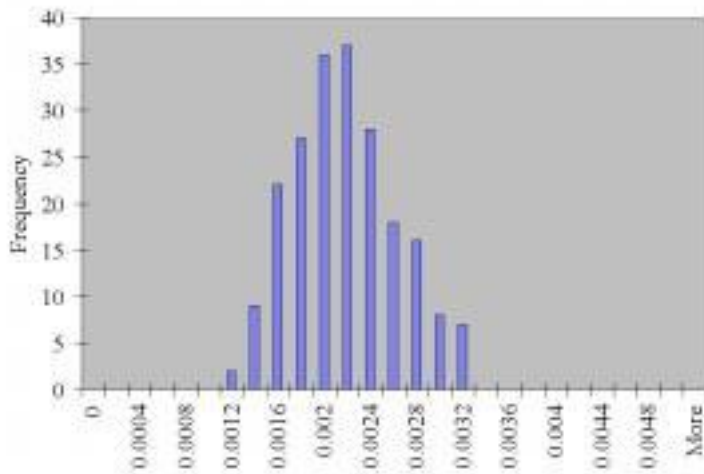


**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



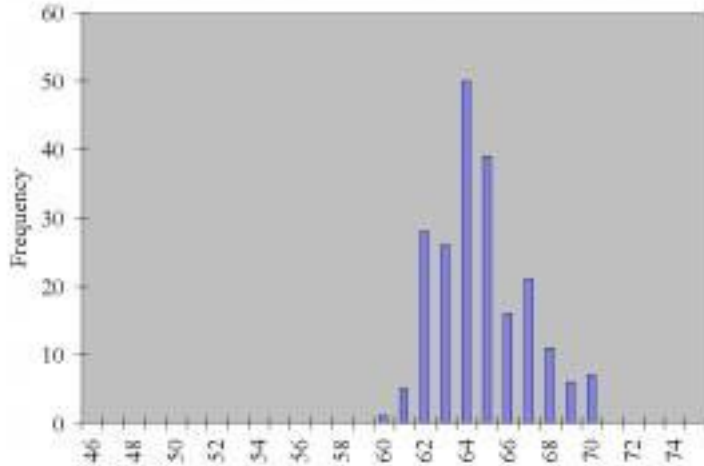
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	414
2	785000	795
3	785000	1225
4	785000	2065
5	785000	3259
6	785000	4730
7	785000	6907
8	785000	8796
9	785000	10902
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



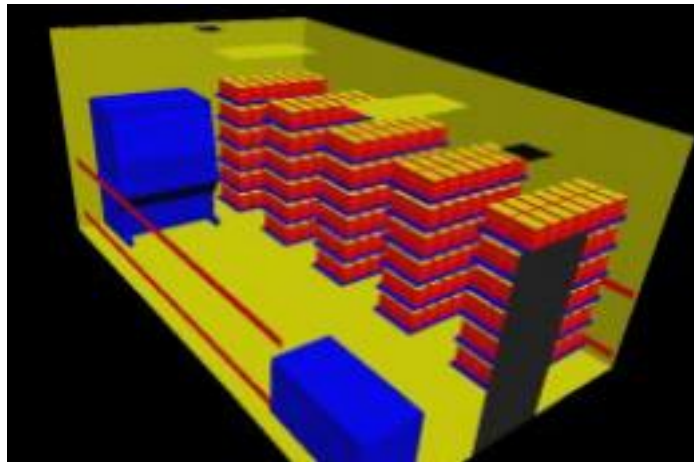
Casename      **Case 98**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low ind	17.5	66%	Ceiling	22	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON alt design	Perp all 5 on 1 wall	Double	2100	42000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	21.70	71.07	1955	65.78%
<b>S.D.</b>	0.30	0.54	428	3.05%
<b>Max.</b>	22.30	72.13	2712	73.07%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	1.04	1.98	3.05	5.50	9.05	13.33	19.85	24.85	30.12	33.29
<b>Max.</b>	1.44	2.74	4.23	7.64	12.56	18.50	27.54	34.48	41.79	46.19

**Room Breathing Zone**

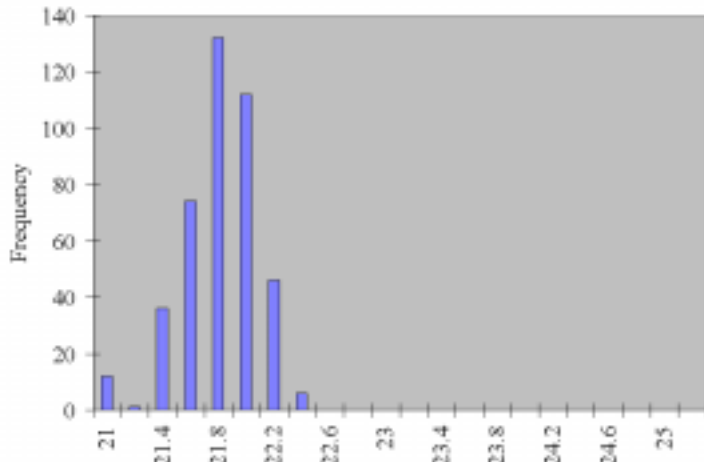
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	19.99	67.98	83	56.88%
<b>S.D.</b>	0.20	0.35	47	
<b>Max.</b>	20.65	69.17	334	

**Room Breathing Zone NH3 (ppm)**

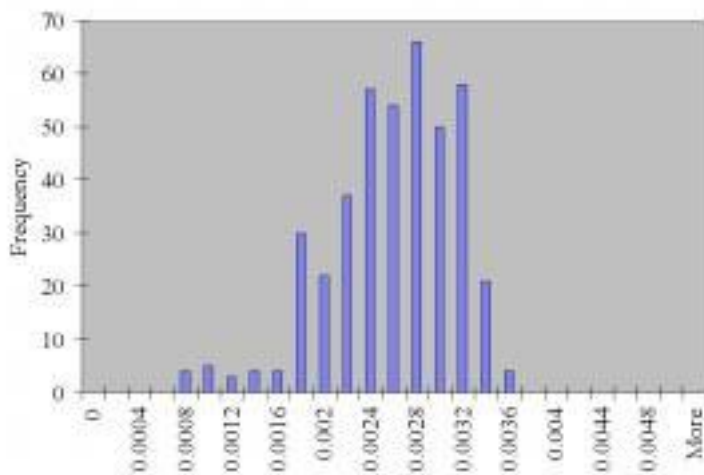
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.04	0.08	0.13	0.23	0.39	0.57	0.85	1.06	1.29	1.42
<b>Max.</b>	0.18	0.34	0.52	0.94	1.54	2.28	3.39	4.24	5.14	5.68

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



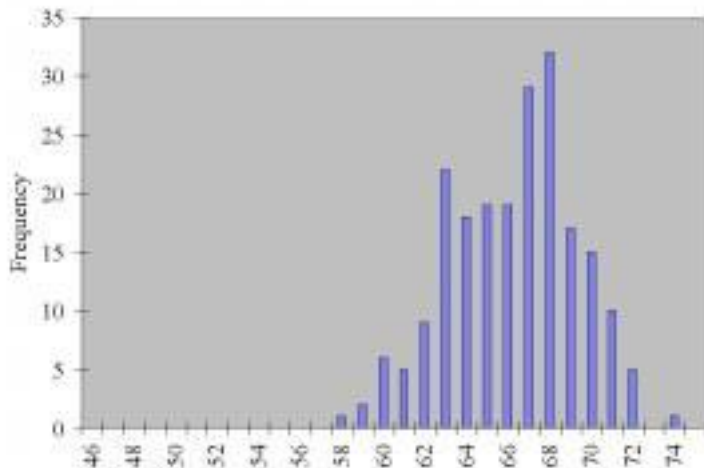
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	417
2	785000	795
3	785000	1225
4	785000	2210
5	785000	3636
6	785000	5355
7	785000	7971
8	785000	9979
9	785000	12096
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



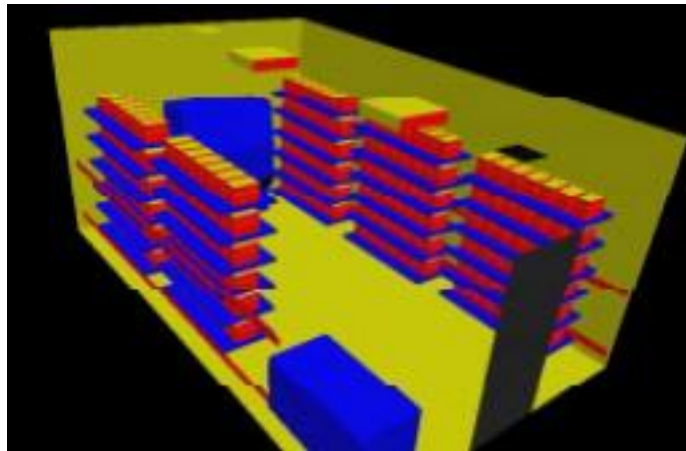
Casename      **Case 99**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	22	49%	Ceiling	26	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	24.78	76.60	1984	58.69%
<b>S.D.</b>	0.32	0.58	357	1.55%
<b>Max.</b>	25.73	78.32	2959	61.50%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	1.03	2.01	3.10	4.46	6.28	8.70	11.91	16.07	21.34	27.89
<b>Max.</b>	1.54	3.00	4.62	6.66	9.36	12.98	17.76	23.96	31.82	41.60

**Room Breathing Zone**

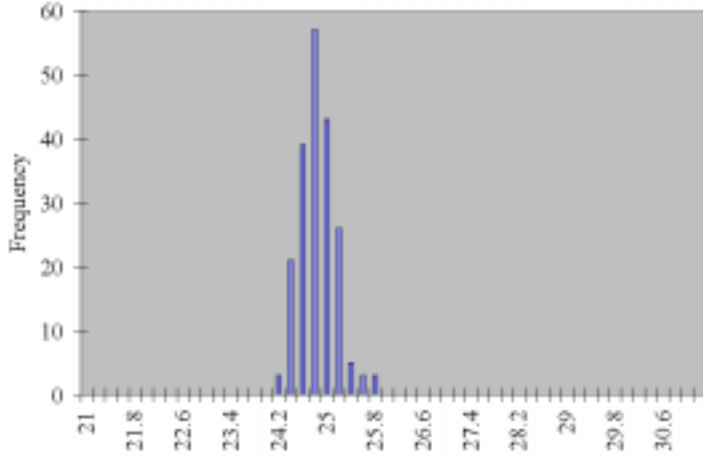
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	23.86	74.94	27	44.18%
<b>S.D.</b>	0.41	0.74	12	
<b>Max.</b>	24.70	76.46	123	

**Room Breathing Zone NH3 (ppm)**

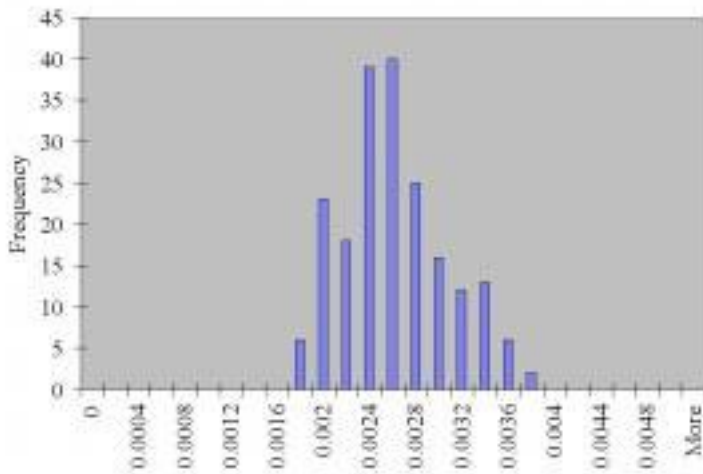
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.01	0.03	0.04	0.06	0.09	0.12	0.16	0.22	0.29	0.38
<b>Max.</b>	0.06	0.12	0.19	0.28	0.39	0.54	0.74	1.00	1.33	1.73

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



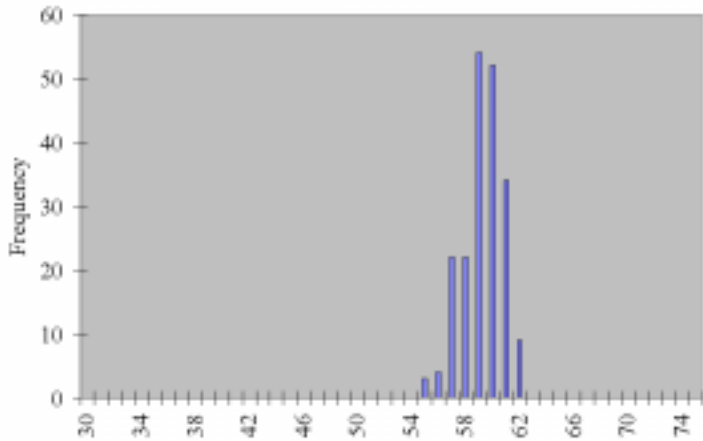
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



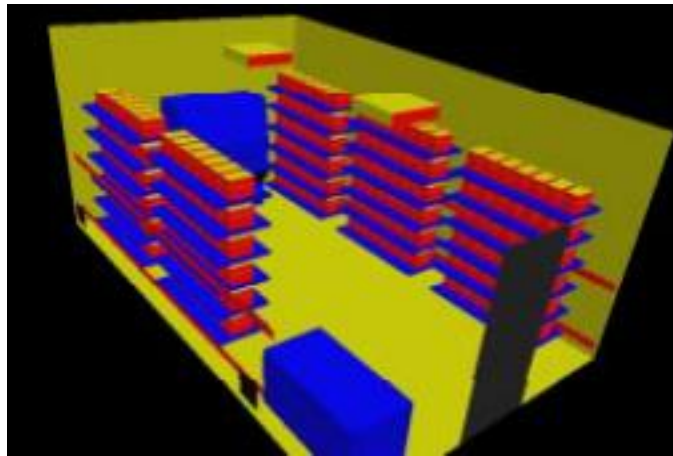
Casename      **Case 100**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Radial	22	49%	Low	25	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON	On wall	Single	1050	21000 gr	neg 100cfm

**Room ACH**  
15

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	25.43	77.77	1730	55.39%
<b>S.D.</b>	0.47	0.85	428	1.89%
<b>Max.</b>	26.84	80.30	3305	60.49%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.90	1.75	2.70	3.89	5.47	7.59	10.38	14.01	18.61	24.32
<b>Max.</b>	1.72	3.35	5.16	7.43	10.46	14.50	19.84	26.77	35.55	46.47

**Room Breathing Zone**

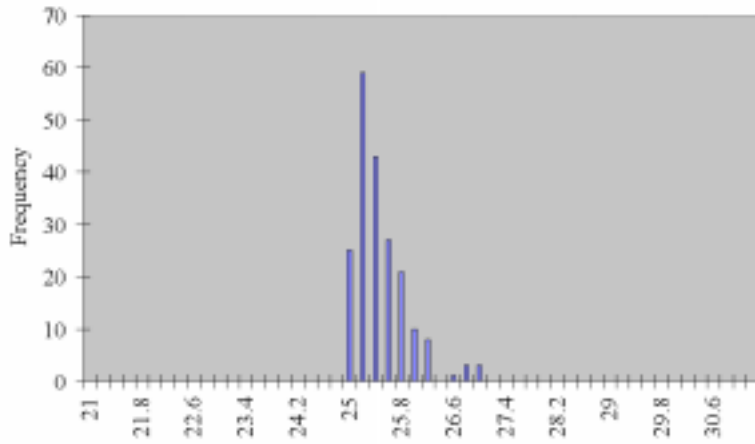
	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	24.82	76.67	40	41.72%
<b>S.D.</b>	0.33	0.59	20	
<b>Max.</b>	25.82	78.47	192	

**Room Breathing Zone NH3 (ppm)**

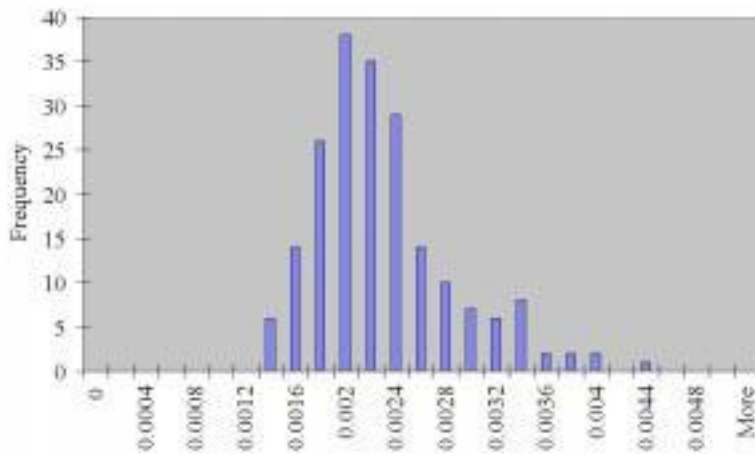
Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.02	0.04	0.06	0.09	0.13	0.18	0.24	0.32	0.43	0.56
<b>Max.</b>	0.10	0.19	0.30	0.43	0.61	0.84	1.16	1.56	2.07	2.71

**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



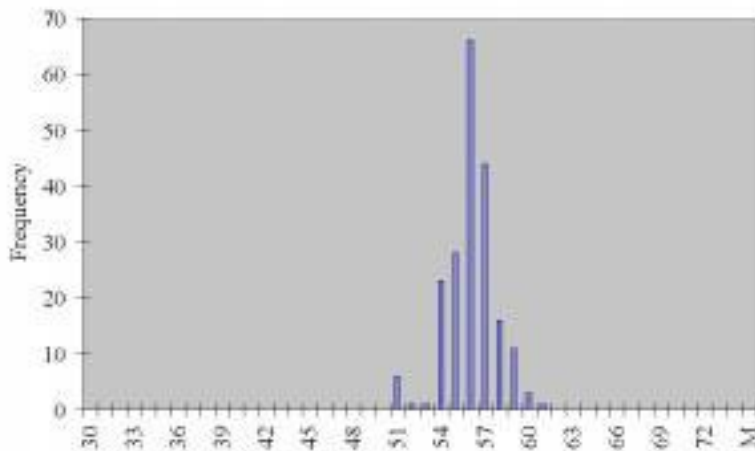
Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution



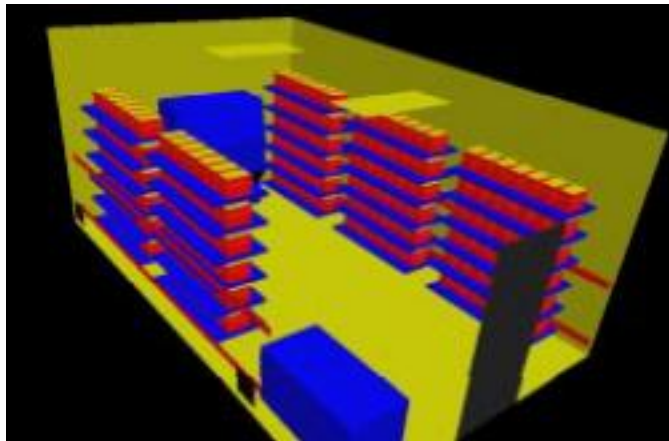
Casename **Case 101**

**Description**

<b>Supply Configuration</b>	<b>Supply Discharge Temperature (°C)</b>	<b>Supply Discharge RH</b>	<b>Exhaust Configuration</b>	<b>Exhaust Temperature (°C)</b>	<b>Exhaust RH</b>
Low Ind	22	49%	Low	25	50%
<b>Change Station</b>	<b>Rack Orientation</b>	<b>Rack Density</b>	<b>Number of Mice in Room</b>	<b>Total mass of Mice in Room</b>	<b>Room Pressurisation</b>
ON alt design	Perp	Double	1050	21000 gr	neg 100cfm

**Room**  
ACH  
5

**Cage Condition**  
Top On



**Analysis Results**

**Cage Occupied Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	26.82	80.27	2400	55.39%
<b>S.D.</b>	0.69	1.23	530	1.89%
<b>Max.</b>	28.34	83.02	3522	60.49%

**Cage Occupied Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	1.25	2.43	3.74	5.40	7.59	10.53	14.40	19.43	25.81	33.74
<b>Max.</b>	1.83	3.56	5.50	7.92	11.14	15.45	21.14	28.51	37.87	49.50

**Room Breathing Zone**

	Temperature		CO <sub>2</sub> (ppm)	RH
	°C	°F		
<b>Mean</b>	26.24	79.22	284	39.78%
<b>S.D.</b>	1.52	2.74	138	
<b>Max.</b>	28.22	82.79	793	

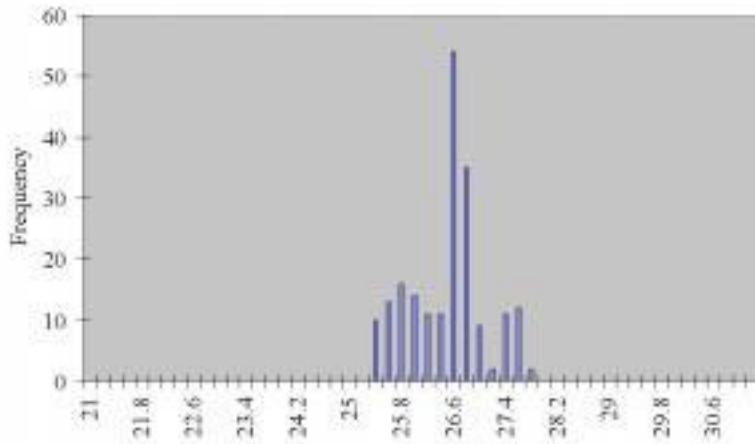
**Room Breathing Zone NH3 (ppm)**

Day	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	0.15	0.29	0.44	0.64	0.90	1.25	1.71	2.30	3.06	4.00
<b>Max.</b>	0.41	0.80	1.24	1.78	2.51	3.48	4.76	6.42	8.53	11.15

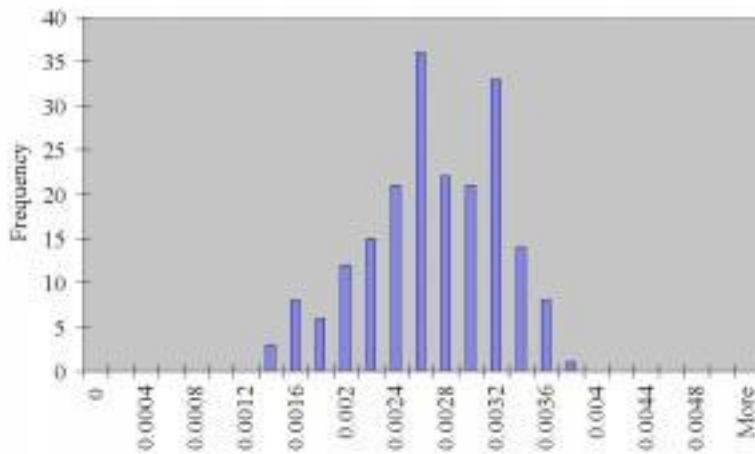


**Histogram Distributions**

Cage occupied zone average temperature (°C) distribution



Cage occupied zone average contamination (kg/kg) distribution



Contamination conversion factors (kg/kg -7 ppm)

Day	CO <sub>2</sub>	NH <sub>3</sub>
1	785000	408
2	785000	795
3	785000	1225
4	785000	1766
5	785000	2483
6	785000	3443
7	785000	4712
8	785000	6356
9	785000	8442
10	785000	11384

Cage occupied zone average relative humidity (%) distribution

